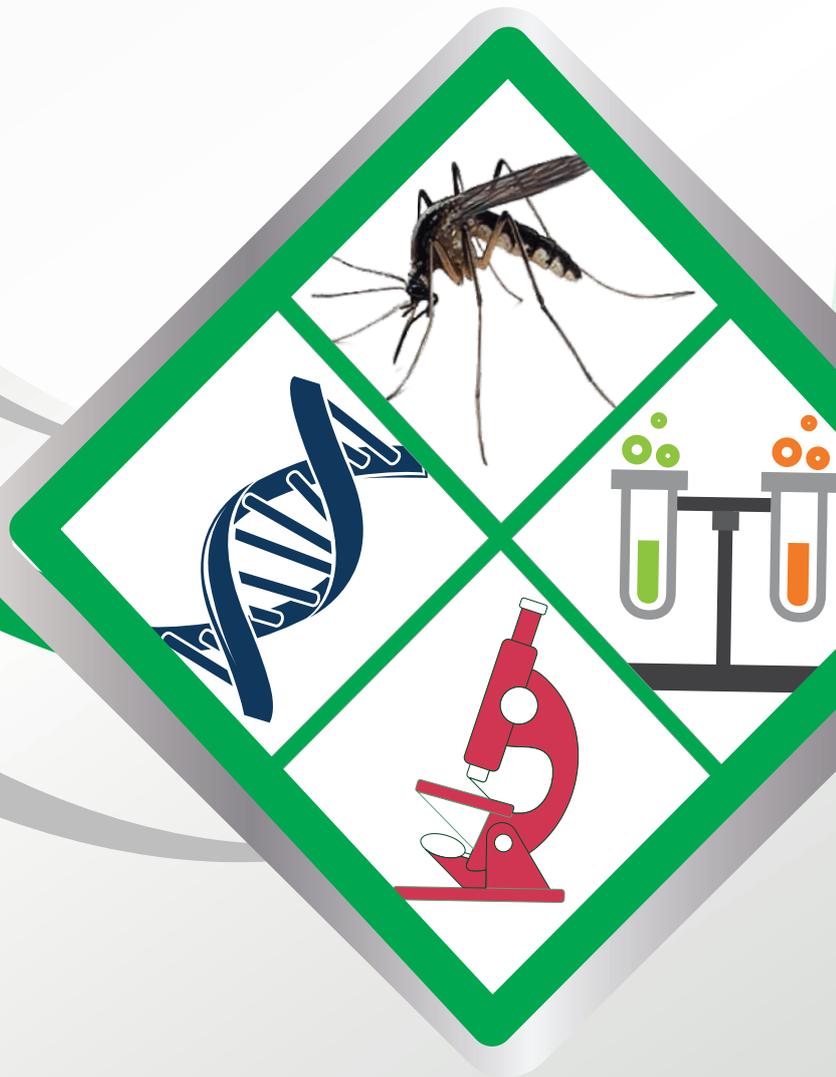


— | COMPENDIUM OF | —  
**NIMR RESEARCH STAFF**  
PUBLICATION

**1970-2016**



**NIGERIAN INSTITUTE  
OF MEDICAL RESEARCH**

LAGOS, NIGERIA



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Library & Information Communication Technology Department

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ICT Unit,  
Library & Information Technology Department



# **NIGERIAN INSTITUTE OF MEDICAL RESEARCH**

LAGOS, NIGERIA

## — COMPENDIUM OF — **NIMR RESEARCH STAFFS** PUBLICATIONS

**1970-2016**

## ABOUT THE INSTITUTE

### VISION

To be an institution of excellence in basic, applied and operational research for the promotion of National Health and

### CORE VALUES

Honesty, Integrity, Leadership, Excellence, Respect, Fairness, Dignity Teamwork, Responsibility, Innovation, Relevance, Handwork, Fair Reward and Recognition  
Accountability and Transparency, Communication: Internal and External Equity



### MISSION

To conduct research into diseases of public health importance in Nigeria and develop structures for the dissemination of research findings while providing the enabling environment and facilities for health research and training in cooperation with the federal and state ministries of health and in collaboration with universities, allied institutions and organized private sector nationally and internationally



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Biochemistry & Nutrition Department  
Clinical Sciences Department  
Microbiology Department  
Molecular Biology & Biotechnology Department  
Public Health Department  
Library & Information Technology Department  
Works & Maintenance Department



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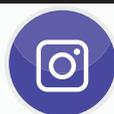
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## FOREWARD

The Nigerian Institute of Medical Research was established through the research institutes establishment order of the National Science and Technology Act of 1977 with the mandate to conduct research into diseases of public health importance in the country. The instrument of measurement of her performance is publication output by research Fellows of the institute, this compendium of publications of the research Fellows is the realization of that objective detailing the institute's contribution to science between 1970 and 2016. Indeed it is the result of the activities of the institute in cutting-edge research over this period, many of which have served as evidence for policy and practice in our environment.

This compendium will therefore be an asset to not only upcoming Fellows of the institute but also academicians from other Tertiary institutions in Nigeria by providing them with easy access to relevant research in their field. It is arranged in chronological order starting from 1970 and includes studies carried out by past and present staff of the institute including in collaboration with others. However, it should be noted that not all the staff publications are captured in this edition because some of the authors could not be reached. It is hoped that subsequent editions will take care of such papers that are omitted.

The quality of the publication listed in this work is a reflection of the commitment of staff to the vision and mandate of the institute, geared to words improving the Nigerian health system as well as longevity in our nation. We shall continue to publish subsequent works as a way to archive the scientific contributions of the staff of the institute and to avoid duplication of studies.

I cannot but appreciate all staff for their commitment to the vision of the institute especially the research staff who painstakingly carried out these research works. Their hard work and commitment are highly appreciated and to the library staff, I say thank you for putting the compendium together, I commend it to all research institutes and University researchers who which to answer relevant research questions that may be supported by the information available in this compendium.

Thank you.

**Professor Babatunde Lawal Salako**  
Director General/CEO



## PREFACE

From the time immemorial, man's activities have always been documented in one form or the other. These documented activities have always served as reference materials and a foundation of modern history for future development.

The idea behind the compendium of NIMR staff publication; being the maiden edition of its kind is aimed at documenting the research output of NIMR for research and reference purpose(s). It is also to recognise the research staffs that have made advancements in their fields as well as allow fellow researchers see opportunities for cross-disciplinary collaboration.

The institute library has painstakingly gathered and compiles this work using Procite software. Though this edition might not reflect all the paper/work published by the staff overtime due to lack of access to some paper/articles, the library however decided to 'kick start' this edition by succinctly capturing the available papers from 1970 - 2016. It is hoped that this edition will be seen as a 'mother' for future edition. Each article contains: record number, the author(s) name, title of the work, name of Journal, date of publication, volume, pages, Abstract and Keywords (where available).

I want to sincerely thank the Director General **Professor Babatunde Lawal Salako** for his encouragement and support towards the production of this maiden edition and to every researcher whose work appeared in this compendium you are highly appreciated for your co-operation. Finally, I appreciate every NIMR staff especially Library and IT department staff for their efforts towards making this compendium a reality by the exquisite contribution, compilation to publishing the work. Without their support it will not be possible to come up with this high quality reference material.

Thank you.

A handwritten signature in blue ink, appearing to read 'S.T. Abolarinwa'. The signature is stylized and cursive.

**S.T. Abolarinwa**

Director

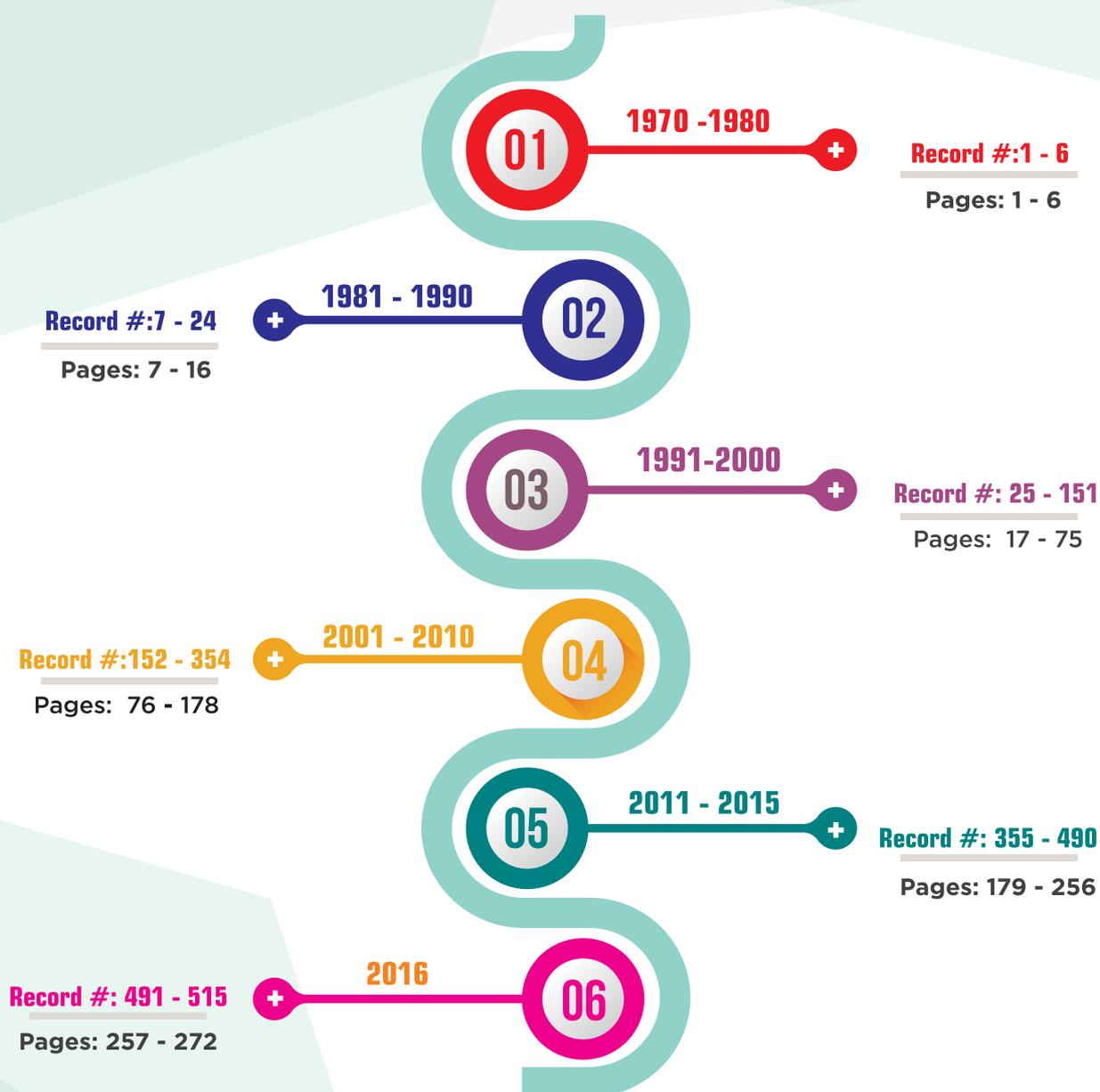
Library and Information Department

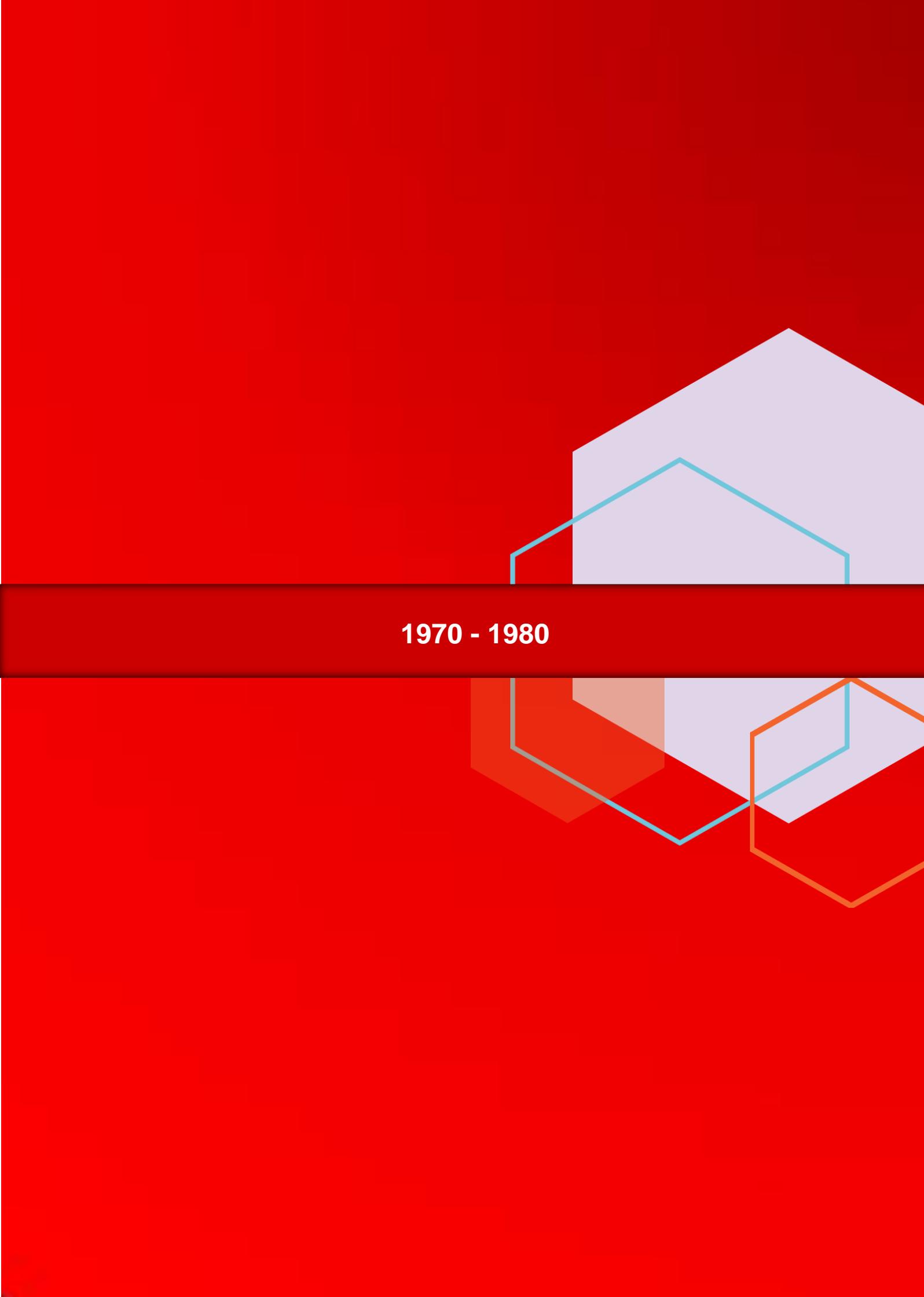
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<b>Years of Publication</b>	<b>Record No</b>	<b>Pages</b>
1970 - 1980	1 - 6	1 - 6
1981 - 1990	7 - 24	7-16
1990 - 2000	25 - 151	17 - 75
2001 - 2010	152 - 354	76 - 178
2011 - 2015	355 - 490	179 - 256
2016	491 - 515	257 - 272

## PUBLICATION TIMELINE





1970 - 1980

**Record Number:** 1  
**Author(s):** Tayo, M. A. Jewsbury, J. M.  
**Title:** Malumfashi Endemic Diseases Research Project, IV Changes in Snail Population Following the Construction of a Small Dam  
**Journal Title:** Annals of Tropical Medicine and Parasitology  
**Date of Publication:** 78  
**Volume ID:** 72  
**Issue ID:** 5  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

The general ecological and demographic background to the Malumfashi Endemic Diseases Research Project has been described by Bradley et al, (1977) in paper 1 of this series. The results of a preliminary parasitological survey of the area were given by Bell and Howells (1973), and in paper 111 of the series Pugh and Gilles (1978) described the results of a longitudinal survey for schistosomiasis. The Agricultural Development project, based at Funtua (approx. 46 km south west of Malumfashi) and financed by the World Bank is likely to have a significant effect on Local agriculture in the near future. The objective of Agricultural project include improvement of water the supply as a means of raising the water table and stabilizing agricultural practices in the area, which are very susceptible to seasonal deficiencies in rainfall (see Fig 6, pughand Gilles,1978).To achieve this objective a number of low earth dams have been constructed in the district and one of these is at Ruwan Sany, in the study area of the Endemic Disease Research project. This paper describes the effects of the construction of this dam on snail populations within the area of the dam and draws attention to the potential significance of the construction of relatively large numbers of such dams in terms of community health, with particular reference to schistosomiasis infection. Some general comments about the hydrology of the area are appropriate before the impact of the newly constructed dam is discussed. Most of the rivers draining the area are sand-bed rivers which flow only during the rainy season (May-September), although even in the dry season the water table is usually only a metre below the valley floors. There is no piped water and many villagers rely to a considerable extent on wells, either communal or situated in individual compounds. Many of these wells are situated some distance from the rivers and dry up in the dry season, so that the only water then available to many people is from occasional more-or-less permanent pools and from holes dug in the river beds (Bradley et al., 1977). Concentration of people at such sources readily occurs and intensifies as the dry season progresses. Most schistosome infections probably originate in these pools, which usually contain large populations of *Bulinus* (P.) *globosus* snails and smaller numbers of *B. forskalii* and *Biomphalaria pfeifferi*. The Ruwan Sanyi dam is of the low earth type and is situated at the confluence of two small streams which flow during the rainy season, draining the Ruwan Sanyi and Kuringafa village areas (see Map). The general physical characteristics of the dam are given in the accompanying table.

**Keywords:** Malumfashi, Endemic Diseases, Research Project, Small dam.

---

**Record Number:** 2  
**Author(s):** Lelchuk, R. Taverne, J. Agomo, P. U. Playfair, J. H. L.  
**Title:** Development and Suppression of a Population of Late-Adhering Macrophages in Mouse Malaria  
**Journal Title:** Parasite Immunology  
**Date of Publication:** 78  
**Volume ID:** 1  
**Issue ID:**  
**Page(s):** 61-78  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Changes in phagocytic and adherent cell numbers were compared during the course of infections of mice with *Plasmodium yoelii* (Py) and *P. berghei* (Pb) and in vaccinated mice challenged with homologous parasites. Nucleated cells in the spleen increased in number in Py-infected mice and were maximal at the time of recovery. The number of phagocytic cells increased in parallel, as did the number of blood leucocytes. Rates of increase were accelerated in vaccinated mice. Changes in Pb-infected mice resembled controls and blood leucocytes showed no consistent increase. In infected mice, the number of spleen and bone marrow cells which adhered to plastic rose above normal. At some stages of infection, cells which did not adhere in 24 h did so in 72 h. Such late-adhering cells, which resembled macrophages in morphology, were most numerous at the time of recovery. They appeared to be derived from monocyte precursors which matured in culture. Sometimes cells adherent at 24 h suppressed the development of the late-adhering population. Silica inactivated these suppressive macrophages but did not affect the precursors which developed into late-adhering cells. It is concluded that malarial infection stimulates the production of precursors of the macrophage-monocyte series and that their development is regulated by the presence of mature macrophages.

**Keywords:** **Plasmodium yoelii, P. berghei vaccination, mouse blood leucocytes, spleen, bone marrow, Adherent cells, Phagocytes, Macrophages, Monocyte-precursors, Culture, Suppression.**

**Record Number:** 3  
**Author(s):** Diane, M. Scott, I. McConnell, P. Agomo, P. U. Lachmann, P. J  
**Title:** **Purification of Antigen-Dependent Macrophage Migration Inhibition Factor (MIF) from Lymph Draining a Tuberculin Reaction**  
**Journal Title:** Immunology  
**Date of Publication:** 78  
**Volume ID:** 34  
**Issue ID:** 591  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** An antigen-dependent factor showing migration inhibition (MIF) and gold uptake stimulation (GUS) activities which has been previously described (Lowe & Lachmann, 1974) has been further purified from defferent lymph collected from cannulated nodes of BCG-sensitized sheep under-going a delayed hypersensitivity response to PPD. During purification, fractions containing MIF activity also exhibited GUS activity. Initial purification by salt precipitation showed that antigen-dependent MIF activity was in the 40-90% ammonium sulphate precipitate. Non-specific activity and contaminating immunoglobulin were found in the 0-20% and 20-40% precipitates. Gel filtration on Sephadex G-200 and affinity chromatography on Concanavalin A-Sepharose have shown that antigen-dependent MIF is a glycoprotein of approximately 70,000 molecular weight (Lowe & Lachmann, 1974). Traces of contaminating antibody in the glycol-protein fraction were removed by immuno-adsorption on monospecific anti-sheep IgG-Sepharose. Antigen-dependent MIF was also purified by affinity chromatography on PPD-Sepharose. The eluted fractions with all the antigen-specific activity contained less than 1% of the applied material. Analysis by polyacrylamide gel electrophoresis showed that the major protein component in the purified MIF preparation has a molecular weight and electrophoretic mobility identical with that of sheep albumin. Although this represents a high degree of purification of antigen-dependent MIF it seems that albumin is still present as a contaminant and that the protein associated with MIF activity is present in trace quantities.

**Keywords:** **Antigen-dependent, macrophage, migration inhibition factor (MIF), lymph, Tuberculin.**

- Record Number:** 4  
**Author(s):** Pugh, R. N. H. Chillhorn, van Veen, T. W. **Tayo, M. A.**  
**Title:** **Malumfashi Endemic Diseases Research Project XII Schistosoma Bovis and Fasciola Gigantica in Livestock**  
**Journal Title:** Annals of Tropical Medicine and Parasitology.  
**Date of Publication:** 80  
**Volume ID:** 74  
**Issue ID:** 4  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Slaughter-slab surveys of livestock within the human schistosomiasis study area of Malumfashi revealed a very low prevalence of snail-borne trematode infections. The drought of 1973 was responsible for a decline in *Schistosoma haematobium* transmission, but there were other factors responsible for the less than 5% prevalence of bovine schistosomiasis and fascioliasis in the surveyed animals. The husbandry method of the settled farmers accounted for a low prevalence of trematode infections in their goats and sheep, and most of the infected animals probably acquired *S. bovis* and *Fasciola gigantica* outside the study area. The dry seasonal conditions had been unfavourable for fascioliasis transmission, but there may have been the added factor of *S. bovis* incompatibility with available snail hosts to account for the low level of bovine schistosomiasis transmission. The recent construction of several low earth dams in this dry part of northern Nigeria is likely to sustain the recent upward trend in *S. haematobium* transmission. It is also likely that the level of infections with *S. bovis* and *F. gigantica* will increase among settled animals in such areas, where conditions will favour the introduction and growth of *Bulinus* and *Lymnaea* snail populations. Moreover, the dams are attracting Fulani-owned cattle which contaminate the northern water-environment with infections acquired during their seasonal migration to wetter, southern areas where snail host populations are more stable and abundant. Beef is an important element of the livestock industry and it is likely that the expected increase in the intensity of bovine trematode infections will be of economic importance in Nigeria.
- Keywords:** **Malumfashi, Endemic Diseases, Research Project, XII Schistosoma Bovis, Fasciola.**
- 

- Record Number:** 5  
**Author(s):** **Tayo, M. A.** Pugh, R. N. H. Bradley, A. K.  
**Title:** **Malumfashi Endemic Diseases Research Project, XI Water-contact activities in the schistosomiasis study area.**  
**Journal Title:** Annals of Tropical Medicine and Parasitology.  
**Date of Publication:** 80  
**Volume ID:** 74  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Fishing, bathing, swimming and playing in water were the most important activities at the Ruwan Sanyi dam site, northern Nigeria, in terms of schistosomiasis. Various washing activities were important in exposure to the infection. Males were responsible for 98% of activity involving contamination and exposure. This accounted for the marked male predominance of *Schistosoma haematobium* infection in the Muslim communities of the area, where boys under the age of 21 years were responsible for more than 77% of environmental egg contamination. Peak water-contact activity occurred in the afternoon and this coincided with the peak cercarial shedding period and the peak urinary egg output. As a result of the construction of many such dams in this part of northern Nigeria, the recent upward trend in schistosomiasis transmission is likely to be maintained. Fishing is a new and a potentially important activity in transmission. Any future programme to control urinary schistosomiasis in this area should pay particular attention to this activity as well as group swimming activity

by young males who should be the prime target. Human water-contact activities were observed around one of several recently constructed small dams in the Malumfashi-Funtua area, northern Nigeria. The study was designed to discover which activities and which members of the surrounding population were important in the transmission of urinary schistosomiasis. The intensity and prevalence of *Schistosoma haematobium* infection in the Muslim farming population of Ruwan Sanyi and Kuringafa villages, Malumfashi District, has been described (Pugh and Gillies, 1978). The infection predominated in males; prevalence rose after four years, rarely exceeded 70% after the age of eight, and the associated intensity of infection fell to low levels after the age of 25. A low earth dam was constructed between the two villages in May 1977 and it was shown that changes in snail population following construction favoured the transmission of *S. haematobium* infection (Tayo and Jewsbury, 1978). The present report describes observations of water-contact activity around the Ruwan Sanyi dam (Fig. 1) in the year following construction. Seasonable variables were not investigated in detail (as they had been in the comprehensive study by Farooq and Mallah, 1966). Water-contact activity was not related to egg output of observed subjects, as had been investigated by Dalton and Pole (1978).

**Keywords:** Malumfashi, Endemic Diseases, Research Project, XI Water-contact activities, Schistosomiasis.

**Record Number:** 6  
**Author(s):** Tayo, M. A. Pugh, R. N. H. Bradley, A. K.  
**Title:** Malumfashi Endemic Diseases Research Project, XIV Increasing Schistosomiasis Transmission  
**Journal Title:** Annals of Tropical Medicine and Parasitology  
**Date of Publication:** 80  
**Volume ID:** 74  
**Issue ID:** 5  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

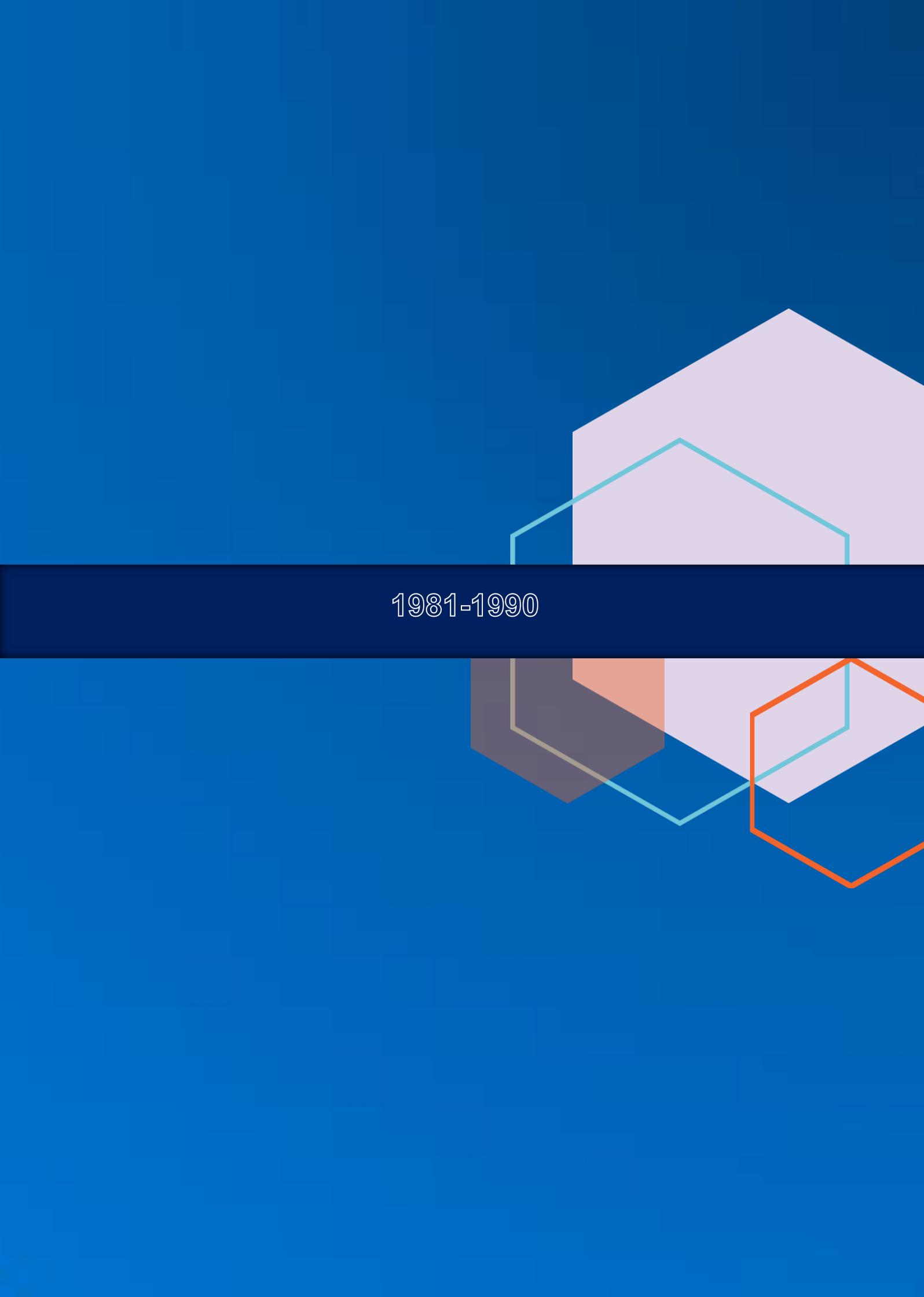
We present the results of a 1979 survey for infection levels with *Schistosoma haematobium*, in the Malumfashi area of northern Nigeria. The infection predominated in males and surveys conducted on boys (aged five to 15 years) attending Ruwan Sanyi primary school have provided a convenient indicator of transmission. A high prevalence (59.3%) and intensity of infection in schoolboys was recorded in 1971 (Bell and Howells). Following the 1973 drought, a decline in transmission was observed in 1975 (prevalence 41.2%) (Pugh and Gilles, 1978). A low earth dam was constructed at Ruwan Sanyi in 1977 and the results of a snail population study supported a suggestion that the upward trend in transmission would continue (Tayo and Jewsbury, 1978). The same study also warned of the potential for *S. mansoni* transmission. Urine samples from the 217 boys attending the Ruwan Sanyi School in July 1979 were examined as described previously. A further increase in the prevalence of *S. haematobium* infection, from 41.2% to 55.8% was recorded and the egg counts of the 121 infected boys are shown in the Table, grouped into  $\log_2$  classes. These results are plotted in the Figure using an accepted method of comparing egg counts described in the two previous reports for 1971 and 1975/6 (Bell and Howells, 1973; Pugh and Gilles, 1978). By this technique the lower the position of a plotted line, the higher the number of eggs and the intensity of infection in the group studied. The highest plotted line for 1975 is correlated with the decline of intensity of infection that had occurred since 1971. The two lines representing successive surveys in 1976 and 1979 suggest that the level of *S. haematobium* transmission has almost returned to that which existed before the Sahel drought. Our experience has shown a disproportionate number of boys with light infections, which may indicate that heavy egg excretors are receiving treatment. Since 11971 school boys with clinical symptoms of schistosomiasis have been referred to malumfashi for specific therapy. An enquiry in 1977 showed that 15% of boys attending the school had already received chemotherapy. Despite

the availability of schistosomicides (niridazole or metrifonate), *S. haematobium* transmission is increasing and is likely to reach hyperendemic proportions, particularly in areas served by the recent water conservation programme.

**Keywords:**

**Malumfashi, Endemic-Diseases, XIV Increasing, Schistosomiasis transmission.**

---



1981-1990

**Record Number:** 7  
**Author(s):** Idigbe, E. O. Partron, R. Wardlaw, A. C.  
**Title:** **Rapidity of Antigenic-Modulation of Bordetella in Pertussis in Modified Hornibrook Medium**  
**Journal Title:** Med.Microbio.  
**Date of Publication:** 81  
**Volume ID:** 14  
**Issue ID:**  
**Page(s):** 409-418  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Modulation of bordetella pertussis was induced by growth in hornibrook medium with a high content of magnesium sulphate (c-medium); four pathophysiological activities in the cells or in the whole culture were measured at intervals. Modulation shows by the extensive loss of protective antigen, histamine-Sensitising factor,leukocytosis-promoting factor, heat-labile toxin and X-mode specific envelope proteins, Occurred during the first 10 h of incubation of X mode cell in c-medium at 35c and before the onset of the logarithmic phase of growth. The rapidity of these losses was greater than could be explained by a simple growth dilution effect and did not appear to be due to release of activity into the culture fluid. It seem therefore, that there was selective destruction of pathophysiological activities as well as cessation of synthesis. The activities appeared to be lost at different rates. Mouse-protective activity was lost more rapidly than histamine-sensitising and leukocytosis promoting activities;heat labile toxicity was lost more. Slowly or less completely Modulation was shown to be easily reversed  
**Keywords:** **Antigenic Modulation, Bordetella in Pertussis, Modified Hornibrook Medium.**

---

**Record Number:** 8  
**Author(s):** Adeiga, A. Ahmed, O. A.  
**Title:** **Prevalence of Toxoplasma Antibodies in Pregnant Women in Lagos State**  
**Journal Title:** West Afri.J.Medicine  
**Date of Publication:** 83  
**Volume ID:** 2  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Blood samples were obtained from 445 pregnant women attending ante-natal clinics in the major hospitals in Lagos State of Nigeria. Sera were tested for antibodies to Toxoplasma gondii by indirect haemagglutination test (Biomerieux Laboratories, France). Of the 445 pregnant women tested, 179 (40%) were sero-positive for T.gondii with titres ranging from 1.80 and above, and 62 (13.9%) of the 179 had antibody titres of 1.1280 and above, while 266 (60%) were sero-positive. The survey also revealed that, out of the four major areas sampled in the State, one (Ikorodu Area) had the highest sero-positive rate (Table 2). The detection of high prevalence of antibody to toxoplasmosis gave indication of latent asymptomatic infection. The public health importance was then stressed. In conclusion, the formal screening of pregnant women, especially in the first and second trimester during ante-natal care, as it is done in developed countries is hereby advocated.  
**Keywords:** **Toxoplasma, Antibodies, Pregnant, Women, Lagos State.**

---

**Record Number:** 9  
**Author(s):** Idigbe, E. O. Onwujekwe, D. I.  
**Title:** **Clinico-Laboratory Study of Pulmonary Tuberculosis in Lagos, Nigeria.**  
**Journal Title:** The Nigerian Society for Microbiology  
**Date of Publication:** 83

**Volume ID:** 3  
**Issue ID:** 2  
**Page(s):** 107-13  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A clinical study designed to estimate the incidence of pulmonary tuberculosis in four chest clinics in the Lagos Metropolis was carried out during the period January June, 1982. Of the 2784 new cases registered in these clinics within the period of study, 668 (24%) were randomly selected and constituted the study population. The survey involved direct microscopic and culture examination of sputum samples obtained from all 668 patients. Of these samples, 142(21%) were positive for tubercule bacilli as determined by both microscopy and culture. Microscopy alone detected 128(19%) positive cases, while 102(15%) were identified by culture. Of the 142 positive cases detected 89% was through microscopy while culture accounted for 72%. A 7% contamination rate was recorded. Males seemed to be more affected than females. The age-specific incidence rates from both sexes showed that the highest rate was recorded in the age-group 20-39 years. For the males the peak positively was in the 20-29 years group while in the females it was in the 30-39 years group. Compared to the results of an earlier study of clinical tuberculosis in Lagos, these findings indicate little or no decline in the incidence of the disease in Lagos over the past 10 years. A reasonable improvement in the socio-economic conditions in the metropolis and a vigorous effort towards case-finding and chemotherapy are clearly indicated if, there is to be a substantial reduction in the incidence of this disease in Lagos.

**Keywords:** **Clinico-Laboratory, Pulmonary, Tuberculosis, Lagos, Nigeria.**

**Record Number:** 10  
**Author(s):** Adeiga, A. A. Ade-Serrano, M. A.  
**Title:** **Cryoglobulins in Schistosoma Haematobium Infection.**  
**Journal Title:** Acta Trop.  
**Date of Publication:** 83  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The sera of school children with Schistosoma haematobium infection were tested for the presence of cold-insoluble immune complexes "the cryoglobulins". Two different methods were used: the standard macro-technique and the micro-adaptation technique. On using the standard macro-technique, 40 (32.8%) out of 122 schistosomiasis patients and 6 (7.5%) out of 80 control children were positive for cryoglobulins. Using the micro-adaptation technique, the corresponding numbers were 47 (38.5%) and 8 (10%), respectively. A comprehensive medical examination was carried out before treatment. After treatment with metrifonate (Bilarcil) the quantity of cryoglobulins and the number of children with cryoglobulins were significantly reduced to 12 (9.8%) when using macro-technique, and to 15 (12.3%) with micro-adaptation technique, thus suggesting a possible relationship of cryoglobulinaemia with urinary schistosomiasis. There was a significant difference in the number of sera found positive by the two techniques ( $X^2 = 0.875$ ,  $P$  less than 0.1).

**Keywords:** **Cryoglobulins, Schistosoma haematobium, Infection.**

**Record Number:** 11  
**Author(s):** Ezeugwu, S. C.  
**Title:** **Variations in the Calcium Hardness Levels and in the Abundance of Bulinus globosus and bulinus forskali (pulmonata) in the L.C.R.I. Rice Irrigation scheme at Ngala (Borno State) Nigeria.**  
**Journal Title:** Res. Seminar Series: Public Health  
**Date of Publication:** 85  
**Volume ID:** 1

**Issue ID:** 1  
**Page(s):** 13-23  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Irrigation canals favour the establishment of schistosome-transmitting bulinid snails. The variations in the calcium hardness levels and in the abundance of two species of bulinid snails were studied. Calcium hardness level was significantly ( $P=0.01$ ) different from station to stations. There was significant ( $P=0.05$ ,  $P=0.01$ ) difference in the abundance of both *Bulinus globosus* and *B. forskali* among the stations.  
**Keywords:** **Variations, calcium hardness, Bulinus globosus, Bulinus forskali (pulmonata), Rice, irrigation, Ngala, Borno State, Nigeria.**

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**Record Number:** 12  
**Author(s):** **Idigbe, E. O.** Anyiwo, C. E. **Onwujekwe, D. I.**  
**Title:** **Human Pulmonary Infections with Bovine and Atypical Mycobacteria in Lagos, Nigeria.**  
**Journal Title:** J Trop Med Hyg.  
**Date of Publication:** 86  
**Volume ID:** 89  
**Issue ID:** 3  
**Page(s):** 143-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A total of 2784 cases with persistent symptoms of lower respiratory tract infections were seen in four of the chest clinics in Lagos between January and June of 1983. Of these, 668 were randomly selected and screened for pulmonary tuberculosis. Repeated sputum samples from the 668 patients were cultured on Lowenstein-Jensen slopes and 102 pure mycobacterial isolates were obtained. The isolates were differentiated into tubercle bacilli, bovine or atypical mycobacteria on the basis of results obtained from nine identification tests. Of the 102 mycobacterial isolates obtained, 87 (85%) were identified as *Mycobacterium tuberculosis*, four (4%) as *M. bovis* and 11 (11%) as atypical mycobacteria. Among this atypical group, six were classified as *M. avium*, four as *M. kansasii* and one as *M. fortuitum*. The study showed the involvement of bovine and atypical mycobacteria in pulmonary infections in Lagos. Tuberculosis-like diseases produced by some of the atypical group are resistant to most of the conventionally used anti-tuberculosis drugs. The need for adequate bacteriological analysis in current-day diagnosis and treatment of pulmonary tuberculosis is therefore highlighted since the 11 atypical cases seen in this study would otherwise have been diagnosed and treated as cases of classical tuberculosis.  
**Keywords:** **Human pulmonary, Bovine, Mycobacteria, Nigeria.**

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**Record Number:** 13  
**Author(s):** Coker, A. O. Dosunmu, Ogunbi, T. **Odugbemi, S. A. Alabi, S. A.** Macaulay  
**Title:** **A Study on the Pervalece of Rotavirus Diarrhoeas in Ohaozara Local Government Area, Imo State, Nigeria and the Lagos State University Teaching Hospital, Lagos, Nigeria.**  
**Journal Title:** The East African Medical Journal  
**Date of Publication:** 87  
**Volume ID:** 64  
**Issue ID:** 9  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

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**Abstract:** This study consisted of two parts a community- based (rural) study (February 1983 February 1986) undertaken at ohaozara local government Area of Imo state, in the Eastern part of Nigeria ;and a one year hospital-based (urban) study which was undertaken at the Lagos university Teaching Hospital (LUTH) in the surulere Area of metropolitan Lagos. The studied population in both cases consisted of children (with or without diarrhoea) under six years of age. Our urban prevalence rate of 25.2% for rotavirus is in agreement with findings in similar studies in African. On the other hand, our rural rate of 1.6% for rotavirus is low. The possible reasons for this are discussed in the paper.

**Keywords:** **Rotavirus, Diarrhoeas, Nigeria.**

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**Record Number:** 14  
**Author(s):** Idika, N. Lawal, S. F. Odugbemi, T.  
**Title:** Streptococcal Carriage in Domestic Animals in parts of Nigeria  
**Journal Title:** Trop. Vet  
**Date of Publication:** 87  
**Volume ID:** 5  
**Issue ID:**  
**Page(s):** 179-182  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Of the 380 nasal and seven skin swab-specimens collected from various domestic animals and examined for evidence of streptococci, 71 (18.7%) of the nasal specimens were positive. None of the seven skin lesion swab-specimens yielded any streptococci. Twenty-seven (38%) of the 71 isolates belonged to Lancefield group C representing a total group C carriership rate of 7.1% while the remaining 44(62.0%) could not be serogrouped with available grouping sera. Four species, *Streptococcus equisimilis*, *Streptococcus dysgalactia*, *Streptococcus equi* and *Streptococcus zooepidemicus* were among the 27 isolates when characterized biochemically. All the 13 group C strains that were characterized as *S. equisimilis* were isolated from dogs. The results of this study indicate that group C cross-infection could occur between man and his dog.

**Keywords:** **Lancefield group C Streptococci, Serogrouping, Nasal, Skin swab**

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**Record Number:** 15  
**Author(s):** Idigbe, E. O  
**Title:** Correlation Between Growth Rate and Loss of Histamine-sensitizing factor during Antigenic Modulation in *Bordetella pertussis*.  
**Journal Title:** Microbios  
**Date of Publication:** 87  
**Volume ID:**  
**Issue ID:**  
**Page(s):** 49-89  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

The pattern of loss of histamine-sensitizing factor (HSF) during antigenic modulation of *Bordetella pertussis* in Hornibrook medium was examined. The aim was to determine the possible underlying mechanism involved in modulation. Normal (X-mode) *B. pertussis* cells were grown in Hornibrook medium in which 0.5% (w/v) NaCl had been replaced with 0.5% (w.v) MgSO<sub>4</sub> · 7H<sub>2</sub>O (C-medium). A various time intervals during growth, in viable cell numbers and optical densities of both cultures in the X-and C-media were estimated. Whole cells were harvested from the cultures at the same time intervals and aliquots from the cultures were assayed for the levels of their histamine-sensitizing properties. Correlation of the increase in viable cell numbers with rate of loss of histamine-sensitizing activity in both the cells and whole cultures indicated that components responsible for the histamine-

sensitizing activity were not synthesized during modulation. Moreover, the loss of HSF from *N. pertussis* cells was faster than can be explained by dilution of the original factor in the inoculum among progeny cells. Modulation may involve cessation of synthesis and selective degradation or denaturation of some envelope polypeptides immediately upon inoculation of normal X-mode *B. pertussis* cells into C-medium.

**Keywords:** Histamine, Antigenic, Modulation, *Bordetella pertussis*.

**Record Number:** 16

**Author(s):** Alli, O. John, E. K. O. Idigbe, E. O.

**Title:** Short versus long term chemotherapy in Pulmonary Tuberculosis: The Nigeria situation.

**Journal Title:** Pharmanews

**Date of Publication:** 87

**Volume ID:** 10

**Issue ID:** 10

**Page(s):** 8-14

**Address/Availability:**

**Location/URL:**

**Abstract:**

A study was carried out between 1984 and 1986 to evaluate and compare the efficacies of an 8-months short course regimen and the standard 18-months regimen for tuberculosis management in Lagos. The study was carried out in four of the referral chest clinics in Lagos State. Within the period of the study our hundred patients who were diagnosed as active cases of pulmonary tuberculosis were randomly selected from the chest clinics and enrolled in the study. Two hundred of these patients were placed on the 8-months short course treatment with Isoniazid, Streptomycin, Rifampicin and Pyrazinamide for two months then Isoniazid and Rifampicin for the subsequent six months. The other two hundred patients were placed on the standard 18-months regimen of Isoniazid streptomycin and ethambutol for two months then Isoniazid and Thiacetozone for the subsequent sixteen months. All the patients were followed up during the period of treatment and for another one year after the completion of treatment. The cure, relapse and death rates were recorded for each of the groups of patients, 86% cure rate was recorded in the group of patients on 8-months regimen as against 64% in the group of the 18-months regimen. Also the relapse (2.5%) and death (4.0%) rates recorded in the short course treatment was significantly ( $p,0.01$ ) lower than the 5.5% and 13.0% rates recorded respectively with the standard regimen. Rate of loss to follow-up was also significantly higher with the standard than with the short course regimen. The overall results indicated that short course regimen was more effective than the standard regimen. On the cost-effective analysis, the short course regimen was found to be cheaper if other costs of full treatment and duration of the standard regimen was taken into account. Data therefore highlighted the adoption of the short course treatment regimen under the National Tuberculosis Control Programme in the country.

**Keywords:** Chemotherapy, Pulmonary Tuberculosis, Nigeria.

**Record Number:** 17

**Author(s):** Lawal, S. F. Akinleye, A. O. Idika N. Solanke, E. O. Odugbemi, T.

**Title:** The Prevalence of *Streptococcus Milleri* Among Beta Haemolytic *Streptococci* Isolated from School Children in Lagos, Nigeria

**Journal Title:** West African Journal of Medicine

**Date of Publication:** 88

**Volume ID:** 7

**Issue ID:**

**Page(s):** 166-169

**Address/Availability:**

**Location/URL:****Abstract:**

Two hundred and eighty strains of BHS isolated from healthy 6-year-old Nigerian children were characterized on the basis of bacitracin sensitivity, serological grouping and biochemical reactions. The main species in the study were *S. pyogenes* (28.5%), *S. equisimilis* (87.5%), *S. canis* (93.3%) and *S. milleri* (9.1%). The results of these test combinations have shown that a polyphasic approach to streptococcal characterization is of epidemiological importance where serological classification is not adequate.

**Keywords:**

**Streptococcus milleri, Beta Haemolytic streptococci, Children, Nigeria.**

**Record Number:**

18

**Author(s):**

Agomo, P. U.

**Title:**

**Murine Blood-Stage Malaria Vaccine: Differences in Effectiveness In Vitamin-Malnourished Hosts and Well-Fed Controls.**

**Journal Title:**

Nig. J. Immunol.

**Date of Publication:**

88

**Volume ID:**

1

**Issue ID:****Page(s):**

27-34

**Address/Availability:****Location/URL:****Abstract:**

Male, inbred Swiss albino mice initially 3 weeks old and weighing between 9 and 10g were fed normal mouse diet (NMD, 15g/day/5 mice). Others were malnourished by feeding (a) one-third by weight NMD (5g/day/5 mice) (b) vitamin-deficient high carbohydrate tropical diet, gari (Monihot ultissima, 15g/day/5 mice) and (c) another vitamin-deficient high carbohydrate diet, maize flour (ogi 15g/day/5 mice). They were stabilized on the diets one week before and in some cases, one to two weeks after vaccination against the blood-stage *Plasmodium yoelii nigeriansis*. After 3 weeks the vaccinated animals together with non-vaccinated controls were challenged intravenously with homologous *P. yoelii nigeriansis* ( $10^4$ /mouse). Parasitaemia was monitored using Giemsa-stained thin blood films. Results showed that there was decrease in weights, reticulocyte numbers and haematocrit values in all malnourished mice. In non-vaccinated controls parasitaemia increased (max. 72.3% and 55.4%) in groups fed NMD 15g/day and 5g/day respectively until the animals died. Conversely parasitaemia was suppressed (max. 1.0% and 1.3% respectively) in groups fed gari and ogi. Vaccinated mice fed the high NMD recovered from the low-grade challenge on day 7 whilst the mice fed low NMD recovered on day 9, with peak parasitaemia about 1.5% and 4.5% respectively. Conversely most vaccinated mice fed ogi or gari before and after vaccination were not protected from the homologous challenge. However, the few mice in this group which were protected got protected, got protected on days 12 and 14 respectively. We suggest that undernourishment resulting from feeding inadequate but balanced (vitamin rich) diet neither inhibited parasite multiplication in non-vaccinated hosts nor the efficacy of the vaccine in the vaccinated host: suppression of parasite growth and failure of malaria vaccine resulted from mal-nourishment with vitamin-deficient, high carbohydrate diets.

**Keywords:**

**Murine, Blood, Malaria, Vaccine.**

**Record Number:**

19

**Author(s):**

Agomo, P. U.

**Title:**

**Recent Advances in Malaria Vaccine Development**

**Journal Title:**

Nig J. Immunol.

**Date of Publication:**

88

**Volume ID:**

1

**Issue ID:****Page(s):**

1-8

**Address/Availability:**

**Location/URL:****Abstract:**

Emphasis on the development of malaria vaccine has shifted from the studies on the use of intact malaria parasite and adjuvant to studies on the utilization of pure protective fractions or derivatives of the antigen. The need for the production of large quantities of Plasmodia for mass vaccination and for other immunological studies gave rise to the utilization of the continuous in vitro culture technique of Trager and Jensen. This unfortunately had its own drawbacks as regards cost and alteration of antigenic determinants. The hybridoma technique of Kohler and Milstein for the production of monoclonal antibodies (MAB) helped significantly in the identification isolation and purification of protective antigens. Yet, the antigens produced by these methods were far too small. The MAB is now being combined with cloning of the genes coding for the protective antigens, a technique that is expected to lead to large-scale production of malaria vaccines. The gene cloning, recombinant DNA technique and the polypeptide sequencing data have shown that the final vaccine could emerge from any of the three recent approaches, namely (a) the coupling of genes from malaria with a bacterial or viral genome to form a hybrid antigen (b) the use of anti-idiotypes as potential vaccines and (c) the synthesis of the immunogenic polypeptides. It is also possible that the three stages of the parasite vaccine the sporozoite stage, the asexual blood stage and the gametocyte stage would first emerge separately to the public before a combination protocol is worked out.

**Keywords:****Malaria, Vaccine.****Record Number:****20****Author(s):****Agomo, P. U.****Title:****Toxicity Studies on Some Medicinal Plants in Use as Antimalarials.****Journal Title:**

Proceedings of the Nigerian society for pharmacognosy

**Date of Publication:**

90

**Volume ID:**

11

**Issue ID:****Page(s):**

169-186

**Address/Availability:****Location/URL:****Abstract:**

We have investigated the effect of leaf bark decoctions of **ocimum gratissimum**, **Azadiracta indica**, **Morinda lucida** and **Enantia chlorantha** on (1) the course of **Plasmodium yoelii nigeriensis** malaria (2) body weights, reticulocyte and haematocrit values and (3) nucleated cell numbers in the spleen, bone marrow, peritoneum, liver and peripheral blood of Swiss albino mice. Results obtained showed that normal mice infected with the parasite (104/mouse) suffered fulminant parasitaemia which resulted in death 7-10 days later. All infected mice treated with chloroquine survived. On the other hand all infected mice treated with the medicinal plants exhibited varying percentages of chemosuppression of early parasitaemia which did not lead to their survival. The total number of nucleated cells in the liver and peripheral blood of malaria-infected mice increased enormously before the animals died. Such increases were maintained in other groups of mice treated with the medicinal plants but not with chloroquine. There was decrease in reticulocyte numbers in the blood of normal mice injected with chloroquine. Conversely, reticulocyte numbers increased in normal mice injected with some medicinal plants. No significant differences in haematocrit values have yet emerged. However, acute and chronic toxicity tests revealed that some of the medicinal plants were much more toxic than others. It is concluded that some "antimalarial" medicinal plants exhibit properties which could be deleterious to health if dosages are not controlled.

**Keywords:****Toxicity, Medicinal plants, Antimalarials.****Record Number:****21****Author(s):**

Adegoke, E. A. Ephraim-Bassey, H. Lawal, S. F. Ajala, H. O. T.

**Title:** Hypoglycaemic and Antimicrobial Activities of Aqueous Seed: Extract of *Hunteria Umbrellata* (Schumf) Hallier.

**Journal Title:** Nigerian Journal of Basic and Applied Sciences.

**Date of Publication:** 90

**Volume ID:** 4

**Issue ID:** 1/2

**Page(s):** 127-138

**Address/Availability:**

**Location/URL:**

**Abstract:** Aqueous extracts of six Nigerian medical plants claimed by the natives to have hypoglycaemic properties were examined. These were the leaves of *Hippocratea indica*, wild, bark of *Gircinia Kola*, Heckel seeds of *Hunteria umbellata* (K.Schum) Hallier f. and *Allium sativum* Linn and the roots of *Uvaria afzelli* Sc. Elliot and *Clausena anisata* (Wild) Hood f. ex Benth. Very positive hypoglycaemic result was recorded for *H. umbellata* with the expected reversibility in metabolism of alloxan-induced diabetes in rabbits. The extract only controlled diabetes in humans. *Gircinia kola* on the other hand affected a three week control but not a complete cure; extracts of the other plants gave negative results. *H. umbellata* was further monitored. The aqueous extract gave positive reactions with two alkaloid reagents- Dragendorff's and Meayer's reagents. Others reacted negatively. The anti-hemorrhoid activity of the seed cream of the plant extract prompted an anti-bacterial testing. It showed inhibition to two colon bacteria, *Escherichia coli* NCTC strain No. 6571, and *Klebsiella aerogenes* a local isolate and two skin-bacteria, *Staphylococcus aureus* NCTC strain No. 1198 and *Streptococcus pyogenes* NCTC Strain No. 8198. While 175 pg/ml of the extract effected minimum inhibition concentration (MIC) against *S. pyogenes*, and 350 pg/ml effected both effects against the other strains.

**Keywords:** Hypoglycaemic, Antimicrobial, Aqueous seed, *Hunteria Umbrellata* (Schumf) Hallier.

**Record Number:** 22

**Author(s):** Adegbola, R.A. Alabi, S. A. Akinkuade, F. O. Coker, A.O, Odugbemi, T.

**Title:** Correlation between Human and Animal Bio-serogroups of *Campylobacter* Isolates in Nigeria.

**Journal Title:** Journal of Tropical medicine and Hygiene

**Date of Publication:** 90

**Volume ID:** 93

**Page(s):** 280-283

**Address/Availability:**

**Location/URL:**

**Abstract:** *Campylobacter* enteritis is endemic in Nigeria as in other developing countries of the world. This paper examines the common biotypes and serogroups of *Campylobacter* in human and animal isolates. The observed correlation suggests possible animal to human route of infection in Nigeria. Implications on preventive and control measures are discussed.

**Keywords:** Diarrhoea, Pathogens, Microbiology, Nigeria.

**Record Number:** 23

**Author(s):** Okonkwwo, C. A. Coker, H. A. B. Agomo, P. U. Ogunbanwo, J. A. Mafe, A. G Agomo, C. O. Afolabi, B. M.

**Title:** Effect of Chlorpheniramine on the Pharmacokinetics of and Response to Chloroquine of Nigerian Children with *Falciparum* Malaria

**Journal Title:** Transactions of the Royal Society of Tropical Medicine and Hygiene

**Date of Publication:** 90

**Volume ID:** 93

**Issue ID:**

**Page(s):** 1-6

**Address/Availability:****Location/URL:****Abstract:**

Chlorpheniramine (CP), a histamine H<sub>1</sub>-receptor antagonist, enhances the efficacy of chloroquine (CQ) in acute uncomplicated falciparum malaria. The effects of this combination therapy on the pharmacokinetic disposition of CQ is, however, unpredictable. A standard treatment with 25 mg CQ base per kilogram bodyweight was orally administered over 3 days, alone or in combination with CP, to 17 semi-immune Nigerian children with Plasmodium falciparum parasitaemic attending hospital in Lagos, Nigeria, and observed for 28 days. Whole-blood CQ concentration were monitored 14 times during the follow-up by high-performance liquid chromatography analysis of blood dried on filter paper. Parasitaemia was determined on thick blood films stained with Giemsa, and treatment failures were established following the WHO classification for CQ resistance. Our pharmacokinetic data showed that the peak whole-blood CQ concentration was significantly increased ( $P < 0.05$ ) by CP administration, and the time to achieve the peak was reduced in the presence of CP. The area under the first-moment drug-concentration time curve was also significantly increase ( $P < 0.05$ ) by CP administration. Treatment with CQ-CP combination resulted in a shorter parasite clearance time (2.0 0.5 days) and a higher cure rate (87.5%) compared to treatment with CQ alone (3.5 0.5 days; 66.7%). Our data suggest that chlorpheniramine enhanced the efficacy of chloroquine against resistant *P. falciparum* in acute uncomplicated malaria by increasing the uptake/concentration of chloroquine in resistant parasites.

**Keywords:**

**Malaria, Plasmodium falciparum, Drug reesistance, Children, chloroquine, Chlorpheniramine, Pharmacokinetics, Nigeria.**

**Record Number:**

24

**Author(s):**

Alabi, S. A. Odubemi, T.

**Title:**

**Occurrence of Aeromonas species and Plesiomonas Shigelloides in Patients with and without Diarrhoea in Lagos, Nigeria.**

**Journal Title:**

J Med Microbiol

**Date of Publication:**

90

**Volume ID:**

32

**Issue ID:****Page(s):**

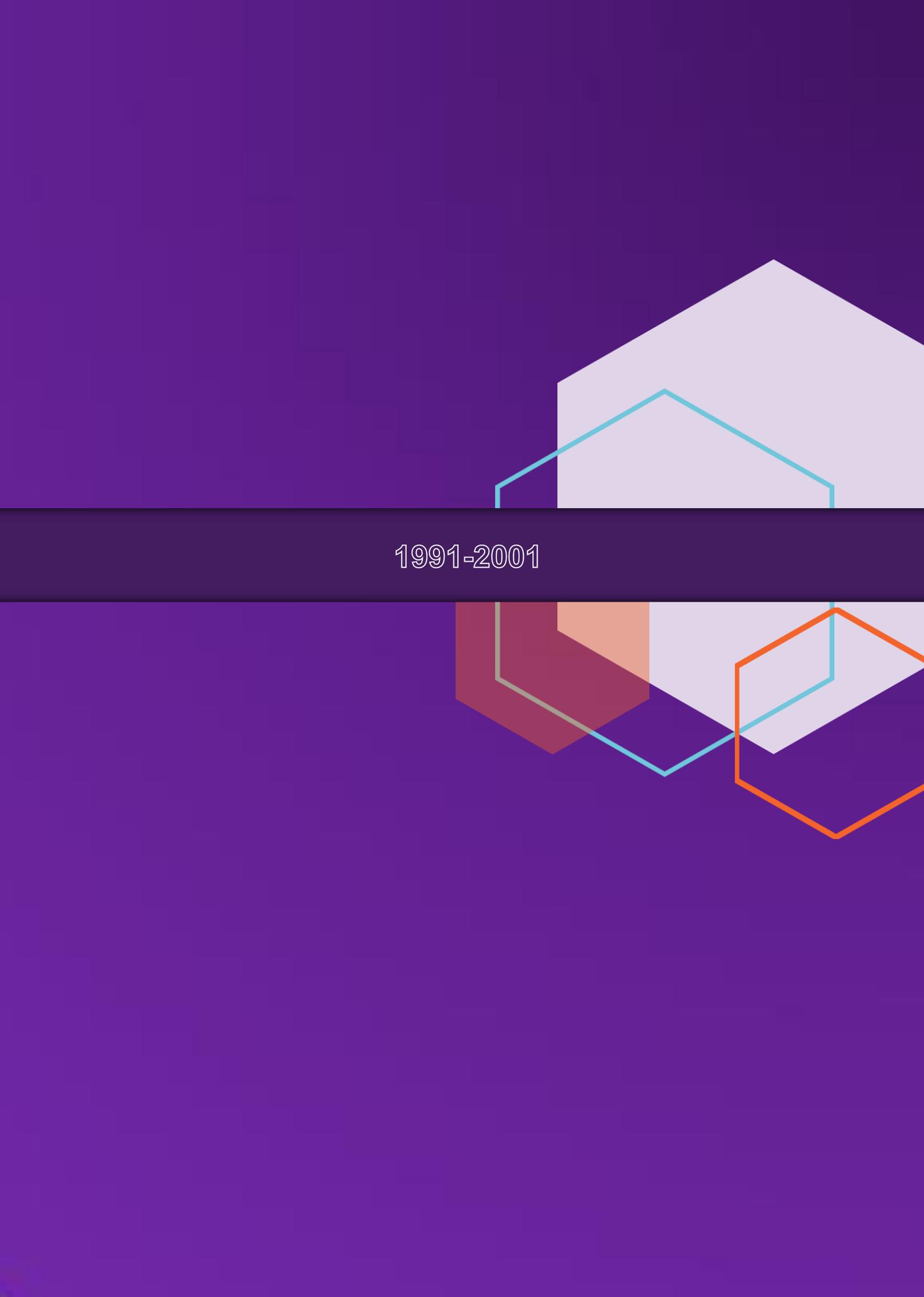
45-48

**Address/Availability:****Location/URL:****Abstract:**

The prevalence of *Aeromonas* spp. And *Plesiomonas shigelloides* was determined in patients attending the enteric laboratory of the Department of Medical Microbiology and Parasitology, Lagos Univerisity Teaching Hospital, Nigeria. During the 12-month study (October, 1986 September, 1987), *Aeromonas* spp. Were isolated from 53 (2.26%) of 2350 patients with diarrhoea and only 2 (0.4%) of 500 patients without diarrhoea ( $p < 0.01$ ). Similarly, *P. shigelloides* was isolated from 16 (0.68%) patients with diarrhoea and none of the controls ( $p > 0.05$ ). The seasonality, age and sex distribution of diarrhoea associated with *Aeromonas* spp. And *P. shigelloides* in this study were similar to those of diarrhoea associated with other recognised enteropathogens in Nigeria. Both species mayu play a role in the actiology of acute diarrhoeal disease in that environment.

**Keywords:**

**Aeromonas, species, Plesiomonas Shigelloides, diarrhoea, Lagos, Nigeria.**



1991-2001

**Record Number:** 25  
**Author(s):** Idika, N. Lawal. S. F. Odugbemi, T. Cocker, H. A. B  
**Title:** Occurrence of leuconostoc Mesenteroides and Leuconostoc-like organisms in Lagos, Nigeria  
**Journal Title:** East African Medical Journal  
**Date of Publication:** 91  
**Volume ID:** 68  
**Issue ID:** 12  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A total of 91 catalase- negative Gram positive coccal isolates obtained from 245 clinical specimens in Lagos were characterized. Ten (11.0%) of the isolates were vancomycin resistant, they fermented glucose, sucrose, fructose, lactose, mannose, mannitol, ribose, salicin, sorbitol, arabinose and xylose with acid production. One of the isolates produced in addition gas inclusive and ethanol, thus identified as Leuconostoc mesenteroides. The ten vancomycin-resistant Gram-positive coccal organisms (VRGPC) showed variable sensitivity patterns to penicillin, tetracycline, erythromycin, ampicillin, streptomycin, chloramphenicol, cloxacillin and co-trimoxazole. The possible role of Leuconostoc spp. and VRGPC in clinical infections in hospital setting is still to be defined.  
**Keywords:** Leuconostoc mesenteroides, Leuconostoc-like organisms, Nigeria.

**Record Number:** 26  
**Author(s):** Agomo, P. U.  
**Title:** Anti-malarial Medicinal Plants the Need for Caution.  
**Journal Title:** Clinical Medicine  
**Date of Publication:** 91  
**Volume ID:** 4  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Malaria.

**Record Number:** 27  
**Author(s):** Esumeh, F. I. Audu, R. A. Odugbemi, T. O et. al  
**Title:** Faecal Contamination Level, Survival of Salmonella Typhi and ph Changes in "Garri" and its Potential Public Health Hazard in Lagos.  
**Journal Title:** Niger. Med. J.  
**Date of Publication:** 91  
**Volume ID:** 21  
**Issue ID:** 344  
**Page(s):** 86-89  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The pH changes, faecal contamination level, and survival of nalidixic-acid resistant Salmonella typhi in 'gari' soaked in water was examined. The pH values showed that 'gari' had a range of pH 3.76 to pH 6.24. The mean pH values showed that there were no appreciable change for gari types from various sources within the studied time period of 120 minutes. Faecal coliform contamination of 4 to = 2,400/g using the MPN technique were

recorded in 33% of the 36 'gari' samples. This high faecal coliform contamination rate of gari, a popular fermented cassava food is unacceptable and it is of public health importance. Our survival experiment showed that the seeded enteric pathogen slightly decreased in colony-forming unit (cfu) with  $\log_{10}^{0.3}$  0.3 within the studied 120 minutes. It is concluded that our local foods should be monitored regularly for public health safety and improved hygienic practices should be emphasized as an intervention for diarrhoea diseases in developing countries.

**Keywords:** Faecal contamination, Salmonella Typhi, ph, Garri, public health hazard, Lagos.

**Record Number:** 28  
**Author(s):** Idigbe, E. O. Duque, J. P. John, E. K. O. Annam, O.  
**Title:** Resistance to Antituberculosis Drugs in Treated Patients in Lagos, Nigeria.  
**Journal Title:** Journal of Tropical Medicine and Hygiene.  
**Date of Publication:** 92  
**Volume ID:** 95  
**Issue ID:**  
**Page(s):** 186-191  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The extent and pattern of drug resistance among previously treated tuberculosis patients was investigated. Ninety-six patients with total treatment duration of between 6 and 18 months and still smear and culture positive were examined. Treatment was either continuous or in intermittent blocks. Drug susceptibility tests on strains of tubercle bacilli isolated from the patients were performed against isoniazid, streptomycin, p-aminosalicylic acid, ethambutol rifampicin by the proportion method using LJ medium without potato starch. A total of 56% of the strains were resistant to one or more of the drugs tested. Resistance to isoniazid (38%) and streptomycin (29%) was most common. A significant finding in the study was the low level of resistance to rifampicin (2%) and ethambutol (3%). A relationship between the incidence of drug resistance and the nature and duration of previous treatment appeared likely since susceptible strains were isolated more often from patients with continuous treatment than from patients on intermittent blocks of long-course regimens. It is therefore suggested that the introduction of better supervision of drug taking and the adoption of continuous short-course regimens on a nationwide level will contribute immensely towards the reduction of the drug resistance problems in Nigeria as well as in other developing countries.

**Keywords:** Antituberculosis, Drugs, Patients, Nigeria.

**Record Number:** 29  
**Author(s):** Tayo, M. A.  
**Title:** Dracunculiasis in Kainji Lake Area  
**Journal Title:**  
**Date of Publication:** 92  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:** Organised by National Institute for Fresh Water fisheries Research, P.M.B.6006, New Busa, Niger State.

**Abstract:** Sixty one villages of the Kainji Lake Area were surveyed for active guinea worm infection between 1985 and 1986. Further surveys were conducted during 1987 and 1989 after provision of improved drinking water in the area. A prevalence rate of 0.7% was obtained from the examination of 25,361 individuals and is indicative of low transmission of the disease in the area. However, the disease showed focal areas of importance in villages such as

Rikoffe where the highest prevalence of 30.4% was reconted. Subsequent surveys carried out between 1987 and 1989 showed that the intense effort at improving the water situation of the Kainji Lake Area has had great impact on the disease transmission in the area. It is suggested that safe drinking water be provided to communities that lack it in order to control the burden of dracunclisis in the area.

**Keywords:** **Dracunculiasis, Kainji Lake.**

**Record Number:** 30  
**Author(s):** Idigbe, E. O. Onubogu, C. C. John, E. K. O.  
**Title:** Human Pulmonary Nocardiosis  
**Journal Title:** Microbios  
**Date of Publication:** 92  
**Volume ID:** 69  
**Issue ID:**  
**Page(s):** 163-170  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The involvement of Nocardia species in human pulmonary infections was investigated. Pulmonary nocardiosis mimics pulmonary tuberculosis in both clinical symptoms and radiological characteristics. In third world countries where diagnosis is based solely on such findings, anti-tuberculosis regimens may indicate chronic tuberculosis when in fact pulmonary nocardiosis should have been treated. Differential diagnosis is recommended for efficient health care and cost-effective drug use.

**Keywords:** **Human, Pulmonary, Nocardiosis, Tuberculosis.**

**Record Number:** 31  
**Author(s):** Alabi, S. A. Mustrpha, A. Obi, C. L. Idigbe, O.  
**Title:** A possible scheme for the biotyping of clinical strains of Eschericha coli in developing countries.  
**Journal Title:** Nigerian Journal of Microbiology  
**Date of Publication:** 93  
**Volume ID:** 9  
**Page(s):** 1-4  
**Address/Availability:**  
**Location/URL:**

**Abstract:** In the study we looked at biotyping by evaluating a total of fifteen biochemical tests for their ability to discriminate between E. coli strains isolated from clinical specimens at the Lagos University Teaching Hospital (LUTH), Lagos, Nigeria. We found seven of these tests fermentation of sucrose, reffingse, xylose, rhamnose, sorbitol, selicin and dulcitol to be highly discriminatory and reproducible. Using these seven tests, a biotyping scheme recognizing six different biotypes ( I VI) of E. coli was developed, when the scheme was used to type 102 freshly isolated E.coli strains in our laboratory, biotype I was found to be the commonest representing 57.8% while biotype III was the least common representing only 3.9% of the strains. This is an indication of the preparat----- of biotype in our environment. We have found this biotyping scheme to be simple and reproducible and we are recommending it for further evaluating and adoption as an alternative to serotyping in the epidemiological study pf E. coli infections, particularly in laboratories with limited resources.

**Keywords:** **Biotyping, clinical strains, Eschericha coli.**

**Record Number:** 32  
**Author(s):** Agomo, P. U. Akindele, S.  
**Title:** Codliver Oil and Lipid Peroxidation in Malaria: The Effect of High Protein Diets.

**Journal Title:** The Nigerian Journal of Parasitology  
**Date of Publication:** 93  
**Volume ID:** 14  
**Issue ID:**  
**Page(s):** 27-36  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The objectives of this work were (a) to study whether vitamin-deficient diet, rich in codliver oil's poly-unsaturated fatty acids (PUFA) were inhibitory to *Plasmodium yoelii nigeriensis* infection (b) to assess the levels and role of lipid peroxidation products (Malondialdehyde, MDA) and (c) to investigate the effect of high and low protein (casein) diets on these activities. Swiss albino mice were maintained in 6 cages (A-F) and fed various mixtures of diets containing protein (casein), codliver oil (source of PUFA), sucrose, vitamin premix and maize starch. The mice were stabilized on the diets for 2 weeks before infection with the parasites (104 mouse). Parasitaemia was monitored daily with Giemsa-stained thin blood films. Lipid peroxidation products were measured with the thiobarbituric acid reaction method, and haematological parameters were assessed, using conventional methods. Result showed that high codliver oil diets inhibited parasite growth only in the absence of, or small quantities of protein diets. Normal and high protein diets suppressed the inhibitory effect of high codliver oil diets. Haematological and biochemical investigations showed that there were massive increases in peripheral white blood cells (WBCs) accompanying a rise in MDA levels (evidence of lipid peroxidation) during malaria infection. These increases were more significant ( $P < 0.001$ ) in animals fed high protein diets and hying from fulminant parasitaemia. We conclude that the reported super-power of poly-unsaturated fatty acids against malaria infection should be viewed with caution as high protein diets occlude oil-induced inhibition.

**Keywords:** **Malaria.**

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**Record Number:** 33  
**Author(s):** Uko, I. E. Adeoye, G. O. Tayo, M. A. Ogbe, M. G.  
**Title:** **Evaluation of Three Diagnostic Techniques for Urinary Schistosomiasis (Reagent Strip, Egg Count and Elisa) in Kainji Lake Area, Nigeria.**

**Journal Title:** The Nigerian Journal of Parasitology  
**Date of Publication:** 93  
**Volume ID:** 14  
**Issue ID:**  
**Page(s):** 65-73  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Examination for *Schistosoma haematobium* infection in urine samples was made and antisera sample were collected from 153 individuals in Nassarawa village in the Kainji Lake area of Nigeria. Of the 153 urine and antisera samples collected, 17.0% were found to be infected with *S haematobium* by the parasitological or egg count technique, 23.0% positive by the reagent strip technique (R.S) and 16.7% positive by the Enzyme Linked Immunosorbent Assay (ELISA) technique. The age groups 10-19 years had the highest prevalence and mean egg count for *S haematobium* infection. A comparison of the sensitivity, specificity, J\_index and the predictive value of the reagent strip technique as the standard test was carried out. The reagent strip technique and the ELISA has similar sensitivity values, but the specificity differs. The J indices were higher with the reagent strip technique than the ELISA except in the age group 15-19 years. The positive predictive values of the reagent strip technique were higher in all the age groups than the ELISA, in exact contrast to the negative predictive values. The study confirms that both the reagent strip technique and Elisa were suitable as diagnostic screening tests but the sensitivity of the ELISA could be improved by using the purified *S haematobium* antigens.

**Keywords:** Evaluation, Urinary, Schistosomiasis (reagent strip, egg count and Elisa), Kainji Lake, Nigeria.

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**Record Number:** 34  
**Author(s):** Olukoya, D. K. Ebigwei, S. I. Adebawo, O. O. Osiyemi, F. O.  
**Title:** Plasmid Profiles and Antibiotic Susceptibility Patterns of Lactobacillus Isolated from Fermented Foods in Nigeria  
**Journal Title:** Food Microbiology  
**Date of Publication:** 93  
**Volume ID:** 10  
**Issue ID:**  
**Page(s):** 279-285  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** As part of an investigation into the genetics of lactobacilli isolated from Nigerian fermented foods, Lactobacillus species isolates were obtained from nine locally fermented foods. The food items were ogi, fufu, burukutu, pito, nono, kunu zarki, wara, iru and ugba. In order to evaluate the plasmid encoded genes involved in the fermentation of Nigeria foods, the isolates were tested for resistance to antibiotics and screened for the presence of plasmids. The majority of the isolates were resistant to cloxacillin, penicillin and streptomycin. Of the 50 isolates screened, 40 contained plasmids ranging in size from 1.8-45.0kb. The majority of the isolates carried more than one plasmid.  
**Keywords:** Food, Antibiotic, Plamid profiles, Lactobacillus.

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**Record Number:** 35  
**Author(s):** Ahmed, O. A. Agomo P. U. Olukoya D. K. Esan, G. J. F.  
**Title:** The Incidence of ABO Blood Group Antigens and antibodies in Lagos State Nigeria.  
**Journal Title:** African J. of Medicine, Sciences  
**Reprint Status:**  
**Date of Publication:** 93  
**Volume ID:** 22  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** ABO Blood Group, Antigens, Antibodies, Lagos, Nigerian.

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**Record Number:** 36  
**Author(s):** Ebigwe, S. I. Olukoya, D. K.  
**Title:** Drug Resistance and Plasmids of Bacillus Isolated from Locally Fermented Foods.  
**Journal Title:** Afr J Med Med Sci.  
**Date of Publication:** 93  
**Volume ID:** 22  
**Issue ID:** 2  
**Page(s):** 13-7  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** In an epidemiological survey of antibiotic resistance in this environment, Bacillus bacteria were isolated from commonly consumed fermented foods. The fifty strains isolated were tested for susceptibility to antibiotics and screened for the presence of plasmids. Majority (72%) were resistant to Cloxacillin and Penicillin (70%) while 40% harbour plasmids ranging

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from 3.0kb-36.3kb in molecular weight. A 4.6kb plasmid was found to be common to all plasmid-bearing strains. The implication for the epidemiology of antibiotic resistance is discussed.

**Keywords:** Drug resistance, Plasmids, Bacillus, Fermented foods.

**Record Number:** 37  
**Author(s):** Ebigwei, S. I. Obi, C. L. Coker, A. O.  
**Title:** The Effect of Temperature, pH and Sodium Chloride on the Growth Rate of *Campylobacter jejuni* and *Campylobacter coli* Isolated in Lagos, Nigeria.  
**Journal Title:** Discovery and Innovation  
**Date of Publication:** 93  
**Volume ID:** 5  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The effects of temperature, pH and sodium chloride on the growth rate and survival of two strains of *Campylobacter jejuni* and two strains of *Campylobacter coli* were investigated. Standard inocula of the organisms were placed on media adjusted to pH values ranging from 1.0-7.5 in the presence of sodium chloride concentrations ranging from 1.0-5.0%. Incubation was carried out at different temperatures after appropriate dilutions. None of the strains grew at pH values from 1-4, in 5% sodium chloride concentration, or at temperatures above 47°C. The optimum pH and temperature for growth were 6.2 and 42°C, respectively. Although growth was enhanced by the addition of 1% sodium chloride, all strains grew poorly in the absence of the salt. At 4°C, *C. coli* grew in the presence of 3.5-4.0% sodium chloride unlike *C. jejuni*. For the maximum isolation of *C. jejuni* and *C. coli* in our environment, optimum pH value of 6.2, temperature of 42°C and the presence of 1% sodium chloride in the medium are recommended.

**Keywords:**

**Campylobacter jejuni, Campylobacter coli.**

**Record Number:** 38  
**Author(s):** Ahmed, O. A. Agomo, P. U. Olukoya, D. K. Esan, G. J. F.  
**Title:** The Prevalence of ABO Blood Group Antigens and Antibodies in Lagos State, Nigeria  
**Journal Title:** Afri.J.Med.med.sci.  
**Date of Publication:** 93  
**Volume ID:** 22  
**Issue ID:**  
**Page(s):** 49-53  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A total of 1239 normal donors from the Lagos university Teaching hospital (LUTH) and 111 staff of the national Institute for Medical Research (NIMR), Yaba were screened for ABO antibodies. Of the number from LUTH, 220 (17.8%) were found to be in group A, 282 (22.8%) in group B, 85 (6.9%) in group AB and 652 (52.6%) in group O. The number from NIMR consisted of 20 (18.0%) in group A, 25 (22.5%) in group B, 8 (7.2%) in group AB and 58 (52.3%) in group O. The mean titre avidity time of sera from 789 (62.66%) potent LUTH donors was less than 35 seconds. Only 97 (6.91%) of this reacted within 10 seconds. On the other hand, only 11 (9.9%) of the NIMR sera reacted within 35 seconds and none reacted within 10 seconds. Group O individuals from LUTH and NIMR did not always have anti-A and anti-B components of their sera with equal avidity or potency. It was also observed that high avidity of antibody did not necessarily correspond with high potency. The commonest titre for group B (anti-A) sera was 256 and that for group A (anti-B) was 512. In general, anti-B titres tended to be consistently higher than anti-A. There was a bimodal peak at titres 32

**Keywords:**

and 256 in group B (anti-A) sera. This repeated itself in the anti-A component of group O sera (i.e. anti-A+B), but here the peaks occurred at 32 and 128. We conclude that ABO antisera examined in Lagos State, Nigeria, exhibited distinct characteristics and that the socio-economic status of the donors influenced avidity and titre.

**Keywords:** **Blood, Antigens, Antibodies, Lagos, Nigeria.**

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**Record Number:** 39  
**Author(s):** Ogbadu, I. J. Audu, R. A.  
**Title:** **Bacteriological Quality of Frozen, Semi-frozen and Smoked Seafish from Retail Outlets in Zaria.**  
**Journal Title:** Bioscience Research Communications  
**Date of Publication:** 93  
**Volume ID:** 5  
**Issue ID:** 1  
**Page(s):** 65-69  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Samples of frozen, semi-frozen and smoked seafish as purchased by consumers from the cold room and open market retail outlets were collected and analysed for their bacteriological quality. The analyses involved assaying for some microorganisms of significance in fish according to ICMSF recommendations such as determining the total mesophilic aerobic count, total faecal coliforms, total *Staphylococcus aureus*, *Salmonella* sp. and *Vibrio parahaemolyticus*. The counts obtained for the semi-frozen and smoked fish in the open market of mesophilic aerobic organisms, faecal coliform and *S. aureus* were  $10^5$ ,  $10^2$  and  $10^2$  cfu/g respectively. These values are slightly above the recommended ones for good quality fish, thereby adjudging the fish samples in this study except those obtained from the cold room to be of poor quality. Neither *Salmonella* nor *V. parahaemolyticus*, both of which signify hazardous condition of the fish, was detected in this study. The levels of contamination of the fish obtained on different trips vary, indicating some chances of obtaining good quality fish at certain times.

**Keywords:** **Bacteriological, Semi-frozen, Smoked seafish, Nigeria.**

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**Record Number:** 40  
**Author(s):** Edungbola, L. D. Nwoke, B. E. B. Onwuliri, C. O. E Akpa, A. U. G. Mafe, M. A.  
**Title:** **Selection of Rapid Assessment Methods for Community Diagnosis of Onchocerciasis in Nigeria: A Recapitulation**  
**Journal Title:** The Nigerian Journal of Parasitology  
**Date of Publication:** 93  
**Volume ID:** 14  
**Issue ID:**  
**Page(s):** 3-6  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Merits and demand of large-scale Mectizan treatment of onchocerciasis are enumerated. In view of the limitations of skin snipping, the development of rapid assessment method for community diagnosis of onchocerciasis becomes a major factor that determines the ultimate success of large-scale treatment were defined and the attributes, evolution and use presented. The emergence of leopard skin and nodules as the best indicators and their confirmation and adoption for use in Nigeria were reviewed. The merits and limitations of leopard skin and nodules were compared. It was concluded that the development of rapid assessment method is a great assessment method is a great asset for the implementation of large-scale Mectizan treatment of onchocerciasis.

**Keywords:** **Onchocerciasis, Nigeria.**

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**Record Number:** 41  
**Author(s):** Olukoya, D. K. Idika, N. Odugbemi, T  
**Title:** Antibacterial Activity of some Medicinal Plants From Nigeria  
**Journal Title:** Journal of Ethnopharmacology  
**Date of Publication:** 93  
**Volume ID:** 39  
**Issue ID:**  
**Page(s):** 69-72  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Antibacterial, Medicinal plants, Nigeria.

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**Record Number:** 42  
**Author(s):** Olukoya, D. K. Tichaczek, P, S. Butsch, A. Vogpl, R.F. Hammes, W.P.  
**Title:** Characterization of the bacteriocins produced by *Lactobacillus pentosus* DK 7 isolated from Ogi and *Lactobacillus plantarum* DK9 from Fufu Chemie Mikrobiologic Technologie der Lebensmittel  
**Journal Title:** (Food Chemistry Microbiology Technology)  
**Date of Publication:** 1993  
**Volume ID:** 15  
**Issue ID:** 314  
**Page(s):** 65-68  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Ogi, *Lactobacillus*.

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**Record Number:** 43  
**Author(s):** Olukoya, D. K. Daini, O. Niemogha, T.  
**Title:** Preliminary Epidemiological Studies on Tetracycline Resistant Plasmids Isolated from Enteric Bacteria in Nigeria.  
**Journal Title:** Tropical and Geographical Medicine  
**Date of Publication:** 1993  
**Volume ID:** 45  
**Issue ID:** 3  
**Page(s):** 117-20  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Epidemiological, Enteric Bacteria.

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**Record Number:** 44  
**Author(s):** Abaelu, A.M. Owumi, C.J. Aoeoye, A. O. Olukoya, D. K.  
**Title:** Antibacterial action of *Bridelia Ferruginea* extract and its effect on mice liver mitochondrial Electron transport.  
**Journal Title:** Journal of Science and Research Development  
**Date of Publication:** 1993  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 85-93  
**Address/Availability:**

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**Location/URL:****Abstract:****Keywords:**

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**Record Number:** 45**Author(s):** Agbabiaka, A. Animashaun, T. Ademidun, O. **Olukoya, D. K.** Bello, C.S.S. Odugbemi, T.**Title:** **Antimicrobial susceptibility of Neisseria species in Lagos, Nigeria.****Journal Title:** Nigerian medical Journal**Date of Publication:**93**Volume ID:** 24**Issue ID:** 2**Page(s):** 50-53**Address/Availability:****Location/URL:****Abstract:****Keywords:**

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**Record Number:** 46**Author(s):** Daini C. A. **Olukoya, D. K.** Arinrimisi, E. **Odugbemi****Title:** **Characterization of the tetracycline resistance determinant from' enteropathogenic Escherichia coli plasmids.****Journal Title:** African Journal of Medicine & Medical Sciences**Date of Publication:**93**Volume ID:** 22**Issue ID:** 2**Page(s):** 39-41**Address/Availability:****Location/URL:****Abstract:****Keywords:**

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**Record Number:** 47**Author(s):** **Idigbe, E. O.** John, E.K.O. Dabiri, C. **Okoye, R.** Nwaobu, R.A.U. **Onubogu, C.** Begg, O.**Title:** **Profile of respiratory opportunists infections associated with AIDHIV infection in Lagos, Nigeria.****Journal Title:** Nig. J. Med. Res. Hith. Sci**Date of Publication:**93**Volume ID:** 1**Issue ID:** 1**Page(s):** 11-18**Address/Availability:****Location/URL:****Abstract:****Keywords:**

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**Record Number:** 48**Author(s):** **Olukoya, D.K.****Title:** Lactobacillus in human health with reference to locally fermented foods.**Journal Title:** Nigerian Medical Journal**Date of Publication:** 93**Volume ID:** 24

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**Issue ID:** 1  
**Page(s):** 28-30  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Lactobacillus.**

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**Record Number:** 49  
**Author(s):** **Idigbe, E. Nasidi, A. Anyiwo, C. E. Onubogu, C. Alabi, S. Okoye, R. Ugwu, O. John, E. K.**  
**Title:** **Prevalence of Human Immunodeficiency Virus (HIV) Antibodies in Tuberculosis Patients in Lagos, Nigeria.**  
**Journal Title:** J Trop Med Hyg.  
**Date of Publication:** 94  
**Volume ID:** 97  
**Issue ID:** 2  
**Page(s):** 91-7  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** To establish the prevalence of HIV antibodies in patients with pulmonary tuberculosis, 536 new cases presenting with symptoms of bronchopulmonary disorders were randomly selected from the six referral chest clinics in Lagos and screened for tuberculosis and HIV infections. Sputum and serum samples were obtained from all the patients. The sputum samples were examined for acid-fast bacilli (AFB) by both microscopy and culture. The sera were screened for HIV-1 and HIV-2 antibodies by ELISA and confirmed by Western blot (WB). Of the 536 cases studied, 188 (35%) were positive for AFB while 13 (2.4%) were seropositive for HIV. Correlation between the AFB and HIV results revealed that 10 (5.3%) of the 188 AFB positives were also seropositive for HIV as compared to 3 (0.9%) in the 348 AFB negative cases. The difference in the HIV seroprevalence rates in the two groups was statistically significant ( $P < 0.001$ ). The recorded higher frequency of HIV infections in the AFB positives strongly suggested some level of interaction between TB and HIV infections in Lagos. Infections with HIV-2 were more prevalent than HIV-1 in the patients with HIV and TB. No case of dual infection with HIV-1 and HIV-2 was recorded in this group of patients. However, in the 3 HIV-seropositive patients within the control group (non-tuberculosis patients), 2 (67%) were positive for both HIV-1 and HIV-2 while 1 (33%) was positive for HIV-2 only. Mycobacterium tuberculosis (70%), M. avium (20%) and M. kansasii (10%) were the mycobacteria strains isolated from the HIV/TB infected patients.  
**Keywords:** **Human immunodeficiency virus, HIV, Tuberculosis, Nigeria.**

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**Record Number:** 50  
**Author(s):** **Olukoya, D. K.Ebigwei, S. I. Olasupo, N. A. Ogunjimi, A. A.**  
**Title:** **Production of DogiK: An Improved Ogi (Nigerian Fermented Weaning Food) with Potentials for Use in Diarrhoea Control.**  
**Journal Title:** J Trop Pediatr.  
**Date of Publication:** 94  
**Volume ID:** 40  
**Issue ID:** 2  
**Page(s):** 108-13  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** As part of a programme to formulate foods to aid the control of diarrhoeal diseases, an improved ogi (the commonest weaning food in Nigeria) named DogiK has been developed. DogiK was produced by using Lactobacillus starter cultures with antimicrobial activity against diarrhoeagenic bacteria and also possessing amylolytic activity. The survival of

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diarrhoeagenic bacteria was investigated in locally-fermented ogi and in DogiK. The foods were inoculated with cell suspensions of Salmonella, Shigella, Campylobacter, Aeromonas, Pleisiomonas, Enteropathogenic and Enterotoxigenic Escherichia coli, Yersinia enterocolitica, and Vibrio cholerae. None of the diarrhoeagenic bacteria were detected in DogiK after 6 h whereas in the local ogi Salmonella, E. coli, and Shigella survived for 24 h or more, but showed a sharp decrease in numbers, while V. cholerae survived for 12 h. DogiK is active whether cooked or uncooked and exhibited inhibition of pathogens at neutral pH. It gives consistent quality. Preliminary investigation indicates possession of a better shelf life. Thus, DogiK may have a potential use in the prevention and treatment of Diarrhoea.

**Keywords:** DogiK, Ogi, Fermented, Weaning food, Diarrhoea, Control.

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**Record Number:** 51  
**Author(s):** Afolabi, B. M. Ekanem, E. E. Sodeinde, O. Randle, S. A.  
**Title:** Traditional and Other Remedies in Childhood Diarrhoea in Coastal Lagos, Nigeria  
**Journal Title:** Nigerian Journal of Paediatrics  
**Date of Publication:** 94  
**Volume ID:** 21  
**Issue ID:** Suppl  
**Page(s):** 121-131  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The treatment and help-seeking behaviours of mothers whose children had diarrhoea was investigated in a 6-month study at a coastal community of Lagos, Nigeria. Sixty-three mothers, whose mean age was 26.4 years, were interviewed during or within 2 weeks of the child's diarrhoeal episode. All mothers first managed the child's illness with home remedies. The commonest home remedies used for the treatment of watery or water-mucoid diarrhea were ewe-ipa (raw, uncooked pap mixed with lime juice), and a mixture of lime juice, salt and water. Some mothers also patronised traditional healers \*10%), quacks (16%) and medicine hawkers (14%). The use of oral dehydration therapy (ORT) was higher among mothers who were younger (41.5%), educated (42.5%), of high socioeconomic (43.8%) and occupational status (66.6%) of low parity (42.9%), and who had not lost a child (48.4%). The use of antibiotics was higher among mothers who were older (31.8%), illiterate (26.0%) and who had not lost a child (32.3%). Mother named increased stool output (84%), i.e. of mothers weight loss (78%). Lethargy (81%) and vomiting (76%) as signs of worsening. The presence of solid stools (90%), increase in activity (94%) and calm condition (86%) were regarded as recuperating signs. No mother attributed the cause of diarrhea to food, flies, water or poor hygiene. There is a need to educate coastal mothers not only about treatment but also about causes of childhood diarrhoea.

**Keywords:** Tradition, Childhood Diarrhoea, Lagos, Nigeria.

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**Record Number:** 52  
**Author(s):** Niemogha, M. T.Olukoya, D. K. Coker, A. O.  
**Title:** Inhibition of bacterial Pathogens by Local Isolates of Lactobacillus  
**Journal Title:** Niger. Med J.  
**Date of Publication:** 94  
**Volume ID:** 27  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A total of 88 isolates of Lactobacillus were obtained from twelve locally fermented foods. These were strains of Lactobacillus plantarum, L. casei, L. delbrueckii Subsp.lactis, L.jensenii, L.acidophilus, L.fermentum, L.salivarius and L.brevis. Lactobacillus strains which

exhibited antibacterial activity against Streptococcus Group A, Escherichia coli, Staphylococcus aureus, Klebsiella pneumoniae, Campylobacter jejuni, Pseudomonas pyocyanea, Micrococcus luteus, Vibrio cholerae and against some species of Lactobacillus were identified. The results obtained of this work, suggest the possibility of extracting vital inhibitory components from local isolates of Lactobacillus and using them for the purposes of therapy and as preservatives, in addition to obtaining strains that could be used as probiotics.

**Keywords:** Lactobacillus strains, Fermented foods, Probiotics.

**Record Number:** 53  
**Author(s):** Adeiga, A. A. Akinosho, R. O. Onyewuche, J.  
**Title:** Evaluation of immune response in infants with Different Nutritional Status: Vaccinated against Tuberculosis, Measles and Poliomyelitis.  
**Journal Title:** J Trop Pediatr.  
**Date of Publication:** 94  
**Volume ID:** 40  
**Issue ID:** 6  
**Page(s):** 345-50  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Immune response of infants vaccinated under Expanded Programme on Immunization (EPI) was evaluated for measles, poliomyelitis, and tuberculosis in Ifo/Otta area of Ogun State and Badagry area of Lagos State, Nigeria. In the prevaccination evaluation of measles antibody, 59 per cent were protected and 41 per cent were at risk in Ifo/Otta area, while 49 per cent were protected and 51 per cent were at risk in the Badagry area. After measles vaccination, 89 per cent of those evaluated seroconverted and 11 per cent did not in Ifo/Otta area, while in Badagry area, 86 per cent of those evaluated seroconverted and 14 per cent did not. For polio neutralizing antibody evaluated at post-immunization, 91 per cent seroconverted, while 9 per cent did not in Ifo/Otta area, while in Badagry area 66 per cent seroconverted and 34 per cent did not. Tuberculin test was used to evaluate the cellular response to BCG vaccination against tuberculosis. 64 per cent were found protected, while 18 per cent were at risk in both areas examined and 18 per cent dropped out. Using Gomez method to evaluate the nutritional status of the infants, 34 per cent were malnourished in Ifo/Otta area and are mostly immigrants. In Badagry area, 53 per cent were normal while 47 per cent were malnourished and most of the malnourished infants were plagued with diarrhoea, severe cough, high fever or malaria infection. Most of the malnourished in the two areas screened were between 9 and 18 months of age, which is the crucial period in the growing stage of the children. (ABSTRACT TRUNCATED AT 250 WORDS)

**Keywords:** Immune, Vaccination, Tuberculosis, Measles, Poliomyelitis.

**Record Number:** 54  
**Author(s):** Daini, A. O. Olukoya, D.K. Ogunjimi, A.A  
**Title:** Genetic Analysis of Tetracycline-Resistant Plasmids in Enteropathogenic Escherichia coli Iso- lated from Patients in Nigeria  
**Journal Title:** Journal of Diarrhoea[ Diseases Research  
**Date of Publication:**94  
**Volume ID:** 12  
**Issue ID:** 4  
**Page(s):** 1-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:**

**Record Number:** 55  
**Author(s):** Edungbola, L. D.Ashaolu, S. O. Akinwale, O. P.  
**Title:** Chiropteran Bats. Their Ecto- and Endo-Parasites and their Implications.  
**Journal Title:** The Nigerian Journal of Parasitology.  
**Date of Publication:** 95  
**Volume ID:** 16  
**Issue ID:**  
**Page(s):** 14 - 26  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Chiropteran Bats, Parasites.

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**Record Number:** 56  
**Author(s):** Agomo, P. U. Akindele, S. K Salako, L. A.  
**Title:** Limitations of Parasight®F as a Rapid Dipstick Antigen Capture Assay for the Detection of Plasmodium falciparum in Nigeria.  
**Journal Title:** The Nigerian Journal of Parasitology  
**Date of Publication:** 95  
**Volume ID:** 16  
**Issue ID:**  
**Page(s):** 55-64  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The efficacy of a rapid diagnostic technique (ParaSight®F) which detects plasmodium falciparum histidine-rich Protein-2 (HRP-11) antigen in human blood has previously been investigated in some countries and recommended for use in rural areas. The objective of this study was to investigate its suitability for routine use in Nigeria by comparing it with clinical manifestations and the microscopic technique of Giemsa-stained thin blood films. A total of 235 patients reporting for treatment at various health centers in Lagos and Abia States were screened and results showed that 67 (28.5%) were positive by ParaSight®F and 78 (33.2%) by (slide) microscopy. A total of 157 slide and 168 ParaSight®F negative patients were seen and 12 of 14 slide-positive but ParaSight®F negative patients were P. malariae only. The degree of Parasitaemia and detection of antigenaemia did not always correlate with clinical manifestations. Analysis of the results showed that ParaSight®F had a positive predictive value of 82.1% a negative predictive value of 98.1%, a sensitivity of 95.5% and a specificity of 91.7%. Longitudinal studies on ten treated slide and ParaSight®F positive patients showed that only 3 were ParaSight®F negative. The thick (slide) films were negative on day 3. Others lingered on, some for 12 days, when examinations stopped. It was confirmed that ParaSight®F is simple to perform and required neither electricity nor equipment. However, the cost by Nigerian standards is prohibitive. Furthermore, with antigenaemia persisting long after recovery, the possibility of adopting ParaSight®F for routine use in rural communities is remote. The continued search for a rapid technique for the diagnosis of malaria is advocated.  
**Keywords:** Parasight®F, Antigen, Plasmodium falciparum, Nigeria.

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**Record Number:** 57  
**Author(s):** Opeifa, I. K. Bakare, A. A. Agomo, P. U.  
**Title:** Effect of Diethyl Carbamazepine Citrate on Serum Electrolytes in Mice  
**Journal Title:** Biokemistri  
**Date of Publication:** 95  
**Volume ID:** 5  
**Issue ID:** 2

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**Page(s):****Address/Availability:****Location/URL:****Abstract:**

The effect of diethyl carbamazine citrate (DEC) on the levels of some serum electrolytes in unanaesthetized mice was investigated. The serum levels of sodium, potassium, calcium and phosphorus in mice administered 2mg, 4mg and 8mg of DEC per kg. Body weight over a period of 7 days was monitored. The results indicate a statistically significant ( $P < 0.05$ ) increase in the levels of phosphorus and sodium, when compared with control, with a corresponding decrease in the levels of calcium potassium. These changes are dose and time dependent. The results also suggest that alterations in the serum electrolyte balance induced by DEC may be responsible for the toxicity associated with this compound.

**Keywords:****Serum electrolytes; Diethyl carbamazine; Serotonin; Serotonergic process.****Record Number:****58****Author(s):****Akinwale, O. P. Ashaolu, S. O. Edungbola, L. D.****Title:****Functional Morphology of Cyclopodia greeffi (Karsch), an Ectoparasite of the Fruit Bat, Eidolon Helvum (Kerr).****Journal Title:**

The Nigerian Journal of Parasitology

**Date of Publication:**

95

**Volume ID:**

16

**Issue ID:****Page(s):**

3-13

**Address/Availability:****Location/URL:****Abstract:****Keywords:****Morphology, Cyclopodia greeffi (Karsch), Ectoparasite, Fruit Bat, Eidolon Helvum (Kerr)****Record Number:****59****Author(s):****Idigbe, E. O. Sofola, T. O. John. E. K. O. Okoye, R. Onubogu, C. C. Begg, O. Giwa-Amu, J.****Title:****The Trend of Pulmonary Tuberculosis in Lagos. Nigeria, 1982-1992.****Journal Title:**

Bioneducak Letters

**Date of Publication:**

95

**Volume ID:**

51

**Issue ID:****Page(s):**

99-109

**Address/Availability:****Location/URL:****Abstract:**

The epidemiological trend of clinical pulmonary tuberculosis (TB) in Lagos, Nigeria, between 1982 and 1992 was examined. Available data indicated a significant increase ( $p < 0.05$ ) in the incidence of pulmonary tuberculosis from 21% (1982) to 42% (1992). Males were more afflicted, with a positive male to female ratio of between 1.3:1 and 2.8:1. Peak positivity in both sexes remained relatively stable at 30-49 years. M. tuberculosis was most incriminated in detected cases (69.9-85.4%) than other mycobacteria strains (14.6-30.1%). Resistance to anti-TB drugs was isoniazid (38%), streptomycin (29%), p-aminosalicylic acid (17%), ethambutol (3%), rifampicin (2%), and 56% to one or more of the drugs tested. A 5.3% level of association between M. tuberculosis and HIV infections was established. Overall data confirmed an upsurge in hospital cases of TB in Lagos within the past decade. To help avert an imminent epidemic of HIV related TB, urgent efforts are needed to strengthen and coordinate activities of the National AIDS and TB control programs.

**Keywords:****Pulmonary, Tuberculosis, Epidemiology, Lagos, Nigeria.**

**Record Number:** 60  
**Author(s):** Niemogha, M. T. Alabi, S. A. Uzoma, K. C. Odugbemi, T. O. Adegbola, R. A. Coker, A. O.  
**Title:** The Incidence of Salmonella, Shigella and other Enteric Bacterial Pathogens in Stool Specimens of Diarrhoeic Patients  
**Journal Title:** Niger. Med. J.  
**Date of Publication:** 95  
**Volume ID:** 28  
**Issue ID:** 2  
**Page(s):** 70-75  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Objective: To determine the pattern of bacterial agents causing diarrhoea in a hospital setting. Subject: materials and methods: Stool specimens received in the hospital laboratory were microscoped, cultured and subjected to antibiotic sensitivity over a 30-month period. Result: Salmonella species, Shigella species, Campylobacter species and enteropathogenic Escherichia coli were the principal agents isolated from stool specimens of clinically diagnosed cases of diarrhoea, dysentery and enteric fever. The occurrence of these organisms varied with different age groups and sex but showed no particular relation to season. Conclusion: The predominant diarrhoea agents in Lagos appear to be Salmonella, and Shigella species. However, a substantial contribution is also made by E. coli (especially in neonates) and Campylobacter species. There is the need to search for Campylobacter and other newer bacterial agents in the investigation of diarrhoea shown not to be due to Salmonella or Shigella in our hospital setting.  
**Keywords:** Diarrhoea, Pathogens, Distribution, Newer bacterial agents.

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**Record Number:** 61  
**Author(s):** Audu, R. A et al.  
**Title:** Seroepidemiology of polioviruses and efficacy of oral Poliovirus immunization in Lagos Nigeria.  
**Journal Title:** Nig. Quart. J. Hosp. Med.  
**Date of Publication:** 96  
**Volume ID:** 6  
**Issue ID:** 4  
**Page(s):** 275-278  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** As a result of low seroconversion rates reported in warm climate countries, it became necessary to assess the efficacy of OPV in immunized children in our own environment in order to ascertain our position in eradicating Poliomyelitis by the year 2,000. Blood samples were collected from children before the 1<sup>st</sup> dose of immunization and four weeks after the 2 subsequent doses were administered. These samples were then subjected to neutralization test to determine the level of seroconversion. The immunity status of Poliovirus 1,2 and 3 was boosted from 8% 19% and 10% before vaccination to 76%, 100% and 62% respectively after immunization. These results represent actual seroconversion rates of 75%, 100% and 58% to Polioviruses 1, 2 and 3 which is low for types 1 and 3. Improved sanitation and hygiene as well as nutrition would contribute to enhancing the immune response of children vaccinated if we have to meet up with the WHO target.  
**Keywords:** Seroepidemiology, Polioviruses, oral Poliovirus, immunization, Nigeria.

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**Record Number:** 62  
**Author(s):** Smith, S. I. Coker, A. O. Olukoya D. K.  
**Title:** Serogroup and Bacteriophage Typing of Campylobacter Isolates from Humans and Chicken in Nigeria  
**Journal Title:** Niger Me J

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**Date of Publication:** 96  
**Volume ID:** 31  
**Issue ID:** 2 & 3  
**Page(s):** 67-69  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **Objective:** A total of 58 isolates of *Campylobacter jejune* and *Campylobacter coli* from human and chicken sources were serogrouped and bacteriophage-typed. **Material and Methods:** The isolates were serogrouped using Penner scheme and bacteriophage-typed using the Preston typing scheme. **Results:** The common human *C. jejune* serotypes were 2,4 and 5, while the common *C. coli* serotypes was 24. Phase group 90B and 85 were common to the *C. jejune* phages. **Conclusion:** These schemes (Penner and Preston-phage typing) were able to differentiate between *C. jejune* and *C. coli* and they are of value in epidemiological studies, most especially when the two schemes are used in combination.

**Keywords:** **Campylobacter, Penner serotyping, Bacteriophage-typing, Human, Chicken.**

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**Record Number:** 63  
**Author(s):** Taylor, O. G. Oyediran, O. A. Bamgboye, A. E. Afolabi, B. M. Osuntokun, B. O.  
**Title:** **Profile of Some Risk Factors for Coronary Heart Disease in a Developing Country: Nigeria.**

**Journal Title:** Afr J Med Med Sci.

**Date of Publication:** 96  
**Volume ID:** 25  
**Issue ID:** 4  
**Page(s):** 341-6

**Address/Availability:**

**Location/URL:**

**Abstract:** The profile of some risk factors for coronary heart disease was studied in 557 male and 325 female Nigerians aged 20 years and above from the low and medium income groups, respectively. Except for the weight of subjects in the low income level, values of all physical characteristics were significantly higher in females than males ( $P < 0.01$ ). In the 20-39 years age group, the systolic blood pressure was higher in males than females, and among the medium income group than the low income group ( $P < 0.01$ ); but this difference disappeared in the higher age groups. The mean diastolic blood pressure was higher (but not statistically significant) at medium income levels than low income levels ( $P > 0.05$ ). In each age group, the mean plasma total cholesterol was significantly higher in the medium income group than in the low income group ( $P < 0.01$ ). The percentage of smokers and alcohol consumers were higher in the high income group than the low income group ( $P < 0.01$ ). A high percentage of the smokers and alcohol consumers were male subjects. Blood pressure was correlated with age, smoking and body fat, ( $P < 0.01$ ). Waist to trochanter ratio, and percentage body fat were significantly related to plasma total cholesterol level ( $P < 0.01$ ).

**Keywords:** **Coronary Heart, Disease, Nigeria.**

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**Record Number:** 64  
**Author(s):** Adeiga, A, Audu, R A.  
**Title:** **Detection of Rabies Virus in the Saliva of Apparently Healthy Dogs in Lagos, Nigeria.**  
**Journal Title:** Biomedical Letters  
**Reprint Status:**  
**Date of Publication:** 96  
**Volume ID:** 54  
**Issue ID:**  
**Page(s):** 207-212  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The high incident rate of dog bites in urban areas and a report establishing dogs as the major vector of rabies in Nigeria motivated the investigation of rabies in the saliva of apparently healthy dogs. Three categories of dogs were tested (a) pet dogs (b) security dogs and (c) stray dogs. Mouse inoculation and fluorescent antibody tests were employed for the investigation. In the 229 dogs tested, 127 were pets, 57 were security dogs and 45 were strays. Of all these dogs, only two were positive for the rabies test and both were from the 45 stray dogs. This is 0.87% of the total dogs tested. The indication of this finding is that the risk of contracting rabies from such bites maybe high.

**Keywords:** Rabies, Virus, Saliva, Dogs, Nigeria.

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**Record Number:** 65  
**Author(s):** Idigbe, E. O. John, E. K. O, Dabiri, M. A. Onubogu C. Okoye, R. Giwa-Amu, J. Begg, O. Nwobu, R. U.  
**Title:** Clinical and microbiolocal Re-assessment of Some Classified Chronic Cases of Pulmonary Tuberculosis in Lagos, Nigeria.  
**Journal Title:** The Nigerian Journal of Medical Research  
**Date of Publication:** 96  
**Volume ID:** 1  
**Issue ID:**  
**Page(s):** 1-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Clinical and microbiological re-assessment of some classified chronic cases of pulmonary tuberculosis in Lagos, Nigeria. Nigerian Journal of Medical Research, 1996; 1:1-5. The study re-assessed, clinically and microbiologically, 28 patients classified as cases of chronic or resistant tuberculosis because of their inadequate response to various anti-TB treatment. The main focus of interest was to establish possible factors responsible for their poor response to treatment. Repeated sputum samples from all the 28 patients were obtained and screened for pathogenic bacteria. -----Fungi. Isolated were identified to specie level and their drug susceptibility profiles established. The mode of their initial diagnosis and treatment patterns were also established. 22(11%) of the patients had pure infections while 6(29%) had mixed infections. Of the 22 patients with pure infections, 4 were infected with *Nocardia asteroides*; 2(*Nocardia braziliensis*) 1(*Cryptococcus neoformans*) and 1(*Ilistoplasma capsulatum*). The other 14 patients were infected with strains of *Mycobacterium*. *N. asteroides*, *N. brazilliensis* and *Streptococcus pneumoniae* were also involved in the patients with mixed infections. 14.3% of the patients had continues treatment for at least 6 months, while 85.7% had intermittent treatment for periods of 6-12 months or more and most often treatment was broken for period of 21-3 months due mainly to lack of drugs. Data strongly indicate that the poor response of the patients could largely be attributed to initial misdiagnosis, absence of well supervised and sustained treatment and drug resistance which may be related to prolonged and often broken treatment regimens. The crucial need for laboratory tests (at least microscopy) in the initial diagnosis of tuberculosis in Nigeria is highlighted. Findings also indicate the need for differential diagnosis for other pathogenic bacteria and fungai in cases of lower respiratory tract infections. A national adoption of well-supervised and sustained short-course treatment regimen will meaningfully improve cure-rate and minimize emergence of drug resistant stains.

**Keywords:** Re-assessment, Chronic cases, Tuberculosis.

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**Record Number:** 66  
**Author(s):** Olukoya, D. K. Smith, S. I.  
**Title:** Genetic Analysis of Trimethoprim Resistance Amongst *Shigella* and *Escherichia coli* Isolates from Nigeria.  
**Journal Title:** Nig. Qt. J. Hosp. Med.

**Date of Publication:** 97  
**Volume ID:** 7  
**Issue ID:** 3

**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Of 230 cotrimoxazole resistant *Shigella* Isolates, 90(39%) were resistant to trimethoprim. Of these 20 (22.2%) transferred their trimethoprim resistance to *E. coli* k-12. Of 240 *Escherichia coli* strains, 100 (41.7%) were resistant to trimethoprim out of which 37(37%) transferred trimethoprim resistance. A total of 16 antibiotic resistance patterns co-linked with trimethoprim were observed. The plasmids were tested with Type 1 DHFR Trimethoprim probe. On the whole 105/150 i.e. 70% hybridized with gene for Type 1 DHFR. The epidemiological significance of these findings are discussed.

**Keywords:** **Trimethoprim, DHFR1, Genetic transfer.**

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**Record Number:** 67

**Author(s):** **Olukoya, D. K. Smith. S. I. Ilori, M. O.**

**Title:** **Isolation and Characterization of Heavy Metals Resistant Bacteria from Lagos Lagoon.**

**Journal Title:** *Folia Microbiol (Praha).*

**Date of Publication:** 97

**Volume ID:** 42

**Issue ID:** 5

**Page(s):** 441-4

**Address/Availability:**

**Location/URL:**

**Abstract:** A total of 228 bacteria with an ability to resist toxic heavy metals were isolated from 8 selected sites of the Lagos Lagoon. The bacteria isolated were *Staphylococcus* sp., *Bacillus* sp., *Pseudomonas* sp., *Streptococcus* sp., *Moraxella* sp., *Escherichia coli*, *Proteus* sp., *Klebsiella* sp. and *Salmonella* sp. The heavy metals to which resistance was recorded were mercury, lead, zinc, cobalt, copper and chromium. The lagoon sites from which the highest number of resistant bacteria were isolated were Marina and Ebute-Ero. The heavy metal to which most bacteria were resistant was cobalt, while the least was chromium. The significance of the result is discussed in relation to the Nigerian environment and human health.

**Keywords:** **Heavy metals, Bacteria, Lagos, Lagoon.**

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**Record Number:** 68

**Author(s):** **Mafe, M. A.**

**Title:** **The Diagnostic Potential of Three Indirect Tests for Urinary Schistosomiasis in Nigeria**

**Journal Title:** *Acta Tropica*

**Date of Publication:** 97

**Volume ID:** 68

**Issue ID:**

**Page(s):** 277-284

**Address/Availability:**

**Location/URL:**

**Abstract:** Schistosomiasis is one of the major parasitic infections of man in the tropical and subtropical areas of the world. Diagnosis of the disease is usually based on microscopic detection of eggs in excreta which is both laborious and time consuming. In Nigeria, the Government's emphasis on the control of the disease dictates the need for a simple, fast, reliable and affordable diagnostic test for the identification of infected communities and detection of infected persons. Three indirect diagnostic tests for urinary schistosomiasis: interview technique, visual examination for macrohaematuria and the use of a chemical reagent strip

were employed in screening 1056 individuals of the Kainji Lake area of Nigeria for urinary schistosomiasis, using haematuria as the disease indicator. The sensitivity of the three tests were determined using the filtration (egg counting) technique as the reference test. The sensitivity of the reagent strip test was 69.0% and 44 and 38% for the interview technique and visual examination respectively. The reagent strip test was particularly useful for screening children (5-19 years old). The implication of these findings are discussed.

**Keywords:** Urinary, schistosomiasis, Diagnosis, Evaluation.

**Record Number:** 69  
**Author(s):** Mafe, M. A. Adewale, B. Idowu, E. T. Mafe, G. A. Ogungbemi, M. A.  
**Title:** Comparison of Praziquantel Alone and Praziquantel with Albendazole in the Treatment of Schistosomiasis Associated with Multiple Intestinal Helminthiasis in Nigeria Children  
**Journal Title:** The Nigerian Journal of Medical Research  
**Date of Publication:** 97  
**Volume ID:** 1  
**Issue ID:** 3&4  
**Page(s):** 52-55  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Comparison of praziquantel alone and praziquantel with albendazole in the Treatment of schistosomiasis associated with multiple intestinal Helminthiasis in Nigeria Children. The Nigerian Journal of Medical research 1997; 1 (3&4): 52-55. The effect of treatment with praziquantel alone on schistosomiasis and intestinal helminthic infections in school children of Kainji Lake Area, Nigeria, was examined and compared with treatment with both praziquantel and albendazole. The results showed that both treatment were effective in rapidly reducing prevalence levels and intensity of these infections. The only additional benefit that the combined drug therapy had over the single drug was that it produced complete clearance of *Ascaris lumbricoides* for up to 14 months after treatment, whereas infection with this worm persisted though a low rate in children given the praziquantel therapy alone. Praziquantel has been shown in this study to be effective against intestinal helminthic infections when given alone. There is therefore no need to combine it with Albendazole which will only increase costs.  
**Keywords:** Praziquantel, Albendazole, Helminthic Infections, Schistosomiasis, School-aged Children.

**Record Number:** 70  
**Author(s):** Idowu, E. T. Mafe, M. A. Otubanjo, O. A.  
**Title:** Social Aspects of Onchocerciasis in Ipogun Community in South Western Nigeria  
**Journal Title:** Journal Sci. Res. Dev.  
**Date of Publication:** 97-98  
**Volume ID:** 3  
**Issue ID:**  
**Page(s):** 13-22  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A questionnaire based study was conducted in Ipogun community to determine the socio-cultural factors that may be of importance in achieving high coverage in ivermectin delivery. The questionnaire was designed to tap information on the knowledge, attitude and practice on the disease as well as the perception of the people on the control program. The questionnaire was administered on 410 respondents selected by simple random sampling. The result indicates a clear lack of knowledge of the disease. For instance, only 2.9% of the respondents had knowledge of the cause of infection while 34% viewed the disease as contagious as reflected by their responses that they will avoid infected persons and their opposition to

public officer holding on to their post. The findings indicate a great need for appropriate and intense health education on the disease and the control effort.

**Keywords:** **Onchocerciasis, Nigeria.**

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**Record Number:** 71  
**Author(s):** Idowu, E. T. Mafe, M. A. Otubanjo O. A.  
**Title:** **Some Indices of Sustainability of Ivermectin Distribution in Onchocerciasis Control in an Endemic Rural Community of South Western Nigeria.**  
**Journal Title:** Journal Sci. Res. Dev.  
**Date of Publication:** 97-98  
**Volume ID:** 3  
**Issue ID:**  
**Page(s):** 147-156  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A survey was conducted to assess some indices of sustainability of Ivermectin distribution and control of onchocerciasis in Ipogun community of Ifedore L.G.A., a hyper-endemic area of onchocerciasis in Ondo State. Questionnaire designed to tap information on cost of distribution, choice of distributors and period of distribution were employed on 323 individuals of this community. The findings revealed that 94.1% of the people who participated in the study were ready to pay for the cost of distributing the drug. Majority (98.4%) preferred local health officer to community representative as main distributors, while 57.2% preferred any period of the year for the distribution. 28.2% of the respondents however considered cocoa season as the best distribution time. The importance of these finding are discussed as part of measures for compliance and sustainability of Ivermectin distribution in the country.

**Keywords:** **Vermectin, Onchocerciasis, Nigeria.**

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**Record Number:** 72  
**Author(s):** Contreras, A. Falkler Jr W. A. Enwonwu, C. O. Idigbe, E. O. Savage, K. O. Afolabi, B. M. Onwujekwe, D. Rams, T. E. Slots J.  
**Title:** **Human Herpesviridae in Acute Necrotizing Gingivitis in Children in Nigeria**  
**Journal Title:** Oral Microbiol Immunol  
**Date of Publication:** 97  
**Volume ID:** 12  
**Issue ID:**  
**Page(s):** 259-265  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Herpesviruses have been implicated in the pathogenesis of human periodontitis. The present study investigated whether herpesviruses are present in the lesions of acute necrotizing ulcerative gingivitis. Sixty-two Nigerian children, aged 3-14 years, were studied. Twenty-two children had acute necrotizing ulcerative gingivitis and were also malnourished, 20 exhibited no acute necrotizing ulcerative gingivitis but were malnourished, and 20 were free of acute necrotizing ulcerative gingivitis and in a good nutritional state. Polymerase chain reaction methods were used to determine the presence of human cytomegalovirus (HCMV), Epstein-Barr virus type 1 and type 2 (EBV-1, EBV-2), herpes simplex virus (HSV), human herpes virus 6 (HHV-6), human papilloma virus and human immunodeficiency virus type 1 in crevicular fluid specimens collected by paper points. Of the 22 acute necrotizing ulcerative gingivitis patients, 15 (68%) revealed viral infection and 8 (36%) viral coinfection. Thirteen (59%) acute necrotizing ulcerative gingivitis patients demonstrated HCMV, 6 (27%) EBV-1, 5 (23%) HSV and 1 (5%) HHV-6. Only 2 (10%) subjects from each group not affected by acute necrotizing ulcerative gingivitis showed viral presence, and no control subject revealed

viral coinfection. These findings suggest that HCMV and possibly other herpesviruses contribute to the onset and/or progression of acute necrotizing ulcerative gingivitis in malnourished Nigerian children.

**Keywords:** Herpesviridae, Necrotizing, gingivitis, children, Nigeria.

**Record Number:** 73  
**Author(s):** Afolabi, B. M. Mafe, A. G. Audu, R. A et al.  
**Title:** Coastal Malaria and Nutritional Status of Children 0 - 6 Years Old in Lagos, Nigeria.  
**Journal Title:** The Nig. J. Med. Res.  
**Date of Publication:** 97  
**Volume ID:** 1  
**Issue ID:** 2  
**Page(s):** 28-31  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Malaria parasitaemia, packed cell volume and nutritional anthropometry (Weight-for-age Z-score, Height-for-age Z-score and Weight-for-height Z-score) were evaluated among 253 children aged 0-6 years old in an indigenous rural coastal community in Lagos, Nigeria. They were classified into two different groups according to their nutritional anthropometry: well-nourished children (WAZ, HAZ and WHZ >-2) and malnourished (WAZ, HAZ and WHZ = -2). Their malaria status was established based on positive peripheral blood smear for asexual erythrocytic stage Plasmodium. Forty four (18%) were smear positive. Sixteen (24%) of the malnourished children (WAZ ≤ -2) were parasitised; 29 (43%) of the stunted (HAZ ≤ -2) children were parasitised; 5 (19%) of the wasted WHZ ≤ -2) children were parasitised and those that were malnourished and parasitised. Geometric mean parasite density was higher among those stunted compared with the healthy children (958.6) and 638.1 respectively, the malnourished compared with the healthy (2165.8 and 730.7). Mean PCV of healthy (WAZ >-2) but smear positive children was lower (29.3±6.1) than that of smear positive but malnourished children (30.5±3.3) mean PCV of healthy and smear negative of children (30.4±7.6) was higher than that of malnourished and smear negative children (28.4±5.3). There was no significant correlation between nutritional status of the children and parasite density. Results suggest that parasitaemia occurs among a high proportion of well nourished children in terms of weight-for-age and weight-for-height but not height-for-age.

**Keywords:** Coastal malaria, Nutritional, Children, Nigeria.

**Record Number:** 74  
**Author(s):** Adewale, B, Mafe, M. A. Oyerinde, J. P. O.  
**Title:** Onchocerciasis in the Forest Zone of Ondo State, Nigeria  
**Journal Title:** The Nigerian Journal of Medical Research  
**Date of Publication:** 97  
**Volume ID:** 1  
**Issue ID:** 3&4  
**Page(s):** 70-73  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Onchocerciasis in forest zone of Nigeria. A study on the endemicity level of onchocerciasis in Idanre Local Government Area of Ondo State, Nigeria was conducted prior to intervention based on chemotherapy using ivermectin. The results of this study showed that onchocerciasis was hyperendemic in the area. Parasitologically, positive skin snips were recorded for 60.7% of the persons examined, with males having higher prevalence than females (P.0.05). The parasite load, expressed as the geometric mean number of microfilariae per skin snip was 4.8mf per skin snip. Symptoms and signs observed were pruritus in 72.6%, onchocercal nodules in 10.9%, skin depigmentation in 21.8%. Lymphoedema of the limb in

1.2% inguinal femoral herniae in 1.2% and lymphoedema of the external genitalia in 0.8% of the population examined, while 0.2% had eye impairment. The prevalence of these symptoms with the exception of pruritus and onchodermatitis increased with age and are significantly higher in males than in females ( $P>0.05$ ).

**Keywords:** **Onchocerciasis, Microfilariae, Forest Zone.**

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**Record Number:** 75  
**Author(s):** Adewale, B. Mafe M. A. Sulyman, M. A.  
**Title:** Impact of Guineaworm Disease on Agricultural Productivity in Owo Local Government Area, Ondo State.  
**Journal Title:** WAJM  
**Date of Publication:** 97  
**Volume ID:** 16  
**Issue ID:** 2  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Of the 500 Cocoa farmers infected with guineaworm in Amurin, 74.3% of the farmers were incapacitated for 3 months without going to their farms while 25.7% mostly those who sought the orthodox form of treatment were incapacitated for about 4 weeks. This resulted in the loss of 9,566 bags of the potential harvest of the farmers which translates to N2,442,000.00 for the period. The substantial part of this loss was from cocoa (N1,570,000.00), a major export crop in Nigeria. The losses experienced were as a result of inability to plant and supervise the farm. An average of 45,000 mandays were lost due to guineaworm infection at a value of N54.27k per individual for incapacitation for a day and a farmer infected with guineaworm loses 19 bags of his potential harvest within the infection duration, which translates to N4,884.00. Guineaworm disease is a major preventable cause of agricultural work loss and a significant impediment to agriculture, the dominant occupation in Nigeria, which implies that guineaworm disease poses large

**Keywords:** **Guineaworm, Agricultural Productivity, Cocoa Farmers, Incapacitation.**

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**Record Number:** 76  
**Author(s):** Bakare, S. Olukoya, D. K. Smith S. I. Okpalaeke, D. C.  
**Title:** Amylase Production by Bacillus Strains Using Spent Grains of Maize  
**Journal Title:** Journal of Prospects in Science  
**Date of Publication:** 97  
**Volume ID:** 1  
**Issue ID:**  
**Page(s):** 84-86  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Seven strains of Bacillus were tested for the production of amylase. Of these, two were not amylase producers. An assay of the crude enzyme extract using the method of Welker and Campbell, showed that two strains, Bacillus subtilis and B. Licheniformis. produced amylase of the greatest specific activity. The specific activity of the former was 2.37, while the latter was 2.13. Purification of the amylase using the method of Manning and Campbell, showed 22.fold. The pH and temperature optima of the partially purified enzymes were 5.5 and 65°C respectively for B. licheniformis. The enzyme extracts of the other strains were not purified nor characterized. The enzymes source was from spent grains of maize, obtained as a by-product during maize fermentation to produce ogi, a local Nigeria food.

**Keywords:** **Amylase production, Bacillus, maize.**

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**Record Number:** 77  
**Author(s):** Nwofor, A. C. Onile, B. A. Oluboyo, P. O. Idigbe, E. O.  
**Title:** Comparison of Microscopic and Cultural Methods for the Diagnosis of Pulmonary Tuberculosis in Ilorin  
**Journal Title:** Nig. Qt. J. Hosp. Med.  
**Date of Publication:** 97  
**Volume ID:** 7  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A laboratory based stud designed to compare the sensitivity of microscop (Direct Smear, and Concentrated Smear) and culture methods in the diagnosis of pulmonary tuberculosis was carried out. The patients were drawn from those attending the Chest and the General Out-patient Department of the University of Ilorin Teaching Hospital, Ilorin, between September and December, 1996. A total of 82 patients' sputum samples were examined. A total of 55(67.1%) were positive for tubercle bacilli by Direct Smear, Concentrated Smear and culture. Thirty-one (56.4%) of the 55 positive cases were detected by direct smear, 50 (90.9%) by concentrated smear, and 27(49.1%) by culture. The difference between concentrated smear method 90.9% and direct smear 56.4% or culture (49.1%) for identifying tubercle bacilli was statistically significant (p,0.001). Male/Female ratio was 0.8:1. The peak number positive for males and females were in the age group 25-34 years and 15-24 years respectively. Concentrated sputum smear examination for the routine diagnosis of pulmonary tuberculosis and for better case finding is recommended. Where therapeutic failure is suspected, culture should be introduced to determine the sensitivity of the strains to routine antimicrobial agents.  
**Keywords:** Culture, Concentrated Smear, and Direct Smear, Nigeria.

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**Record Number:** 78  
**Author(s):** Okonkwo, C. A. Agomo, P. U. Mafe, A. G. Akindele, S. K.  
**Title:** A Study of the Hepatotoxicity of Chloroquine (SN-7618) in Mice  
**Journal Title:** Nig. Qt. J. Hosp, Med  
**Date of Publication:** 97  
**Volume ID:** 7  
**Issue ID:** 2  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The objectives of this work were to determine: (a) the median lethal does (LD<sub>50</sub>) of chloroquine in mice (acute toxicity); (b) the effect of repeated chloroquine administration on biochemical liver functions (sub-chronic toxicity) & (c) histopathological changes in the liver cells after prolonged chloroquine administration. The intraperitoneal LD<sub>50</sub> was 56 mg chloroquine base/kg body weight. Swiss albino mice aged about 4-5 weeks were maintained in 4 cages (A-D) of 15 mice each. Group A served as control while B-D were placed on weekly dosage of 30 mg, 40 mg, and 50 mg chloroquine base /kg body weight responsively, administered intramuscularly once a week. The liver function tests (L.F.T) included assays for the enzymes: alanine transaminase (ALT), aspartate transaminase (AST), alkaline phosphates (ALP) and some biochemical parameters: total bilirubin, direct bilirubin, total protein & albumin, at 4 weekly intervals. Liver tissues were also taken for histopathological examination. The results showed that the body weight gain was slightly lower in the test groups than in the control. The L.F.T. performed gave no clue to the hepatotoxic effect of chloroquine. However, from histological observations, group A showed normal liver tissue sections while groups B, C & D showed cytolytic changes; cytolysis increasing with dosage phenomena that should not be ignored. We therefore cannot conclude that chloroquine is not

**Keywords:** toxic to the liver.  
**Chloroquine, Liver functions, Toxicity.**

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**Record Number:** 79  
**Author(s):** Smith, S. I. Coker, A. O. Olukoya D. K.  
**Title:** Biotyping of Campylobacter Strains Isolated in Lagos, Nigeria Using the Modified Preston Biotype.  
**Journal Title:** Z Naturforsch C.  
**Date of Publication:** 97  
**Volume ID:** 52  
**Issue ID:** 3-4  
**Page(s):** 259-63  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Fifty-eight *Campylobacter* strains were isolated from children with diarrhoea at various health centres in Lagos and from healthy chicken. Twenty-nine strains of *Campylobacter* were isolated from humans, while the same numbers were isolated from chicken. The strains were biotyped using the modified Preston biotype scheme. The Preston biotyping results have been compared with the results of Penner serotyping. Out of fifty-eight strains studied, the technique identified ten strains (17%) as *C. coli*, three (5%) as *C. lari* and forty-five (78%) as *C. jejuni*, by the coding system. This technique identified twenty-eight *Campylobacter* species. This method highlights the usefulness of this technique in the biotyping of local strains, however, when the two schemes are used in combination they give excellent typing results suitable for epidemiological purposes.

**Keywords:** Biotyping, *Campylobacter*, Preston biotype.

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**Record Number:** 80  
**Author(s):** Afolabi, B. M. Sodehide, O. Audu, R. A.  
**Title:** Malaria in Early Infancy on the Atlantic Coast of Lagos, Nigeria.  
**Journal Title:** The Nig. J. Med. Res.  
**Date of Publication:** 97  
**Volume ID:** 1  
**Issue ID:** 2  
**Page(s):** 32-36  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A survey of malaria among 73 infants under 6 months old living on the Atlantic coast of Nigeria was conducted from January to March 1994. The infants' mean age was 2.2 months, mean weight was 5.2kg mean height was 59.00 cm. None of the infants had been vaccinated against childhood immunizable disease. Six (8%) infants were parasite-positive while 67 were parasite negative. Mean packed cell volume, mean parasite density and mean temperature of parasite-positive infants were 33.2%, 781.5 and 36.7<sup>0</sup> C respectively. Of the six parasitaemic children, 1 was younger than 1 month, 1 younger than 2 months, 1 younger than 3 and 3 younger than 4 months. All were males. Two each of the infants had concurrent diarrhoea and skin sepsis and 1 was suffering from vomiting. Although none of the parasite positive children had temperature up to or greater than 37.5<sup>0</sup> C at the time of investigation, one health care provider's response showed that 1 infant had fever. Two other infants had had fever since the previous 2 weeks. There was no evidence of malnutrition among the infants. The result of this study suggests that infants who present at clinics or hospitals with non-malaria symptoms should be screen for and it positive, treated for malaria. Information of the disease burden in this age group is essential for health planners in order to identify priority health programme for reduction of high infant fatality, the prevention of malaria morbidity and

**Keywords:** Malaria, Infancy, Atlantic coast, Nigeria.

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**Record Number:** 81  
**Author(s):** Idigbe, E. O. Onubogu, C. Okoye, R.  
**Title:** R-8. A Review of Current Control Measures and the Trend of Pulmonary Tuberculosis in Nigeria.  
**Journal Title:** Proceedings of Nigeria/Japan Joint-Conference, Jos.  
**Date of Publication:** 98  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** In a recent study, the pulmonary tuberculosis problem in Nigeria between 1975 and 1985 was reassessed. The focus of interest was mainly on the impact of control measures on the trend of the disease. Results indicated that within the study period, the national incidence of the disease did not show any significant change. Furthermore, the national case-detection rate and BCG immunization coverage were estimated at only 3% and 20% respectively, of the population at risk. Intensified efforts towards case-detection and broader immunization coverage are clearly indicated for any meaningful improvement in the disease situation. Possible ways of achieving these are discussed.  
**Keywords:** Pulmonary, Tuberculosis, Nigeria.

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**Record Number:** 82  
**Author(s):** Odunukwe, N. N. Okany. C. C.  
**Title:** Adverse Effect of Splenectomy In A 56-Year-Old Nigerian Woman With Cold Agglutinin Disease (A Case Report)  
**Journal Title:** Med  
**Date of Publication:** 98  
**Volume ID:** 8  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The case of a 56 year old multiparous Nigerian female with cold agglutinin disease, who was initially treated with steroids and later splenectomy, is hereby reported. The patient presented with jaundice, mild hepatosplenomegaly and anaemia that was triggered off by exposure to cold. Investigations revealed cold agglutinin titre of 1:1024, cytomegalovirus (CMV) titre of 1:2048, ESR of 110mm/hr and positive direct coomb's test. The diagnosis was made based on the clinical findings and laboratory data. The merits and demerits of the splenectomy on this patient are discussed. We are of the opinion that splenectomy is unnecessary for patients such as this.  
**Keywords:** Splenectomy, Cold Agglutinin Disease.

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**Record Number:** 83  
**Author(s):** Sulyman, M. A. Mafe, M. A. Ajayi, M. B. Fagbenro-Beyioku, A. F.  
**Title:** Schistosomiasis and Abo Blood group types in Abeokuta North Local Government Area, Ogun State, Nigeria  
**Journal Title:** Applied Natural Sciences Research  
**Date of Publication:** 98  
**Volume ID:** 1  
**Issue ID:** 1

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**Page(s):** 11-13

**Address/Availability:**

**Location/URL:**

**Abstract:** A survey of 241 primary school pupils was carried out in Abeokuta North Local Government Area of Ogun State, Nigeria to determine possible correlations between blood groups and susceptibility to schistosomiasis infection. Blood was collected through venipuncture for blood type grouping while *Schistosoma haematobium* infection was determined by the presence of eggs in urine using syringe filtration method. No statistically significant relationship was found to occur between ABO blood group types and schistosomiasis. Frequencies of the blood groups were 20%, 18%, 6% and 56% for groups A, B, AB and O respectively. The intensity of schistosomiasis infection showed no significant association with the frequencies of blood groups at  $P < 0.05$ . There were also no significant differences in the blood group frequencies and rates of infection with respect to sex ( $P < 0.05$ ) of the sample population.

**Keywords:** Schistosomiasis, Abo, Blood group, Abeokuta, Ogun State, Nigeria.

**Record Number:** 84

**Author(s):** Agomo, P. U. Kalu, N. Fagbenro-Beyioku, A. F.

**Title:** Influence of Protein Content on the Inhibitory Effect of Poly-Unsaturated Fatty Acid-Rich diets on *Plasmodium Yoelli Nigeriensis* Infection in Mice.

**Journal Title:** The Nigerian Journal of Medical Research

**Date of Publication:** 98

**Volume ID:** 2

**Issue ID:** 3&4

**Page(s):** 47-50

**Address/Availability:**

**Location/URL:**

**Abstract:** Influence of protein content on the inhibitory effect of poly-unsaturated fatty acid-rich diets on *Plasmodium Yoelii Nigeriensis* infection in mice. The Nigerian Journal of Medical Research, 1998; 2(3 & 4): 47-50. The objective of this work was to study the effect of poly-unsaturated fatty acid (PUFA)-rich diets on *Plasmodium yoelii nigeriensis* and to determine the interaction of protein-rich diets with this phenomenon. Cod liver oil was the source of poly-unsaturated fatty acids (PUFA) whilst casein served as the protein source. Swiss albino mice aged between 7-8 weeks and weighing between 18-20g were maintained in six cages (A-F) and fed varying diet compositions, were inoculated with the parasite ( $10^4$ /mouse). Parasitaemia was monitored daily with Giemsa-stained blood films and haematological parameters were measured using standards. Results showed that there was a progressive increase in parasitaemia in mice in cages E and A until all the animals in these two cages died on days 9 and 7 respectively, with mean peak parasitaemia of 55.8 ± 2.90% and 51.3 ± 0.37% respectively. On the other hand 15% of mice in cage C survived with mean peak parasitaemia of 32.1 ± 1.5% whereas 30% survived in cage B where the mean peak parasitaemia on day 6 was 30.6 ± 2.0%. There was however, decreased peak parasitaemia (28.4 ± 1.10%) and higher rate of survival (50%) in cage D mice but this was more so in cage F mice (mean peak parasitaemia 6.7 ± 1.2%). Where 70% of the mice survived. We conclude from our observations that although fish oil diets inhibit the multiplication of malaria parasites in mice, this effect is suppressed by normal to high protein diets.

**Keywords:** Malaria, Nutrition, *Plasmodium yoelii nigeriensis*.

**Record Number:** 85

**Author(s):** Agomo, P. U. Akindele, S. K. Asianya, V. N. Okonkwo, C.A.

**Title:** The Main Benefits of Histidine-Rich Protein-II Antigen capture Assay (ParaSigh® F) In the Detection of *Plasmodium Falciparum* In various Health centres in Nigeria

**Journal Title:** Nig. Qt. J. Hosp. Med. Vol.

**Date of Publication:** 98  
**Volume ID:** 8  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

The objective of the present study was to investigate the conditions under which Histidine-rich Protein-II antigen Capture Assay (ParaSight® F) would be of utmost value when used in the diagnosis of Plasmodium falciparum in Primary Health Care Centres (PHCs) especially in rural areas. Finger-prick blood was collected from patients reporting at some PHCs and Clinics in South-Eastern and South-Western Nigeria. ParaSight® F) was assayed according to the manufacturer's instructions and compared with the microscopic technique which was used as the Gold Standard. Results showed that when data from the 501 examined patients were pooled and Plasmodium malaria cases included, the sensitivity, specificity, Positive Predictive Value ((PPV) and Negative Productive Value (NPV) were 79.7%, 96.1% and 898.9% respectively. With the exclusion of P. malariae cases, they were 90.8%, 951%, 89.6% and 95.7 respectively. However, when data were stratified according to the PHC or clinics, the value of ParaSight® F was excellent in some but not so good in other centers. It is advocated that PHCs preparing to use ParaSight® F for the diagnosis of malaria should first conduct pereliminary investigations on the state of P. malariae. P. ovalo, false positive and false negative rates in their areas.

**Keywords:** **Malaria, ParaSight® F, Health-Centres.Nigeria.**

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**Record Number:** 86  
**Author(s):** Adegbola, R.A. **Alabi, S.A.** Akinkuade, F. O. Coker ,A.O. **Odugbemi, T. Idigbe, E. O.Enwonwu C. O. Falkler ,W. A. Onwujekwe D. Ibrahim, M. M. Meixner, J. Ai-Hassan, H. Savage, K. O. Akinosho, R. O. Onyewuche, J.**  
**Title:** **Microbiology of Noma (Cancrum Oris) in Malnourished Children of Sokoto in North-Western Nigeria.**  
**Journal Title:** Nig. J. Med. Res.  
**Date of Publication:** 98  
**Volume ID:** 2  
**Issue ID:** 3-4  
**Page(s):** 35-42  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

This paper summarized some of the data obtained in various phases of a study carried out in Northwestern Nigeria between September, 1996 and April, 1998. The focus of the study was to examine the sequence of interaction of microorganisms and nutritional, immunological and environmental factors in the evolution of Noma from oral lesions in malnourished children A total of 1534 children aged 2-12 years were screened for malnutrition ANG and Noma. However, the final study population comprised of 47 malnourished children without ANG or Noma, 40 malnourished children with ANG, 36 malnourished children with Noma and 50 healthy children as controls. Sterile endodontic paper point samples were taken from several areas of typical lesions in the children with Nom and ANG as well as from corresponding oral sites in the malnourished children without Noma or ANG and healthy controls. The paper points were screened for viruses and bacteria using conventional methods. The height and weight of each child was taken and a questionnaire completed to obtain their full biodata and other information on their demographic background. Human cytomegaloviruse and the herpes viruses were isolated at a higher frequency from the children with ANG and Noma than from the children without oral lesions. Strains of Staphylococcus and Pseudomonas, which are potential secondary bacterial invaders were also recovered at a remarkably higher frequency in the groups of children with ANG or Noma than in the healthy or malnourished children without oral lesions. A significant observation was the isolation of strains of Prevoellela

intermedia and *Fusobacterium necrophorum*, which are strict anaerobes from the children with Noma. Because of its highly invasive and tissue destructive properties, it is proposed that it may be the trigger organism in the final development of Noma from oral lesions in malnourished children.

**Keywords:** Noma, ANG, Microbiology, Pathogenesis, Nigeria.

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**Record Number:** 87  
**Author(s):** Sulyman, M. A. Adewale, B. Mafe  
**Title:** Socio-Cultural Effects of Guinea-Worm Infection on Women in Ondo State of Nigeria.  
**Journal Title:** Social Sciences Research Communications  
**Date of Publication:** 98  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 31-35  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The study was carried out in Square in the Akoko South Local Government Area of Ondo State, Nigeria. 500 women between the ages of 18 and 35 selected by simple random sampling were interviewed with the aid of pre-tested structured questionnaire to investigate the socio-cultural effects of guineaworm infection. Majority (74% or 370) of the women were prevented from carrying out their domestic as well as socio-cultural/religious activities owing to incapacitation. Despite the hindrance caused by the disease 31% (155) of the respondents did not seek treatment at all while 40% (200) claimed they did not know the cause of guinea-worm infection, and 30% (150) did not know how the infection can be prevented. It was discovered that guinea-worm infection is not a social stigma in the community.

**Keywords:** Guinea-worm, Infection, Women, Ondo, Nigeria.

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**Record Number:** 88  
**Author(s):** Oyefolu, A. O. Omilabu, S. A Amure, O. F. Adeniyi, A. S Audu R. A. et al.  
**Title:** Potency Status of Trivalent Oral Polio Vaccines (topv) Administered in Lagos, Nigeria.  
**Journal Title:** Nig. Quart. J. Hosp.Med.  
**Date of Publication:** 98  
**Volume ID:** 8  
**Issue ID:** 1  
**Page(s):** 14-17  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Nigeria is known to top the list of African Countries with reported cases of poliomyelitis till date, despite the speculations according to official figures that the disease was grossly under reported. Several factors could cause this increase in the recent years in Nigeria which actually call for concern by all and sundry. With the World Health Organisation (WHO) global target year-2000 for poliomyelitis eradication at the corner, there is need for laboratory check-up services for vaccines administered to our children in Nigeria. Our study was designed to evaluate the potency status of poliovirus vaccines administered in one of the government recognised vaccination centre in Lagos, Nigeria. Potency tests were performed using the microneutralisation techniques, using Hep-2 cells in 48-well tissue culture plates, and the (CID<sub>50</sub> virus titre per human dose determined, using the Reed and Muench methods. Result showed seven (87.5%) and six (75%) of the eight vaccine tested met the WHO standard virus titre for both serotypes 1 and 2 respectively while none (0%) of the vaccines met the required titre for serotype 3. The implication of this finding and possible recommendations towards achieving a polio-free country are herein discussed.

**Keywords:** Potency, Trivalent Oral Polio Vaccines (topv), Nigeria.

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**Record Number:** 89  
**Author(s):** Bakare, S. Smith, S. I. Olukoya, D. K. Akpan, E.  
**Title:** Comparison of Survival of Diarrhoeagenic Agents in Two local Weaning Foods (Ogi and Koko).  
**Journal Title:** J Trop Pediatr.  
**Date of Publication:** 98  
**Volume ID:** 44  
**Issue ID:** 332-4  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The pH values of both cooked and uncooked ogi and koko samples were determined and the survival rate of four diarrhoeagenic agents, enteroinvasive Escherichia coli, Salmonella typhi, Shigella flexneri, and Vibrio cholerae were studied after they were seeded into cooked ogi and koko. Analysis of the pH of the cooked inoculated samples showed that there was a slight increase in pH (decrease in acidity) during storage for 48 h and 37 degrees C (from 3.5 to 3.7 for ogi and from 3.7 to 4.1 for koko). The study also showed that ogi had a slightly lower pH value than koko both before and after cooking. In both cases, the cooked samples had a slightly lower pH value than the uncooked samples. The pH value of ogi ranged from 3.0 to 3.6 and that of koko from 3.5 to 3.9. The survival experiment showed that the inoculated enteric pathogens were inhibited in cooked ogi and koko during storage for 24-48 h. The antibacterial effect of cooked koko was more pronounced, on the four enteric pathogens studied, than that of cooked ogi. Except for Shigella flexneri and E. coli in ogi, non of the other bacteria studied was recovered after 24 h.  
**Keywords:** Diarrhoeagenic, Weaning, Foods, Ogi, Koko.

**Record Number:** 90  
**Author(s):** Ilori, M. O. Idigbe, M. O Smith, S. I. Ojelabi, A. A. Giwa-Amu, J. O.Okoye, R. A.  
**Title:** Epidemiological Studies on Pulmonary Tuberculosis in Lagos, Nigeria.  
**Journal Title:** Biomedical Letters  
**Date of Publication:** 98  
**Volume ID:** 58  
**Issue ID:**  
**Page(s):** 51-60  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A clinical study designed to investigate the incidence of pulmonary tuberculosis from some chest clinics, prisons private land government hospitals in the Lagos metropolis was carried out The survey involved direct microscopic and culture examination of sputum and sera samples obtained from 668 patients. Of these samples, 142 (21%) were positive for acid fast bacilli as determined by both microscopy and culture. Microscopy alone detected 128(19%) positive cases, while 102(15%) were detected by culture. Of the 142 positive cases detected 89% was by microscopy, while culture accounted for 725. A 7% contamination rate was recorded. Males were more affected than females. The age specific incidence rate from both sexes showed that the highest rate was recorded in the age group 20-29 years. For the males, the peak positively was in the 20-29 year group, while in the females, it was in the 30-39 year group. A possible inter-relationship between HIV infection and tuberculosis was suspected.  
**Keywords:** Epiemiology, Tuberculosis, Lagos, Nigeria.

**Record Number:** 91  
**Author(s):** Omilabu, S. A. Oyefolu, A. O. Audu, R. A et al.  
**Title:** Potency Studies of Live-attenuated Viral Vaccines Administered in Lagos Metropolis, Nigeria  
**Journal Title:** J. Nig. Infect. Control Assoc.

**Date of Publication:** 98  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 27-33  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

We critically carried out a potency study in 1992 and 1997 on measles and poliovirus vaccines administered at five different vaccination centres in the metropolitan Lagos, Nigeria. Using WHO guidelines on titration of live-viral vaccines, our results revealed that only 6 (16.7%) of 36 measles vaccine (MV) vials and 11 (24.4%) of the 45 trivalent oral poliovirus vaccine (TOPV) vials titrated met the WHO recommended human dose. We observed that 14 (38.9%) of the total 36 vials of measles vaccine and 24 (53.3%) of the total 45 polio vaccine vials titrated from the different vaccination centres for both 1992 and 1997 were found to be expired or about 2-3 weeks to their expiry dates. Moreover, while noting the potency of reference vaccine obtained from the national cold store to be adequate, it may not be improper to observe that the vaccines were also about 4 weeks to their expiry dates. It then suffice to say by our findings that, the inadequacies observed in our vaccines cold chains, poor vaccine handling, lack of laboratory back-up services and the administration of these sub-potent and/or, impotent expired vaccines, will be a big clog in the wheel of Nigeria towards meeting the WHO deadline of disease eradication programmes particularly, the vaccine preventable ones like measles and polio, by the year 2000. We suggested however, that education of health officers and/or, vaccinators on vaccine handling, subjection of imported vaccines to a thorough laboratory tests, discontinued distribution and non administration of laboratory-certified expired vaccine to children are some but important remedies to the scourge of vaccine failure in Nigeria.

**Keywords:** **Potency, Viral Vaccines, Lagos metropolis, Nigeria.**

**Record Number:** 92  
**Author(s):** Alabi, S. A. Audu, R. A. et al.  
**Title:** Viral, bacterial and parasitic agents associated with infantile diarrhoea in lagos, Nigeria.  
**Journal Title:** The Nig. J. Med. Res.  
**Date of Publication:** 98  
**Volume ID:** 2  
**Issue ID:** 1&2  
**Page(s):** 29-32  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

In a pilot study carried out to identify the role of viral, bacterial and parasitic agents responsible for most diarrhoea episodes in children in Lagos State and to identify any antimicrobial resistance pattern among the bacterial isolates, 72 stool samples were collected from children under five years of age with diarrhoea and 37 stool samples from children without diarrhoea. The samples were screened for viral, bacterial and parasitic agents using ELISA technique, culture and formol either floatation methods respectively. A total of 46 (63.8%) of the diarrhea stools contained recognized enteropathogens compared with only 7 (18.9%) of the control. From the diarrhoeal group, 48.6% had bacterial, 30.6% had viral, 8.3% had enteric parasites and 6.9% had dual aetiology. However, rotavirus was the most commonly isolated pathogen responsible for 37.5% of diarrhoea as against 10.8% in the control group. Other agents were Salmonella spp (16.6%), Escherichia coli (13.8%) Shigella spp (12.5%), Enterobacter spp (6.9%), Lebsiella (5.6%), Giardia lamblia (4.2%), Entamoeba histolytica (2.8%) and trichuris trichuria (1.4%). Most of the bacterial isolates were resistant to tetracycline, ampicillin, cotrimozole and chloramphenicol but were sensitive to gentamicin and the quinolones ofloxacin and ciproxin. Our study therefore shows that rotavirus is the most prevalent agent of infantile diarrhoea and the sensitivity results show that gentamicin is the most suitable drug in treating infantile diarrhoea of bacterial origin in this environment.

**Keywords:** Viral, bacterial, Parasitic, infantile diarrhoea, Nigeria.

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**Record Number:** 93  
**Author(s):** Brai, B. I. C. Smith, H.A. Idika, N. Adedoyin, J. A.  
**Title:** Antipneumococcal Activity of Lawsonia Inermis Leaf Extract  
**Journal Title:** The Nigeria Journal of Medical Research.  
**Date of Publication:** 98  
**Volume ID:** 2  
**Issue ID:** 3&4  
**Page(s):** 72-74  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Ethanolic leaf extract of Lawsonia inermis, prepared by overnight percolation of the dried leaves with ethanol at room temperature, was tested in vitro and in vivo (using white mice) for antipneumococcal activity against Streptococcus pneumoniae. The in vitro test with disc-soaked extract produced a zone of inhibition of about 12mm against S. pneumoniae, while the in vivo testing in white mice revealed that the L. inermis ethanolic crude leaf extract was able to cure 33.3% of the mice infected with S. pneumoniae. This preliminary results reveal that the L. inermis leaf extract possess some antipneumococcal properties which could be exploited for treatment of pneumococcus infections. These properties should be further exploited considering the fact that S. pneumoniae have been found in some cases or show resistance to a wide range of commonly used antibiotics in respiratory infections.

**Keywords:** Antipneumococcal, Lawsonia inermis, ethanolic, Extract.

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**Record Number:** 94  
**Author(s):** Falkler Jr. W.A. Enwonwu, C.O. Idigbe, E. O.  
**Title:** Microbiological Understandings and Mysteries of Noma (Cancrum oris)  
**Journal Title:** Oral Disease  
**Date of Publication:** 98  
**Volume ID:** 5  
**Issue ID:**  
**Page(s):** 150-155  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The microbiologic history of noma was reviewed. Studies have associated the disease process with large numbers of fusiform bacilli and spirocheata organisms. In order to study the microbiology of the staging and infection periods of noma 62 Nigerian children, aged 3-14 years, 22 children and acute necrotizing ulcerative gingivitis (ANUG) and were also malnourished, 20 exhibited no acute necrotizing ulcerative gingivitis but were malnourished and 20 were free of acute necrotizing ulcerative gingivitis and in good nutritional state) were evaluated for the presence of viruses and oral microorganisms. The ANUG cases in the malnourished children had a higher incidence of Herpesviridae, .....in virus being detected was cytomegalovirus. There were more anaerobic microorganisms recovered, with Prevotella intermedia as the predominant isolate, in the malnourished children as compared to the healthy children. A study of the predominant microflora in active sites of noma lesions was carried out in eight noma patients, 3-15 years of age, in Sokoto state, northwestern Nigeria. Fusobacterium necrophorum was recovered from 87.5% of the noma lesions. Oral microorganisms isolated included Prevotella intermedia, alpha-hemolytic streptococci and Actinomyces spp. Which were isolated from 75.0, 50.0 and 37.5% of the patients, respectively. Peptostreptococcus micros, Veitouella pervula, Staphylococcus aureus and Pseudomonas spp. were each recovered from one lesion. All strains were observed to be sensitive to all of the antibiotic tested with the exception of our strain of P. intermedia which showed resistance to penicillin. The pathogenic mechanisms of P. necrophorum as a trigger

organism we discussed. The isolation from human noma lesions of *F. necrophorum*, a pathogen primarily associated with animal diseases may have important etiologic and animal transmission implications.

**Keywords:** **Noma, Cancrum Oris, Oro-facial gangrene, fusobacterium necrophorum, Prevotella intermedia, Anaerobic microorganisms; malnutrition.**

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**Record Number:** 95  
**Author(s):** Smith, S. I. Olukoya, D. K. Fox, A. J. Coker, A. O.  
**Title:** Ribosomal RNA gene restriction fragment diversity amongst Penner serotypes of *Campylobacter jejuni* and *Campylobacter coli*.  
**Journal Title:** Z Naturforsch C.  
**Date of Publication:** 98  
**Volume ID:** 53  
**Issue ID:** 1-2  
**Page(s):** 65-8  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Diversity based on ribosomal RNA gene-restriction endonuclease digest patterns was detected amongst forty-seven strains of *Campylobacter* made up of 38 strains of *Campylobacter jejuni* and 9 strains of *Campylobacter coli*. Restriction digests of chromosomal DNA prepared by treating with Hae III were probed with an oligonucleotide specific for *Campylobacter* 16S ribosomal RNA genes. Seventeen distinct hybridization patterns, each indicating the presence of 2-4 copies of the 16S rRNA gene are encoded in *Campylobacter* DNA. Differences in fragment patterns were observed not only between members of two species, but also between individual strains of the same species. Ribopattern fragments of 8.71, 7.56, 2.81 and 1.0 kb were characteristic of the majority of *C. jejuni*, whereas 7.59 and 4.68 kb fragments were commonly present in *C. coli*. In conclusion, Hae III ribotyping was even more discriminatory than the Penner serotyping of *C. jejuni* and *C. coli*, as strains of the same serotype were distinguished.

**Keywords:** **Ribosomal, RNA gene, Penner serotypes, Campylobacter jejuni, Campylobacter coli.**

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**Record Number:** 96  
**Author(s):** Awolola, T. S. Adedoyin, J. A. Ogunrinade, A. F.  
**Title:** Studies on the epidemiology of Human Onchocerciasis in South Western Nigeria I: Prevalence of Infection.  
**Journal Title:** The Nigerian Journal of Medical Research.  
**Date of Publication:** 98  
**Volume ID:** 2  
**Issue ID:** 2  
**Page(s):** 15-17  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Studies on the epidemiology of human onchocerciasis in south western Nigeria I: prevalence of infection. The Nigerian Journal of Medical Research 1998: 2(1&2): 1-3. A survey of human onchocerciasis based on clinical signs was carried out between February and May, 1993 in a group of villages near the Asefire dam in Oyo State. A total of 1612 people six villages were examined using rapid assessment methods. 39.70% of the population had onchodermatitis. Palpable *Onchocerca* nodules occurred in 21.34% while 11.91% were leopard skin positive. The prevalence of leopard skin and skin nodules were higher in males than in females and in people above 20 years old than in those below 20 years ( $p < 0.05$ ). There was no significant difference in the prevalence of skin nodules and onchodermatitis with respect to distances from the fly breeding sites. The overall prevalence of 11.91% and 21.34% for leopard skin and onchocercal nodules qualifies the area for large scale treatment with

**Keywords:** ivermectin.  
**Onchocerciasis, prevalence, infection, western, Nigeria.**

**Record Number:** 97  
**Author(s):** Idigbe, E. O. Enwonwu, C. O. Falkler W. A. Ibrahim, M. M. Onwujekwe, D. Afolabi, B. M. Savage, K. O. Meeks, V. I.  
**Title:** Living Conditions of Children at Risk for Noma: Nigeria Experience  
**Journal Title:** Oral Diseases  
**Date of Publication:** 99  
**Volume ID:** 5  
**Issue ID:**  
**Page(s):** 156-162  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

The study reported in this paper was carried out in the Northwestern and southwestern regions of Nigeria, between October, 1996 and April 1998. The study examined the possible contributory role of living conditions in the development of acute necrotizing gingivitis (ANG) or noma from oral lesions, Questionnaire data obtained from 42 fresh noma cases seen in the Northwest and four fresh cases seen in the Southwest were examined. In the addition 46 cases of advanced ANG from the Southwest were included. The main focus was to compare some of the environment living conditions of cases with advanced ANG and those with noma in these regions. All the noma and ANG cases were seen in children aged 2-12 years. The level of good oral hygiene practices and general environmental living conditions were significantly higher in the Southwest than in the Northwest. Data also showed that living in close proximity with livestock was significantly higher in the Northwest than in the Southwest (p,0.05). The environmental living conditions of children in the Northwest were further compounded by poor sanitary faecal disposal practices as well as minimal access to potable water. The overall data indicated that living in substandard accommodations, exposure to debilitating childhood diseases, living in close proximity to livestock, poor oral hygiene, limited access to potable water and poor sanitary disposal of human and animal faecal waste could have put the children in the Northwest at higher risk for noma than the children in the Southwest. These could have been responsible for the higher prevalence of noma in the Northwest than in the Southwest.

**Keywords:** Noma, ANUG, Environmental factors, Nigeria.

**Record Number:** 98  
**Author(s):** Okonkwo, C. A. Coker, H. A. B. Agomo, P. U. Agomo, C. O. Anyanwu, R. Asianya, V. N. Akindele, S. K.  
**Title:** Effect of Chlorpheniramine on Protein Plasma Binding of Chloroquine in Malaria  
**Journal Title:** Transactions of the Royal Society of Tropical Medicine and Hygiene  
**Date of Publication:** 99  
**Volume ID:** 93  
**Issue ID:**  
**Page(s):** 1-6  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

This study was carried out to examine the effect of chlorpheniramine (CP) on the plasma protein binding of chloroquine (CQ) in Nigeria children with acute uncomplicated falciparum malaria. A standard treatment with 25 mg CQ base per kilogram body weight was orally administered over 3 days, alone or in combination with CP to 17 semi-immune Nigerian children with acute uncomplicated malaria, attending the Massey Street Children's Hospital, Lagos, Nigeria. The patients were observed for 28 days post-treatment and plasma CQ concentrations monitored 7 times during the follow-up by high performance liquid

chromatography analysis. Parasitemia was determined on thick blood films stained with Giemsa, and treatment failures were established following the WHO classification of CQ resistance. Scatchard analysis of the binding data demonstrated a 3-fold decrease in the affinity of CQ for plasma proteins ( $K=1.109 \times 10^3$ ) in the presence of CP ( $K=3.559 \times 10^4$ ). Our results suggest that CP enhanced the efficacy of CQ in vivo against resistant *Plasmodium falciparum* in acute uncomplicated malaria by decreasing the affinity of CQ for binding proteins and increasing the free concentration of CQ in resistant parasites. We conclude that changes in plasma protein binding of CQ when administered concomitantly with high doses of CP, as used in the treatment of resistant *falciparum* malaria, are of clinical significance in CQ-therapy of resistant *falciparum* malaria.

**Keywords:** **Chlorpheniramine, Protein, Plasma, Chloroquine, Malaria.**

**Record Number:** 99  
**Author(s):** Okonkwo, C. A. Coker, H. A. B. Agomo, P. U. Mafe, A. G. Afolabi, B. M. Adewole, T. A.  
**Title:** Plasma Protein Binding and Efficacy of Chloroquine in the Presence of Chlorpheniramine in Malaria Infected Nigerian Children  
**Journal Title:** J. of Med. & Medical Sci.  
**Date of Publication:** 99  
**Volume ID:** 1  
**Issue ID:** 2  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

A 3 day standard treatment with 25 mg chloroquine (CQ) base per kilogram Body weight alone or in combichlorpheniramine (CP) was orally administered To 17 semi-immune Nigerian children with acute uncomplicated malaria, attending the Massey Street Children's Hospital, Lagos, Nigeria. Parasitaemia was determined on thick blood films stained with Giemsa and treatment failures were established following the World Health Organization (WHO) classification for CQ resistance. Plasma CQ concentrations were monitored at pre-determined intervals up to 28 days post-treatment. All plasma samples and ultrafiltrate were analyzed by high performance liquid chromatography. Our protein binding data showed that significantly more CQ was protein-bound in malaria infected plasma ( $<0.05$ ) than to uninfected plasma, and that this binding correlates positively with the degree of parasitemia. Scatchard analysis of data demonstrated decreased affinity of CQ for plasma proteins ( $K=1.109 \times 10^3$ ) in the presence of CP ( $K=3.559 \times 10^4$ ). Treatment with CQ-CP combination also has a shorter parasite clearance time ( $2.0 \pm 0.5$  days) and a higher cure rate (87.5%) compared to treatment with CQ alone ( $3.5 \pm 0.5$  days; 66.7%). Our results suggest that chlorpheniramine enhanced the efficacy of chloroquine against resistant *Plasmodium falciparum* in acute uncomplicated malaria by decreasing the affinity of chloroquine for binding proteins.

**Keywords:** **Drug resistance, Chlorpheniramine, Plasma protein, Nigeria.**

**Record Number:** 100  
**Author(s):** Omilabu, S. A. Oyefolu, A. O. Ojo, O. O. Audu, R. A.  
**Title:** Potency Status and Efficacy of Measles Vaccine Administered in Nigeria: A Case Study of Three Epi Centres in Lagos, Nigeria.  
**Journal Title:** Afr. J. Med. Med. Sci.  
**Date of Publication:** 99  
**Volume ID:** 28  
**Issue ID:** 3-4  
**Page(s):** 209-212  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The potency status and efficacy of measles vaccines were studied in three immunization (EPI) centres in the suburban area of Lagos, Nigeria. A total of 14 vials of measles vaccine were collected and subjected to potency testing while, 203 measles-vaccinated children were recruited for this study. Only 85 (41.87%) of the vaccinees reported back for the post-vaccination follow-up screening. The seroconversion pattern showed that 51 (60%) had potent antibody titres ranging from 1:40 to 1:1280, while the remaining 34 (40%) had a low antibody titres between <1:20 and 1:20. The vaccine potency test showed that only 1 (7.14%) of the 14 vaccine vials collected at these centres had virus titre of 3.5 Log while the remaining 13 (92.86%) had virus titres lower than 3.0 Log; the recommended human dose by the World Health Organisation (WHO) for measles vaccine. The administration of these subpotent and/or impotent vaccinees vis-à-vis this status of immune response elicited in the vaccinees may be one of the reasons for the occurrence of measles infection in vaccinated children in the recent time in Nigeria. We herein suggested the subjection of all vaccines to a thorough standard laboratory screening before use in Nigeria.

**Keywords:** **Potency, Efficacy, Measles, Vaccination, Nigeria.**

**Record Number:** 101

**Author(s):** Onipede, A. O. **Idigbe, O.** Ako-Nai, A. K. Omojola, O. Oyelese, A. O. Aboderin, A. O. **Akinosho,** Komolafe, A. O. Wemambu, S. N.

**Title:** **Sero-prevalence of HIV Antibodies in Tuberculosis Patients in Ile-Ife, Nigeria.**

**Journal Title:** East Afr Med J.

**Date of Publication:** 99

**Volume ID:** 76

**Issue ID:** 3

**Page(s):** 127-32

**Address/Availability:**

**Location/URL:**

**Abstract:** **BACKGROUND:** The acquired immunodeficiency syndrome (AIDS) is of major public health concern worldwide more so in sub-Saharan Africa where there is an upsurge in the incidence of the disease. Reports from developed countries have shown that a close link exists between the human immunodeficiency virus (HIV) and pulmonary tuberculosis. No such study has ever been carried out in Ile-Ife, Nigeria. **OBJECTIVE:** The study was designed to determine the prevalence of HIV infection among randomly selected tuberculosis patients seen in a Nigerian chest clinic using third generation ELISA kits that detect HIV-1 and HIV-2 strains. **RESULTS:** Of the 79 subjects with confirmed active tuberculosis, 12.7% tested positive for HIV antibodies compared with 2.0% of subjects without tuberculosis designated as the control group--a value that is statistically significant ( $p < 0.05$ ). Farmers, artisans and students contributed a large proportion of the seropositive sera. Although the seroprevalence rate of 12.7% is low compared with the rates from eastern and southern African countries, this value was threefold higher than 5.2% value reported in metropolitan Lagos--suggesting concern about the spread of HIV in a semi-urban centre such as Ile-Ife. **CONCLUSION:** This study suggests that a close link exists between active tuberculosis and HIV infection in Ile-Ife, Nigeria which underscores the urgent need to monitor tuberculosis patients as the increase in the rate of new cases may indicate the spread of HIV infection. The study also recommends that an aggressive public awareness programme be undertaken to enlighten communities about the risk of TB/HIV infection.

**Keywords:** **Sero-prevalence, HIV, antibodies, tuberculosis, patients, Nigeria.**

**Record Number:** 102

**Author(s):** **Idigbe, E. O. Enwonwu, C. U. Falkler W. A. Onwujekwe, D. Ibrahim, M. M. Meisner, J. Al-Hassan, I. I. Savage, K. O. Akinosho, R. O. Onyewuche, J.**

**Title:** **Microbiology of Noma (Cancrum Oris) in Malnourished Children of Sokoto State in North-Western Nigeria.**

**Journal Title:** The Nigerian Journal of Medical Research,  
**Date of Publication:** 99  
**Volume ID:** 2  
**Issue ID:** 3-4  
**Page(s):** 35-42  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Microbiology or Noma (Cancrum Oris) In Malnourished Children In North-Western Nigeria. The Nigerian Journal of Medical Research, 1998; 2(3-4): 35-42. This paper examines some of the data obtained in the various phases of a study carried out in Sokoto State, North Western Nigeria, between September, 1996 and April, 1998. The focus of the study was to determine the sequence of interaction of microorganisms and nutritional, immunological and environmental factors in the evolution of Noma from oral lesions in malnourished children. A total of 1534 children aged 2-12 years were screened for malnutrition. Acute Necrotizing Gingivitis (ANG) and Noma. However, the final study population comprised 47 malnourished children without ANG or Noma, 40 malnourished children with ANG, 36 malnourished children with Noma and 50 healthy children as controls. Sterile endodontic paper point samples were taken from several areas of typical lesions in the children with Noma and ANG as well as from corresponding oral sites in the malnourished children without Noma or ANG and healthy controls. The paper points were screened for viruses and bacteria using conventional methods. The height and weight of each child was taken and a questionnaire completed to obtain their full biodata and other information on their demographic background. Human cytomegalovirus and the herpes viruses were isolated at a higher frequency from the children with ANG and Noma than from the children without oral lesions. Strains of Staphylococcus and Pseudomonas, which were potential secondary bacterial invaders were also recovered at a remarkably higher frequency in the groups of children with ANG or Noma than in the healthy or malnourished children without oral lesions. The significant observation was the isolation of strains of Prevotella intermedia and Fusobacterium necrophorum, which were strict anaerobes from the children with Noma. Because of its highly invasive and tissue destructive properties, it is proposed that it may be the trigger organism in the final development of Noma from oral lesions in malnourished children.

**Keywords:** Noma, Poverty Malnutrition Children, ANG, Microbiology, and Pathogenesis, Nigeria.

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**Record Number:** 103  
**Author(s):** Falkler Jr, W. A. Enwonwu, C. O. Idigbe, E. O.  
**Title:** Isolation of Fusobacterium Necrophorum from Cancrum Oris (noma).  
**Journal Title:** Am J Trop Med Hyg.  
**Date of Publication:** 99  
**Volume ID:** 60  
**Issue ID:** 1  
**Page(s):** 150-6  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A study of the predominant microflora in active sites of noma (cancrum oris) lesions was carried out in eight noma patients 3-15 years of age in Sokoto State in northwestern Nigeria. Paper point sampling and conventional anaerobic microbiologic techniques were used. Fusobacterium necrophorum was recovered from 87.5% of the noma lesions. Oral microorganisms included Prevotella intermedia, alpha-hemolytic streptococci, and Actinomyces spp. which were isolated from 75.0%, 50.0%, and 37.5% of the patients, respectively. Peptostreptococcus micros, Veillonella parvula, Staphylococcus aureus, and Pseudomonas spp. were each recovered from one lesion. The F. necrophorum and P. intermedia isolates were tested for antibiotic sensitivity to clindamycin, tetracycline, metronidazole, and penicillin using the E-test, and all strains were observed to be sensitive to

all of the antibiotics tested with the exception of one strain of *P. intermedia*, which showed resistance to penicillin. The first reported isolation from human noma lesions of *F. necrophorum*, a pathogen primarily associated with animal diseases may have important etiologic and animal transmission implications.

**Keywords:** **Fusobacterium necrophorum, Cancrum oris, Noma.**

**Record Number:** 104  
**Author(s):** Akinwale, O. P.  
**Title:** Anaemia in African Animal Trypanosomiasis.  
**Journal Title:** Applied Natural Sciences Research.  
**Date of Publication:** 99  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 32 - 34  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Anaemia, African, Animal, Trypanosomiasis.

**Record Number:** 105  
**Author(s):** Akinwale, O. P.  
**Title:** Current Trends in the Control of African Trypanosomiasis.  
**Journal Title:** Research Communications in Parasitology.  
**Date of Publication:** 99  
**Volume ID:** 1  
**Issue ID:**  
**Page(s):** 13 - 20  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** African Trypanosomiasis.

**Record Number:** 106  
**Author(s):** Agomo, P. U. Okechukwu, A. N. Amajoh, C. N. Asianya, V. N. Okonkwo, C. A.  
**Title:** The Impact of Community-Directed Administration of various formulations Of Pre-packaged chloroquine in Umuahia South Local Government Area of Abia State, Nigeria  
**Journal Title:** Nig. Qt. J. Hosp. Med  
**Date of Publication:** 99  
**Volume ID:** 9  
**Issue ID:** 2  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The high patronage of Patent Medicine Vendors (PMVs) to the detriment of Primary Health Centres (PHCs), the uncontrollable habit of home treatment and self-medication by rural dwellers, have necessitated the need to improve on the knowledge and awareness of malaria exhibited by these target groups. A community-directed intervention programme to effect prompt and adequate treatment of presumptive episodes of clinical malaria in a rural community (Ubakala, population 15,600) in Umuahia South Local Government Area (L.G.A.) of Abia State, Nigeria has therefore been studied. The instruments of implementation were based on (a) training the rural dwellers, 3 Community Malaria Committees (CMCs) and the Patent Medicine Vendors (PMVs) in the community and (b) supplying the CMCs and PMVs with the essential antimalarial drug, chloroquine (CQ)

packaged in various age-specific plastic bottles, compartmentalized polythene bags and blister packs. Of the 3,000 pre-packs delivered in 4 instalments from January to November 1998, 2503 were sold under a subsidized cost-recovery scheme. The progress of 510 patients was followed up 4 days after treatment and 250 mothers/carers of children under 6 years in each of the test and control (Olokoro, population: 11,800) communities were interviewed in-depth. Results showed a significant increase ( $P < 0.001$ ) in knowledge, awareness drug consumption (without misuse) and compliance amongst PMVs and rural dwellers in the test compared with the control community. Analysis of cases of malaria which were recorded as "severe" by the PHCs highlighted a reduction in the test community. These results showed that the strategy is feasible and sustainable and could lead to continued reduction of malaria-specific morbidity and mortality in the community. The protocol could also be extended to other communities in Nigeria.

**Keywords:** Malaria, Chloroquine, Pre-packaging, Community-based programme.

**Record Number:** 107  
**Author(s):** Agomo, P. U. Akindele, S. K. Asianya, V. N. Okonkwo, C. A.  
**Title:** The Main Benefits of Histidine-Rich Protein-II Antigen Capture Assay (ParaSight® F) In The Detection of Plasmodium Falciparum in Various Health Centres in Nigeria  
**Journal Title:** Nig. Qt. J. Hosp. Med  
**Date of Publication:** 99  
**Volume ID:** 8  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The objective of the present study was to investigate the conditions under which Histidine-rich Protein-II antigen Capture Assay (ParaSight® F) would be of utmost value when used in the diagnosis of Plasmodium falciparum in Primary Health Care Centres (PHCs) especially in rural areas. Finger-prick blood was collected from patients reporting at some PHCs and Clinics in South-Eastern and South-Western Nigeria. ParaSight® F was assayed according to the manufacturer's instructions and compared with the microscopic technique which was used as the Gold Standard. Results showed that when data from the 501 examined patients were pooled and Plasmodium malariae cases included, the sensitivity, specificity, Positive Predictive Value (PPV) and Negative Predictive Value (NPV) were 79.7%, 95.1% and 89.9% respectively. With the exclusion of P. malariae cases, they were 90.8%, 95.1%, 89.6% and 95.7% respectively. However, when data were stratified according to the PHC or clinics, the value of ParaSight® F was excellent in some but not so good in other centres. It is advocated that PHCs preparing to use ParaSight® F for the diagnosis of malaria should first conduct preliminary investigations on the state of P. malariae, P. ovale, false positive and false negative rates in their areas.

**Keywords:** Malaria.

**Record Number:** 108  
**Author(s):** Adeiga, A. A. Aro. Audu, R. A. Onyewuche, J.  
**Title:** Estimation of Measles Sero-conversion in Children Vaccinated against Measles in Edo State of Nigeria.  
**Journal Title:** Nig. Quart. J. Hosp. Med.  
**Date of Publication:** 99  
**Volume ID:** 9  
**Issue ID:** 2  
**Page(s):** 169-171  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A study of seroconversion of 115 children between 9 months to 5 years vaccinated against measles was conducted in Oriowon local government area of Edo State. This has to establish the immune status of the children against measles after immunization. Haemagglutination inhibition technique was used. Pre vaccination immune status was conducted and 89.6% of the children studied especially among the older ones between 2-5 years were found with protective measles antibody. The highest of the titre attained was 1:256. Exposure to endemic environment was attributed to this cause. In the postvaccination assessment of the immune status, 94.7% developed protective measles antibody with a minimum titre level of 1:16, while 5.27% was not protected against measles. Among the highly protected children, 84.9% had a titre range between 1:64 and 1:1024. The high measles antibody titre detected in the children before vaccination was thought could affect the measles antibody titre. This could indicate the potentiation of antibody development by the immunization. Children were observed to have been vaccinated at older age than the scheduled age of

**Keywords:** Measles, Sero-Conversion, Children, Vaccination, Nigeria.

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**Record Number:** 109  
**Author(s):** Adewale, B. Mafe, M. A. Oyerinde, J. P.  
**Title:** Infectivity and Transmission Dynamics of Simulium Damnosum s. 1 Around Owena Dam (Ondo State).  
**Journal Title:** West Afr J Med.  
**Date of Publication:** 99  
**Volume ID:** 18  
**Issue ID:** 4  
**Page(s):** 257-60  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

A twelve month study on the infectivity and transmission dynamics of simulium damnosum s.1 around Owena dam was conducted as part of a longitudinal study of onchocerciasis in the community living in the vicinity of the dam. A total of 3,133 flies (49.6% nulliparous, 50.4% parous) were caught during the period of study and dissected. The annual biting rate per year was recorded as 33,663 flies while the parous biting rate was recorded as 16,780 for these flies. 0.4% of the flies were infected with Onchocerca volvulus larvae while 0.3% of these had the infective larvae. However 0.3% of the nulliparous flies were found to be infected with mermithid larvae and 0.5% with trematodes. The biting activity of the fly was observed to be bimodal with a small peak in the morning hours (10.00-11.00 hours) and a more pronounced peak in the evening (16.00-17.00 hours). An annual transmission potential of 109 larvae per man per year was recorded with 64% of the infection being recorded during the early dry season when the parous rate was very high. The implications of these findings to the study area are discussed.

**Keywords:** Dynamics of simulium damnosum s. 1, Owena dam, Ondo State.

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**Record Number:** 110  
**Author(s):** Enwonwu, C. O. Afolabi, B. M. Salako, L. A. Idigbe, E. O. Al-Hassan, H. Rabi, R. A.  
**Title:** Hyperphenylalaninaemia in Children with Falciparum Malaria.  
**Journal Title:** QJM.  
**Date of Publication:** 99  
**Volume ID:** 92  
**Issue ID:** 9  
**Page(s):** 495-503  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Brain monoamine levels may underlie aspects of the cerebral component of falciparum malaria. Since circulating amino acids are the precursors for brain monoamine synthesis, we

measured them in malaria patients and controls. Malaria elicited significantly elevated plasma levels of phenylalanine, particularly in comatose patients, with the Tyr/Phe (%) ratio reduced from 83.3 in controls to 39.5 in infected children, suggesting an impaired phenylalanine hydroxylase enzyme system in malaria infection. Malaria significantly increased the apparent K(m) for Trp, Tyr and His, with no effect on K(m)(app) for Phe. Using the kinetic parameters of NAA transport at the human blood-brain barrier, malaria significantly altered brain uptake of Phe (+96%), Trp (-28%) and His (+31%), with no effect on Tyr (-8%), compared with control findings. Our data suggest impaired cerebral synthesis of serotonin, dopamine and norepinephrine, and enhanced production of histamine, in children with severe falciparum malaria.

**Keywords:** **Hyperphenylalaninaemia, Children, Falciparum, Malaria.**

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**Record Number:** 111  
**Author(s):** Agomo, P. U.  
**Title:** **Herbal Medicine: Malaria and Health Care Delivery: The Need for Caution**  
**Journal Title:** Medicare Journal  
**Date of Publication:** 99  
**Volume ID:** 4  
**Issue ID:**  
**Page(s):** 26-29  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** "Since no one can stop the poor masses from practicing what they believe in attempt should be made by appropriate Government agencies to formulate safe dosages of some non-toxic decoction".  
**Keywords:** **Herbal, Medicine, Malaria.**

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**Record Number:** 112  
**Author(s):** Smith, S. I. Olukoya, D. K. Fox A. J. Coker A. O.  
**Title:** **Flagellin Gene Polymorphism Analysis of Campylobacter Compared with Antigen Serotyping.**  
**Journal Title:** Z Naturforsch C.  
**Date of Publication:** 99  
**Volume ID:** 54  
**Issue ID:** 11  
**Page(s):** 946-51  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Flagellin gene sequence polymorphisms were used to discriminate amongst 53 strains of Campylobacter jejuni and C. coli. The Campylobacter strains were made up of forty-three strains of Campylobacter jejuni and 10 strains of Campylobacter coli. The results were analysed in relation to Penner serotyping. Twenty DNA PCR-RFLP patterns (genotypes) were identified by analysis of Dde I fragment length polymorphisms in flagellin gene (fla A and fla B) polymerase chain reaction (PCR) products. Flagellin gene 13 genotype was a feature of 15% of strains, followed by flagellin gene 8 (9%). Differences in fragment patterns were observed not only between members of two species, but also between individual strains of the same species. The strains that were non-typable by the Penner serotype were distributed into 6 flagellin gene types. In conclusion, Ddc I fla typing is reproducible and offers high typability. However, when the scheme is used in combination with the Penner serotype it provides improved discrimination for the characterizing and subtyping of isolates.  
**Keywords:** **Flagellin gene, polymorphism, Campylobacter, antigen, serotyping.**

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**Record Number:** 113  
**Author(s):** Akinwale, O. P. Nock, I. H. Esievo, K. A. N. Edeghere, H. U. F.  
**Title:** The Effect of Experimental Trypanosoma Vivax Infection and Treatment on the packed Cell Volume of three Breeds of Nigerian Goats.  
**Journal Title:** The Nigerian Journal of Parasitology.  
**Date of Publication:** 99  
**Volume ID:** 20  
**Issue ID:**  
**Page(s):** 27 - 32  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Trypanosoma Vivax, Breeds, Nigerian, Goats.

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**Record Number:** 114  
**Author(s):** Asianya, V. N. Agomo, P. U. Okonkwo, C. A. Mafe, G. Akindele, S. K. Agomo, C. O Aina, O. O. Okoh, H. I. Omoruyi, S. O  
**Title:** Evaluation of a new immunochromatographic test (ICT) for rapid diagnosis of plasmodium falciparum malaria in Nigeria.  
**Journal Title:** The Nigerian Journal of Parasitology  
**Reprint Status:**  
**Date of Publication:** 99  
**Volume ID:** 20  
**Issue ID:**  
**Page(s):** 19-26  
**Address/Availability:**  
**Location/URL:**  
**Notes:**  
**Abstract:** The development of rapid and specific diagnostic tests to identify patients infected with P. falciparum is of paramount importance in efforts to control morbidity and mortality caused by malaria. This study evaluated the efficacy of a new immunochromatographic test (ICT) for the detection of histidine-rich protein-2 (PfHRP-2) in the peripheral blood of 243 patients reporting in a 4 Health Centres in Lagos State Nigeria. The thick blood film microscopy (TFM) was used as the Gold Standard. Results showed that 41(16.9%) of the patients were parasitaemic by TFM whereas 39(16.0%) were positive (antigenaemic) by ICT. In 4 of the patients, one was negative by TFM but positive by ICT (false positive) whereas 3 were negative by ICT but positive by TFM (false negative). Thorough microscopic examination by three laboratory scientists revealed no mixed infections, with P. malariae, P. ovale and P. vivax. Further analysis of the results showed a sensitivity of 92.7%, specificity of 99.5%, positive predictive value of 97.4% and negative predictive value of 98.5%. comparative assessment of persistence of parasitaemia and antigenaemia after chloroquine treatment showed that despite the observation of clinical cure, parasites were seen on day 3 but not on day 7 in 3 cases. On the other hand, antigenaemia without clinical symptoms persisted in 29 (74.4%) patients on day 3, five (12.8%) patients on day 7 and one (2.6%) of the patients on day 14. It is concluded that ICT is a valuable, rapid diagnostic and confirmatory tool for the detection of P. falciparum in patients with clinical, symptomatic malaria.  
**Keywords:** Immunochromatographic test (ICT), Diagnosis, plasmodium falciparum, malaria, Nigeria.

**Record Number:** 115  
**Author(s):** Sanni, A. I. Onilude, A. A. Ogunbanwo, S. T. Smith, S. I.  
**Title:** Antagonistic Activity of Bacteriocin Produced by Lactobacillus Species from Ogi, an Indigenous Fermented Food.  
**Journal Title:** J Basic Microbiol.

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**Date of Publication:** 99  
**Volume ID:** 39  
**Issue ID:** 3  
**Page(s):** 189-95

**Address/Availability:**

**Location/URL:**

**Abstract:** Seven *Lactobacillus* species each with one or more strains were isolated from various fermented cereal gruel's (ogi). They were identified as *L. plantarum* (3 strains), *L. delbrueckii* (1 strain), *L. brevis* (2 strains), *L. reuteri* (2 strains), *L. casei* (1 strain), *L. fermentum* (1 strain) and *L. acidophilus* (1 strain). Bacteriocin production was observed in cell-free supernatants of 8 of these strains with *L. fermentum*, *L. delbrueckii* and *L. reuteri* strains (white maize ogi) being negative. The bacteriocin produced by the eight strains inhibited the growth of various target organisms with the inhibition strongly noticed using *Enterococcus faecalis* as indicator. While catalase treatment, pH changes and heat treatment up to 80 degrees C had no effect on the activity of bacteriocin from these isolates, treatment with trypsin and proteinase K resulted in complete loss of inhibitory activity of the bacteriocins. A reduction in the inhibitory activity of the bacteriocins was also found to occur with increasing concentrations of glucose or peptone in the cultivation medium.

**Keywords:** **Antagonistic, Bacteriocin, Lactobacillus, Ogi, Fermented food.**

**Record Number:** 116

**Author(s):** Enwonwu, C. O. Falkler, Jr W. A. Idigbe, E. O. Afolabi, B. M. Ibrahim, M. Onwujekwe, D.Savage, O. Meeks V. I.

**Title:** **Pathogenesis of Cancrum Oris (Noma): Confounding Interactions of Malnutrition with Infection.**

**Journal Title:** Am J Trop Med Hyg.

**Date of Publication:** 99

**Volume ID:** 60

**Issue ID:** 2

**Page(s):** 223-32

**Address/Availability:**

**Location/URL:**

**Abstract:** This study showed that impoverished Nigerian children at risk for cancrum oris (noma) had significantly reduced plasma concentrations of zinc (< 10.8 micromol/L), retinol (< 1.05 micromol/L), ascorbate (< 11 micromol/L), and the essential amino acids, with prominently increased plasma and saliva levels of free cortisol, compared with their healthy counterparts. The nutrient deficiencies, in concert with previously reported widespread viral infections (measles, herpesviruses) in the children, would impair oral mucosal immunity. We postulate, subject to additional studies, that evolution of the oral mucosal ulcers including acute necrotizing gingivitis to noma is triggered by a consortium of microorganisms of which *Fusobacterium necrophorum* is a key component. *Fusobacterium necrophorum* elaborates several dermonecrotic toxic metabolites and is acquired by the impoverished children via fecal contamination resulting from shared residential facilities with animals and very poor environmental sanitation.

**Keywords:** **Pathogenesis, Cancrum oris, Noma, Malnutrition, Infection.**

**Record Number:** 117

**Author(s):** Enwonwu, C.O.Falkler Jr, W. A. Idigbe, E. O. Savage, K. O.

**Title:** **Noma (Cancrum Oris): Questions and Answers.**

**Journal Title:** Oral Dis.

**Date of Publication:** 99

**Volume ID:** 5

**Issue ID:** 2  
**Page(s):** 144-9  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Noma (cancrum oris) is an infectious disease which destroys the oro-facial tissues and other neighboring structures in its fulminating course. It affects predominantly children aged 2-16 years in sub-Saharan Africa where the estimated frequency in some communities may vary from one to seven cases per 1000 children. The key risk factors are poverty, malnutrition, poor oral hygiene, deplorable environmental sanitation, close residential proximity to livestock, and infectious diseases, particularly measles. Malnutrition acts synergistically with endemic infections in promoting an immunodeficient state, and noma results from the interaction of general and local factors with a weakened immune system as the common denominator. Acute necrotizing gingivitis (ANG) is considered the antecedent lesion. Current studies suggest that evolution of ANG to noma requires infection by a consortium of microorganisms with *Fusobacterium necrophorum* and *Prevotella intermedia* as the suspected key players. Without appropriate treatment, mortality rate is 70-90%. Survivors suffer the two-fold affliction of oro-facial disfigurement and functional impairment. Reconstructive surgery of the resulting deformity is time-consuming and financially prohibitive for the victims who are poor.

**Keywords:** **Noma, cancrum oris.**

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**Record Number:** 118  
**Author(s):** **Smith, S. I.** Sansa, T. I. Coker A. O.  
**Title:** **Antibiotic Susceptibility Patterns and Beta-Lactamase Production of Animal and Human Isolates of Campylobacter in Lagos, Nigeria.**

**Journal Title:** Z Naturforsch C.

**Date of Publication:** 99

**Volume ID:** 54

**Issue ID:** 7-8

**Page(s):** 583-6

**Address/Availability:**

**Location/URL:**

**Abstract:** Forty-three stool samples and rectal swabs were collected from diarrhoeic and 20 non-diarrhoeic patients under 5 years of age at various general hospitals in Lagos. A total of 110 faecal samples from animals (101 from chickens and 9 from pigs) were obtained from Mitchel farm, Agege and Oshodi--Isolo Local Government farms at Ejigbo. *Campylobacter* species were isolated from 6 (13.9%) of 43 children with gastroenteritis and none from 20 asymptomatic subjects. Forty-nine (48.5%) isolates from the hundred and one faecal specimen were isolated from chicken, while 3 (33.33%) out of 9 were from pigs. *Campylobacter jejuni* was the most prevalent accounting for 79% of the total isolates and *C. coli* accounted for 25%. All the human strains were gentamicin sensitive, while streptomycin and cloxacillin were resistant. Erythromycin had a high activity (83.3%) on human strains and only 59.6% activity on animal strains. About ten percent (9.6%) of the strains produced beta-lactamase.

**Keywords:** **Antibiotic, Beta-Lactamase, Animal, Human, Campylobacter, Lagos, Nigeria.**

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**Record Number:** 119  
**Author(s):** **Afolabi, B. M.** Akintonwa, A. Ekanem, E. E.  
**Title:** **Evidence for Obstructive and Restrictive Lung Pathology Among Tetra-ethyl Lead Handlers and Petrol Tanker Fillers at a Petrochemical Industry in Nigeria.**

**Journal Title:** West Afr J Med.

**Date of Publication:** 99

**Volume ID:** 18

**Issue ID:** 4  
**Page(s):** 265-9  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Described here is a computer predicted and computer measured pulmonary function in a randomly selected population sample of 111 men. These consisted of 36 primary school teachers (control), 35 Tetra-ethyl Lead handlers (TEL) and 40 Tanker Loaders (TL) at a petrochemical industry in Warri, Delta State, Nigeria. Productive cough and headache were commoner among the TL (45%, 38%) and the TEL handlers (43%, 31%). TEL handlers were 5 times likely to develop insomnia and other sleep disturbances than the control group. TL were more than 3 1/2 times more likely to develop nervousness than the control group. Measured FEF25-75% was significantly lower than its predicted value among the TEL handlers (56%) and TL (55%) when compared with the control group (36%) ( $P < 0.05$  respectively). Although there were distinct reductions in the measured values of FEF75-85% among the TEL handlers (41%) and the TL (40%) compared to the control group (28%), this difference did not reach a level of significance when the TEL or the TL were compared individually to the control group. Predicted and measured forced mid expiratory flow time (FMFT) was not significantly varied among the cases and the control. There was statistically significant disparities ( $P < 0.005$ ) in the values of predicted and measured maximum voluntary ventilation (litres) of the TEL handlers (47%) and of the TL (46%) compared with that of the control group (29%). The data suggest obstruction of the big and small airways of those occupationally exposed at a petrochemical factory in Nigeria especially the tetra-ethyl lead handlers and the tanker loaders. This data also suggests that pulmonary impairment may lead to an increased respiratory absorption of lead in its organic form. Efforts should be made to ascertain the degree of impairment and to treat the affected workers.

**Keywords:** Lung, Pathology, Tetra-ethyl lead handlers, Petrol tanker, Record

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**Record Number:** 120  
**Author(s):** Adewole, T. A. Olukosi, Y. A. Disu, F. Akinde, J. A. Akinyanju, O. O  
**Title:** Application of Polymerase Chain Reaction to the Prenatal Diagnosis of Sickle Cell Anaemia in Nigeria.  
**Journal Title:** West Afr. J. Med.  
**Date of Publication:** 99  
**Volume ID:** 18  
**Page(s):** 160-164  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Although sickle-cell disease is very common in Nigeria, control by prenatal testing is lacking. The polymerase chain reaction-based technology combined with chorionic villi sampling has enabled us to offer prenatal diagnosis of sickle cell disease to 50 pregnant women who were at risk of bearing children with sickle cell anaemia. DNA was extracted from the villus and subjected to either PCR and restriction enzyme (Dde I) analysis (36 samples) or to PCR-ARMS procedure (12 samples) or to both procedures when the results by the first procedure were equivocal (2 samples). The genotypic distribution was 13AA, 25AS and 11SS. In one case, it was not possible to determine the genotype of the villi by both methods. A post delivery genotype analysis confirms the correctness of prenatal diagnosis in all the 42 subjects that has so far reported. The results clearly demonstrate the usefulness of the PCR method in the prenatal diagnosis of sickle-cell anaemia in this environment.

**Keywords:** Genetics, Polymerase, Prenatal Diagnosis, Sickle cell, Anaemia, Nigeria.

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**Record Number:** 121  
**Author(s):** Olorunshola, I. D. Smith S. I. Coker, A. O.  
**Title:** Prevalence of EHEC 0157:H7 in Patients with Diarrhea in Lagos, Nigeria

**Journal Title:** APMIS 108:  
**Date of Publication:** 2000  
**Volume ID:** 108  
**Issue ID:**  
**Page(s):** 761-3  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The prevalence of sorbitol-nonfermenting *Escherichia coli* 0157:H7 (EHEC) was assessed in 100 patients with diarrhea by stool culture on sorbitol MacConkey agar. The cytotoxicity of the EHEC strains was analysed by Vero cell assay and the antimicrobial susceptibility pattern of the isolates was determined. Detection rate of EHEC 0157:H7 was 6%. Five of the six patients were males. Three of the isolates were from children and one was from a teenager. All strains induced cytotoxic effects in the Vero cell assay. All isolates were susceptible to most of the antimicrobials tested. The results showed that diarrhea caused by EHEC 0157:H7, a potentially life-threatening pathogen has remained common particularly among the child population of Lagos during the past 10 years (5). There must therefore be adequate meat and food inspection to improve the general hygiene of local fast food restaurants, so-called 'bukkas', which are regarded as likely sources of infection.  
**Keywords:** EHEC 0157:H7, Vero cell assay, Antimicrobial susceptibility, Lagos.

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**Record Number:** 122  
**Author(s):** Omotola, B. D. Omotola, E.B. Oladipo, S.A.  
**Title:** Female education, health and development: Status constraints and the way forward.  
**Journal Title:** Nig. Educ. Rev.  
**Date of Publication:** 2000  
**Volume ID:** 7  
**Issue ID:** 1  
**Page(s):** 142-152  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Female education.

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**Record Number:** 123  
**Author(s):** Enwonwu, C. O. Falkler W. A. Idigbe E. O.  
**Title:** Oro-facial Gangrene (noma/cancrum oris): Pathogenetic Mechanisms.  
**Journal Title:** Crit Rev Oral Biol Med.  
**Date of Publication:** 2000  
**Volume ID:** 11  
**Issue ID:** 2  
**Page(s):** 159-71  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Cancrum oris (Noma) is a devastating infectious disease which destroys the soft and hard tissues of the oral and para-oral structures. The dehumanizing oro-facial gangrenous lesion affects predominantly children ages 2 to 16 years, particularly in sub-Saharan Africa, where the estimated frequency in some communities varies from 1 to 7 cases per 1000 population. The risk factors are poverty, malnutrition, poor oral hygiene, residential proximity to livestock in unsanitary environments, and infectious diseases, particularly measles and those due to the herpesviridae. Infections and malnutrition impair the immune system, and this is the common denominator for the occurrence of noma. Acute necrotizing gingivitis (ANG) and oral herpetic ulcers are considered the antecedent lesions, and ongoing studies suggest

that the rapid progression of these precursor lesions to noma requires infection by a consortium of micro-organisms, with *Fusobacterium necrophorum* (Fn) and *Prevotella intermedia* (Pi) as the suspected key players. Additional to production of a growth-stimulating factor for Pi, Fn displays a classic endotoxin, a dermonecrotic toxin, a cytoplasmic toxin, and a hemolysin. Without appropriate treatment, the mortality rate from noma is 70-90%. Survivors suffer the two-fold afflictions of oro-facial mutilation and functional impairment, which require a time-consuming, financially prohibitive surgical reconstruction.

**Keywords:** Oro-facial, Gangrene, Noma, Cancrum oris, Pathogenetic.

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**Record Number:** 124  
**Author(s):** Mafe, M. A. Von Stamm, T. Utzinger, J. N. Goran, E. K.  
**Title:** Control of Urinary Schistosomiasis: An Investigation Into the Effective Use of Questionnaires to Identify High-risk Communities and Individuals in Niger State, Nigeria.  
**Journal Title:** Trop Med Int Health.  
**Date of Publication:** 2000  
**Volume ID:** 5  
**Issue ID:** 1  
**Page(s):** 53-63  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Schistosomiasis is a public health problem in Nigeria. Although there is a national programme for its control, there is the need for reliable and simple means of rapidly diagnosing communities to provide a detailed map on the distribution of the disease in the country, in order to prioritize control activities, as well as to monitor the effectiveness of control operations. A rapid assessment technique using school questionnaires was tested in Borgu Local Government Area (LGA), Niger State, north-western Nigeria. Following a series of focus group discussions, the questionnaires were adapted before they were administered through the school system to 60 primary schools in Borgu LGA. Correctly completed questionnaires were returned from 58 schools (97%) within 4 weeks. Questionnaires were validated by reagent stick tests performed by trained teachers. Their results proved to be reliable compared to those obtained by our research team in 20 randomly selected schools. Overall prevalences of microhaematuria at 1+ and 2+ levels were 45.7% and 27.1%, respectively. Highly significant correlations were obtained between school prevalence of microhaematuria and reported schistosomiasis, as well as reported blood in urine. The diagnostic performance of the questionnaires at the 2+ level of microhaematuria was very good. The design of our study also allowed data analysis on an individual level, and multivariate analysis revealed highly significant odds ratios for reported schistosomiasis and reported blood in urine to detect an individual with urinary schistosomiasis. Our results are in good agreement with reports from other African countries, and questionnaires can be recommended for rapid identification of communities at highest risk of urinary schistosomiasis in Nigeria, so that scarce resources of the national control programme can be used most effectively.

**Keywords:** Schistosomiasis.

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**Record Number:** 125  
**Author(s):** Okenu, D. M. N. Riley, E. M. Bickle, Q. D. Agomo, P. U. Barbosa, A. Daugherty, J. R. Lanar, D. E. Conway, D. J.  
**Title:** Analysis of Human Antibodies to Erythrocyte Binding Antigen 175 of *Plasmodium Falciparum*  
**Journal Title:** Infection and Immunity  
**Date of Publication:** 2000  
**Volume ID:**

**Issue ID:**  
**Page(s):** 5559-5556  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Invasion of human erythrocytes by *Plasmodium falciparum* merozoites is a multistep process. For many strains of the parasite, part of this process requires that the erythrocyte binding antigen 175 (EBA-175) of the merozoite binds to sialic acid residues of glycophorin A on the erythrocyte surface, a receptor-ligand interaction which represents a potential target for inhibition by antibodies. This study characterizes the reactivity of naturally acquired human antibodies with four recombinant proteins representing parts of EBA-175 (region II, regions III to V, and the dimorphic C and F segment region) in populations in which the organism is endemic. Serum immunoglobulin G (IgG) recognizing the recombinant proteins is predominantly of the IgG1 and IgG3 subclasses, and its prevalence increases with age. In a large population study in The Gambia, serum positivity for IgG or IgG1 and IgG3 subclass antibodies to each of the EBA-175 recombinant antigens was not significantly associated with subsequent protection from clinical malaria. However, there was a trend indicating that individuals with high levels of IgG to region II may have some protection.

**Keywords:** **Human, Antibodies, Erythrocyte binding antigen 175, Plasmodium falciparum.**

**Record Number:** 126  
**Author(s):** Sulyman, M. A. Akinwale, O. P. Ogunbanwo, J. A.  
**Title:** Chemotherapy and African Trypanosomiasis.  
**Journal Title:** Research Communications in Parasitology  
**Date of Publication:** 2000  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 21 - 27  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Chemotherapy, African Trypanosomiasis.

**Record Number:** 127  
**Author(s):** Sulyman, M. A. Akinwale, O. P. Ogunbanwo, J. A.  
**Title:** Onchocerciasis and its Control.  
**Journal Title:** Applied Natural Sciences Research.  
**Date of Publication:** 2000  
**Volume ID:** 1  
**Issue ID:** 2  
**Page(s):** 1-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Onchocerciasis

**Record Number:** 128  
**Author(s):** Enwonwu, C. O. Afolabi, B. M. Salako, L. O. Idigbe, E. O. Bashirelah, N.  
**Title:** Increased Plasma Levels of Histidine and Histamine in *falciparum* Malaria: Relevance to Severity of Infection.  
**Journal Title:** J Neural Transm.  
**Date of Publication:** 2000  
**Volume ID:** 107

**Issue ID:** 11  
**Page(s):** 1273-87  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Severe falciparum malaria, with its associated hyperpyrexia, distorts plasma levels of large neutral amino acids (NAA) and consequently, brain uptake of individual NAA. Since brain levels of NAA determine cerebral synthesis of monoamines (serotonin, histamine, catecholamines), we measured plasma concentrations of NAA, and also plasma histamine (Hm) in children with falciparum malaria and in uninfected controls. Malaria elicited a marked ( $P < 0.025$ ) increase in plasma histidine (His) with a 5-fold significant ( $P < 0.001$ ) elevation in histamine, as well as a 2.5-fold increase ( $P < 0.005$ ) in plasma phenylalanine (Phe), with no changes in the other NAA. Using kinetic parameters of NAA transport at human blood-brain barrier (BBB), we showed that malaria significantly altered calculated brain uptake of His (+30%), Phe (+96%), Trp (-30%) and Ile (-27%), with no change in the other NAA, compared with controls. Our data suggested enhanced cerebral synthesis of Hm with impaired production of serotonin and the catecholamines in the patients, and therefore, the need to evaluate the encephalopathy in severe malaria within the context of abnormalities in metabolism of Hm and other monoamines resulting from imbalance in plasma levels of the large neutral amino acids. Of clinical relevance also is the impaired inactivation of increased brain Hm by antimalarials such as the widely used aminoisoquinolines leading to elevated brain levels of imidazole-4-acetic acid (IAA), a potent inducer of a sleep-like state often accompanied by seizures, analgesia, decreased blood pressure and other effects.

**Keywords:** **Plasma, Histidine, Histamine, Falciparum, Malaria, Infection.**

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**Record Number:** 129  
**Author(s):** Afolabi, B. C. Ohanele, C. Adewole, T. A. Agomo, P. U Iwuanyanwu, S. Enwuru, C. A. Afolabi, A. S. Inem, V. A.  
**Title:** **Measurement of the Poticaal Density of Urine as a non-invasive Method for the Diagnosis of Malaria**  
**Journal Title:** Nig J Int med  
**Date of Publication:** 2000  
**Volume ID:** 3  
**Issue ID:** 1  
**Page(s):** 12-16  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **Objectives:** the conventional invasive diagnostic method of malaria by microscopic examination of stained blood film always involves drawing of blood. The objective of this study was to measure urinary optical density for the diagnosis of early phase of malaria infection **Material and methods:** blood and urine samples were collected from 252 consecutive patients (80% males, 122 females; ages 3-76t years) who presented, for the first time, at a tertiary hospital. Among these, 202 presented with symptoms suggestive of malaria and 50 were healthy student volunteers. Thick and thin blood films were prepared for each patient from which parasite density and species were studied. Optical density of each urine sample was recorded from spectrophotometer. Urine of each subject was also subjected to full urinalysis. **Results:** Of the 202 symptomatic patients and 50 asymptomatic controls, 121(59.9%) and 22 (44%) respectively had positively parasitaemia. Geometric means parasite density (GMPD) of the asmptomatic group (3051.8) was significantly greater ( $P < 0.001$ ) than that of the asymptomatic group.urinary spectrophotometry (450 nm) showed marked differences in the means of the optical density (OD) OFC SYMTOMATIC (0.55nm) and asymptomatic (0.37nm) subjects ( $p < 0.005$ ), and of parasitised (0.60nm), and parasitised (0.41nm) and subjects ( $p < 0.0005$ ). there was significant difference ( $p < 0.05$ ) in the urine concentrations of bilirubin (0.6,0.1),protein (24.6,11.4),nitrate (0.4,0.1) and ascorbic acid (6.3,3.4) of case and controls respectively. Using a cut-off point of 0.41nm,the specificity of

optical density in the case-control aspect of this study was 66.0%. **Conclusion:** within statistical limits, the study suggests a strong positive correlation between malaria parasitaemia and the optical density of urine(urinary spectrophotometry). When analysis along with other clinical signs and symptoms, urinary spectrophotometry blood film can greatly increase the efficiency of malaria diagnosis in the absence of microscopy.

**Keywords:** Spectrophotometry, Urine, Diagnosis, Malaria, Nigeria.

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**Record Number:** 130  
**Author(s):** Falkler, W. A. Enwonwu, C. O. Ewell, A. J. Idigbe, E. O.  
**Title:** Isolation of fusobacteria from the Oral Cavities of Malnourished Nigerian Children living in Agricultural and Herding Villages.  
**Journal Title:** Oral Dis.  
**Date of Publication:** 2000  
**Volume ID:** 6  
**Issue ID:** 2  
**Page(s):** 103-5  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A previous study demonstrated the presence and possible involvement of *Fusobacterium necrophorum* in the pathogenesis of noma lesions of children living in agricultural and herding villages in northwestern Nigeria. In order to determine if *F. necrophorum* was part of the oral flora of malnourished children with no noma lesions, a study of the fusobacteria present in the oral cavities of 30 children, 2-6 years of age in Sokoto State, was undertaken. Swabs taken of the oral cavity were cultured on selective fusobacteria medium using conventional anaerobic microbiological techniques. *F. nucleatum* was recovered from each child and *F. necrophorum* was isolated from the oral cavity of only one child. The presence of *F. nucleatum* and the lack of *F. necrophorum*, except in one case, suggests that the latter is not normal flora in the children at risk for noma. *F. necrophorum*, a putative trigger organism for noma may gain a foothold only when certain staging conditions (i.e., lowered host resistance and/or oral lesion) are present.

**Keywords:** Fusobacteria, Oral cavities, Malnourished, Nigeria, Children, Agricultural, Herding, villages.

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**Record Number:** 131  
**Author(s):** Adeiga. A. Akinosho, R. O. Audu, R. A. Onyewuche, J.  
**Title:** Status of Tetanus Antibodies in the Newborns of Immunised Mothers.  
**Journal Title:** J. Med & Medical Sci.  
**Date of Publication:** 2000  
**Volume ID:** 2  
**Issue ID:** 2  
**Page(s):** 125-128  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Tetanus antibody in newborns of 45 mothers immunized with tetanus toxoid was carried out to assess the concentration of the antibody transferred to the babies before delivery. Serum samples were collected from the mothers before delivery and from the babies at delivery. ELISA technique was employed to run the assay for the tetanus antibody in the sera. The antibody level observed in the mothers ranged between 0.015 to 0.2 I.u/ml; and that of their babies ranged from 0.25I.u/ml. Generally, the result showed that most of the mothers developed high tetanus antibodies post vaccination and most of them passed the antibodies to their babies. This was shown by the regression analysis made ( $r=0.74$ ,  $p<0.05$ ). However, the degree of transfer was lower in 17 mothers that passed less tetanus antibodies ( $r=0.47$ ,  $p<0.05$ ). A significant difference was observed in the maternal tetanus antibodies and

that of the babies using student's t-test, ( $t= .80808$  p,  $<0.001$ ). An indication of poor antibody transfer placental insufficiency and short interval between last tetanus dose and time of delivery were advanced as possible causes that could reduce antibody transfer to the babies in-utero. It was concluded that late completion of tetanus immunization to delivery time can cause delay in antibody transfer. Recommendation is that early completions of tetanus immunization of the mothers before delivery, maintenance of good hygiene at delivery reduce neonatal tetanus.

**Keywords:** Tetanus, Antibodies, Newborns, Immunization, Mothers.

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**Record Number:** 132  
**Author(s):** Audu, R.A, Omilabu, S. Renner, J. K. Awodiji, J. A.  
**Title:** Risk factors, clinical features and management of children with Diarrhoea in Lgos.  
**Journal Title:** J. Nig. Infect. Con. Assoc.  
**Date of Publication:** 2000  
**Volume ID:** 3  
**Issue ID:** 1  
**Page(s):** 24-29  
**Address/Availability:**  
**Location/URL:**

**Abstract:** In spite of the diarrhoeal disease control programme of WHO and campaign efforts of the Nigerian government in the prevention and management of diarrhoea, the disease still remains a major cause of death among children under 5 years in Nigeria. Hence, this study was aimed at assessing the risk factors, clinical features and quality of home case management of diarrhoea. A hospital based longitudinal study was carried out. Questionnaires were administered to mothers with children presenting with diarrhoea in a primary, secondary and tertiary health institutions. Age of a child, position in the family and mother's occupation have been identified as risk factors of diarrhoea. Fever and vomiting was prevalent in 68% of hospitalization. The mean frequency of stool per day was 5.0 while the mean duration of diarrhoea was 4.9 days. Persistent diarrhea was found to be most prevalent among children aged 0.6 months. While acute diarrhoea was not prevalent in the 7-12 months age group. Only 28% of mothers managed diarrhoea with oral rehydration solution (ORS), 29% did not do anything to manage the diarrhea while 57% did not know the possible cause of diarrhoea in their children. These findings show that the diarrhoeal control programme in Nigeria has not made much impact on the mothers knowledge and attitude. Hence, health education programme on the control and management of diarrhea should be intensified.

**Keywords:** Risk factors, Clinical, Children, Diarrhoea, Nigeria.

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**Record Number:** 133  
**Author(s):** Ahmed, O. A. Ogunnaike, A. I. Odunukwe, N. N. Efiennemoku, C. Raheem, T. Y. Babaeale, C. D. Afolabi, B. M.  
**Title:** The knowledge, Attitudes and Perception of Malaria and Anaemia in Osogbo, Osun State, Nigeria.  
**Journal Title:** Soc.Sci.Res.Comm  
**Date of Publication:** 2000  
**Volume ID:** 1  
**Issue ID:** 3  
**Page(s):** 34-45  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The knowledge, attitudes and perception of malaria and anaemia were assessed in communities in Osogbo district to determine how malaria and anaemia are diagnosed, and also how the community perceives the causes of malaria, its prevention, and treatment before it results in anaemia. Structures questionnaire interview method was used, and blood samples

were collected and analysed for Packed Cell Volume (PCV). The people interviewed cut across the social economic strata, comprising mothers of under 5 years old children and Primary Healthcare Workers including Traditional Birth Attendants (TBA) and Village Health Workers (VHW). The mother and 78.6% of the TBA interviewed recognize fever by hand feeling. Twenty-Six percent of the mothers do not know what causes malaria and 27.2% do not know how to prevent malaria infection. The mothers recognized pallor as anaemia but 6.5% only associate with malaria. 46% of these mothers patronize TBA while 56.3% patronize orthodox medicine. About 75% of TBA can detect anaemia, but only 34.5% of these associate malaria with anaemia. Laboratory results established hypochronic anaemia. 27% of the infants from the Government Oke Baale Health Center (OBHC) and 32% from usman Memorial Herbal Home (UMHH) were strictly anaemic with PVC of 0.30 and below. Infants and mothers of UMHH had toxic granulation in their blood film indicating presence of chronic infection. Malaria and anaemia health education plus adequate monitoring of the traditional treatment will enhance health status in Nigeria.

**Keywords:** Malaria, Anaemia.

**Record Number:** 134  
**Author(s):** Akinwale, O. P.  
**Title:** Goat: A Small Ruminant of Great Economic Importance.  
**Journal Title:** Annals of Agricultural Sciences  
**Date of Publication:** 2000  
**Volume ID:** 1  
**Issue ID:** 3  
**Page(s):** 76 - 79  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Goat, Ruminant.

**Record Number:** 135  
**Author(s):** Idika, I. N Audu, R. A. Oyedeji, K. S. Iyanda, R. Egbom, C. A.  
**Title:** Investigation of Different Water Sources as a Possible cause of Cholera Outbreak in Lagos in 1997  
**Journal Title:** Journal of the Nigerian Infection Control Association.  
**Date of Publication:** 2000  
**Volume ID:** 3  
**Issue ID:** 2  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Cholera still remains one of the major causes of high morbidity and mortality in developing countries. In Nigeria this has been attributed to poor health management response of outbreaks. So during a cholera outbreak in Lagos state in October 1997, water samples were examined to identify the epidemic strain and determine the antibiotic susceptibility patterns of any *Vibrio Cholerae* isolated. Twenty-four water samples from various sources (wells, taps, boreholes and packaged water) from the affected areas were processed using alkaline peptone water and thiosulphate citrate bile salt agar. Various biochemical and serological tests were used for identification. *Vibrio Cholerae*, 01 serogroup, Ogawa serotype and El-Tor biotype was isolated from 20.8% of the water samples tested. These isolates showed multiple resistance to antibiotics particularly tetracycline but were susceptible to the cephalosporins. Eleven other water samples (45.8%) showed growth of *Enterococcus faecalis* while two others (8.3%) grew diphtheroids. Samples from Ikeja area (control) showed no bacterial growth. This study isolated a *V. cholerae* that was the same as the strain reported in previous

cholera outbreaks in Nigeria. Isolation of other faecal bacteria suggests faecal pollution of water sources in the areas studied.

**Keywords:** Cholera outbreak, Lagos, 1997.

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**Record Number:** 136  
**Author(s):** Idika, N. Odugbemi, T, Anigbogu, C, Adegunloye, B.J, Mojiminiyi, F.B.O. Elesha, S.O, Azinge, E. N.  
**Title:** Water Purification Properties, Cardiovascular and Metabolic effects of Potash alum (Trona)  
**Date of Publication:** 2000  
**Volume ID:** 10  
**Issue ID:** 2  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Boiling or chlorination as water purification methods may not be suitable for use in rural areas. So the use of potash alum (trona) which has antibacterial properties was investigated as a water purifier. Various weights of trona (0.05-1.0%) were added to water samples collected from different sources such as wells, streams and ponds at concentrations of trona were also added to laboratory water samples contaminated with water pathogens, Salmonella typhi, Shigella dysenteriae, Escherichia coli and Vibrio cholerae. At concentrations of 0.5% and 2% trona resulted in increase in blood pressure while the heart rate alanies and aspparate transaminase activities were unaffected. These results suggest that trona may be useful for domestic water purification, however the cardiovascular effect needs to be further elucidated.

**Keywords:** Water purification, Potash alum, Cardiovascular effects.

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**Record Number:** 137  
**Author(s):** Nnodu, O. E. Odunukwe, N. Odunubi, O. Ekanem, E. Njoku, O. S.  
**Title:** Cost Effectiveness of Autologous Blood Transfusion a Developing Country Cospital's Perspective  
**Journal Title:** West Afr. J. Med  
**Date of Publication:** 2000  
**Volume ID:** 22  
**Issue ID:** 1  
**Page(s):** 10-2  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** An autologous blood donation program was set up at National Orthopaedic Hospital, Igbobi, Lagos in 1992 in response to the rising zero prevalence of HIV observed in our "relative replacement donors. A retrospective batch analysis of patients who received autologous transfusion and those who received homologous blood in our hospital in 1997 was carried out. Based on hospital charges, the mean charge (from the day of operation and excluding the cost of surgery) was dollars 116(+/- dollars 7), median dollars 102 for those who donated and used their own blood compared to the mean charge of dollars 259.7 (+/- 116.3), median dollars 224, for homologous blood recipients (P=008). This was found to be due to a significant difference in the means of length of hospital stay of 21 days for autologous blood recipients, 34 for homologous blood recipients (P=0.0009). The rate of infection was 85.7% for homologous blood recipients and 14.3% for autologous blood recipients. There was no significant difference in the means hospital charges, length of hospital stay and rate of infection in the entire population of patients who received blood transfusion when analysed by ward and consultant. We conclude that homologous blood transfusion in this hospital is significantly more expensive than autologous transfusion mainly due to greater infective morbidity in homologous blood recipients.

**Keywords:** Autologous, Blood Transfusion.

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**Record Number:** 138  
**Author(s):** Smith, S. I. Olukoya D. K. Fox A. J. Coker, A. O.  
**Title:** Genotyping of clinical and Chicken Isolates of *Campylobacter Jejuni* and *Campylobacter coli*.  
**Journal Title:** Cytobios.  
**Date of Publication:** 2000  
**Volume ID:** 103  
**Issue ID:** 403  
**Page(s):** 91-101  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Genomic DNA from 58 strains of *Campylobacter* made up of 48 *Campylobacter jejuni* and ten *Campylobacter coli* were digested with *Sma* I and analysed by pulsed-field gel electrophoresis (PFGE). The cleavage of DNA by *Sma* I gave 22 distinct hybridization patterns. The two *Campylobacter* species were subtyped by PFGE. The average genomic size for *C. jejuni* by *Sma* I digestion was 1.73 Mb, while that of *C. coli* gave 1.7 Mb. Results from this study indicate that PFGE analysis by *Sma* I digested genomic DNA provides a reliable means of differentiating between and within species of *Campylobacter* and provides a practical approach to epidemiological studies of *Campylobacter*.  
**Keywords:** Genotyping, clinical, chicken, *Jejuni*, *Campylobacter coli*.

**Record Number:** 139  
**Author(s):** Idika, N. Idigbe, O. E. Agomo, P. U.  
**Title:** Studies on the Knowledge, Attitude and Practice of Child Carers for Children with Acute Respiratory Infections in Some Rural Areas of Abia State, Nigeria.  
**Journal Title:** Afr. J. Clin. Exp. Microbiol.  
**Date of Publication:** 2000  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** As acute respiratory infections (ARI) are important causes of childhood morbidity and mortality developing countries, the knowledge, attitude and practice of child carers and patent medicine vendors (PMVs) towards ARI in the rural areas were assessed. A total of 345 child carers and 12 PMVs in 5 communities in Isuikwuato LGA were interviewed and the information obtained were analyzed statistically, 92.7% of the respondents had forma education and they were mainly farmers and pety traders. 69.2% had 1-3 episodes per year of upper respiratory tract infection (URTI), while 72.3% experienced lower respiratory tract infection (LRTI) per year. Only a few of the respondents could differentiate between symptoms of URTI and LRTI. Methods of preventing, ARI were mentioned by only 29.5%. Drugs used by the people were obtained from PMVs (45%), health centres (44.7%), government hospitals (4.5%) while 4.2% combined the orthodox drugs with local herbs and onitment. The knowledge and treatment-seeking behaviour of the child carers in the study areas were inadequate, so training programmes and health education campaigns should be organized to improve the home management of ARI in the rural areas.  
**Keywords:** Children, Respiratory, Nigeria.

**Record Number:** 140  
**Author(s):** Odunukwe, N. N. Akinsete, I  
**Title:** Effects of Frequent Painful Crisis on Hepatic Function Tests in Adult Sickle Cell Anaemia Patients in Steady State in Enugu, Nigeria

**Journal Title:** Niger Med. J.  
**Date of Publication:** 2000  
**Volume ID:** 38  
**Issue ID:** 1  
**Page(s):** 21-23  
**Address/Availability:**  
**Location/URL:**

**Abstract:** To evaluate the liver function tests of adult sickle cell anaemia (SCA) patients in a steady state, to relate the findings to the frequency of crisis and determine how long the liver abnormality detected in painful crises persists after the crises. Material and methods: Fifty SCA patients aged between 16 and 37, attending adult sickle cell clinic at UNTH Enugu, and 50 healthy blood donors as controls were studied. Data obtained was subjected to statistical analysis. Result: - All patients with hepatomegally had crisis more than 3 times in a year. A comparison of the biochemical values between patients and controls showed no significant evidence of liver damage. However, the serum globulin level was significantly higher in SCA patients when compared with controls ( $P < 0.00$ ), and all patients who had elevated aspartate aminotransferase had had crisis less than two month before this study. Serum billirubin and enzyme activities were significantly higher in patients with four crises or more per year compared to those with one or less per year. Conclusion: Liver function abnormalities observed in SCA in crisis do not persist for more than four weeks after the crisis. There was no biochemical evidence of liver damage in adults SCA in steady state. Hepatic dysfunction reported in crisis appears to be transient and reverses to normal after 22 months. High frequency of crisis and short intervals between crises may result in apparent persistent hepatic dysfunction.

**Keywords:** Hepatic, Sickle Cell, Anaemia, Enugu, Nigeria.

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**Record Number:** 141  
**Author(s):** Smith, S. I. Olukoya, D. K. Fox, A. J. Coker, A. O.  
**Title:** Deoxyribonucleic Acid Restriction Digest Patterns in Campylobacter Species: a Comparison with Penner Serotype.  
**Journal Title:** Br J Biomed Sci.  
**Date of Publication:** 2000  
**Volume ID:** 57  
**Issue ID:** 2  
**Page(s):** 137-41  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Diversity, based on restriction fragment length polymorphism (RFLP) analysis, was studied in 48 strains of Campylobacter, comprising 27 chicken and 21 human strains of *C. jejuni* and *C. coli*, using genomic Southern hybridisation. Restriction digests of chromosomal DNA were prepared by treating with HaeIII and probed using a *C. jejuni* DNA probe. Nineteen distinct hybridisation patterns were identified, and differences in hybridisation pattern between members of the two species, and in individual strains of the same species, were seen. The method described proved more discriminatory than the Penner serotype, as strains from the same serotype were distinguished. The relative simplicity of the patterns obtained, together with the apparent diversity identified among individual strains and species, suggests that DNA fingerprinting using the *C. jejuni* DNA probe could be a useful identification method in epidemiological studies of Campylobacter infection in Nigeria.

**Keywords:** Deoxyribonucleic acid, Campylobacter, Penner serotype.

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**Record Number:** 142  
**Author(s):** Odunukwe, N. N. Salako, I. A. Okanny, C. Ibrahim, M. M.  
**Title:** Serum ferritin and other haematological Measurement in Apparently Healthy Adults

- Journal Title:** Trop Med Int. Health  
**Date of Publication:** 2000  
**Volume ID:** 5  
**Issue ID:** 8  
**Page(s):** 582-6  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** We studied 300 apparently healthy residents of Lagos aged 16-57 years. Their mean ferritin levels were 99.6+/- 50.5 microg/l (men aged 20-57) and 66.5+/- 44 microg/l (women aged 20-53) in aparasitaemic individuals. In parasitaemic subjects, mean ferritin levels were 133.1+/- 48.3 microg/l (men aged 20-56) and 114.8+/- 51.1 microg/l (women aged 15-50). Mean haematocrit values for aparasitaemic males were 45.7+/- 5.6% and 37.9+/- 5% for females, while mean haemoglobin levels were 153.2+/- 1.5 microg/l and 124+/- 3 microg/l respectively. The mean values for MCV (mean corpuscular volume), MCH (mean corpuscular haemoglobin concentration) were 101.7 +/- 8ft, 30.6 +/- 2.2 pg, 335+/- 0.4 g/l and 99.8 +/- 10.1ft 29.1 +/- 6.5 pg 33335+/- 6 g/l. Serum iron levels were 34.2 +/- 5 micromol/l and 29.5+/- 77 micromol/l. All haematological parameters measured were similar in both malaria parasitameia positive and negative subject, except ferritin level which were significantly higher in parasitamic individuals (P<O.O5). Ferritin concentration and malaria density (r=O.76 inmales, r = O.74 on females, P= O.O5) were positively correlated. Ferritin levels of subject infected with Plasmodium falciparum were significantly higher than of these infected with P. malaria (P<O.O5. Hence ferritin estimation without examination for malria parasitaemia in a malaria-endemic region such as Nigeria is not reliable. Asymptomatic malaria parasitaemia increases the ferritin level. Considering the mean ferritin level we found in normal subjects in a balanced diet, routine iron supplementation may not be necessary in the treatment of malaria-induced anaemia in Nigeria.
- Keywords:** **Serum Ferritin, Haematological, Malaria, Parasitaemia, Lagos, Nigeria.**

- Record Number:** 143  
**Author(s):** Smith, S. I, Bakare, S. Olukoya, D. K. Oguntayo, O.  
**Title:** Isolation and characterization of Lactobacillus species isolated from chicken droppings.  
**Journal Title:** Afr. J. Clin. Exp. Microbiol.  
**Date of Publication:** 2000  
**Volume ID:** 1  
**Issue ID:**  
**Page(s):** 51-55  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Lactobacillus, Chicken.**

- Record Number:** 144  
**Author(s):** Olukoya, D. K. Smith, S. I. Eytayo, C.A. Ogunjimi, A.  
**Title:** Drug resistance and plasmid profile of Salmonella species isolated from different sources in Nigeria.  
**Journal Title:** Afr. J. Clin. Exp. Microbiol.  
**Date of Publication:** 2000  
**Volume ID:** 1  
**Issue ID:**  
**Page(s):** 21-27  
**Address/Availability:**  
**Location/URL:**

**Abstract:**  
**Keywords:**

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**Record Number:** 145  
**Author(s):** Olukoya, D. K. Smith, S. I. Olasupo, N. A. Ogunjimi, A. A. Abaelu, A. M, Apena, A. Iyanda, R.  
**Title:** Development of nutritionally improved cereal-based indigenous food 'Ogi'.  
**Journal Title:** Adv. Food Sci. (CMTL)  
**Date of Publication:** 2000  
**Volume ID:** 22  
**Issue ID:**  
**Page(s):** 77-80  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Food, 'Ogi'.

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**Record Number:** 146  
**Author(s):** Nnodu, O.E. Odunubi, O. O. Njoku, O. S. Odunukwe, N. N.  
**Title:** Autologous transfusion practice seven years experience (1992 - 1998) at the National Orthopaedic and Military Hospital in Lagos, Nigeria.  
**Journal Title:** Nig. Quart. J. Hosp. Med.  
**Date of Publication:** 2000  
**Volume ID:** 10  
**Issue ID:** 1  
**Page(s):** 15-17  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Autologous transfusion, National Orthopaedic, Military Hospital.

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**Record Number:** 147  
**Author(s):** Savage, K.O. Enwonwu, C.O. Falkler, W.A. Idigbe, E.O. Ibrahim, M. M. Afolabi, B.M. Onwujekwe, D. Akinosho, R  
**Title:** Oral cleanliness and periodontal status of children in the south-western and North western regions of Nigeria.  
**Journal Title:** Nig. Quarterly J. of Hosp. Med.  
**Date of Publication:** 2000  
**Volume ID:** 9  
**Issue ID:** 4  
**Page(s):** 274-278  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Oral cleanliness, Periodontal status.

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**Record Number:** 148  
**Author(s):** Adeiga, A. Akinosho, R. A.  
**Title:** Study of relationship between tonsil growth and response to BCG vaccination in infants

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vaccinated under EPI programme.  
**Journal Title:** Nig. Quart. J. Hosp. Med.  
**Date of Publication:** 2000  
**Volume ID:** 10  
**Issue ID:** 1  
**Page(s):** 1-3  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** vaccination.

**Record Number:** 149  
**Author(s):** Otunbanjo, O. O. Mafe, M. A. Idowu, E.T. Adeneye, A. K.  
**Title:** Knowledge, attitude and perception of malaria in Lagos State  
**Journal Title:** Nigerian Quarterly Journal of Hospital Medicine  
**Date of Publication:** 2000  
**Volume ID:** 73-77  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Malaria.

**Record Number:** 150  
**Author(s):** Ogunrinde, A.F. Awolola, T.S. Rotimi, O. Chandrashekar R.  
**Title:** Longitudinal studies of skin microfilaria and antibody conversion rates in children living in an endemic focus of onchocerciasis in Nigeria.  
**Journal Title:** Jour. of Trop. Paedr.  
**Date of Publication:** 2000  
**Volume ID:** 46  
**Issue ID:** 348-351  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Onchocerciasis.

**Record Number:** 151  
**Author(s):** Awolola, T.S. Manafa, O.U. Rotimi O. Ogunrinde, A. F.  
**Title:** Knowledge and beliefs of cause, transmission, treatment and control of human onchocerciasis in rural communities in south western Nigeria.  
**Journal Title:** Acta Tropica.  
**Date of Publication:** 2000  
**Volume ID:** 76  
**Issue ID:** 3  
**Page(s):** 247-252  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Descriptive and quantitative information on onchocerciasis transmission and control were

collected using focus group discussions and structured questionnaire to determine what changes if introduced, could upset the established human–vector–parasite relationship in limiting transmission. People’s knowledge of cause of infection and transmission was very poor. Of the 1012 people interviewed, only 3% related the clinical manifestations of onchocerciasis to *Simulium* bites. Thirty six percent had no idea of the cause of infection while the rest attributed the clinical symptoms of the disease to many other causes. People’s knowledge of the current treatment and control measures was also poor. However an impressive knowledge of the daily and seasonal distribution of *Simulium* flies was observed. The study identifies the need for health education campaigns aimed at relating the clinical manifestations of onchocerciasis to *Simulium* bites. This could help people in taking personal protective measures and seeking appropriate treatment.

**Keywords:****Onchocerciasis, Knowledge, Beliefs, Causes, Treatment, Control.**

**2001 - 2010**



**Record Number:** 152  
**Author(s):** Odunukwe, N. N. Salako, L. A. Okany, Ahmed, O. A. Mafe A. G. Efiemokwu, C. Rhaem, T. Y.  
**Title:** Serum Ferritin and other Haematological Measurements in Apparently Health Children with Malaria Parasitaemia in Lagos, Nigeria.  
**Journal Title:** WAJM  
**Date of Publication:** 2001  
**Volume ID:** 20  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** One hundred apparently normal nursery and primary school children aged between 2 to 12 years from private schools, in Lagos Nigeria were studied. From this study the mean ferritin levels for children aged 2-5 years and 6-12 years were  $112 \pm 48 \mu\text{g/l}$  respectively. Mean haematocrit values were  $37.6 \pm 2.2\%$ , and  $37.5 \pm 2.6\%$ , while mean haemoglobin levels were  $126 \pm 9\text{g/l}$   $127 \pm 7.9\text{g/l}$  (2-5 years and 6-12 years respectively). The mean values for MCV, MCH, MCHC were  $92 \pm 8.6\text{fl}$ ,  $27.6 \pm 3.0\text{pg}$ ,  $338.0 \pm 15.0\text{g/l}$  and  $93.5 \pm 9.0\text{fl}$ ,  $28.7 \pm 2.5\text{pg}$ ,  $332.0 \pm 17.0\text{g/l}$  (2-5 years and 6-12 years respectively). All haematology parameters measured were similar in both malaria parasitaemia positive and negative subjects, except ferritin level which was significantly higher in subject with malaria parasitaemia ( $p < 0.05$ ). There was positive correlation between ferritin concentration and malaria density ( $r = 0.85$ ,  $p < 0.05$ ). From the above findings, it would be concluded that, ferritin estimation without examination for malaria parasitaemia in a malarious region like Nigeria is not reliable. It is also concluded that with the high mean ferritin level obtained in this study for normal children on balanced diet, routine iron supplementation may not be necessary for this group of children in Nigeria.  
**Keywords:** Ferritin, Healthy, Malaria Parasitaemia, Children, Lagos.

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**Record Number:** 153  
**Author(s):** Idika, N. Odugbemi, T. Ekanem, E. E.  
**Title:** Solar radiation method of water purification. A potential way of reducing morbidity and mortality due to diarrhoeal diseases.  
**Journal Title:** Proceedings of national sanitation foundation 3rd International Symposium and Technology Expo.  
**Date of Publication:** 2001  
**Volume ID:**  
**Issue ID:**  
**Page(s):** 101-110  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:**

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**Record Number:** 154  
**Author(s):** Adesanya, A. A. **Oyedeji, K. S.** Elesha, S.O. Oluwatowoju, I.O. da Rocha Afodu, J.T. Coker, A. O. Kehinde, M. O. Afonja, O.A  
**Title:** **Gastric antral justamucosal pH in Helicobacter pylori positive and negative dyspeptic patients.**  
**Journal Title:** Nig. Postgrad. Med. J. 8(3): 116 - 122.  
**Date of Publication:** 2001  
**Volume ID:** 8  
**Issue ID:** 3  
**Page(s):** 116-122  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:**

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**Record Number:** 155  
**Author(s):** Jagbra-Rizk, M. A. Falkler, W.A. **Enwonwu, C.O. Onwujekwe, D.I.** Merz, G. Meiller, T.F.  
**Title:** **Prevalence of yeast among children in Nigeria and the United States.**  
**Journal Title:** Oral Microbiol. Immunol.  
**Date of Publication:** 2001  
**Volume ID:** 16  
**Issue ID:** 383-385  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Yeast, Children**

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**Record Number:** 156  
**Author(s):** O.J. Nebe1, P. U. **Agomo, C. O.** Adeoye, C. O. **Agomo. M. E.** Mosanya  
**Title:** **Malaria in a Coastal Area of Lagos State, Nigeria: Performance of Parasight®F and Immunochromatographic Tests as Rapid Diagnostic Techniques**  
**Journal Title:** Research Communications in Parasitology  
**Date of Publication:** 2001  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 41-48  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The objective of this work was to investigate the performance of ParaSight® F and immunochromatographic assays in comparison with thick film microscopy (TFM) as the Gold Standard using peripheral blood from the same set of subjects and from the same reverine/coastal area of Ibeju-Lekki Local Government Area of Lagos State. The study was conducted in February, 2000. The study participants comprised thirty children under five years of age and thirty pregnant women. The thick film microscopy detected malaria parasite on 31(51.6%) subjects. ParaSight® F and ICT detected Plasmodium falciparum antigen in 34 (56.6%) and 36 (60%) subjects respectively. A total of 27 subjects were positive using the 3 techniques; as such, PSF and ICT detected antigenaemia in seven and nine subjects respectively when thick film microscopy was negative. Four subjects were also positive by thick film microscopy when ParaSight® F and ICT were negative. There were four cases of mixed infection with Plasmodium falciparum and Plasmodium malariae and the cases were detect by the dipstick assays. Further analysis was carried out to determine the sensitivity and

specificity of the two assays. ParaSight® F showed a sensitivity of 87.1% and a specificity of 75.9%. The positive and negative predictive values were 79.4% and 84.6%. Immunochromatographic Text (ICT) also showed a sensitivity of 87.1% and a specificity of 69.0%. The positive and negative predictive values were 75.0% and 83.3%. We conclude that PSF and ICT are indispensable laboratory diagnostic tools for such rural coastal areas as Ibeju-Lekki LGA.

**Keywords:** Malaria, Immunochromatographic, Nigeria

**Record Number:** 157  
**Author(s):** Iwalokun, B. A. Gbenle, G. O. Smith, S. I. Ogunledun, A. Akinsinde, K. A. Omonigbehin, E. A.  
**Title:** Epidemiology of Shigellosis in Lagos, Nigeria: Trends in Antimicrobial Resistance.  
**Journal Title:** J Health Popul Nutr.  
**Date of Publication:** 2001  
**Volume ID:** 19  
**Issue ID:** 3  
**Page(s):** 183-90  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Antimicrobial susceptibility of *Shigella* spp. and *Escherichia coli*, isolated from diarrhoeal patients in Lagos, was studied from March 1999 to February 2000. Four hundred fifty-nine isolates were identified as shigellae (62) and *E. coli* (397). *Shigella flexneri*, *S. dysenteriae*, *S. boydii*, and *S. sonnei* accounted, respectively, for 51.6%, 17.7%, 17.7%, and 13% of the total number of shigellae isolated. Eleven cases of shigellosis occurred in the age group of 0-9 years, 22 cases in the age group of 10-19 years, and 29 cases in the age group of > or = 20 years. Of the 397 *E. coli* isolates, 11 were enteropathogenic *E. coli* (EPEC), and 7 of these strains were isolated with shigellae from stools of patients aged 0-9 year(s) (71.4%) and 10-19 years (28.6%). Over 70% of the *Shigella* isolates were resistant to two or more drugs, including ampicillin and tetracycline. Twenty-one distinct multidrug resistance patterns were observed in these isolates. During 1990-2000, resistance to ampicillin increased from 70% to 90%, co-trimoxazole from 77% to 85%, chloramphenicol from 71% to 77%, streptomycin from 71% to 79%, and nalidixic acid from 0% to 11.3%. Resistance to tetracycline decreased from 89% to 79% but with MIC50 and MIC90 values outside the susceptible range. While resistance to ciprofloxacin and ofloxacin remained nil with MIC50 and MIC90 values of 0.008 and 0.0016 microgram/mL respectively. The results of this study revealed the endemicity of shigellosis with *S. flexneri* as the predominant serogroup in Lagos. Children and young adults were at a higher risk of severe shigellosis. The results also suggest that ampicillin, tetracycline, co-trimoxazole, and streptomycin should not be used as the first-line drugs in the treatment of shigellosis. Nalidixic acid should still be selectively used for treatment, while ciprofloxacin and ofloxacin can be ideal alternatives.

**Keywords:** Epidemiology, Shigellosis, Nigeria, Antimicrobial.

**Record Number:** 158  
**Author(s):** Iwalokun, B. A. Adewole, T. A. Adeiga, A. A. Odunukwe, N. N. Akinrinmisi, E. O.  
**Title:** Comparative Analysis of DNA Fragment Length Polymorphs at a  $\beta$ -globin Gene Locus of Human, rhesus Monkey and Guinea Pig by PCR  
**Journal Title:** Nigerian Journal of Biochemistry and Molecular Biology  
**Date of Publication:** 2001  
**Volume ID:** 10  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

A 770bp region of  $\beta$ -globin genes of humane, rhesus monkey, guinea pig was analyzed for

nucleotide, sex, space polymorphism in order to delineate the phylogenetic relationship in the organizations. Genomic DNAs of the organisms were extracted by salting out procedures followed by in vitro amplification of the 770bp of region by the polymerase chain reaction and Dde1(CTNAG) digestion. The extraction procedure yielded a relatively low genomic DNA yield of guinea pigs (1.8-2.8pg) compared with those of the rhesus monkeys (3.0-3pg) and humans (3.2-3.9pg) per ml of blood. Similar patterns were also observed in their PCR products yields. The percentage purity of the PCR product range for 1.73-1.79). Furthermore, the digestion of the PCR products by Dde 1 revealed three fragments in guinea pigs (520bp, 500bp, 250bp) that differs in molecular size from those of humans. In rhesus monkeys, identical bands as those of humans AA genotype (201bp, 130bp, 89bp, 88bp) were found with an additional 660bp, 350bp and 330bp fragments. The result indicates a highly polymorphic and heterologous  $\alpha$ -globin gene of guinea pig. Phylogenetic distance can be generalized to the human rhesus monkeys and guinea pigs.

**Keywords:** DNA, Polymorphs,  $\beta$ -globin Gene Locus of Human, rhesus, Monkey ,Guinea Pig,PCR

**Record Number:** 159  
**Author(s):** Agomo, P. U. C. A. O. Asianya V. N Aina O. O Okoh H. I. Nebe O. J.  
**Title:** Comparative Evaluation of Immuno-chromatographic Text (ICT) And Parasight ®-F for the Rapid Diagnosis of Falciparum Malaria in Nigeria.  
**Journal Title:** Afr. J. Clin. Exp. Microbiol  
**Date of Publication:** 2001  
**Volume ID:** 2  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The efficacy of two new rapid diagnostic techniques: Parasight®-F and Immunochromatographic (ICT) tests, which detect Plasmodium falciparum histidine-rich protein-2 (HRP-2) antigen in human blood has been previously investigated in some countries and recommended for use in rural areas. The objective of this study was to evaluate the comparative efficacy of these two new rapid diagnostic techniques for the detection of malarial histidine-rich protein-2 (PfHRP-2) in the peripheral blood of P. falciparum-infected patients. The thick blood film microscopy (TEM) was used as the “Gold Standard”. Results obtained using the Parasight ®-F technique showed an average sensitivity of 82.1% and a specificity of 98.1% , a positive and negative predictive values of 95.5% and 91.7%. Respectively. The (ICT technique gave an average sensitivity of 92.7%, a specificity of 99.5% positive and negative predictive values of 97.4% and 98.5% respectively. The immunochromatographic (ICT) technique showed a higher efficacy than the Patasight ®-F technique, as judged by the higher sensitivity and specificity obtained from the ICT assays.

**Keywords:** Malaria diagnosis, Plasmodium falciparum, Immunochromatographic Text (ICT) Partasight®-F Test; Histidine Rich Protein-2

**Record Number:** 160  
**Author(s):** Akinwale, O. P. Nock, I. H. Esievo, K. A. N.  
**Title:** Relapse Infection in West African Dwarf Goats Experimentally Infected with Trypanosoma Vivax.  
**Journal Title:** Research Communications in Parasitology  
**Date of Publication:** 2001  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 34-38  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**Keywords:** Dwarf Goats, Trypanosoma Vivax.

**Record Number:** 161  
**Author(s):** Agomo, P. U. Akindele, S. K. Opedun, D. O. Brai, B. I. C.  
**Title:** Lipid Peroxidation products and Glucose-6-Phosphate Dehydrogenase (g6pd) in falciparum materia Subjects in Lagos state, Nigeria.  
**Journal Title:** Applied Natural Sciences Research  
**Date of Publication:** 2001  
**Volume ID:** 1  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** As part of our studies on the effect of free of radicals and antioxidants in health and disease, we have in this project investigated the levels and effects of a lipid peroxidation product (malondialdehyde,mda) and glucose-6-phosphate dehydrogenase (g6pd) in nigerian patients suffering from plasmodium falciparum malaria. mda and g6pd were estimated in 200 malaria patients attending various clinics in lagos state, nigeria. Control subjects consisted of 80 uninfected males and females.the plasma from the patients was assayed for a a lipid peroxidation product (malondialdehyde,mda). rapid diagnostic techniques (parasight® f and immunochromatograhic test: ict), the thick film microscopy (tfm) and clinical parameters were used to ascertain the malaria status of the patients.another rapid single- step screening method was used for the detection of g6pd.result showed that all 9(4.5%)plasmodium falciparum-positive subjects with g6pd deficiency had low parasitaema (>1000 parasites/pd of blood) a total of 191(95.5%) of malaria-positive patients were also positive for g6pd, and their mean parasite density was significantly higher (p<0.001) than the mean density of the g6pd-deficient, malaria-positive patients. on the other hand, the mean concentration of mda was significantly higher (p<0.001) in patients with malaria than in control subjects the increase in mda concentration positively correlated with the increase in parasite density and the severity of the disease. no correlation was found between the concentration of plasma mda and the presence or deficiency of g6pd. we suggest that mda (a lipid per oxidation product) is one of the diagnostic risk factors in severe malaria, and we recommend that the new rapid diagnostic techniques for p.falciparum and for g6pd should be utilized in malaria diagnosis in endemic areas so that prompt and appropriate treatment could be carried out and administration of drugs for g6pd-deficient subjects could be undertaken with caution.

**Keywords:** Lipid, Peroxidation, glucose-6-phosphate dehydrogenase (g6pd), falciparum, Lagos, Nigeria.

**Record Number:** 162  
**Author(s):** H. Millogo, I. P. Guissou N. Idika, A. Adepoju-Bello. HAB. Coker, Agomo, P. U.  
**Title:** Identification of Phenolic Acids and Free Phenols of the Stem Barks Parkia Biglobasa (JACQ.) Mimosaceae: Comparative Study of the Activity of the total and Hydroalcoholic Extracts with that of the Gentamicin against Pathogenic Bacteria  
**Journal Title:** West Afr. Pharm.  
**Date of Publication:** 2001  
**Volume ID:** 15  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The chemical screening of the stem back of Parkia Biglobosa has shown that the are rich in polyhenolic compounds. The extraction of these compounds with ethanol was followed by the identification of phenolic acids and free phenols using paper chromatography. The aqueous and

ethanolic extracts were proven active against a number of pathogenic bacteria. The gentamicin was found for more active than the ethanolic and the aqueous extracts against the tested pathogenic bacteria.

**Keywords:** **Parkia Biglobosa, Polyphenolic compounds, Paper chromatography, Pathogenic bacteria.**

**Record Number:** 163

**Author(s):** **Salako, L. A. Brieger, W. R. Afolabi, B. M. Umeh, R. E. Agomo, P. U Asa, S. Adeneye, A. K. Nwankwo, B. O. Akinlade, C. O.**

**Title:** **Treatment of Childhood Fevers and Other Illnesses in Three Rural Nigerian Communities**

**Journal Title:** Journal of Tropical Pediatrics

**Date of Publication:** 2001

**Volume ID:** 47

**Address/Availability:**

**Location/URL:**

**Abstract:** The seeking of healthcare for childhood illnesses was studied in three rural Nigerian communities of approximately 10 000 population each. The aim was to provide a baseline understanding of illness behaviour on which to build a programme for the promotion of prepackaged chloroquine and cotrimoxazole for early and appropriate treatment of childhood fevers at the community level. A total of 3117 parents of children who had been ill during the 2 weeks prior to interview responded to questions about the nature of the illness and the actions taken. Local illness terms were elicited, and the most prevalent recent illness and the actions taken. Local illness terms were elicited and the most prevalent recent illnesses were 'hot body' (43.9 per cent), malaria, known as iba (17.7 per cent), and cough (7.4 per cent). The most common form of first-line treatment was drugs from a patent medicine vendor or drug hawker (49.6 per cent). Only 3.6 per cent did nothing. Most who sought care (77.7 per cent) were satisfied with their first line of action, and did not seek further treatment. The average cost of an illness episode was less than US\$2.00 with a median of US\$1.00. Specifically, chloroquine tablets cost an average of US 29~ per course. Analysis found a configuration of signs and symptoms associated with chloroquine use, to include perception of the child having malaria, high temperature and loss of appetite. The configuration positively associated with antibiotic use consisted of cough and difficult breathing. The ability of the child's care-givers, both parental and professional, to make these distinctions in medication use will provide the foundation for health education in the promotion of appropriate early treatment of childhood fevers in the three study sites.

**Keywords:** **Children, Fever, Nigeria.**

**Record Number:** 164

**Author(s):** **Smith, S. I. Oyedeji, K. S. Arigbabu A. O. Chibututu, C. C. Anomneze, E. E. Agbakwuru, A. E. Ndububa, D. A. Coker, A. O**

**Title:** **Seroprevalence of Helicobacter pylori Infection in Patients with Gastritis and Peptic Ulcer in Western Nigeria**

**Journal Title:** British Journal of Biomedical Science

**Date of Publication:** 2001

**Volume ID:** 58

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:**

**Keywords:** **Seroprevalence, Helicobacter pylori, Infection, Patients, Gastritis, Peptic ulcer, Nigeria.**

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**Record Number:** 165  
**Author(s):** Millogo, H. Guissou, I. P. **Idika**, N. Adepoju, Bello, A. Coker, H. A. B. **Agomo**, P. U.  
**Title:** **Identification of Phenolic Acids and Free Phenols of the Stem Barks Parkia Biglobasa (JACQ.) Mimosaceae: Comparative Study of the Activity of the Total and hydroalcoholic Extracts with that of the Gentamicin against Pathogenic Bacteria**  
**Journal Title:** West Afr. Pharm.  
**Date of Publication:** 2001  
**Volume ID:** 15  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The chemical screening of the stem back of Parkia Biglobosa has shown that they are rich in polyphenolic compounds. The extraction of these compounds with ethanol was followed by the identification of phenolic acids and free phenols using paper chromatography. The acqeous and ethonolic extracts were proven active against a number of pathogenic bacteria. The gentamicin was found more active than the ethanolic and the aqueous extracts against the tested pathogenic bacteria.  
**Keywords:** **Parkia Biglobosa, Polyphenolic compounds, Paper chromatography, Pathogenic bacteria.**

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**Record Number:** 166  
**Author(s):** **Smith, S. I.** Aweh, A. J. Coker, A. O. Savage, K. O. Abosedede, D. A. **Oyedeji, K. S.**  
**Title:** **Lactobacilli in Human Dental Caries and Saliva.**  
**Journal Title:** Microbios.  
**Date of Publication:** 2001  
**Volume ID:** 105  
**Issue ID:** 411  
**Page(s):** 77-85  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Samples (98 plaque and 72 saliva) from 93 patients with dental caries were investigated for Lactobacillus species which comprised 65 (62.5%) of 104 isolates. Yeasts (20.1%), Streptococcus spp. (8.7%), Staphylococcus spp. (2.9%) and a few unidentified species (5.8%), were also found. The Lactobacillus isolates were L. brevis (24.6%) L. fermentum (18.5%) L. casei (16.9%), L. delbrueckii (15.4%), L. plantarum (9.23%), L. acidophilus (7.69%), L. jensenii (4.62%), L. salivarius (1.54%) and L. gasseri (1.54%). The most common species was L. brevis (24.6%). The strains tested for beta-lactamase production showed 75.4% positive. All the Lactobacillus strains were tested for bacteriocin production against Escherichia coli, Salmonella spp., Shigella dysenteriae, S. sonnei, Klebsiella spp. and Campylobacter sp. All the lactobacilli except L. jensenii produced bacteriocin against at least one of the indicator organisms. The involvement of Lactobacillus in dental caries was established, although its role and mechanism is not well understood. The ability of Lactobacillus spp. to protect their host against certain diseases by inhibiting the growth of potential pathogens was evident.  
**Keywords:** **Lactobacilli, Dental, \_saliva.**

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**Record Number:** 167  
**Author(s):** **Akinwale, O. P.** Nock, I. H. Esievo, K. A.N. **Olukosi Y. A.**  
**Title:** **Treatment Failure in Experimental Trypanosoma Vivax Infection of Sahel Goats.**  
**Journal Title:** Journal of Science Research and Development

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**Date of Publication:** 2001  
**Volume ID:** 6  
**Issue ID:**  
**Page(s):** 19-24  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Eight sahel bucks were used for the experiment. six of them were intravenously inoculated with  $2 \times 10^4$  *Trypanosoma vivax* through the jugular veins while two served as non-infected and non-treated control. their ages ranged between 10 and 12 months and weighed between 11.76 and 11.76kg. The mean pre-patient period was 4.5 days and the establishment of infection was followed by increasing parasitaemia. The first parasitaemic peak was high and occurred second week post-infection in all the infected goats. There was a drop in the packed cell volume (PCV) of all the infected goats from 30.73 “0.01% to 13.21 “0.18% which was recorded second week post-treatment. the onset of parasitaemia was associated with an increase in the rectal temperature of all the infected goats. The temperature peak was reached by the third week of infection with a mean temperature of 39.15 “0.14°C. The infected goats were treated with a single intramuscular injection of diminazene aceturate (berenil) at 3.5mg/kg body weight four weeks post-infection. four of the infected goats died within one week post-treatment. the remaining two goats died two weeks post-treatment without responding to treatment. The infected Sahel goats were found to be highly susceptible to *Trypanosoma vivax* infection without any response to treatment as they all died within two weeks post-treatment.

**Keywords:** **Trypanosoma Vivax, Infection, Sahel goats.**

**Record Number:** 168  
**Author(s):** Smith, S. I. Oyedeji, K. S. Arigbabu, A. O. Atimomo, C. Coker, A. O.  
**Title:** High Amoxicillin Resistance in *Helicobacter pylori* Isolated from Gastritis and Peptic Ulcer patients in Western Nigeria.  
**Journal Title:** J Gastroenterol.  
**Date of Publication:** 2001  
**Volume ID:** 36  
**Issue ID:** 1  
**Page(s):** 67-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A total of 58 isolates were resistant to metronidazole, amoxicillin, tetracycline, erythromycin, piperacillin and ampicillin.  
**Keywords:** Amoxicillin, *Helicobacter pylori*, Gastritis, Peptic ulcer, Nigeria.

**Record Number:** 169  
**Author(s):** Audu R.A. Omilabu, S. A. Onile, B. A.  
**Title:** The prevalence of Rotavirus, Adenovirus and Astrovirus in children with Diarrhoea in Ilorin Kwara State, Nigeria.  
**Journal Title:** Afr. J. Clin. Exp. Micro.  
**Date of Publication:** 2001  
**Volume ID:** 2  
**Issue ID:** 2  
**Page(s):** 20-22  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** In a prevalence study of viral agents of diarrhoea amongst children under 5 years of age visiting health institution, Kwara State of Nigeria, 74 children were enrolled in the study. Enzyme Immune assay was used for detection of the viruses. The prevalence observed was

16.2 for rotavirus, 8.2% adenovirus accounting for 25.8% of the diarrhoeal diseases. These findings suggest that rotavirus is the most important viral pathogen associated with gastroenteritis. Next to it is adenovirus and then astrovirus is the third most common viral enteropathogen in Ilorin, Nigeria

**Keywords:** Rotavirus, Adenovirus, Astrovirus, children, Diarrhoea, Ilorin, kwara State, Nigeria.

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**Record Number:** 170  
**Author(s):** Idika, N. Odugbemi, T. Ekanem, E. E. Ogunsola, F. T.  
**Title:** Factors Responsible for Domestic Water Contamination  
**Journal Title:** J. of the Nig. Infection Control Association  
**Date of Publication:** 2001  
**Volume ID:** 4  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Many deaths occurring in the developing countries are due to water borne diseases which are usually associated with water related behaviour such as improper disposal of faecal material as well as improper storage of water. This study was therefore designed to identify the factors that influenced domestic water contamination in our rural communities and recommend some intervention measures that can reduce this high morbidity and mortality due to diarrhoeal diseases in Nigeria. Water samples from the water sources serving six rural communities in three local government areas of Lagos State as well as water samples from 308 households from the six communities were collected for bacteriological examination. Demographic and socio-economic characteristics, toilet facilities and water storage facilities available in the households were recorded in a structured questionnaire and analysed with X2 and ANOVA statistical packages. Two out of the 12 (16.7%) water sources (both boreholes), were potable and the others were contaminated with faecal bacteria. A low percentage of households in each of the six communities had potable drinking water. Many toilets facilities (42.9%) were situated less than 10 meters away from the households. Only a few households (6.1%) purified their drinking water. The water source, toilet facilities and occupation of the fathers in the households had a statistically significant positive association ( $p < 0.05$ ) with the domestic water contamination level whereas age, level of education and overcrowding did not. The study recommends provision of less contaminated sources of water such as boreholes as a source of supply to communities and introduction of programmes that will promote hygienic practices amongst the communities.

**Keywords:** Water Contamination.

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**Record Number:** 171  
**Author(s):** Afolabi, B. M. Salako, L. A. Mafe, A. G. Ovwigho, U. B. Rabi, K. A. Sanyaolu, N. O. Ibrahim, M. M.  
**Title:** Malaria in the first 6 Months of Life in Urban African Infants with Anemia.  
**Journal Title:** Am J Trop Med Hyg.  
**Date of Publication:** 2001  
**Volume ID:** 65  
**Issue ID:** 6  
**Page(s):** 8822-7  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

A total of 446 infants in the first 6 months of life who presented at an urban children's hospital with complaints of any illness whatsoever were recruited into a study with the aim of determining the contribution of malaria to infant morbidity in a malaria-endemic urban area in Nigeria. Sixty-eight of the infants were in their first month of life and 79, 77, 61, 97, and 64

were in their second, third, fourth, fifth and sixth month of life, respectively. Overall, 107 (24.0%) infants were clinically diagnosed as having malaria. This included 3 who were in the first month of life, 12 in the second, 15 in the third, 17 in the fourth, 33 in the fifth, and 27 in the sixth months of life (4.4, 15.2, 19.5, 27.9, 34.0, and 42.1%, respectively). Laboratory investigations confirmed 35 (32.7%) of those clinically diagnosed and 86 (25.4%) of those not clinically diagnosed (n = 339) as having malaria parasitemia, giving an overall malaria parasite rate of 27.1% among the infants. Acute respiratory infection was the major diagnosis (41.3%) among those that were not initially diagnosed as malaria but turned out to have malaria parasitemia followed by gastroenteritis (11.8%) and failure to growth (1.5%). Overall geometric mean parasite density was 202.5 parasites/microL of blood (range, 12-65,317 parasites/microL of blood). The mean hematocrit of infants with parasites (33.0%) was significantly lower ( $P < 0.005$ ) than that of infants without parasites (35.1%). The mean hematocrit of infants with malaria parasites in each age group was lower than that of infants without malaria parasites in the corresponding age group. Among the infants with malaria parasites, those aged 2 to 2.9 months recorded the lowest mean hematocrit (30.1%), and those aged  $< 1$  month recorded the highest mean hematocrit (42.7%). Axillary temperature increased and hematocrit decreased with increase in parasite density. The percentage of infants with anemia likewise increased as the parasite density increased. Plasmodium falciparum was present in all infected infants, but mixed infection with P. malariae was present in only 2.5% of infections. Analysis of our data suggests an urgent need for health education of caretakers and for training of clinicians for increased awareness of malaria as an important cause of illness and anemia in infants aged  $< 6$  months so as to reduce children's wasting due to an easily preventable and treatable disease.

**Keywords:** Malaria, Anemia.

**Record Number:** 172  
**Author(s):** Smith, S. I. Canter, F. Angelini, F. Marais, A. Megraud, F. Bayerdoffer, E. Miehle, S.  
**Title:** Discriminatory Power of RAPD, PCR-RFLP and Southern Blot Analyses of ureCD or urea Gene Probes on Helicobacter pylori Isolates  
**Journal Title:** Verlag der Zeitschrift für Naturforschung, Tübingen  
**Date of Publication:** 2002  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The genetic diversity of 33 Nigerian Helicobacter pylori isolates were studied using RAPD, PCR-RFLP and Southern blot analysis of urea or ureCD gene probes RAPD was able to distinguish the following number of isolates using the primers 3880: 5'-AAGAGCCCGT-3' (28), 3881 : 5'-AACGCGCAAC-3' (33) and OPH8 :5'-GAAACACCCC-3' (25). Southern blot analysis using the ureCD probe was also able to distinguish the 12 isolates tested into ten different patterns. The PCR-RFLP technique distinguished all 33 isolates into six types. In conclusion, considering typeability, discriminatory power, and convenience, RAPD with the 3881 primer was considered the most useful technique.  
**Keywords:** Discriminatory Power, RAPD, PCR-RFLP, Southern Blot, ureCD, urea Gene Probes, Helicobacter pylori Isolates.

**Record Number:** 173  
**Author(s):** Afolabi, B.M. Oynigho, U.B. Sanyaolu, N.O. Ekanem, E.E. Abegunde, A.T. Azimoh, J. E. Ogunshile, F.S. Ojikutu, M. A. Udejaja, M.N. Igbasi, U.T.  
**Title:** Drug prescribing practices in Lagos, Nigeria.  
**Journal Title:** Journal of Malaria in Africa and the Tropics.  
**Date of Publication:** 2002

**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 13-15  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Drug prescribing.

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**Record Number:** 174  
**Author(s):** Manafa, O.U. Ismal, A.N.  
**Title:** Onchocerciasis in Oji-River local government area, Nigeria. Knowledge, attitude and practice of the people to the disease.  
**Journal Title:** Epidemiology and infection.  
**Date of Publication:** 2002  
**Volume ID:** 129  
**Issue ID:**  
**Page(s):** 629-633  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Onchocerciasis.

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**Record Number:** 175  
**Author(s):** Omotola, E. B. Ojeshina, J. O. Omotola, B. D. Aminu, F.T. Fadeyi, T.O.  
**Title:** Influence of maternal education on nutritional status of under five children in Oyo state.  
**Journal Title:** Nig. Educ. Rev.  
**Date of Publication:** 2002  
**Volume ID:** 7  
**Issue ID:** 2  
**Page(s):** 142-152  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Maternal education, Nutritional status.

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**Record Number:** 176  
**Author(s):** Enwuru, C. A. Idigbe O. Ezeobi N. V. Otegbeyo A. F.  
**Title:** Care-Seeking Behavioral Patterns, Awareness and Diagnostic Processes in Patients with Smear and Culture Positive Pulmonary Tuberculosis in Lagos, Nigeria.  
**Journal Title:** Transactions of the Royal Society of Tropical Medicine and Hygiene  
**Date of Publication:** 2002  
**Volume ID:** 96  
**Issue ID:**  
**Page(s):** 614-616  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** This study was carried out in 2 chest referral clinics in Lagos, Nigeria between February 2000 and May 2001 to assess the effects of knowledge, attitude and practice of 168 newly diagnosed tuberculosis (TB) patients on their care-seeking behavior. At the onset of symptoms patients sought treatment from one or more of the local private orthodox and traditional health providers, and patent medicine stores before presenting at a chest clinic.

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There was a correlation between the level of knowledge and awareness of TB with time of presentation at the chest clinic. Of the 32 patients who presented and were diagnosed at the chest clinic within 4 weeks of onset of symptoms, 50% and knowledge of the netiological agent of the disease and 60% had some idea of the mode of transmission. Of the 105 patients who presented and were diagnosed 12 weeks after the onset of symptoms, 97% had no knowledge of the aetiological agent and 95% had no idea of the mode of transmission. Overall there was a low level of knowledge and awareness of the disease as well as an apparently high level of improper health care-seeking behaviour amongst the patients studied which probably contributed significantly to the delay in early and accurate diagnosis of most of the cases. These findings indicate an urgent need to educate communities and care providers on the case and mode of transmission of TB, and the need to attend designated health facilities for early diagnosis and proper treatment.

**Keywords:** **Pulmonary Tuberculosis, Care Seeking Behavior, Knowledge, Awareness, Diagnosis, Treatment, Nigeria.**

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**Record Number:** 177

**Author(s):** Aboderin, A. O. **Smith, S. I.** Oyelese, A. O. Onipede, A. O. Zailani, S. B. Coker. A. O.

**Title:** **Role of Campylobacter jejuni/coli in diarrhoea in Ile-Ife, Nigeria.**

**Journal Title:** East Afr Med J.

**Date of Publication:** 2002

**Volume ID:** 79

**Issue ID:** 8

**Page(s):** 423-6

**Address/Availability:**

**Location/URL:**

**Abstract:** To re-examine the role of *C. jejuni* as an agent of diarrhoea after more than a decade at Ile-Ife, Nigeria and to determine the biological characteristics of local strains.

**Keywords:** **Campylobacter, Jejuni, coli, diarrhoea, Ile-Ife, Nigeria.**

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**Record Number:** 178

**Author(s):** **Adewole, T. A. Agomo, C. O. Okenu, D. N. M. Fagbenro-Beyioku, A. F. Afolabi, S. Olukosi, Y. A. Agomo, P. U.**

**Title:** **Allelic dimorphism of msp-1, a Malaria Vaccine Candidate, in the Clinical Isolates from Lagos, Nigeria.**

**Journal Title:** Journal of Malaria and Tropical Diseases.

**Date of Publication:** 2002

**Volume ID:** 1

**Page(s):** 20-22

**Address/Availability:**

**Location/URL:**

**Abstract:** Proteins have been found on the surface of merozoites that are targets of immune response. One of such proteins, merozoite surface protein 1 (MSP-1) has been particularly studied to show that the carboxyl (C-) terminal fragment of MSP-1 is the actual target for protective immune response. Antibodies raised against this fragment have been shown to be inhibitory to merozoite invasion of red blood cells. This domain which has been shown to be 42kDa in size (MSP1<sub>42</sub>) is dimorphic, having MAD20 and Wellcome prototype alleles. In this study, a total of 51 blood samples from malaria patients attending Lagos University Teaching Hospital and Psychiatric Hospital, Lagos were evaluated for the presence and distribution of MSP-1 alleles, using PCR-based molecular typing. The mean parasite density was 4049 (range: 84-62,128) parasites/mL of blood. 47 (92.2%) of the samples had the PNG-MAD20 allele alone, none (0%) had Wellcome allele alone, while 4(7.8%) had mixed infection with the two alleles. The results showed no significant association ( $P>0.05$ ) between the distribution of alleles and age, parasite density and packed cell volume (PCV). These results showed that

although both alleles are present in our environment, a vaccine construct incorporating MAD20 would probably be more useful.

**Keywords:** Alleles, Clinical isolates, Dimorphism, Malaria, Merozoites, PCR, Molecular Epidemiology.

**Record Number:** 179  
**Author(s):** Audu, R. Omilabu, Aremu, S. Peenze, I. Steele, Duncan, A.  
**Title:** Isolation and Identification of Adenovirus recovered from the Stool of Children with Diarrhoea in Lagos, Nigeria.  
**Journal Title:** Afr.J.Health Sci  
**Date of Publication:** 2002  
**Volume ID:** 9  
**Issue ID:**  
**Page(s):** 105-111  
**Address/Availability:**  
**Location/URL:**

**Abstract:** In order to establish the role of adenovirus in gastroenteritis in Nigerian children, stool samples were collected from 138 young children with gastroenteritis and 29 other age-matched controls. The samples were inoculated into 6 different tissue culture cell lines and isolates with characteristic CPE were subjected to CFT confirmation of the presence of adenovirus antigen. All the samples were screened for adenovirus by a commercially available enzyme immunoassay (Biotrin Adenovirus Antigen EIA) for the presence of the group antigen. Of the 138 stool samples from children with diarrhoea screened by EIA, on 23 (16.7%) were positive, while 4(13.8%) of the 29 controls were also found positive. A greater proportion of the adenovirus-positive cases were aged between 13 and 24 months. There was no difference in the prevalence of the infection between male and female. The fastidious, enteric adenoviruses of subgroup F were sought utilizing a second EIA (AdenoClone), and occurred in 3.6% of the samples from diarrhoeic children and was not detected in the control group. There was no significant difference between the clinical symptoms of children infected with adenovirus and those not infected with adenovirus. However, the source of drinking water had a significant effect on the frequency of stool per day. The infection occurred all year round except for April and there was no significant correlation with climatic factors. This study implies that the fastidious adenovirus is important in the aetiology of diarrhoeal illness in Nigerian children.

**Keywords:** Isolation, Identification, Adenovirus, Gastroenteritis, Stool, Children, Diarrhoea, Lagos, Nigeria.

**Record Number:** 180  
**Author(s):** Audu, R. Omilabu, S. A. De beer, M peenze, I. Steele, A. D.  
**Title:** Diversity of human Rotavirus vp6, vp7, and vp4 in Lagos state, Nigeria.  
**Journal Title:** J. Health Popul. Nutr.  
**Date of Publication:** 2002  
**Volume ID:** 20  
**Issue ID:** 1  
**Page(s):** 59-64  
**Address/Availability:**  
**Location/URL:**

**Abstract:** This study investigated the diversity of rotavirus strains recovered from young children in Lagos, Nigeria, during December 1996-January 1997. In total, 287 children, aged 1-60 months(s) presenting with diarrhoea to the Gbaja Health Centre, Massey Street Children Hospital and the Lagos University Teach Hospital, were included in the study. Rotavirus-positive specimens were characterized by monoclonal antibody enzyme linked

immunosorbent assay (ELISA) for VP6 subgroup and VP7 serotype and by polymerase chain reaction (PCR) for VP4 genotype and VP7 strains (that were non reactive to ELISA). Of 84 samples tested for VP6 subgroup epitope, subgroup II was predominant (51%) with only a few subgroup 1 strains (4%), while many could not be typed at all (45%). For the VP7 serotypes, G1 was the most prevalent strain (45%), followed by G3 strains (5%). Neither G2 nor G4 strains were found, although mixed G1/G2 has been reported for the first time in Nigeria. Of strains that were non-reactive to ELISA, 29 (34%) could not be typed by PCR for G type. A subset of 23 samples was selected on the basis of RNA electropherotype, VP7 serotype, and included nine strains of VP7 that were non-reactive to ELISA. VP4 genotype of this subset was determined by PCR, and most prevalent genotype was P[6] (30%), followed by P[8] (26%). Only one P[4] strain was identified. This study has shown the diversity of rotavirus stains circulating in West Africa

**Keywords:** Human, rotavirus vp6, vp7, vp4, Lagos state, Nigeria.

**Record Number:** 181  
**Author(s):** Idika, N. Odugbemi, T. Ogunsola, F. T. Idigbe, E.O.  
**Title:** An Assessment of Existing Common Traditional Methods of Water Purification  
**Journal Title:** African Journal of Clinical & Experimental Microbiology  
**Date of Publication:** 2002  
**Volume ID:** 3  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Classical water purification methods include boiling, filtration, irradiation and the use of chemicals while traditional water purification methods in use are boiling, filtration, sedimentation, long storage and solar radiation. Waterborne diseases are more common in the rural communities where potable water supply coverage is usually low. Therefore, this study was designed to assess and modify existing water purification methods in use in the rural communities so as to encourage their regular use.

Water samples collected from various sources serving six rural communities in Agege, Epe and Ikorodu Local Government areas of Lagos State were purified using each of the traditional methods. Viable counts were carried out on each of the water samples before and after the purification process. Water samples contamination with known pathogens were also included in the test. The boiling method was the most efficient giving 100% decontamination after three minutes of continuous boiling. The solar method gave varying degrees of decontamination of the water samples (42-100%) depending on the turbidity of the water and the type of container used for the test. The long storage method and the cloth filtration methods decontaminated the water by (0.6-4.2%) and 41% respectively. The solar water purification method should be encouraged. Turbid water samples should be cloth filtered prior to exposure to the sun for maximum efficiency.

**Keywords:** Traditional methods, Water purification.

**Record Number:** 182  
**Author(s):** Akanbi, A. S. Akinwale, O. P. Ajayi, M. B.  
**Title:** Incidence of Trypanosome Infections Among Some Herdsmen from Two Abattoirs.  
**Journal Title:** Medipharm Medical Journal  
**Date of Publication:** 2002  
**Volume ID:** 2  
**Issue ID:**  
**Page(s):** 15-17  
**Address/Availability:**

**Location/URL:****Abstract:****Keywords:** Trypanosome, Infections, Herdsmen, Abattoirs, Lagos, Nigeria.**Record Number:** 183**Author(s):** Audu, R. A. Omilabu, S. A. Peenze, I. Steele, D.**Title:** Nutritional status of Preschool Children in Rural coastal Nigeria.**Journal Title:** The Cent Afr J Med.**Date of Publication:** 2002**Volume ID:** 48**Issue ID:** 5/6**Page(s):** 59-63**Address/Availability:****Location/URL:****Abstract:** **Objectives:** To determine the prevalence of viral agents of diarrhoea in Ilorin and Lagos, two zones in Nigeria.**Design:** A survey of young children who had clinically confirmed diarrhea. Setting: University of Ilorin Teaching Hospital in Ilorin, Kwara State and the Massey Street Children's Hospital in Lagos State, Nigeria. Subjects: 108 children under the age of five**Results:** The prevalence rates observed were 33.3% for rotavirus, 6.7% for Adenovirus and 1.2% for Astrovirus. The Rotavirus strains were characterized further. PAGE determined the presence of seven patterns of RNA electropherotypes, with one short RN patterns and six long patterns. The G and P types of selected the most prevalent single strain found (8.3%), while G3 and G4 accounted for 6.7% and 1.7%. The rate of mixed G serotypes was 26.7%. The P(6) genotype was the most prevalent (52%) and the P(4) had a prevalence of 8%. The mixed P genotypeing accounted for 28% of the rotavirus strains. The high rate of mixed infection may have an implication on vaccine development**Conclusion:** Rotavirus was the most prevalent virus in the study with astrovirus being the second most prevalent. There was only a single incidence of astrovirus.**Keywords:** Nutritional status, preschool children, rural coastal, Nigeria.**Record Number:** 184**Author(s):** Smith, S. I. Cantet, F. Angelini, F. Marais, A. Mégraud, F. Bayerdöffer, E. Miehle, S.**Title:** Discriminatory power of RAPD, PCR-RFLP and Southern Blot Analyses of ureCD or ureA Gene Probes on Helicobacter pylori Isolates.**Journal Title:** Z Naturforsch C.**Date of Publication:** 2002**Volume ID:** 5-6**Page(s):** 516-21**Address/Availability:****Location/URL:****Abstract:** The genetic diversity of 33 Nigerian Helicobacter pylori isolates were studied using RAPD, PCR-RFLP and Southern blot analysis of ureA or ureCD gene probes. RAPD was able to distinguish the following number of isolates using the primers 3880: 5'-AAGAGCCCGT-3' (28), 3881:5'-AACGCGCAAC-3' (33) and OPH8:5'-GAAACACCCC-3' (25). Southern blot analysis using the ureCD probe was also able to distinguish the 12 isolates tested into ten different patterns. The PCR-RFLP technique distinguished all 33 isolates into six types. In conclusion, considering typeability, discriminatory power, and convenience, RAPD with the 3881 primer was considered the most useful technique.**Keywords:** RAPD, PCR-RFLP, ureCD, ureA gene, Helicobacter Pylori isolates.**Record Number:** 185**Author(s):** Paster, B. J. Falkler Jr W. A. Enwonwu, C. O. Idigbe, E. O. Savage, K. O. Levanos, V. A.

**Title:** Tamer, M. A. Ericson, R. L. Lau, C. N. Dewhurst, F. E.  
**Journal Title:** **Prevalent Bacterial Species and Novel Phylotypes in Advanced Noma lesions.**  
**Date of Publication:** J Clin Microbiol.  
**Volume ID:** 2002  
**Issue ID:** 40  
**Page(s):** 6  
**Address/Availability:** 2187-91  
**Location/URL:**  
**Abstract:**

The purpose of this study was to determine the bacterial diversity in advanced noma lesions using culture-independent molecular methods. 16S ribosomal DNA bacterial genes from DNA isolated from advanced noma lesions of four Nigerian children were PCR amplified with universally conserved primers and spirochetal selective primers and cloned into *Escherichia coli*. Partial 16S rRNA sequences of approximately 500 bases from 212 cloned inserts were used initially to determine species identity or closest relatives by comparison with sequences of known species or phylotypes. Nearly complete sequences of approximately 1,500 bases were obtained for most of the potentially novel species. A total of 67 bacterial species or phylotypes were detected, 25 of which have not yet been grown in vitro. Nineteen of the species or phylotypes, including *Propionibacterium acnes*, *Staphylococcus* spp., and the opportunistic pathogens *Stenotrophomonas maltophilia* and *Ochrobactrum anthropi* were detected in more than one subject. Other known species that were detected included *Achromobacter* spp., *Afipia* spp., *Brevundimonas diminuta*, *Capnocytophaga* spp., *Cardiobacterium* sp., *Eikenella corrodens*, *Fusobacterium* spp., *Gemella haemolyans*, and *Neisseria* spp. Phylotypes that were unique to noma infections included those in the genera *Eubacterium*, *Flavobacterium*, *Kocuria*, *Microbacterium*, and *Porphyromonas* and the related *Streptococcus salivarius* and genera *Sphingomonas* and *TREPONEMA*: Since advanced noma lesions are infections open to the environment, it was not surprising to detect species not commonly associated with the oral cavity, e.g., from soil. Several species previously implicated as putative pathogens of noma, such as spirochetes and *Fusobacterium* spp., were detected in at least one subject. However, due to the limited number of available noma subjects, it was not possible at this time to associate specific species with the disease.

**Keywords:** **Bacterial, Novel phylotypes, Noma.**

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**Record Number:** 186  
**Author(s):** Oyedeji, K. S. Smith, S. I Arigbabu, A. O. Coker, A. O. Ndububa, D. A. Agbakwuru, E. A. Atoyebi, O. A.  
**Title:** **Use of direct Gram Stain of Stomach Biopsy as a Rapid Screening Method for Detection of Helicobacter pylori from Peptic Ulcer and Gastritis Patients.**  
**Journal Title:** J Basic Microbiol.  
**Date of Publication:** 2002  
**Volume ID:** 42  
**Issue ID:** 1  
**Page(s):** 121-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Four hundred and thirty five stomach mucosal biopsies were taken from 145 consecutive patients (3 from each patient) during investigations for dyspepsia in three hospitals in Western Nigeria. The aim was to determine the best suited rapid screening method to aid fast diagnosis of ulcer/gastritis in this environment, using Gram stain, CLO test kit (urease production test) and culture methods. Eighty-nine (61.4%) biopsies were positive using Gram stain, 61 (42.1%) using CLO test kit and only 28 (19.3%) using culture. Based on the various limitations of CLO test kits and culture methods, Gram stain was adjudged the best suited rapid method. The clinical implication of this finding is discussed.  
**Keywords:** **Gram stain, Stomach biopsy, Helicobacter pylori, Peptic Ulcer, Gastritis, Patients.**

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**Record Number:** 187  
**Author(s):** Otuonye, N. M. Olukoya, D. K. Odunaike, N. N. Idigbe, E. O. Udeaja, M. N. Bamidele, M. Onyewuche, J. I. Oparaugo, C. T Ayelari, O. S. Oyekunle, B.  
**Title:** HIV Association With Conventional STDS (Sexual Transmitted Diseases) in Lagos State, Nigeria  
**Journal Title:** West Afri. J. Med:  
**Date of Publication:** 2002  
**Volume ID:** 21  
**Issue ID:** 2  
**Page(s):** 153-6  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The study examined a possible association between HIV infection and conventional sexually transmitted diseased (STDS) in a population of 700 patients seen some hospitals and clinics in Lagos State between November 1997 and December 1999. The patients were drawn from LUTH and Jolad Hospitals in Lagos State. In these hospitals, patients who presented with symptoms of STDS were clinically and microbiologically for agents of STDS and HIV antibodies. Screening was carried out using conventional methods. A total of 150 (21.5%) were found positive for various STDS while 550 (78.5%) were negative. Also, 109 (15.8%) were seropositive for HIV while 591 (84.4%) were sero-negative. The frequency of STDS diagnosed were, Troponema palladium, 37(25.3%), Neisseria gonorrhoea 3(2.0%). Chlamydia trachomatis 26(17.3), Hepatitis B virus 60(40.0 %) Straphylococcus aureaus, 20 (13.3%) and Candida albicans 3(2.0%). Data showed that Syphillis was the most prevalent STDS diagnosed while Candida and N. gonorrhoea are the least. Amongst the 15) (21.5%) patients positive with STDs 82(64.56% were found to be positive for HIV antibodies. The remaining 67(45.3%) patients were negative for HIV. The difference in sero-prevalence on the true group of patients rates was significant. The higher rate in the STDS patient strongly suggest some association between HIV infections and STDS amongst the patients studied  $p=0.05$ . It was also recorded that HIV-1 infection is four times more prevalent than HIV-2 in these patients  
**Keywords:** HIV, STDS (Sexual Transmitted Diseases), Lagos State, Nigeria

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**Record Number:** 188  
**Author(s):** Akande, D. O. Adeleke, E. O. and Akinwale, O. P.  
**Title:** The Prevalence of Intestinal Parasitic Contaminants of Fruits Sold in some Markets in Lagos, Nigeria.  
**Journal Title:** The Journal of Tropical Biosciences  
**Date of Publication:** 2002  
**Volume ID:** 2  
**Issue ID:** 1  
**Page(s):** 33-35  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Intestinal, Parasitic, Contaminants, Fruits, Markets, Lagos, Nigeria.

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**Record Number:** 189  
**Author(s):** Brieger, W. R. Salako, L. A. Umeh, R. E. Agomo, P. U. Afolabi, B. M. Adeneye, A. K  
**Title:** Promoting Prepackaged Drug for Prompt and Appropriate Treatment of Febrile Illnesses in Rural Nigerian Communities  
**Journal Title:** International quarterly of community Health Education  
**Date of Publication:**

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**Volume ID:** 21  
**Issue ID:** 1  
**Page(s):** 19-40  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Among the strategies being tested to improve prompt and appropriate treatment of febrile illness, especially malaria, in young children is the prepackaging of antimalarial drugs in easy to use daily dosages. A TDR-sponsored study in three rural communities in southern Nigeria tested a delivery system for prepackaged chloroquine and cotrimoxazole for children aged 6 months to 6 years. A variety of distributors were trained including village health workers (VHWs), patent medicine vendors (PMVs), and health clinic staff. These distributors also performed community health Education during a 12-month study period 3954 units of project medicine were sold. While VHWs accounted for the majority distributors, and as a group sold the largest proportion of drug overall, health staff sold the highest number on average. A follow up survey found a 25% increase in the use of antimalarials over baseline, almost all of which could be attributed to sale of the project. While there was also an increased use of cotrimoxazole over baseline, the contribution of project drug was less. PMVs remained the most common source of treatment both before and after intervention, and that was a small but significant raise in the proportion who sought care from VHM. While 93% of respondents sought for their sick child within 24 hours, there was significant more delay among those whose first choice was a government or private clinic seeking. Factors that were positively associated with use of project drugs included reports that the child had high temperature and seeking care from a VHM or PMV. The result indicates that it is possible to gain a significant market share for prepackaged drugs using locally available distribution channels. The value lies in using a variety of channels, both ones that are centrally located and others that are accessible to scattered, outlying communities that are poorly served by orthodox medicine.

**Keywords:** Malaria, Febrile Illnesses, Nigerian.

**Record Number:** 190  
**Author(s):** Smith, S. I. Ibrahim, M. M. Ezeobi, .N. V Oyedeji, K. S. Akinsinde, K.A. Coker, A.O.  
**Title:** Sodium dodecyl sulphate polyacrilamide gel electrophoresis of *Campylobacter coli*.  
**Journal Title:** Afr. J. Clin. Exp. Microbiol.  
**Date of Publication:** 2002  
**Volume ID:** 3  
**Issue ID:** 1  
**Page(s):** 1-2  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Sodium.

**Record Number:** 191  
**Author(s):** Afolabi, B. M, Audu, R. A. Olukosi, A.  
**Title:** Nutritional Status of Preschool Children in Rural Coastal Nigeria.  
**Journal Title:** Journal of Malaria in Africa & the Tropics.  
**Date of Publication:** 2002  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 36-38  
**Address/Availability:**  
**Location/URL:**

**Abstract:** As a result of the distressed national economy in recent years, the standard of living in Nigeria has dropped considerably. This study therefore assessed the nutritional status of children below 60 months of age in rural coastal Nigeria. Anthropometric measurements of the children were taken as well as blood samples for packed cell volume analysis. It was found that the prevalence of stunting, underweight and wasting were 19.2%, 6.1% and 15.6% respectively. When compared with the international reference population, the prevalence of anaemia amongst the study children was found to be 59% which is disturbingly high. Hence, nutritional requirement during crucial stages of development must be met in order to ensure optimal growth of children living in rural areas.

**Keywords:** **Nutritional status, Preschool children, Rural coastal, Nigeria.**

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**Record Number:** 192  
**Author(s):** Ezeugwu, S. M. C. Obiamiwe, B. A.  
**Title:** **Bulinus globosus (Pulmonata) as possible Laboratory Intermediate Host for Fasciola Gigantic (Trematoda): The Implication in a Cattle Producing Area with Large Scale Irrigation Scheme**  
**Journal Title:** Biosc. Res. Comm.  
**Date of Publication:** 2002  
**Volume ID:** 14  
**Issue ID:** 6  
**Page(s):** 629-631  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Cattle rearing is the mainstay of the economy of the people of the Chad Basin Area of Borno State. Here, large scale irrigation scheme is embarked upon by the Chad Basin and Rural Development Authority, Maiduguri in collaboration with the Lake Chad research Institute, Maiduguri. *Bulinus globosus* (intermediate host for *Schistosoma haematobium*) has been established in the irrigation canal at Ngala while *Fasciola gigantic* (causative agent for cattle fascioliasis) is also common in the same locality. Consequently, this study is aimed at finding out if *B. globosus* could act as alternative laboratory host for *F. gigantic*. A laboratory susceptibility test on *Bulinus* using the miracidia of *Fasciola gigantic* with variance in number of miracidia per snail and exposure time was carried out. The results show that *B. globosus* is not an alternative intermediates hos for this parasite.

**Keywords:** **Cattle rearing, Schistosomiasis, Fascioliasis, Bulinus globosus, Fasciola gigantic.**

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**Record Number:** 193  
**Author(s):** Smith, S. I. Otuonye, M. N.Omonigbehin, E. A. Nkoth, A. Okany, C. C. Ariyo, F. Badaru, O. S. Ajayi, A. Coker, A. O.  
**Title:** **Prevalence of Campylobacter species among HIV/AIDS patients in Nigeria.**  
**Journal Title:** Br J Biomed Sci.  
**Date of Publication:** 2002  
**Volume ID:** 59  
**Issue ID:** 3  
**Page(s):** 162-3  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Out of a total of 160 stool and rectal swab samples, 40 isolates were obtained. *Campylobacter* spp was identified from six (7%) out of 84 patients with diarrhoea and two (2.5%) out of 76 patients without diarrhoea. Other bacterial agents included *Enterobacter* spp (7.5%), *S. Paratyphi A* (5%) and *E. coli* (2.5%), followed by *Shigella sonnei*, *Klebsiella pneumonia*, *P. vulgaris* and *Candida* spp (1.25% each). All isolates were resistant to ampicillin and cotrimoxazole. Only 65% were resistant to tetracycline, while 45% to erythromycin. All were

sensitive to ciprofloxacin and gentamicin. While plasmid profile analysis showed that the C. jejuni isolates lacked detectable plasmids.

**Keywords:** **Campylobacter, species, HIV, AIDS, Nigeria.**

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**Record Number:** 194  
**Author(s):** Nebe, O. J. Adeoye, G. O Agomo, P. U.  
**Title:** **Prevalence and Clinical Profile of Malaria Among the Coastal Dwellers of Lagos, Nigeria**  
**Journal Title:** The Nigerian Journal of Parasitology,  
**Date of Publication:** 2002  
**Volume ID:** 23  
**Issue ID:**  
**Page(s):** 61-68  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

This report describes the baseline survey of the clinical profile, prevalence of parasitaemia and anaemia in the coastal dwellers of Ibeju-Lekki Local Government Area of Lagos State using active and passive case detection techniques. Spleen size was assessed by palpation of some of the children less than 10 years of age. Fever was highest in children under five years of age. The over-all prevalence of fever was 7.5%. Spleen size estimation showed a prevalence of 25.3%. Parasitaemia was highest (33.5%) in children aged between 10-14 years. Chi-square analysis showed a significant difference between the various age cohorts in parasite density, ( $P < 0.05$ ). Parasitaemia was significantly higher in females than males except in the age group 10-14 years of age. The overall prevalence of parasitaemia and parasite density were 34% and 488 parasites/ml of blood respectively. Plasmodium falciparum caused 94.4% of the infection, Plasmodium malariae caused 3.0% and 2.6% was as a result of mixed infection of Plasmodium falciparum and Plasmodium malariae. The prevalence of low-grade parasitaemia was quite high in the study communities. Igbolomi community has the highest (43.2%) prevalence of parasitaemia, as a result should be targeted for health education, treatment and vector control. Priority attention should be given to children less than five years of age and 10-14 years of age in the control of malaria in the area. There is no association between parasite density and fever. Prevalence of anaemia was 17.9% in children less than five years of age Chi-square analysis showed a significant difference among the various communities in their PCV values ( $P < 0.05$ ).

**Keywords:** **Malaria, Nigeria.**

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**Record Number:** 195  
**Author(s):** Nebe, O. J. Adeoye, G. O. Agomo, P. U. Mosanya, M. E.  
**Title:** **Malaria in a Coastal Area of Lagos State Nigeria: A Survey of Perceptions and Practices Amongst Mothers/Care-Givers of Children Under Five Years Old**  
**Journal Title:** The Nigerian Journal of Parasitology  
**Date of Publication:** 2002  
**Volume ID:**  
**Issue ID:**  
**Page(s):** 69-80  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

This report describes the prevailing knowledge, attitude and practices (KAP) of the mothers/care givers of children under five years of age in Ibeju-Lekki Local Government Area of Lagos State towards malaria disease. A total of two hundred and seventy-seven (277) mothers/care givers of children under five years of age were interviewed. Rapid assessment methods such as verbal autopsy technique, key informant interviews, focus group discussions, personal observations and in-depth interviews were used to assess the respondents' level of

scientific knowledge about malaria. The results of our investigations showed that there was generally low level of knowledge on the causal agent of malaria. Some of the prevailing responses on the causation and transmission of malaria were eating of oily food, overwork, witchcraft, and excessive sexual activities. The Coastal dwellers at Ibeju -Lekki have a local name for malaria "Iba" as well as correct perception of malaria as a killer disease. Their experiential ability to recognize signs and symptoms of malaria was relatively high. The popular practices/ remedies for the management of childhood convulsion are body mutilation, wedging the child's teeth with spoon, use of cow/child's urine, tying of pieces of wood, different sizes of animal bones and cowries shells with thread on the child's neck. These remedies are believed to be preventive as well as curative against convulsion. There is no documentation on the number of deaths due to malaria in the Local Government Area. Only few respondents admitted that they know about the existence of the insecticide treated bednets. There is remarkable mix-up of traditional and modern medication in the treatment of malaria. Self-medication and consumption of local herbal preparation "agbo Iba" is highly appreciated. Attendance at the homes of the herbalist and spiritualists was high. Our preliminary survey revealed that most treatments of malaria are inadequate and under does was very common. In conclusion it appears that there was inadequate information on the various social, economic, cultural and environmental factors affecting health in the locality.

**Keywords:** Malaria

**Record Number:** 196  
**Author(s):** Ezeugwu, S. M. C. Obiamiwe, B. A.  
**Title:** Studies on Calcium Hardness as a Factor Affecting the Abundance of Snail Vectors of Schistosomiasis in Ngala, Borno State, Nigerian.  
**Journal Title:** Biosc. Res. Comm.  
**Date of Publication:** 2002  
**Volume ID:** 14  
**Issue ID:** 6  
**Page(s):** 617-622  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Irrigation canals favour the establishment of schistosome-transmitting bulinid snails. The effect of calcium hardness on the abundance of two species of bulinid snails were studied. Calcium hardness had a direct positive significant ( $P < 0.05$ ) effect on the abundance of both *Bulinus globosus* and *B. forskali*.  
**Keywords:** Irrigation schemes, Schistosomiasis, Bulinid snails, *Bulinus globosus*, *Bulinus forskali*.

**Record Number:** 197  
**Author(s):** Smith, S. I. Kirsch, C. Oyedeji, K. S. Arigbabu, A. O. Coker, A. O. Bayerdoffer, E. Miehle, S  
**Title:** Prevalence of *Helicobacter pylori vacA, cagA* and *iceA* Genotypes in Nigerian Patients with Duodenal Ulcer Disease  
**Journal Title:** J. Med Microbiol  
**Date of Publication:** 2002  
**Volume ID:** 51  
**Page(s):** 851-854  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Distinct virulence factors of *Helicobacter pylori* have been associated with clinical outcome of the infection; however, considerable variations have been reported from different geographic regions. Data on genotypes of African *H. pylori* isolates are sparse. The aim of this study was to determine the prevalence of specific genotypes of *H. pylori* in Nigerian patients with duodenal ulcer and non-ulcer dyspepsia. *H. pylori* was cultured from endoscopic

biopsies obtained from 41 Nigerian patients (19 with duodenal ulcer, 22 with non-ulcer dyspepsia). The *vacA* alleles, *cagA* and *iceA* genotypes were determined by PCR. The *vacA* *sl,m1* and *sl,m2* genotypes were found in 26.3% and 22.7%, and in 73.7% and 72.7% of *H. pylori* isolates from patients with duodenal ulcer and non-ulcer dyspepsia, respectively. The *iceA1* genotype was present in 94.7% and 86.4% of isolates from duodenal ulcer and non-ulcer dyspepsia patients, respectively. *CagA+* infection was found predominantly (>90%) in Nigerian *H. pylori* isolates irrespective of the clinical diagnosis. In conclusion, *vacA sl,m2*, *iceA1* and *cagA+* are common genotypes of *H. pylori* isolated from Nigerian patients. As in several other developing countries there seems to be no association between these genotypes and duodenal ulcer disease.

**Keywords:** ***Helicobacter pylori vacA, cagA, iceA* genotypes, Nigerian.**

**Record Number:** 198  
**Author(s):** Awolola, T. S. Okwa Hunt R. H. Ogunrinade, A. F. Coetzee, M.  
**Title:** Dynamics of the malaria-vector populations in coastal Lagos, South-western Nigeria.  
**Journal Title:** Ann Trop Med Parasitol.  
**Date of Publication:** 2002  
**Volume ID:** 96  
**Issue ID:** 1  
**Page(s):** 75-82  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

An entomological study was carried out in coastal Lagos, south-western Nigeria, to explore the role of *Anopheles gambiae* s.l. and *A. moucheti* in the transmission of *Plasmodium falciparum* in this holo-endemic area. Mosquitoes were caught, on human bait at night and by pyrethrum-spray catches during the day, twice a month throughout 2000. Of the 1812 *Anopheles* mosquitoes collected, *A. gambiae* s.l., the predominant vector species, represented 78.7% while the other 21.3% were *An. moucheti*. The results of a PCR-based test identified 56.8% of the mosquitoes of the *A. gambiae* complex collected as *An. gambiae* s.s., 36.9% as *An. melas* and 6.3% as *An. arabiensis*. *Anopheles gambiae* s.s. was predominantly recorded in the wet season, biting females being collected from May to October, with a peak in July. *Anopheles melas* and *An. moucheti* were present throughout the year-long study whereas *A. arabiensis* was mainly found in the dry season. The results of ELISA-based analyses of bloodmeals indicated that *A. gambiae* s.s., *An. melas* and *An. moucheti* were predominantly anthropophilic whereas *A. arabiensis* was largely zoophilic. Among all of the females investigated, 3.6% of the *An. gambiae* s.s., 1.9% of the *An. melas*, 1.8% of the *A. moucheti* and 0% of the *An. arabiensis* were found to be infected with *P. falciparum* (i.e. carrying the parasite's circumsporozoite antigen). The corresponding proportions for the females collected during the dry season were 1.3%, 2.3%, 2.7% and 0%. The entomological inoculation rates for *An. melas* and *A. moucheti* were significantly higher during the dry season than at other times of the year. Taken together, these results indicate that *A. melas* and *A. moucheti* maintain transmission of *P. falciparum* during the dry season, while the biting population of *A. gambiae* s.s. is relatively small.

**Keywords:** **Malaria.**

**Record Number:** 199  
**Author(s):** Odunukwe, N. N. Salako, I. A Nnodu, O. E. Njoku, O. S  
**Title:** Tuberculosis Masquerading as 'Constant Malaria'  
**Journal Title:** west afri med  
**Date of Publication:** 2002  
**Volume ID:** 21  
**Issue ID:** 2  
**Page(s):** 145

**Address/Availability:****Location/URL:****Abstract:**

Four hundred adults' aged 20-60 years (200 female and 200 males) were studied. All the subjects were residing in the urban areas of Lagos, Nigeria. Thirteen percent claimed they were having "constant malaria" (> 8 times per year), 5% (20) claimed to have cough mostly during the cold period, 2.5% (10) produced mucoid sputum, 2.5% unproductive cough, 13% were AFB smear positive, 1.5% had positive chest X-ray for pulmonary Tuberculosis (PTB), 1.5% were HIV positive and 50% were mantoux positive (>10mm induration). All who complained of "constant malaria" were AFB positive. Malaria parasite density was lower in those who complained of "constant malaria" than those who did not complain (P=0.003). The complaint of frequent malaria attack decreased after Antituberculosis therapy for 6 months. This study revealed that in a malaria and tuberculosis endemic region, early stage of tuberculosis can masquerade as "constant malaria" Therefore any such complaint should be fully investigated.

**Keywords:**

**Tuberculosis, Malaria.**

**Record Number:**

**200**

**Author(s):**

**Idika, N. Idigbe, E. O. Agomo, P. U.**

**Title:**

**Studies on the Knowledge, Attitude and Practice of Child Carers for Children with Acute Respiratory Infections in Some Rural Areas of Abia State, Nigeria.**

**Journal Title:**

Afr. J. Clin. Exp. Microbiol.

**Date of Publication:**

2002

**Volume ID:**

1

**Issue ID:**

1

**Page(s):****Address/Availability:****Location/URL:****Abstract:**

As acute respiratory infections (ARI) are important causes of childhood morbidity and mortality to developing countries, the knowledge, attitude and practice of child carers and patent medicine vendors (PMVs) towards ARI in the rural areas were assessed. A total of 345 child carers and 12 PMVs in 5 communities in Isuikwuato LGA were interviewed and the information obtained were analyzed statistically, 92.7% of the respondents had formal education and they were mainly farmers and petty traders. 69.2% had 1-3 episodes per year of upper respiratory tract infection (URTI), while 72.3% experienced lower respiratory tract infection (LRTI) per years. Only a few of the respondents could differentiate between symptoms of URTI and LRTI. Methods of preventing, ARI were mentioned by only 29.5%. Drugs used by the people were obtained from PMVs (45%), health centres (44.7%), government hospitals (4.5%) while 4.2% combined the orthodox drugs with local herbs and comment. The knowledge and treatment-seeking behaviour of the child carers in the study areas were inadequate, so training programmes and health education campaigns should be organized to improve the home management of ARI in the rural areas.

**Keywords:**

**Respiratory, Infectious.**

**Record Number:**

**201**

**Author(s):**

**Smith, S. I. Miehke, S. Oyedeji, K. S. Arigbabu, A. A. Coker, A. O.**

**Title:**

**Fingerprinting of Nigerian Helicobacter Pylori Isolates by Plasmid Profile and PCR.**

**Journal Title:**

J Basic Microbiol.

**Date of Publication:**

2002

**Volume ID:**

42

**Issue ID:**

1

**Page(s):**

45-53

**Address/Availability:****Location/URL:**

**Abstract:** Plasmid profiling and digestion of amplified PCR product of ureA genes were used to determine genomic variation in 56 strains of *Helicobacter pylori* isolated from patients with peptic ulcers and subjects with gastritis recruited in Lagos and Ife, Nigeria. Twenty-five (45%) of the strains were found to harbour plasmids ranging in size from 0.9 kb to > 10 kb. The plasmid profile was able to detect differences between the strains, and also to distinguish between different strains isolated from the same patient. The expected amplified ureA gene PCR product was detected in all strains and digestion with the restriction enzyme DdeI did not produce discrimination amongst the strains, however, digestion with MluI produced little discrimination amongst strains. In conclusion, plasmid profiling produced better discrimination amongst *H. pylori* strains than ureA PCR gene profiling.

**Keywords:** **Fingerprinting, Helicobacter pylori, Plasmid profile, PCR.**

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**Record Number:** 202  
**Author(s):** Enwonwu, C. O. Falkler, W. A. Idigbe, E. O. Savage, K. O.  
**Title:** Acute Necrotising gingivitis in impoverished malnourished African Children: Biochemical and Bacteriological Studies.  
**Journal Title:** Euro. J. Oral Sciences  
**Date of Publication:** 2000  
**Volume ID:** 2  
**Issue ID:** 2  
**Page(s):** 105-109  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Gingivitis, African Children.**

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**Record Number:** 203  
**Author(s):** Olukoya, D. K. Ilori, M.O. Smith, S.I.  
**Title:** Heavy metals and antibiotic resistance in bacteria isolated from polluted soils and water in Nigeria.  
**Journal Title:** 2002  
**Date of Publication:** 1  
**Volume ID:** 2  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Heavy metals, Antibiotic.**

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**Record Number:** 204  
**Author(s):** Audu, R. A. Omilabu, S. A. Peenze, I. Steele, D.  
**Title:** Viral diarrhoea in young children in two districts in Nigeria.  
**Journal Title:** Centr. Afr. J. Med.  
**Date of Publication:** 2002  
**Volume ID:** 48  
**Issue ID:** 5/6  
**Page(s):** 59-63  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** OBJECTIVES: To determine the prevalence of viral agents of diarrhoea in Ilorin and Lagos,

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two zones in Nigeria. DESIGN: A survey of young children who had clinically confirmed diarrhoea. SETTING: University of Ilorin Teaching Hospital in Ilorin, Kwara State and the Massey Street Children's Hospital in Lagos State, Nigeria. SUBJECTS: 108 children under the age of five. RESULTS: The prevalence rates observed were 33.3% for rotavirus, 6.7% for adenovirus and 1.2% for astrovirus. The rotavirus strains were characterized further. PAGE determined the presence of seven patterns of RNA electropherotypes, with one short RN patterns and six long patterns. The G and P types of selected rotavirus positive samples were characterized by RT-PCR techniques. The VP7 G typing showed that GI was the most prevalent single strain found (8.3%), while G3 and G4 accounted for 6.7% and 1.7%. The rate of mixed G serotypes was 26.7%. The P[6] genotype was the most prevalent (52%) and the P[4] had a prevalence of 8%. The mixed P genotype accounted for 28% of the rotavirus strains. The high rate of mixed infection may have an implication on vaccine development. CONCLUSION: Rotavirus was the most prevalent virus in the study with astrovirus being the second most prevalent. There was only a single incidence of astrovirus.

**Keywords:** **Viral, Fiarrhoea**

**Record Number:** 205  
**Author(s):** Adesanya, A.A. da Rocha-Afodu, J.T. Oulwatowoju, O.O. Oyedeji, K. S. Coker, A. O. Afonja, O. A.  
**Title:** **Evaluation of a home made urease test for detecting Helicobacter pylori infection.**  
**Journal Title:** Nig. Postgrad. Med. J.  
**Date of Publication:** 2002  
**Volume ID:** 9  
**Issue ID:** 1  
**Page(s):** 43-47  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Helicobacter pylori.**

**Record Number:** 206  
**Author(s):** Agomo, P. U.  
**Title:** **Four diagnostic techniques for possible utilization in the Roll Back Malaria Programme: A Comparative Assessment of Efficacy in Twleve Sites**  
**Journal Title:** Journal of Malaria in Africa &The Propics  
**Date of Publication:** 2002  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Rapid diagnosis, prompt and appropriate treatment constitute an element in the Roll Back Malaria Programme. Various malaria diagnostic techniques: ParaSight®F (PSF). Immunochromatographic Text (ICT). Quatitative Buffy Coat (QBC), thick and thin blood film microscopy and optimal 1 assay have previously been investigated in some countries and recommended for use in rural areas. However, information on their comparative efficacies have been scanty. The objective of this work was to compare the performance of the first three techniques which we have investigated in the peripheral blood of 928 patients from various health facilities (12 sites) in Nigeria. The thick film microscopy (TFM) was used as the Gold standard reference level for positively and patients with only P. malariae were excluded. Results from the sites using light microscopy and QBC showed mean parasitaemic prevalence of 30.1% and 34.1% respectively. The mean antigenaemic prevalence rates using

PSF and ICT were 30.6% and 32.2% respectively. When stratified according to the sites in which the patients were located, the parasitemic prevalence rates ranged from 4.7% to 51.6% and the presence of *P. malariae* in some sites and not in others made it mandatory that very efficient microscopists must be involved. The sensitivities as summarized from the 12 sites showed ICT, PSF and QBC to be 88.632.05% (SEM), 89.952.09% and 87.61.2% respectively. The specificities (%) were as follows: 94.603.05, 91.173.4 and 94.72.2 respectively. No statistical significance emerged with PSF values were compared with the values for ICT or QBC or when ICT values were compared with those of QBC ( $p > 0.05$ ). However the ease with which ICT and PSF techniques were applied and the time-frame (about 10 min.) within which results were obtained place these two rapid diagnostic techniques in better light until more techniques are available.

**Keywords:** Malaria, Microscopy, Parasitology, ICT, QBC, Health facilities.

**Record Number:** 207  
**Author(s):** Hargreaves, K. Hunt R. H. Brooke B. D. Mthembu, J. Weeto, M. M. Awolola, T. S. Coetzee, M.  
**Title:** *Anopheles arabiensis* and *An. quadriannulatus* Resistance to DDT in South Africa.  
**Journal Title:** Med Vet Entomol.  
**Date of Publication:** 2003  
**Volume ID:** 17  
**Issue ID:** 4  
**Page(s):** 417-22  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

The malaria control programme of KwaZulu-Natal Province, South Africa, includes Mafene and Mlambo communities. Western-type houses there are currently sprayed with deltamethrin, whereas traditional houses are sprayed with DDT for malaria control. In 2002, mosquitoes of the *Anopheles gambiae* complex (Diptera: Culicidae) were collected from DDT-sprayed houses, by window exit traps, and from man-baited nets outdoors. Larval collections were also carried out at Mzinweni Pan near Mlambo. Species of the *An. gambiae* complex were identified by rDNA polymerase chain reaction assay. The majority of samples collected by window trap and baited nets were identified as the malaria vector *An. arabiensis* Patton, with a few *An. merus* Dönitz and *An. quadriannulatus* (Theobald). The larval collections were predominantly *An. quadriannulatus* with a small number of *An. arabiensis*. Standard WHO insecticide susceptibility tests using 4% DDT and 0.05% deltamethrin were performed on both wild-caught females and laboratory-reared progeny from wild-caught females. Wild-caught *An. arabiensis* samples from window traps gave 63% and 100% mortality 24-h post-exposure to DDT or deltamethrin, respectively. Wild-caught *An. arabiensis* samples from man-baited net traps gave 81% mortality 24-h post-exposure to DDT. The F1 progeny from 22 *An. arabiensis* females showed average mortality of 86.5% 24-h post-exposure to DDT. Less than 80% mortality was recorded from five of these families. Biochemical analyses of samples from each of the families revealed comparatively high levels of glutathione-S-transferases and non-specific esterases in some families, but without significant correlation to bioassay results. Wild-caught *An. quadriannulatus* larvae were reared through to adults and assayed on 4% DDT, giving 47% ( $n = 36$ ) mortality 24-h post-exposure. Finding DDT resistance in the vector *An. arabiensis*, close to the area where we previously reported pyrethroid-resistance in the vector *An. funestus* Giles, indicates an urgent need to develop a strategy of insecticide resistance management for the malaria control programmes of southern Africa.

**Keywords:** *Anopheles*, *Arabiensis*, *An. quadriannulatus*, Resistance, DDT, South Africa.

**Record Number:** 208  
**Author(s):** Smith, S. I. Lück, P. C. Bayerdöffer, E. Miehle, S.

**Title:** Genotyping of Nigerian *Helicobacter pylori* isolates by pulsed-field gel electrophoresis.  
**Journal Title:** J Med Microbiol.  
**Date of Publication:** 2003  
**Volume ID:** 52  
**Issue ID:** 10  
**Page(s):** 931  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Genomic DNA of 41 isolates from 38 patients were analysed by PFGE using the restriction enzymes NotI/NruI. DNA of 15 could not be digested with the restriction enzyme NotI, while 25 could not be digested with the restriction enzyme NruI.  
**Keywords:** Genotyping, *Helicobacter pylori*, gel electrophoresis.

**Record Number:** 209  
**Author(s):** Agomo, P. C. Asianya, V. N. Akindele, S. K. Agomo, C. O. Akinyele, M. O. Adewole, T. A. Igbasi, U. T. Anyanwu, R.C. Egbuna, K. N.  
**Title:** Investigation of the Efficacy of Two Rapid Assessment Techniques (Optimal 1 and SD Bioline) for the Diagnosis of Malaria In Rural Areas of Nigeria  
**Journal Title:** African Journal of Clinical and Experimental Microbiology  
**Date of Publication:** 2003  
**Volume ID:** 4  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** We had previously studied the efficacy of three new techniques Para Sight®F, (PSF), Immunochromatographic Text (ICT) and Quantitative Buffy Coat (QBC) as possible replacements for the time-consuming microscopy in the diagnosis of malaria. Two more rapid assessment techniques (the Optimal 1 and SD-BIOLINE) were recently introduced into Nigeria and claimed to exhibit high sensitivity and specificity. Optimal 1 was particularly claimed to distinguish between *P. falciparum*, *P. malariae*, *P. ovale* and *P. vivax*. We have in this work evaluated the efficacy of both Optimal 1 and SD-Bioline in 240 patients from Ibafo and Magboro Communities in Obafemi-Owode LGA of Ogun State, Nigeria. Results showed that with regard to the detection of *P. falciparum*, Optimal 1 gave a sensitivity, specificity, positive predictive values of 63.95%, 92.20%, 82.1% respectively, while the SD-Bioline gave 54.84%, 42.9%, 68.0% and 68.% respectively. In retrospect, the sensitivities shown by 3 other techniques (ICT, PSF and QBC) investigated by use were 88.63 and 87.6% respectively. Their specificities on the other hand were 94.60, 91.17, 94.70% respectively. The main advantage of the rapid Optimal 1 technique is that it was able to detect *P. malariae* which microscopy also detected in three patients. The SD-BIOLINE gave the worst comparative result and could not be recommended for use in Nigeria. This work in conclusion has shown that Optimal 1 could be useful in the rapid diagnosis of the various species of *Plasmodium* in Nigeria provided the patients could afford the test.  
**Keywords:** Malaria, Optimal 1, SD\_Bioline, *P. falciparum*.

**Record Number:** 210  
**Author(s):** Awolola, T. S. Brooke, B. D. Koekemoer, L. L. Coetzee, M.  
**Title:** Absence of the *kdr* mutation in the molecular 'M' form suggests different pyrethroid resistance mechanisms in the malaria vector mosquito *Anopheles gambiae* s.s.  
**Journal Title:** Trop Med Int Health.  
**Date of Publication:** 2003  
**Volume ID:** 8  
**Issue ID:** 5

**Page(s):** 420-2  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Field tests conducted on adult *Anopheles* mosquitoes using standard WHO procedures, diagnostic kits and test papers in south-western Nigeria showed pyrethroid (deltamethrin and permethrin) resistance in adult populations of *Anopheles gambiae sensu stricto*. The knock-down resistance (kdr) mutation involved in pyrethroid resistance was only found in the molecular S form of *A. gambiae* s.s. even in area where both molecular M and S forms occurred in sympatry. The absence of the kdr mutation in the M form suggests an additional pyrethroid resistance mechanism in *A. gambiae* s.s.  
**Keywords:** **Malaria.**

**Record Number:** 211  
**Author(s):** **Smith, S. I.** Chibututu C. Anomneze, E. Atimomo, C. Atoyebi, O. Ndububa, D. Agbakwuru, A. Bayerdöffer, E. Miehle, S.  
**Title:** **Molecular Typing of Nigerian *Helicobacter pylori* Isolates by glmM Restriction Fragment Length Polymorphism.**  
**Journal Title:** Br J Biomed Sci.  
**Date of Publication:** 2003  
**Volume ID:** 60  
**Issue ID:** 3  
**Page(s):** 170-2  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Call Number:**  
**Keywords:** **Molecular, *Helicobacter pylori*, Polymorphism.**

**Record Number:** 212  
**Author(s):** Molta, N. B. Oguiche, S. Pam, S. D. Omalu, I. C. **Afolabi, B. M.** Odujoko, J. B. Amajoh, C. N. Adeniji, B. Wuyep, V. P. Ekanem, O. J.  
**Title:** **Amodiaquine Treatment of Uncomplicated Malaria in Children, in an Area of Chloroquine-Resistant *Plasmodium falciparum* in North-Central Nigeria.**  
**Journal Title:** Ann Trop Med Parasitol.  
**Date of Publication:** 2003  
**Volume ID:** 97  
**Issue ID:** 7  
**Page(s):** 663-9  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The efficacy of amodiaquine against *Plasmodium falciparum* malaria was assessed in an area of confirmed chloroquine resistance in the cool, north-central plateau of Nigeria, using a 14-day protocol. The patients were all children aged <5 years of age. The drug proved highly efficacious, giving a cure 'rate' of 100% on day 14 and mean fever- and parasite-clearance times of 1.11 and 3.11 days, respectively. It was also well tolerated. Following treatment, packed-cell volumes (PCV) generally increased (65% of patients) but remained constant (12%) or even decreased (23%) in some patients; the overall improvement in PCV was not statistically significant ( $P > 0.05$ ). The results justify the use of amodiaquine to treat *P. falciparum* malaria in those who have failed treatment with chloroquine and the second-line drugs (e.g. sulfadoxine-pyrimethamine) currently used in Nigeria. As the amodiaquine would be better employed as one part of a combination than on its own, there is a need to identify suitable partner compounds.  
**Keywords:** **Amodiaquine, Malaria, Children, Chloroquine-resistant, *Plasmodium falciparum*, Nigeria.**

- Record Number:** 213  
**Author(s):** Ayankogbe, O. O. **Omotola, B. D. Inem, V. A. Ahmed, O. A Manfa, O. A.**  
**Title:** **Knowledge, Attitudes, Beliefs and Behavioural Practices for Creating Awareness about HIV/AIDS in Lagos State, Nigeria**  
**Journal Title:** Nigeria Medical Practitioner  
**Date of Publication:** 2003  
**Volume ID:** 44  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Background: The number of people in the world living with HIV is estimated to be 40 million, with 23.3 million in sub-Saharan Africa. New infections with HIV are occurring at the rate of almost 16,000 every day and 6 million every year. The majority of those infections occur in people under age 25. In Nigeria, national prevalence of HIV in 1999 was 5.4% and an estimated 2.6 million Nigerians age 15-49 were infected. In 2001, the prevalence was 5.8 % in Lagos State it was 7.4% in 2001. Objectives: This study was to determine the knowledge, attitude, belief and practices of the people of Lagos State concerning HIV/AIDS. Methodology: 6,144 persons aged 18 years and above were sampled from 116 wards randomly selected from the 20 Local Government Areas in the state. Pre-tested and semi-structured questionnaires were administered on these persons. Results: 96% of the respondents affirmed that they had heard of HIV/AIDS prior to the study. 73.7% got information on HIV from radio/TV while 28.3% got from friends. In spite of the significant representation of students in the sample population (20%) only 4.5 got informed in schools. Also, only 4.6% got information from health facilities. Sexual relationship was rightly identified as a major route of HIV infection by 79.5% of the respondents. Only 30.4% of the sampled respondents will relate to PLWA as normal human beings. 93.2% of the sampled population believed that AIDS is real and exists in Nigeria. Only 38.4% of the respondents use condoms regularly. It is concluded that radio and television are a potent tool of dissemination of information on HIV/AIDS. There is little awareness creation among in-school secondary school students. Conclusion and recommendations: Behavior change interventions should focus on condoms use and other risk reduction practices. Stigma reduction activities towards PLWA should be intensified.  
**Keywords:** **Knowledge, Beliefs, HIV, Practices, Lagos, Nigeria.**

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- Record Number:** 214  
**Author(s):** **Olukosi, Y.A. Iwalokun, B.A.**  
**Title:** **Analysis of avr4 Promoter by Sequential Response Element Deletion.**  
**Journal Title:** African Journal of Biotechnology  
**Date of Publication:** 2003  
**Volume ID:** 2  
**Issue ID:**  
**Page(s):** 185-186  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Several reports have associated the variability in physico-chemical properties of avidin protein to dynamism inherent in the consensus regulatory networks within the promoter region of avidin genes. An Avr4 promoter region ligated to chloramphenicol acetyltransferase plasmid vector (pBLCAT2) to produce recombinant plasmid Avr4pBLCAT2 was sequentially deleted to produce five distinct mutants: Avr4pBLCAT2907-176, Avr4pBLCAT2809-176, Avr4pBLCAT2789-176, Avr4pBLCAT2429-176 and Avr4pBLCAT2 302-176. The transformants elicited different chloramphenicol acetyl transferase (CAT) activities.  
**Keywords:** **avr4 promoter, Sequential response, Element deletion.**

**Record Number:** 215  
**Author(s):** Ezeugwu, S. M. C. Obiamiwe, B. A.  
**Title:** **Biostatistical Approach to the Study of the Effects of Water Level and Water Temperature on the Abundance of *Bulinus globosus* and *Bulinus forskali* in irrigation Canal at Ngala, Borno State, Nigeria.**  
**Journal Title:** Biosc. Res. Comm  
**Date of Publication:** 2003  
**Volume ID:** 15  
**Issue ID:** 3  
**Page(s):** 251-258  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Bulinides are snail intermediate hosts of schistosomiasis (Trematoda) and are commonly associated with irrigation canals. Water temperature has been reported as having effect on the infection of pulmonate snails by the schistosome (Wabbe and Jordan. 1996) Water level affects the location and the population of freshwater snails (John 1970. Wilcocks and Manson-Bahr, 1972). The present paper gives a biostatistical approach to the effect of these two parameters (temperature and water level) on the abundance of *B. globosus* and *B. forskali*. Water temperature had a significant ( $p < 0.05$ ) direct effect on the deleterious to *B. globosus* but favoured *B. forskali* ( $p < 0.05$ ).  
**Keywords:** Schistosomiasis, Snail, Irrigation scheme, Water level, Water abundance.

**Record Number:** 216  
**Author(s):** Salu, O. B. Audu, R. A Geyer, A. Steele, A. D Oyefolu, A. O. B.  
**Title:** **Molecular Epidemiology of Rotaviruses in Nigeria: Detection of Unusual Strains with g2p[6] and g8p[1] Specificities.**  
**Journal Title:** J. Clin. Micro.  
**Date of Publication:** 2003  
**Volume ID:** 41  
**Issue ID:** 2  
**Page(s):** 913-914  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** We noted with interest the recent report by Adah and colleagues on the detection of G2P[6] rotavirus strains in Nigeria (1). We have also been conducting epidemiological surveillance of rotavirus strains recovered from young children with diarrheal disease in Lagos, Nigeria (2), and identified similar strains during 2001. Adah and colleagues identified 12 strains that had the unusual profile of VP7 serotype G2 and VP4 genotype P[6]. Most G2 rotavirus strains bear a specific VP4 genotype of P[4] (4), which is well recognized as belonging to the DS-1 genogroup (7). However, Adah did not extend the characterization of these strains to analyze the potential reassortment of various genes. The DS-1 genogroup can be phenotypically measured on at least three structural genes and one nonstructural gene. These include the VP6 subgroup, VP7 serotype, and VP4 genotype, as well as the migration of the NSP5 gene (7). DS-1 genogroup rotaviruses typically share subgroup I, VP7 serotype G2, and VP4 genotype P[4], and the strains carry a short RNA electropherotype. Analysis of these four markers would provide valuable epidemiological data on the potential reassortment of these unusual rotavirus strains. In our studies, we have continued the surveillance and characterization of rotavirus strains from young children admitted with acute infantile diarrhea requiring hospitalization (2). In the present report, we identified 21 cases of rotavirus among 150 children (14%). Fecal samples were collected from children less than 5 years of age with acute diarrhea attending the Gbaja Health Center, Massey Street Children's Hospital, and Lagos University Teaching Hospital (all within Lagos State, Nigeria) between January and December 2001. Ten percent suspensions of the samples in phosphate-buffered saline were

tested for the presence of group A rotavirus antigen by using a commercial enzyme immunoassay (Rotavirus IDEIA; Dako, Cambridge, United Kingdom). All 21 strains were examined for the diversity of the RNA electropherotypes by polyacrylamide gel electrophoresis. Standard RNA extraction was performed by phenol-chloroform treatment and ethanol precipitation as described in detail elsewhere (8). Silver staining was used to identify the double-stranded RNA segments as described previously (8). In addition, the VP6 subgroup specificity of the rotavirus strains was determined by using the VP6 monoclonal antibodies developed by Greenberg et al. (6). These monoclonal antibodies, specific for subgroup I (255/60) and subgroup II rotaviruses (631/9) rotaviruses, have been extensively used in studies worldwide. The methods for their use have been described in detail elsewhere (6). The VP4 types were identified as described by Gentsch et al. (2, 3). The viral RNA was extracted by treatment with Genetron and purified by RNAid (Bio 101, Inc., La Jolla, Calif.) before analysis by the reverse transcription-PCR (RT-PCR) method with primers con2 and con3. The PCR products were then typed with a cocktail of primers for the different human VP4 genotypes (3). The VP7 genotypes were examined by the RT-PCR typing method of Gouvea et al. (2, 5). The purified RNA was reverse transcribed, and primers directed to the terminal sequences were used to amplify the entire gene (5). These techniques have been described in detail elsewhere, and similar conditions were used here (2). In this study, the unusual G2P[6] strains constituted 8 of 21 rotavirus-positive specimens (38%). Analysis of the two other epidemiological markers showed that all eight strains carried a VP6 subgroup I specificity and were characterized by a short RNA electropherotype, although two variations were seen (Fig. 1). Taken together, these observations indicate that the P[6] VP4 gene may have reassorted onto the DS-1 genogroup background of these strains. However, further analysis is required to identify whether other genes also reassorted during the generation of these unusual rotaviruses. Furthermore, this report shows the importance of including all epidemiological markers when characterizing unusual rotavirus strains.

**Keywords:** Molecular, Epidemiology, Rotaviruses, Strains, g2p[6] and g8p, Nigeria.

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**Record Number:** 217  
**Author(s):** Adesida, S. A. Coker, A. O. Smith, S. I.  
**Title:** Resistotyping of *Campylobacter jejuni*.  
**Journal Title:** Niger Postgrad Med J.  
**Date of Publication:** 2003  
**Volume ID:** 10  
**Issue ID:** 4  
**Page(s):** 211-5  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The principal objective of typing in epidemiology is to trace a strain as it passes from one individual to another. Resistotyping is a phenotypic method that consists of testing bacterial strains against a set of arbitrarily chosen chemical agents, whereby, a resistance pattern that is characteristic of a strain is generated and, is believed to describe the isolates for epidemiological purposes. This simple typing system is described for campylobacter isolated in Lagos, Nigeria. Resistotyping was performed with twenty chemical agents incorporated into disc. The resistotyping results revealed that the twenty isolates from human and chickens belonged to 14 different resistotypes with the largest group comprising 25% of the isolates. The human strains were distinctly differentiated into eight resistotypes. All the *Campylobacter Jejuni* isolates were resistant to potassium chloride (A), Boric acid (B), Sodium biselenite (C), potassium dichromate (F), potassium permanganate (I) ferrous sulphate (N), magnesium sulphate (O), sodium hydrogen phosphate (P), sodium sulphate (Q), and magnesium chloride (R). Only one strain was resistant to mercuric chloride (M) while three of the strains were sensitive to disodium orthophosphate (H), sodium azide (J), and metronidazole (T). The method seems to be adequate for defining the relatedness of our

isolates in epidemiologic situation and has proven promising for *Campylobacter jejuni* in our environment.

**Keywords:** **Epidemiology, Resistotyping, Campylobacter jejuni.**

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**Record Number:** 218  
**Author(s):** Harrison, N. E. Odunukwe, N. N. Ijoma, C. K. Mafe, A. G.  
**Title:** **Current Clinical Presentation of Malaria in Enugu, Nigeria.**  
**Journal Title:** Niger Postgrad Med. J.  
**Date of Publication:** 2004  
**Volume ID:** 11  
**Issue ID:** 4  
**Page(s):** 240-5  
**Address/Availability:**  
**Location/URL:**

**Abstract:** This study examined the malaria situation in a malarial endemic area of Nigeria. Structured questionnaire was applied to 300 practicing in Enugu urban, Nigeria and confirmation of the clinical diagnosis by laboratory technique was done using 468 patients. The result shows a high prevalence of *Plasmodium falciparum* infection (96.4% in children, 87.0% in adults). Malaria positivity rate was 51.9% in children and 42.8% in adults. Fever, vomiting and anorexia were the commonest malaria symptoms in children, while headache, fever, chills and rigors were the commonest malaria symptoms in adults. The diagnostic practice of the doctors was clinical. Fever, vomiting and cough were found to be more associated with malaria parasitaemia in children, while in adults fever was found to be more associated with malaria parasitaemia. Chloroquine and sulphadoxine pyrimethamine were the commonest drugs used for treating uncomplicated malaria, while quinine was the commonest drug used for treating severe malaria.

**Keywords:** **Malaria.**

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**Record Number:** 219  
**Author(s):** Ezeugwu, S. M. C. Okaka, C. E.  
**Title:** **Fishing as an Occupational Health Hazard in Schistosomiasis Epidemiology in Central and Northern Borno, Nigeria.**  
**Journal Title:** Journal of Arid Zone Fisheries  
**Date of Publication:** 2004  
**Volume ID:** 2  
**Issue ID:**  
**Page(s):** 67-72  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Six categories of predominant occupations in Central and Northern Borno were studied in relation to their roles as risk factors in schistosomiasis epidemiology. In the pooled data for five schools, fishermen had the highest infection rate (41.79%) followed closely by farmers (38.76%). In the two schools (Amrmawa and Gamboru) that had the highest grand total percentage incidences of 44.57% and 44.00% respectively, fishermen still had very high risk values of 48.57% in Amrmawa and 47.37% in Gamboru

**Keywords:** **Fishing, Health Hazard, Schistosomiasis**

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**Record Number:** 220  
**Author(s):** Audu, R. A. Akanmu, A. S, Efiemokwu, Dele A. Z. Lemoha, E Odunaike, M. I Aniedobe, Idigbe, E. O.  
**Title:** **Impact of Tuberculosis co-infection on the level of PCV in HIV infected patients.**

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**Journal Title:** Nigerian Quarterly Hospital Medicine.  
**Date of Publication:** 2004  
**Volume ID:** 14  
**Issue ID:** 2  
**Page(s):** 115-117  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Background: It has been documented that HIV causes anaemia in HIV infected patients. One of the commonest opportunistic infection in HIV patients is TB and this has also been documented to cause anaemia. In Nigeria, several cases of HIV and TB co-infections have been diagnosed. This study was carried out to determine any possible impact of TB co-infection on the level of HIV induced anaemia. Methods Anaemia in this study was defined as PCV values below 30%. Three categories of subjects were recruited: 22 patients who had HIV infection only, 12 with HIV and co-infected with TB and 29 who are infected with TB only. A group of 10 apparently healthy subjects who were negative for HIV and TB were used as controls. These subjects were recruited from the Lagos University Teaching Hospital (LUTH), the Mainland Hospital Yaba and Staff Clinic of the Nigerian Institute of Medical Research all in Lagos, Nigeria. Blood samples were obtained from each of the enrolled subjects and the PCV levels were determined by the microhaematocrit method. All patients with TB diagnosis were sputum positive for AFB. CD4 cell count was determined for all HIV infected subjects using a FACScount. Results: PCV was significantly lower in all categories of subjects when compared with the control ( $p < 0.003$ ). The median PCV level in HIV subjects co-infected with TB though lowest (32.5%) among all categories of subjects, the value is not significantly different when compared with the level in subjects with HIV infection only. The prevalence of anaemia (13.6%) in HIV infected subjects and subjects co-infected with TB (25%) were not significantly different ( $P = 0.064$ ). Neither was the prevalence of anaemia in TB subjects (21.7%) significantly different ( $P > 0.05$ ) from those co-infected with HIV. Conclusion: Co-infection of HIV with TB did not worsen anemia in the studied subjects.

**Keywords:** Tuberculosis, Co-Infection, PCV, HIV.

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**Record Number:** 221  
**Author(s):** Audu, R. A. Akanmu, A. S. Mafe, A. G. Efiemokwu, C. Musa, A. Z. Lemoha, E. Odunaike, M. I. Funso-Adebayo, E. O. Meshack, E. Idigbe, E. O  
**Title:** Changes in Serum Proteins and Creatinine levels in HIV Infected Nigerians  
**Journal Title:** Nigerian Journal of Health and Biomedical Sciences.  
**Date of Publication:** 2004  
**Volume ID:** 3  
**Issue ID:** 2  
**Page(s):** 69-72  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Immune dysregulation in terms of hypergrammaglobulinaemia and hypogrammaglobulinaemia was part of definition of immunodeficiency that characterized AIDS. This results in either raised level of total plasma/serum protein or low level of plasma/serum protein or low level of plasma/serum protein depending on which component of immune dysregulation predominates. This study examined the level of total serum proteins and globulins in HIV infected Nigerians. 64 patients with HIV infection and 10 apparently healthy subjects were recruited from 3 hospitals in Lagos Metropolis. They were examined for the presence of TB and malaria. Serum total protein, albumin and creatinine level; were determined using commercially available kits while the globulin level was computed. Level of immunodeficiency was also determined by CD4 cell count, using the FACS count method. Data obtained from the patients were compared with values obtained from 10 healthy control; using appropriate statistical tests on EPI-INFO V 6.0. Results showed that

hypergrammaglobulinaemia is the major immune dysregulation found with globulin level of 7.4g/dl as compared with 2.9g/dl in healthy control though it was not statistically significant. Total serum protein was also higher in HIV infected patients than the controls. The serum globulin was found to correlate negatively with CD4 cell count ( $r = -0.28$ ,  $P = 0.0067$ ). Serum creatinine appears not to differ significantly between control and infected patients although the creatinine levels has a positive correlation to plasma globulin levels ( $r = 0.45$ ,  $p = 0.001$ ). In conclusion hypergrammaglobulinaemia was found to be common in HIV infected Nigerians. This was associated with raised level of plasma creatinine.

**Keywords:** Serum, proteins, Creatinine, Albumin, Globulin, HIV

**Record Number:** 222  
**Author(s):** Ahmed, O. A. Odunukwe, N. N Raheem, T. Y.Efiennemoku, C. E.Omotola B. D. Ogedengbe, O. Salako, L. A.  
**Title:** Knowledge, Attitudes and Perception of Traditional Birth Attendants/Herbals Practitioners on Anaemia and its Management in Pregnant Women in Lagos state  
**Journal Title:** Medipharm Medical Journal  
**Date of Publication:** 2004  
**Volume ID:** 2  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Women face risks from pregnancies involving inadequate prenatal care, especially in the developing countries. In Nigeria, 20% of maternal mortality rate is attributable to anaemia. Over 50 % of deliveries take place outside health facilities, and mostly assisted by TBAs (Traditional Birth Attendants). Hence, the management practice of Traditional Birth Attendants (TBAs)/Herbal Practitioners (HPs) for anaemia in pregnancy in Lagos State was studied. Structured pre-tested questionnaires were administered to 189 TBAs/HPs from the 20 Local Government Areas (now 57) of Lagos State. The respondents were made up of 69.8% male and 30.2% female practitioners with a combined mean age of  $50.89 \pm 1.3$  years. Eighty-Nine per cent of the respondents were full-time practitioners. Traditional method of diagnosing anaemia was mainly by observing for paleness of the conjunctiva, palm and body of the patient. TBAs/HPs believed that anaemia in pregnancy is dangerous with severe consequences for both the mother and the foetus. Perceived causes of anaemia in pregnancies were inadequate intake of micronutrients, bleeding, loss of appetite and fever. TBAs' treatment of anaemia in pregnancy was mainly by use of native herbal soups and concoctions of herbal teas/infusion administered orally (93%). The study concluded that TBAs should be trained to identify risk factors in pregnancies, especially the causes, nature and management of anaemia in pregnancy when and how to refer to hospital.

**Keywords:** Traditional birth, Attendants/herbals, Practitioners, Anaemia, Pregnant, Women, Lagos State.

**Record Number:** 223  
**Author(s):** Akinwale, O. P. Adeneye, A. K. Sulyman, M. A. Idowu, E. T. Adewale, B. Manafa, O. U. Mafe, M. A.  
**Title:** Health Care Seeking Behaviour of people in Schistosomiasis Endemic Communities of Ogun and Niger States, Nigeria.  
**Journal Title:** Nigerian Journal of Parasitology  
**Date of Publication:** 2004  
**Volume ID:** 25  
**Issue ID:**  
**Page(s):** 121-126  
**Address/Availability:**

**Location/URL:****Abstract:****Keywords:** Schistosomiasis, Endemic.**Record Number:** 224**Author(s):** Garros, C. Koekemoer, L. L. Kamau, L. Awolola, T. S. Van Bortel, W. Coetzee, M. Coosemans, M. Manguin, S.**Title:** Restriction Fragment Length Polymorphism Method for the Identification of Major African and Asian Malaria Vectors within the *Anopheles funestus* and *An. minimus* groups.**Journal Title:** Am J Trop Med Hyg.**Date of Publication:** 2004**Volume ID:** 70**Issue ID:** 3**Page(s):** 260-5**Address/Availability:****Location/URL:****Abstract:**

The African *Anopheles funestus* and the Asian *An. minimus* groups are closely related and are probably considered distinct only because of their geographic separation. This study aimed at improving two identification methods based on polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) already developed for either group. Each PCR-RFLP, either on the internal transcribed spacer 2 (ITS2) for the *An. minimus* group, and domain 3 (D3) for the *An. funestus* group, was applied to the other group for the standardization of one identification method applicable on both continents. The ITS2 fragment digested by Bsi ZI showed the highest diagnostic power. This assay allowed the discrimination of at least 13 *Anopheles* species within the subgenus *Cellia* from two continents (Africa and Asia), among which are five major malaria vectors. Moreover, digestion of the D(3) with Msp I showed intragenomic variations within *An. funestus* populations. Two types of D3 copies (M and W) occurred in specimens from southern Africa. The populations from West-Central Africa presented only type W and East-Malagasy populations exhibited type M. Since *An. funestus* shows a great capacity of adaptation, these molecular variations, along with behavioral and ecologic ones, reinforce the hypothesis of a species complex that will need to be further investigated.

**Keywords:** Polymorphism, African, Asian, Malaria vectors, *Anopheles*, *funestus*, *An. minimus* groups.**Record Number:** 225**Author(s):** Iwalokun, B.A.Olukosi, Y. A. Adejoro, A. Olaye J. A. Fashade, O.**Title:** Comparative Biochemical and Molecular Evaluation of Swarming of *Proteus* and Effects of Anti-Swarm Agents.**Journal Title:** African Journal of Biotechnology**Date of Publication:** 2004**Volume ID:** 3**Issue ID:****Page(s):****Address/Availability:** 99-104**Location/URL:****Abstract:**

In addition to inadequate understanding of swarming motility and virulence of *Proteus*, there is paucity of information on the relative effectiveness of the various anti-swarm agents. The anti-swarming effects of urea, sodium dodecylsulphate (SDS) and trihydroxymethylglycine (Tris) on 40 clinical isolates of *Proteus* Spp. were comparatively investigated and plasmids associated with swarming were characterized. The three substances elicited a comparable concentration-dependent anti-swarming property at 0.25 – 1.25% on nutrient agar. Anti-swarm agents displayed heterogeneity in their ability to cause significant decreases in

the expression of virulence factors. Swarm motility was further found to be strongly associated with the expression of virulence factors in these strains. Of the *Proteus* strains tested, 32 were found to harbour 1 – 4 plasmids of size ranging from 6.0 – 33.5 kb. Plasmid curing resulted in loss of swarming in 65.6% of these strains. In order to reduce the risk of infection with virulent *Proteus* strains, the laboratory use of urea and SDS is suggested.

**Keywords:** **Biochemical, Molecular, Proteus, Anti-Swarm Agents.**

**Record Number:** 226  
**Author(s):** Akinwale, O. P. Manafa, O. U. Adewale, O. B. Idowu, E. T. Sulyman, M. A. Adeneye, A. K. Olukosi, Y. A. Fesobi, T. Ajala, H. O. T. Akande, D. O.  
**Title:** Knowledge, Attitude, Belief and Practices of Religious Leaders in Lagos State on Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV/AIDS)  
**Journal Title:** Medipharm Medical Journal  
**Date of Publication:** 2004  
**Volume ID:** 2  
**Issue ID:** 1  
**Page(s):** 11-14  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A pre-tested semi-structured questionnaire was given to 350 religious leaders (207 Christian, 86 Islamic and 57 traditional religious leaders) on their knowledge, attitude, belief and practices against HIV/AIDS. While 315 (90%) of the respondents have heard about HIV/AIDS, its modes of transmission were identified as casual/unprotected sex (71.4%), blood transfusion (20%), unsterilized skin piercing instruments (62.2%), wrath of God/Allah (6%) and mother to child transmission (2.5%). About 98.9% of the 315 respondents believed that the infection is incurable, 6.7% believed that prayer could cure it, 72.3% do not pass information about HIV/AIDS to their congregations, while 17.4% preach abstinence from sex, the use of protective barriers during sexual intercourse and prayer against the infection. 20(5.7%) said they will stay away from people suffering from AIDS, 67(19.1%) will pray and care for them, 91(26%) will communicate with them, 22 (6.3%) will show sympathy/pity and 47(13.4%) will show a combination of these. A good number of the respondents (71.4%) identified casual/unprotected sex a source of the infection but only 16% mentioned avoiding casual/unprotected sex as a control measure.

**Keywords:** **Religion, Human Immunodeficiency Virus, Acquired immune deficiency syndrome, HIV, AIDS.**

**Record Number:** 227  
**Author(s):** Nkiru, N. Odunukwe, I. O. Imunugo, Akanmu, S. Akanmu Obioyeli, E. Nnodu, Charlse, C. Okany Ibiroke, Akinsete, Omowunmi, A. Ahmed O. A. Efiemokwu. C  
**Title:** Ferritin and Haematological Values in Health Elderly Nigerians.  
**Journal Title:** Turk J. Heamatology  
**Date of Publication:** 2004  
**Volume ID:** 29  
**Issue ID:** 12  
**Page(s):** 71-77  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Ferritin, Haematological, Health, Elderly, Nigerians.**

**Record Number:** 228

- Author(s):** Afolabi, B. M. Brieger, W. R Salako, L. A.  
**Title:** Management of Childhood Febrile Illness prior to Clinic Attendance in Urban Nigeria.  
**Journal Title:** J Health Popul Nutr.  
**Date of Publication:** 2004  
**Volume ID:** 22  
**Issue ID:** 1  
**Page(s):** 46-51  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Parents and caregivers often try various treatment modalities for their sick children before bringing them to clinic. Many community-based studies have documented home and self-treatment practices, often with the aid of patent medicine vendors, but less is known about prior treatment behaviour of caregivers who actually reach a government clinic. This study, therefore, aimed at documenting the treatment provided by caregivers prior to their attendance at a public hospital. Beginning in April 1996, a year-long study was conducted among 1,943 sick children and their caregivers who attended the largest government-owned paediatric hospital in Lagos, Nigeria. The major complaints mentioned by the caregivers included fever, cough, and diarrhoea. Most (89%) caregivers had administered some form of medicine to the child prior to the clinic visit, and on average, 2.5 medications had been given. Associations were found between major complaint and type of medicine given: fevers were associated with antimalarial drugs and analgesics (antipyretics), cough was associated with cough syrup and analgesics, while diarrhoea was associated with antidiarrhoeal drugs. Although one-fifth of the children had received an antibiotic, provision of antibiotics was not associated with a particular complaint/illness. Since caregivers appeared to use perceived complaints/illnesses as a treatment guide, this can form the basis of safer and more appropriate recognition of illness and home management. In addition, the information obtained in this study can be used for training clinicians to inquire about home management and, thus, for making more informed decisions about their own treatment and prescribing practices.
- Keywords:** Management, Childhood, Febrile illness, Clinic, Urban Nigeria.

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- Record Number:** 229  
**Author(s):** Iwalokun, B. A. Gbenle, G. O. Akinrinmisi, E. O. Smith S. I. Ogunledun, A.  
**Title:** Substrate Profile Variation and Drug Resistance Patterns of  $\beta$ -Lactamase Producing Shigella Species Isolated from Diarrhoeal Patients in Lagos, Nigeria.  
**Journal Title:** Afr J Med Med Sci.  
**Date of Publication:** 2004  
**Volume ID:** 33  
**Issue ID:** 1  
**Page(s):** 51-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The number and trend of antibiotic resistance by Shigella species recovered from food and diarrhoeal stools are on the increase in Nigeria and has resulted in a high frequency of hospitalisation. Increased cost of disease management, and higher mortality in children. This study exposes 51  $\beta$ -lactamase producing Shigella isolates from Lagos to some newly introduced drugs in the country. The drugs include  $\beta$ -lactam -  $\beta$ -actamase inhibitor antibiotics.  $\beta$ -lctam substrate hydrolysis and inhibitory effects of clavulanate were also investigated in-vitro. Results obtained revealed that all the isolates showed high level resistance to tetracycline, ampicillin, streptomycin, co-trimoxazole and amoxicillin with an MIC range of 128 - 1024 microg/ml. The isolates were susceptible to piperacillin, tobramycin, aztreonam and ofloxacin (0.03 - 8 microg/ ml). 18.2 - 40.9% of S. flexneri and S. dysenteriae showed low level resistance to cefuroxime and cefotaxime (MIC = 4 - 16 microg/ ml). Among the  $\beta$ -lactam -  $\beta$ -lctamase inhibitors tested, only piperacillin-tazobactam showed 100% resistance. Hydrolysis of  $\beta$ -lctam substrate was found to be species dependent in decreasing order of S.

flexneri, S. dysenteriae, S. sonnei and S.boydii. An IC50 range of 0.8-2.4 mM was also observed in these isolates. Our data indicate that the incidence of multidrug resistance is high among  $\beta$ -lactamase producing Shigella isolates in Lagos, Nigeria. While the third generation cephalosporins should be used with cautions, some of the newly introduced drugs have the prospects of being used in the future control and management of shigellosis in the country.

**Keywords:** Substrate profile, Variation, Drug,  $\beta$  - lactamase, Shigella Species, Diarrhoeal, Nigeria.

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**Record Number:** 230  
**Author(s):** Uhunmwangho, E. J. Agbonlahor, D. E. **Idigbe, E. O.** Imongan, W. Uyi, I. Ehigie, E. Azeez, M. M. **Enwuru, C**  
**Title:** **Isolation Rate of Mycobacteria Species in Smear Positive-Pulmonary Tuberculosis Patients in Edo-States, Nigeria.**  
**Journal Title:** Enferm Infecc Microbiol Clin  
**Date of Publication:** 2004  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Out of the 704 patients screened microscopically for Acid-fast bacilli 289 were smear positive 100% of the smear positive patients' yielded positive culture. Of the 289 isolates, 3 representing 79.6% were characterized as Mycobacterium tuberculosis while 33 (11.4%) were Mycobacterium avium. It can be inferred from this work that simple Ziehl Neelsen staining giving the same percentage positivity as culture which is more hazardous, cumbersome, this consuming and capital intensive. It is strongly recommended that the direct Microscopy (Ziehl Neelsen) staining should still be first line method of diagnosis in view of its advantage. However, the cultural procedure can be adopted for research and drug trails.

**Keywords:** Tuberculosis (PTB), Isolation.

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**Record Number:** 231  
**Author(s):** Ebuehi, A. O.T. Balogun, M. O. **Audu, R. A. Idigbe, E. O.**  
**Title:** **Blood Chemistry and Platelet Serotonin Uptake as Alternative Method Tracking Hiv/Aids.**  
**Journal Title:** Afr. J. Clin & Exp. Micro.  
**Date of Publication:** 2004  
**Volume ID:** 5  
**Issue ID:** 2  
**Page(s):** 155-159  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A cross sectional study was conducted to investigate the blood chemistry and platelet serotonin uptake as alternate method of determining HIV stage in HIV/AIDS patients. Whole blood was taken from subjects at the Human Virology of the Nigerian Institute of Medical Research. Subjects were judged suitable for the various investigations by means of a questionnaire. The Gene II HIV diagnostic kit was used to confirm HIV positive status. HIV positive subjects were grouped in to two: those receiving antiretroviral therapy were referred to as the ARV group and those not on antiretroviral therapy were designated as non-ARV group. Each group was further sub-divided according to the Centres for Disease Control 1993 classification of HIV disease. HIV negative subjects must have been tested no later than two months to the sample collection date and must not lead a high-risk lifestyle. Serum was used to assay for blood chemistry activities with Randox analytical reagents. Blood platelets were prepared from one milliliter of whole blood and platelet serotonin uptake rates were determined. The serum glutamic-oxaloacetic transaminase (SGOT) of non-ARV subjects was

the only blood chemistry parameter that showed any significant variation from normal ( $p < 0.05$ ). The mean activity of this enzyme was  $28.4 \pm 5.29$  U/L compared to a normal value of 12 U/L. A disease stage-related variation was observed. Platelet serotonin uptake rates of the two HIV positive groups showed no significant difference with the HIV negative control. The data obtained showed that serum glutamic-oxaloacetic transaminase activity is significantly increased in HIV/AIDS patients in a manner that is disease stage related. However, serum glutamic-pyruvic transaminase, bilirubin, triglycerides, amylase, serum creatinine, and alkaline phosphatase showed no significant variation from normal values. Platelet serotonin uptake of HIV subjects was not significantly different from the control.

**Keywords:** **Blood, Chemistry, Platelet serotonin, HIV/AIDS.**

**Record Number:** 232  
**Author(s):** Ebuehi, A. O.T Balogun, M. O. Audu, R. A, Idigbe, E. O.  
**Title:** **Osmotic fragility and  $Na^+ - K^+$  atpase activity of erythrocytes of hiv/aids patient.**  
**Journal Title:** Afr. J. Clin & Exp. Micro.  
**Date of Publication:** 2004  
**Volume ID:** 5  
**Issue ID:** 2  
**Page(s):** 148-154  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

A cross sectional study was carried out to investigate the osmotic fragility and  $Na^+ - K^+$  ATPase activity of the erythrocytes of HIV/AIDS patients. Whole blood was taken from subjects at the Human Virology Laboratory of the Nigerian Institute of Medical Research. Subjects were judged suitable for the various investigations by means of a questionnaire. The Genie II HIV diagnostic kit was used to confirm HIV positive status. HIV positive subjects were grouped into two: those receiving anti-retroviral therapy were referred to as the ARV group and those not receiving antiretroviral therapy were designated as non-ARV group. Each group was further sub-divided according to the Centers for Disease Control 1993 classification of HIV disease. HIV negative subjects must have tested no later than two months to the sample collection date and must not lead a high-risk lifestyle. Twenty microliters of whole blood were used for the erythrocytes osmotic fragility assay. One milliliter of whole blood was used to prepare the erythrocyte ghost membrane for the  $Na^+ - K^+$  ATPase activity assay. The two HIV positive groups showed significant increase in percentage haemolysis under osmotic stress at 0.65% saline. The ARV group had an average percentage haemolysis of  $2.56 \pm 0.81\%$  while the non-ARV group had an average of  $3.19 \pm 1.11\%$  compared to an average of  $0.83 \pm 0.36\%$  for the control group ( $p < 0.05$ ). A pattern observed in the result was an increase in activity with increasing severity of the HIV/AIDS disease. Data from the present study indicate that the osmotic fragility of erythrocytes was significantly potentiated, while  $Na^+ - K^+$  ATPase activity was not significantly altered ( $p < 0.05$ ) in HIV/AIDS disease.

**Keywords:** **Osmotic, fragility,  $Na^+ - K^+$ , atpase, cterthrocytes, hiv/aids, Patient.**

**Record Number:** 233  
**Author(s):** Anorlu, R. Imosemi, D. Odunukwe, N. Abudu, O. Otuonye, M.  
**Title:** **Prevalence of Hiv among women with vaginal discharge in a gynecological clinic**  
**Journal Title:** j natl med. assoc  
**Date of Publication:** 2004  
**Volume ID:** 96  
**Issue ID:** 4  
**Page(s):** 404  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Objective: vaginal discharge is a common complaint among women with sexually transmitted disease (stds) in nigeria. Given the association between stds and hiv and the alarming rise in the prevalence of hiv in nigeria were performed this study to determine the prevalence of hiv in patients with vaginal discharge. study design: between april 2000 and august 2000, women who attended the lagos university teaching hospital and complained of vaginal discharge were adequately counseled for hiv serotest. high vaginal endocervical swabs and venous blood were taken to microbiological studies and hiv serotest respectively. results: out of the 230 women counseled for hiv serotest, 140 (60.9%) consented. the mean age of the 140 was 31.1+/-6.9 years (range 18-50 years). in 31 (22.1%), candida albicans was isolated, in 26 gardnerella vaginalis (18.8%), in 17 staphylococcus spp. (12.1%), and e.coli, trichomonys vaginalis, and neisseria gonococcus in 7.9%, 4.3% and 1.4%, respectively. four (2.9%) of the 140 patients were hiv seropositive, and all had candida albicans isolated. The prevalence of hiv among patients with candida albicans was 12.9%. association between hiv seropositive and candida albicans infection is significant ( $\chi^2=14.48$ ;  $p=0.002$ ). Conclusion: candida albicans is a common cause of vaginal discharge among hiv-seropositive women in Lagos.

**Keywords:** HIV, Women, Vaginal, Discharge, Gynecological, Clinic.

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**Record Number:** 234  
**Author(s):** Otuonye, N. M.Odunukwe N. N. Idigbe E. O. Imosemi O. D. Smith S. I .Chigbo, R. C. Bamidele, M. Oparaugo, C. T.Mafe, A. G Musa, A. Z.  
**Title:** Aetiological Agents of Vaginitis in Nigerian Women  
**Journal Title:** Br. J Biomed Sci  
**Date of Publication:** 2004  
**Volume ID:** 51  
**Issue ID:** 4  
**Page(s):** 175-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

This study focuses on the identification of aetiological agents of vaginitis in Nigeria women. Study subjects are drawn from patients presenting with lower abdominal pain, vaginal discharge and itching at the gynaecology clinic of Lagos University Teaching Hospital and at the Clinical Centre of the Nigerian Institute of Medical Research, Yaba, Lagos, between January 2001 and July 2002. A total of 250 patients gave informed consent to participate in the study. The patients also had pre- and post-test human immunodeficiency virus (HIV) counseling. Each patient completed a questionnaire in order to provide biographical data, past clinical history and socio-economic background information. A cervical swab (CS) and a high-vaginal swab (HVS) were obtained from each patient. Swab samples were examined for pH and under light microscopy by Gram's stain and as wet preparations in 10% potassium hydroxide. Subsequent, samples were cultured on appropriate media at optimal conditions and a drug sensitivity profile for all isolates was determined by standard methods. Blood samples were screened and confirmed for HIV antibodies. Bacterial, fungal and parasitic pathogens were identified or isolated in samples from 241 (96.4%) of the women. Bacterial agents (Neisseria, Streptococcus and Staphylococcus species) were predominant in 128 (51.2%) patients, followed by fungi in 108 (43.3%) and parasites (Trichomonas vaginalis) in five (2.0%). Sensitivity to ciprofloxacin was seen in 40% of Staphylococcus species and in 90% of Neisseria species. Positive HIV serology was seen in 25 (10%) of the 250 women studied, 20 (80%) of which had concurrent microbial infections. Overall, broad spectrums of microbial agents were shown to be responsible for vaginitis in the group of patients studied.

**Keywords:** Aetiological, Vaginitis, Women, Nigeria.

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**Record Number:** 235

**Author(s):** Smith, S. I. Oyedeji, K. S. Arigbabu, A. O. Cantet, F. Megraud, F. Ojo, O. O. Uwaifo, A. O. Otegbayo, J. A. Ola, S. O. Coker, A. O.

**Title:** Comparison of Three PCR Methods for Detection of *Helicobacter pylori* DNA and Detection of *cagA* Gene in Gastric Biopsy Specimens.

**Journal Title:** World J Gastroenterol.

**Date of Publication:** 2004

**Volume ID:** 10

**Issue ID:** 13

**Page(s):** 1958-60

**Address/Availability:**

**Location/URL:**

**Abstract:** To comparatively evaluate PCR and other diagnostic methods (the rapid urease test and / or culture) in order to determine which of the three PCR methods (*ureA*, *glmM* and 26-kDa, *SSA* gene) was most appropriate in the diagnosis of *Helicobacter pylori* (*H pylori*) infection and also to evaluate the detection of a putative virulence marker of *H pylori*, the *cagA* gene, by PCR in biopsy specimens.

**Keywords:** *Helicobacter pylori*, DNA, *cagA*, gene.

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**Record Number:** 236

**Author(s):** Masendu, H. T. Hunt, R. H. Govere, J. Brooke, B. D. Awolola, T. S. Coetzee, M.

**Title:** The Sympatric Occurrence of Two Molecular forms of the Malaria Vector *Anopheles Gambiae* Giles sensu stricto in Kanyemba, in the Zambezi Valley, Zimbabwe.

**Journal Title:** Trans R Soc Trop Med Hyg.

**Date of Publication:** 2004

**Volume ID:** 98

**Issue ID:** 7

**Page(s):** 393-6

**Address/Availability:**

**Location/URL:**

**Abstract:** The complexity of *Anopheles gambiae* Giles sensu stricto, a sibling species of the *A. gambiae* complex, has been shown by the extent of chromosomal inversion polymorphisms and more recently, by divergence at the molecular level. Analysis by PCR of a field population of *A. gambiae* complex from the Zambezi Valley area of Kanyemba, northern Zimbabwe, showed the co-existence of three sibling species: *A. arabiensis* (90%), *A. gambiae* (4%), and *A. quadriannulatus* (6%). Molecular characterization of the *A. gambiae* s.s. material revealed the sympatric presence of the two molecular forms S and M within a sample of eight. This is the first record of the co-existence of these two molecular forms in southern Africa.

**Keywords:** Malaria vector, *Anopheles*, *Gambiae*, Giles sensu stricto, Kanyemba, Zambezi Valley, Zimbabwe.

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**Record Number:** 237

**Author(s):** Smith, S. I. Odunukwe N. N. Niemogha M. T. Ahmed, A. O. Efenemokwu, C. A. Otuonye, M. N. Bankole, M. Junaid, M. Agomo, C. Mafe A. G. Idigbe E. O.

**Title:** Diagnostic Methods for Typhoid Fever in Nigeria

**Journal Title:** British Journal of Biomedical Sciences (4)

**Date of Publication:** 2004

**Volume ID:** 61

**Issue ID:** 4

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** In this study 65 patients are screened to *Salmonella typhi* by conventional culture and the

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Widal test ion addition, the patients undergo full blood count are screened for malaria parasites. Of the 65 patients, 50 report febrile consultants while the remaining 15 are used as a control population. In the febrile group 13 (26%) were positive for *S. typhia*, while in the control group only one (7%) was positive for *S typhia*. Overall, 36 (64.3%) patients had malaria parasites, Patients with a higher O antibody titre (= I in 80) by Widal test were found to have consumed both tap water and oure water. More females (10/14, mean age 33) had typhoid fever as a result of *S. typhi* infection, the majority of which were isolated from stool samples (57%). Nine of the isolates were also positive for malaria parasites, seven of which were in the trophozoite stage. *Plasmodium falciparum* was the predominant parasite (78%), the reminder being *P. malariae*. The majority of patients (12/14) with typhoid fever had normal PCV values. In conclusion, it is recommended that tests for the diagnosis of typhoid fever in Nigeria should include malaria parasites, *S typhi* culture from faecal samples, and the Widal test.

**Keywords:** Bacterial culture, Malaria, Parasites, Salmonella, Typhi, Widal test.

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**Record Number:** 238  
**Author(s):** Adeiga, A, Akinosho, R. O. Audu, R . A. Onyewuche, J. Oyewole, O.  
**Title:** Placental Transfer of Measles Antibodies in Nigerian Mothers.  
**Journal Title:** BR. J. Biomed. Sci.  
**Date of Publication:** 2004  
**Volume ID:** 61  
**Issue ID:** 1  
**Page(s):** 37-39  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Measles is a major health problem of childhood in developing countries, despite the immunisation of children against the disease. Factors such as ignorance, malnutrition, non-immunisation, delay in seeking medical attention and intra-uterine fetal infection from the exposed mother have contributed to the high morbidity and mortality rate of measles infection. Vaccine failure is another factor in the high morbidity rate of measles. The failure of children to seroconvert the live measles vaccine, as observed in kwashiorkor children, also helps to propagate the disease. Normally, babies will acquire measles antibody across the placenta during gestation, and this provides protection until they are immunised at nine months. However, a study of 20 babies (aged between one month and nine months) revealed that 88% had no protective antibody at six months and all were susceptible to measles at nine months. This could result from either the transfer of low levels of measles antibody across the placenta or the possibility that intrauterine infection overwhelms the measles antibody and renders it ineffective. In a community study, women exposed to measles infection during pregnancy had a prenatal mortality rate of 15%, compared with 4% for women not exposed to measles. This type of prenatal infection was suggested as the cause of measles in babies aged one to two months. The present study aims to establish the pattern of measles immunity in babies of women exposed to an environment in which measles is endemic. Forty-two pregnant women gave informed consent and were enrolled in the study. Inclusion criteria were that they must be in the first trimester of pregnancy and that a complete antenatal record be kept to delivery. The study group was monitored through case notes and assessment of clinical condition at each clinic visit. Babies were examined for underweight or infection at delivery. Blood was collected by venepuncture during antenatal consultation. Cord blood was collected at delivery and sera were separated and stored at  $-20^{\circ}$  C until used. A haemagglutination inhibition (HI) technique was used to carry out the measles antibody assay. Briefly, an initial measles antigen titration was performed in phosphate-buffered saline (PBS) to find the haemagglutinating titre of the antigen. Serum samples were absorbed with 50% Rhesus monkey erythrocytes overnight to remove non specific agglutinins, prior to measles antibody titration. Serial two-fold dilution (1 in 4 to 1 in 2048) of treated samples were prepared in PBS (pH 7.2) in a multi-welled plate. Equal volumes (25 $\mu$ L) of each serum

dilution and 4HAI units of measles antigen were mixed. This was incubated for 1h at room temperature, following which 0.5% washed monkey erythrocytes were added as an indicator. This was followed by further incubation at 37<sup>0</sup> C for 1 h. The plate was then examined. Even haemagglutination was recorded as a positive reaction, while a button of erythrocytes at the base of the well indicated a negative reaction. The titre at which positive and negative reactions occurred was noted. Both the maternal and cord sera showed HI measles antibodies. However, three immune status groups emerged from the result. This classification was based on the fetal: maternal ratio of the pair of sera tested. The first group comprised 14 mother/cord pairs that showed a ratio<1. Measles antibody in the sera of mothers in this group was significantly higher than that found in the cord sera (P<0.05; Table 1). The second group comprised nine mother/cord pairs that showed a ratio>1. In this group, maternal measles antibody was found to be lower than the level in the cord sera, although the difference was not significant (p>0.05; Table 2). The third group comprised 19 mother/cord pairs that showed a ratio of 1, indicating that an efficient transfer of HI measles antibody from mother to fetus had taken place (Table 3). Babies acquire measles antibody from their mothers across the placenta. This provides protection until the baby is immunised against the disease at nine months. The study reported here was conducted to assess the levels of measles antibody acquired by babies during gestation. Results revealed three groups of immune status based of fetal:maternal ratio. Group 1 (ratio <1) had a lower level of measles antibody in cord sera than in the mother's sera indicating inefficient transfer as a result of either placental insufficiency or pathology. Among the factors reported to cause placental defect is malaria, which has been shown to affect the transfer of tetanus antibody to the fetus during malaria infection in pregnancy. Although 22 (52%) of the mothers studied had malaria infection during pregnancy, there was no relationship with the transfer of measles antibody because only nine of the mothers in group 1 had malaria. Thus, it is difficult to attribute the low level of measles antibody in the cord sera to malaria alone. The consequence of lowered measles antibody transfer to babies is the risk of measles infection prior to immunisation at nine months. Such early infection has been reported in babies between four and six months old. Group 2 (ratio >1) had a higher level of measles antibody in cord sera than that in the mother's sera. Intra-uterine measles infection could be the cause of such high measles antibody levels in these babies, perhaps due to the exposure of measles of mothers with depressed or compromised immunity, leading to high viraemia. The consequence of this intrauterine infection can be prenatal fetal death, as shown in one study to account for a 15% death rate. Babies with high measles antibody need to be monitored for antibody titre at nine months before immunisation as derived measles antibody may prevent the babies from developing active immunity, thereby leading to vaccine failure. Group 3 (ratio=1) showed evidence of adequate transfer of measles antibody to the babies from their mothers. However, those with high measles antibody should still be monitored for the reasons given above. Malaria was recorded among the pregnant women studied, but there was no evidence of its effect on the transfer of measles antibodies. Hence, malaria cannot be totally implicated in the poor antibody transfer in group 1. Also, no relationship was shown between antibody level and other parameters investigated (e.g, birth weight, parity).

**Keywords:** Measles.

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**Record Number:** 239  
**Author(s):** Ebuehi, O. A. Balogun, M Ebuehi, O. M. Audu, R. A. Idigbe, E. O.  
**Title:** Urinary Creatinine Levels in HIV/AIDS Disease  
**Journal Title:** European Journal of Scientific Research  
**Date of Publication:** 2005  
**Volume ID:** 10  
**Issue ID:** 1  
**Page(s):** 60-65  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Objective: A cross sectional study was conducted to investigate HIV/AIDS as an aetiological factor in the increased prevalence of kidney dysfunction in Nigeria. Urinary creatinine level was used as a marker for kidney dysfunction. Methods: Urine collected over a 24h period from HIV positive patients was analysed using the Chemistry autoanalyzer. 135 HIV positive patients consisting of 63 males and 72 females participated in this study. The mean ages were 40.5 and 33.6 years respectively. 50 HIV negative persons served as a control group. Statistical test of significant difference employed was the student t-test using Microsoft Excel XP, 2002 software. Results: The data obtained showed a significant ( $p < 0.01$ ) decrease in the urinary creatinine levels of both the males and females HIV/AIDS patients, compared to the control levels of 9mMol/-17mMol/l for all age groups studied in both sexes. Conclusion: These findings indicate renal dysfunction. With the increasing rate of HIV infection in the Nigerian population, it can be extrapolated from the data obtained that HIV/AIDS may have a critical aetiological role in the upsurge of renal disease in Nigeria.

**Keywords:** Urinary, creatinine, hiv/aids, Disease.

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**Record Number:** 240  
**Author(s):** Aboaba, O. O. Smith S. I.  
**Title:** Occurrence of Campylobacter Species in Poultry forms in Lagos Area of Nigeria.  
**Journal Title:** J Environ Biol.  
**Date of Publication:** 2005  
**Volume ID:** 26  
**Issue ID:** 2  
**Page(s):** 403-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Samples of poultry droppings were collected from fifty poultry farms in Lagos area of Nigeria. Campylobacter species were isolated from serially diluted samples using Bolton selective enrichment medium under microaerophilic condition at 42 degrees C. Samples of water, both treated and untreated used in the farms were also analysed in the same manner. Fifteen Campylobacter strains were isolated from the droppings. All the strains were identified using biochemical characteristics differentiating Campylobacter species. They were identified as hippurate positive (*C. jejuni*) and negative species (*C. coli*). They were biotype' using the extended scheme described by Lior (1984). Campylobacter coli biotype 'I was the most prevalent (66.66%) followed by *C. jejuni* biotype 1 (20.00%). The biotype ii of the two species accounted for 6.67% each. The *C. jejuni* biotype III and IV were not isolated during the study. The preponderance of *C. coli* indicates that poultry can be a major reservoir for the spread of human campylobacteriosis. Poultry farmers, therefore, must ensure prompt and adequate means of disposal of waste materials as well as maintaining good sanitary conditions.

**Keywords:** Campylobacter, Poultry, Nigeria.

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**Record Number:** 241  
**Author(s):** Taiwo, S. S. Bamidele, M. Omonigbehin, E. A. Akinsinde, K. A. Smith, S. I. Onile, B. A. Olowe, A. O.  
**Title:** Molecular Epidemiology of Methicillin-resistant Staphylococcus aureus in Ilorin, Nigeria.  
**Journal Title:** West Afr J Med.  
**Date of Publication:** 2005  
**Volume ID:** 24  
**Issue ID:** 2  
**Page(s):** 100-6  
**Address/Availability:**  
**Location/URL:**

**Abstract:****Keywords:** Molecular, Epidemiology, Methicillin-resistant, Staphylococcus, Aureus, Nigeria.**Record Number:** 242**Author(s):** Ahmed, O. O. Odunukwe N. N. Akinwale, P. O. Raheem, T. Y. Efiemoku, C. E. Ogedengbe, O. Salako, L. A.**Title:** Knowledge and Practices of Traditional Birth Attendants in Prenatal Services in Lagos State, Nigeria.**Journal Title:** African Journal of Medical Science**Date of Publication:** 2005**Volume ID:** 34**Issue ID:****Page(s):** 55-58**Address/Availability:****Location/URL:**

**Abstract:** A questionnaire-based study was conducted on 189 Traditional Birth Attendants (TBAs) on their knowledge and practices in prenatal services. Only 86 (45.5%) of them associated cessation of menstrual period with pregnancy while others use mystic power 46 (24.3%), early morning sickness, pallor of conjunctiva and reaction to herbs 56 (29.6%) to detect pregnancy. Fundal height N=76 (40.2%), palpation n=82 (43.4%) special soaps and soups n=52 (27.5%) and special devices n=8 (4.2%) are used to determine stages of pregnancy. Foetal health status is determined by regular foetal movements n=95 (50.3%), mystic power n=15 (8%), soap n=2 (1.1%), special concoction 9 (4.8%), health status of mother n=67 (35.4%) and foetal heart beat n=24 (12.7%). Ninety-Seven (51.3%) of them used herbal treatment, 77 (40.7%) used incantations, 189 (100%) used special soaps as their main methods of delivery, while only 18 (9.5%) of respondents refer difficult cases to hospitals. Instruments used for separating cord were blade 123 (65.1%) and scissors 40 (21.1%). Symptoms recognized by the TBAs as signs of complications in pregnancy were dizziness, swollen feet, pallor, tiredness, absent foetal movement, loss of appetite, heaviness, pain in back/stomach/side, weight loss, vomiting, bleeding, fever/malaria, head ache, bad dream, premature or delayed labour. Although some of them recognized some danger signs in pregnancy and labour, only very few would refer difficult cases for emergency obstetric interventions. Clear protocols for management and referral, which are necessary for improved maternal survival, should be provided through regular training of the TBAs.

**Keywords:** Knowledge, Traditional birth attendants (TBAs).**Record Number:** 243**Author(s):** Adeiga, A. Omilabu, S. A. Audu, R. A. Sanni, F. Lakehinde, G. P. Balogun, O. Olagaju, O.**Title:** Tetanus Toxoid Immunization Coverage Among Mothers of Children Below One Year of Age in Difficult-to-Reach Area of Lagos Metropolis.**Journal Title:** Afr. J. Clin & Exp. Micro.**Date of Publication:** 2005**Volume ID:** 6**Issue ID:** 2**Page(s):** 233-237**Address/Availability:****Location/URL:**

**Abstract:** A retrospective survey of tetanus toxoid immunization coverage was conducted among 196 mothers for children less than one year of age in a difficult-to-reach area of Lagos metropolis. This was to ascertain the status of coverage among the women presumed to have been immunized with minimum of two doses of tetanus toxoid during pregnancy, estimate dropout rates, investigate reasons for failure to be immunized and determine missed opportunities to get immunized. An interview was conducted by administering questionnaires using WHO

cluster form for tetanus toxoid immunization. Recall history and immunization card review were taken as response. The results showed that with card/history criterion, 109 (55.6%) women received first dose of tetanus toxoid (TT), 80 (40.8%) received second dose and 22 (11.2%) received third dose while 87 (44.4%) were not immunized. Using the card criterion that only established valid immunization, 20 (10.2%) women received first dose and 14 (7.2%) received the second dose. With the card criterion analysis, 14 (7.2%) mothers were protected against tetanus and only 4 (2%) babies born of these mothers were protected against tetanus. A decline was observed in compliance with the regimen of vaccination. Thirty three (16.8%) of women studied missed the opportunity of getting vaccinated and 87 (79.8%) of 109 who started vaccination dropped out. Reasons advanced for failure to be immunized included lack of information accounting for 65.85%, lack of motivation was 20.4% and 13.8% as environmental factors. Poverty and lack of health facilities also contributed to the low level of immunization coverage. For TT immunization to improve in the area studied, factors impeding immunization must be addressed.

**Keywords:** Tetanus, Toxoid, Immunization, Mothers, Children, Lagos Metropolis.

**Record Number:** 244  
**Author(s):** Awolola, T. S. Oyewole, I. O. Amajoh, C. N. Idowu, E. T. Ajayi, M. B. Oduola, A. Manafa, O. U. Ibrahim, K. Koekemoer, L. L. Coetzee, M.  
**Title:** Distribution of the molecular forms of *Anopheles gambiae* and pyrethroid knock down resistance gene in Nigeria.  
**Journal Title:** Acta Trop.  
**Date of Publication:** 2005  
**Volume ID:** 95  
**Issue ID:** 3  
**Page(s):** 204-9  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** We investigated the distribution of the molecular M and S forms of *Anopheles gambiae* and the knock down resistance (kdr) gene associated with pyrethroid and DDT resistance in *A. gambiae* s.s. at 13 localities across Nigeria. Two-three days old adult female mosquito reared from larval collections were tested using standard WHO procedures, diagnostic test kits and impregnated papers to assess their pyrethroid resistance status. Specimens were identified by PCR assays and characterized for the kdr gene. DNA from adult *A. gambiae* s.s. collected from human dwellings were also tested for the presence of the kdr gene. The overall collection was a mix of the molecular M and S forms across the mangrove (63:37%), forest (56:44%), and transitional (36:64%) ecotypes, but almost a pure collection of the S form in the Guinea and Sudan-savanna. Results of insecticide susceptibility tests showed that mosquitoes sampled at seven localities were susceptible to permethrin, deltamethrin, and DDT, but populations of *A. gambiae* resistant to these insecticides were recorded at six other localities mainly in the transitional and Guinea-savanna ecotypes. The kdr gene was found only in the molecular S forms, including areas where both forms were sympatric. The overall kdr frequency was low: <47% in forest, 37-48% in the transitional, and 45-53% in Guinea-savanna. The data suggest that pyrethroid resistance in *A. gambiae* in Nigeria is not as widespread when compared to neighbouring West African countries.

**Keywords:** Molecular, *Anopheles gambiae*, pyrethroid, Gene, Nigeria.

**Record Number:** 245  
**Author(s):** Odunukwe, N. Idigbe, O. Kanki P. Adewole, T. Onwujekwe, D. Audu R. A. Onyewuche, J.  
**Title:** Haematological and Biochemical Response to Treatment of hiv-1 Infection with a Combination of Nevirapine + Stavudine + Lamivudine in Lagos Nigeria.  
**Journal Title:** Turk. J. Haematol.

**Date of Publication:** 2005  
**Volume ID:** 22  
**Issue ID:** 3  
**Page(s):** 125-131  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

To evaluate the effect of a combination of nevirapine + stavudine + lamivudine on Haematological and Biochemical values of HIV-1 positive patients in Lagos. Fifty patients who met the enrollment criteria for accelerated clinical trial were studied. Ten millimeters of blood was taken from each patient at first visit for basic haematological and biochemical values. Viral load and CD4 cell counts were also analyzed. All the values were repeated at 12 weeks and 24 weeks, after patients were placed on drug treatment regimen. All the data were analyzed using Epi-Info version 6.4D. The mean erythrocyte sedimentation rate (ESR) results were  $53.3 \pm 41.8$  mm/1hr,  $48.2 \pm 40.6$  mm/1hr and  $28.6 \pm 20.7$  mm/1hr. Haemoglobin (Hb)  $123 \pm 15$  g/L,  $124 \pm 21$  g/L and  $132 \pm 14$  g/L. Packed cell volume  $36.8 \pm 4.5\%$ ,  $37.6 \pm 4.8\%$ , and  $40.3 \pm 3.3\%$ . Total white blood cell (WBC)  $4.2 \pm 1.0$ ,  $5.0 \pm 1.5$  and  $4.6 \pm 1.0$  (baseline, 12 weeks and 24 weeks respectively). Creatinine,  $1.2 \pm 0.68$  g/L,  $1.2 \pm 0.7$  g/L and  $1.04 \pm 0.3$  g/L (baseline 12 weeks and 24 weeks respectively). Serum amylase  $37.9 \pm 15.1$  IU/L,  $38 \pm 23.9$  IU/L and  $24.3 \pm 11.6$  IU/L. Triglyceride  $95.2 \pm 48.3$  IU/L,  $92.38 \pm 54.3$  IU/L, and  $78.0 \pm 35.6$  IU/L. Serum bilirubin  $0.18 \pm 0.09$   $\mu$ mol/L,  $0.29 \pm 0.28$   $\mu$ mol/L and  $0.33 \pm 0.24$   $\mu$ mol/L. Alnine transaminase (ALT)  $9.9 \pm 3.3$  IU/L,  $15.1 \pm 9.0$  IU/L and  $14.1 \pm 9.3$  IU/L. Serum aspartate transaminase (AST)  $8.2 \pm 6.2$  IU/L,  $9.4 \pm 5.2$  IU/L and  $9.1 \pm 6.0$  IU/L. On comparison of the results between baseline and 12<sup>th</sup> week, all parameter were similar except PCV, Hb, serum bilirubin, serum ALT and total WBC, which were significantly high at 12<sup>th</sup> week ( $p= 0.05$ ). On comparison of results between 12<sup>th</sup> week and 24<sup>th</sup> week all parameters were similar except Hb and PCV (which were significantly higher at 24<sup>th</sup> week) while ESR, was significantly lower at 24<sup>th</sup> week ( $p=0.05$ ). It was concluded that nevirapine + stavudine + lamivudine combination results in improved haematological values of HIV/AIDS patients. The effect of the drug combination on biochemical parameter in a short period of 24 weeks may not be much. Clinical response and haematological response alone may be used for patient monitoring in a resource poor setting were CD4 count and viral load analysis is impossible.

**Keywords:** **Haematological, Biochemical, Treatment, Hiv-1, Infection, Nevirapine, Stavudine, Lamivudine, Lagos, Nigeria.**

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**Record Number:** 246  
**Author(s):** Awolola, T. S. Oyewole, I. O. Koekemoer, L. L. Coetzee, M.  
**Title:** **Identification of three members of the Anopheles funestus (Diptera: Culicidae) group and their role in malaria transmission in two ecological zones in Nigeria.**  
**Journal Title:** Trans R Soc Trop Med Hyg.  
**Date of Publication:** 2005  
**Volume ID:** 99  
**Issue ID:** 7  
**Page(s):** 525-31  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

The role of the Anopheles funestus group in malaria transmission was investigated in two ecological zones in Nigeria. Sampling was carried out at four sites each around Ibadan (forest) and Ilorin (savanna). Human landing catches were supplemented with indoor and outdoor resting collections. PCR was used to identify 1848 A. funestus group mosquitoes to species level (749 in the savanna, 1099 in the forest) and three species were identified. In the forest, A. funestus s.s. predominated (55.4%), followed by A. rivulorum (27.6%) and A. lesoni (17.0%). Anopheles funestus was found mostly indoors. Anopheles rivulorum and A. lesoni predominated in outdoor collections ( $P<0.001$ ). Only Anopheles funestus s.s. was

found in the savanna. ELISA analysis of 803 blood meal-positive specimens showed that over half of the blood meals were taken from humans in both ecotypes. The human blood index in *A. funestus* from the two study areas was similar. *Anopheles funestus* s.s. was the only species found positive for *Plasmodium falciparum* using ELISA, with overall infection rates of 2.3% and 1.0% in the forest and savanna respectively. The presence of three *A. funestus* species in Nigeria emphasizes the desirability of correct species identification within a malaria vector control programme.

**Keywords:** **Anopheles, Funestus, Malaria Transmission, Ecological, Nigeria.**

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**Record Number:** 247  
**Author(s):** Adeiga, A. Omilabu, S. A. Audu, R .A. Sanni, F. Lakehinde, G. P Balogun, O. Olagbaju. O.  
**Title:** Infant Immunization Coverage in Difficult-to-reach Area of Lagos Metropolis.  
**Journal Title:** Afr. J. Clin & Exp. Micro.  
**Date of Publication:** 2005  
**Volume ID:** 6  
**Issue ID:** 2  
**Page(s):** 227-231  
**Address/Availability:**  
**Location/URL:**

**Abstract:** A retrospective survey of infant immunization coverage was conducted among 210 children aged 12 to 23 months in difficult-to-reach coastal suburb of Lagos, Nigeria. This was to assess immunization coverage for BCG, DPT OPV and measles vaccination and to investigate reasons for failure to be immunized and evaluate the drop out rate as well as missed opportunities. An EPI cluster method was used. Questionnaires were administered with WHO cluster form for infant immunization. Recall history and card records of immunization were the tools used. The result showed that 82 (39%) of the 210 children assessed were not immunized, 84 (40%) were partially immunized and only 44 (21%) were fully immunized. At one year of age, only 21 (10%) of the children completed their immunization. Observation of the follow up of vaccination showed that 65.5% of 127 children who started BCG vaccination dropped out as at the time of receiving measles vaccination. Reasons advanced for failure to immunize or complete immunization of the children included obstacles in 47.7%, lack of information 40.7% and lack of motivation in 11.6%. These factors contributed to missed opportunities. Only 9 (11.%) of 82 children not vaccinated against measles attributed non vaccination to illnesses. Lack of health facilities and the terrain that is difficult to reach contributed to low coverage. Also, low literacy level, poor maternal health education, poor socioeconomic status and poor advocacy of community leaders and lack of commitment of health workers contributed to low coverage. For immunization coverage to improve in this area, these factors must be addressed

**Keywords:** **Infant, Immunization, Lagos metropolis.**

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**Record Number:** 248  
**Author(s):** Audu, R. A. Onwujekwe, D. I Onubogu, C. C Adedoyin, J. AOnyejebu, N. Mafe, A. G. et al  
**Title:** Possible impact of co-infections of tuberculosis and malaria on the cd4+ cell counts of Hiv patients in Nigeria.  
**Journal Title:** Annals of African Medicine.  
**Date of Publication:** 2005  
**Volume ID:** 4  
**Issue ID:** 1  
**Page(s):** 10-14  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Background: This study focused on evaluating the possible impact of coinfections of

tuberculosis and malaria on the CD4<sup>+</sup> cell counts in HIV infected subjects Methods: This is a cross sectional study. The subjects were drawn from three hospitals and a blood bank in Lagos State. After due consent, blood samples were obtained from 69 subjects with single infections (HIV, TB and Malaria), 34 subjects with multiple infection (HIV/Malaria, HIV/TB, Malaria/TB, HIV/TB/Malaria) and 24 blood donors (controls). The CD4<sup>+</sup> cell counts of the 127 blood samples were estimated using FACS count. Results: Data obtained were analysed and a comparison of the results showed that the median CD4<sup>+</sup> counts in all groups of subjects with HIV infections (whether single or co-infection) were similar and significantly lower than the median counts for the healthy control group as well as groups without HIV infection (malaria, TB and malaria/TB). Conclusion: Overall data further confirmed the progressive depletion of CD4<sup>+</sup> cells in HIV infection while co-infections with TB and malaria did not have any impact on the CD4<sup>+</sup> cells of HIV infected subjects. A larger prospective study is needed.

**Keywords:** Co-infections, Tuberculosis, Malaria, cd4+, cell counts, HIV, Patients, Nigeria.

**Record Number:** 249  
**Author(s):** Du, W. Awolola, T. S. Howell, P. Koekemoer, L. L. Brooke, B. D. Benedict, M. Q. Coetzee, M. Zheng, L.  
**Title:** Independent Mutations in the Rdl locus Confer Dieldrin Resistance to *Anopheles gambiae* and *An. arabiensis*.  
**Journal Title:** Insect Mol Biol.  
**Date of Publication:** 2005  
**Volume ID:** 14  
**Issue ID:** 2  
**Page(s):** 179-83  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Substitutions of a conserved alanine residue in the Rdl locus coding for a gamma-aminobutyric acid (GABA) receptor subunit with serine or glycine confer resistance to dieldrin in various insect species. Here, we show that alanine to glycine substitution in the Rdl locus of the malaria vector, *Anopheles gambiae*, is genetically linked to resistance to dieldrin. An alanine to serine substitution developed independently in a dieldrin resistant strain of *An. arabiensis*. An allele-specific polymerase chain reaction (PCR) assay was able to differentiate dieldrin resistant and susceptible mosquitoes.  
**Keywords:** Mutations, Rdl locus, confer dieldrin, resistance, *Anopheles gambiae*, *An. arabiensis*.

**Record Number:** 250  
**Author(s):** Olukosi, Y. A. Iwalokun B. A. Magbagbeola, E. O. Akinwande, O. Adewole, T. A. Agomo, P. U. Awolola, S. T.  
**Title:** Pattern of Rural Urban Acquisition of pfcr t76 Allele Among Nigerian Children with Acute Uncomplicated *Plasmodium Falciparum* malaria.  
**Journal Title:** African Journal of Biotechnology  
**Date of Publication:** 2005  
**Volume ID:** 4  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Malaria caused by *Plasmodium falciparum* remains a public health problem in Nigerian children with treatment complicated by expansion of chloroquine resistant strains known to harbour a common K76T point mutation in their pfcr alleles. Here, we report the outcome of a 2 – year (March 2000 – February 2002) molecular surveillance for pfcrT76 in children aged 6 months – 13 years with acute uncomplicated *falciparum* malaria in rural and urban Lagos,

Nigeria. Rural-urban pfcrT76 acquisition of 48.7 vs. 73.7% and 67.3 vs. 74.6% due to monoclonal and polyclonal *P. falciparum* parasitaemia, respectively, were found in the two study years, suggesting unstable but increasing prevalence of pfcr T76 allele acquisition in the rural area. Further analyses showed that acquisition of pfcrT76 allele was independent of sex but occurred more in  $\leq 5$  – year old children than older children in both populations. The impacts of K76T mutation in pfcr gene and immunity on the clinical efficacy of chloroquine against acute uncomplicated malaria are discussed.

**Keywords:** Rural urban, pfcr t76, Allele, Children, *Plasmodium falciparum*, Malaria.

**Record Number:** 251  
**Author(s):** Akinyemi, K. O. Mendie, U. E. Smith, S. I. Oyefolu, A. O. Coker, A. O.  
**Title:** Screening of Some Medicinal Plants used in South-west Nigerian Traditional Medicine for Anti-Salmonella Typhi Activity.  
**Journal Title:** J Herb Pharmacother.  
**Date of Publication:** 2005  
**Volume ID:** 5  
**Issue ID:** 1  
**Page(s):** 45-60  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Ten Nigerian medicinal plants used traditionally for the treatment of several ailments of both microbial and non-microbial origins were tested on multi-drug resistant *S. typhi* (MDR) strains of which six of them were active. The results revealed that both the aqueous and ethanol extracts of *Terminalia avicennioides*, *Momordica balsamina*, *Combretum paniculatum* and *Trema guineensis* were effective on the MDR-*S. typhi* strains with minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) values ranging from 9.60 to 14 mcg/ml and 24 to 33 mcg/ml, respectively. Whereas, only the aqueous extracts of *Morinda lucida* and *Ocimum gratissimum* were found to be active against this pathogen with MIC and MBC values of 9.60 and 24 mcg/ml for *M. lucida*, 40 and 55 mcg/ml for *O. gratissimum*, respectively. There was no statistical significant difference ( $P > 0.05$ ) between the activity of each plant extract and the decoctions prepared from them. All the six active plants showed positive reactions to alkaloids, tannins, flavonoids and anthraquinones but in variable degrees. All but *M. balsamina*, indicated the presence of saponin.

**Keywords:** Medicinal plants, traditional medicine, Anti-Salmonella typhi.

**Record Number:** 252  
**Author(s):** Mafe, M. A. Appelt, B. Adewale, B. Idowu, E. T. Akinwale, O. P. Adeneye, A. K. Manafa, O. U. Sulyman, M. A. Akande, O. D. Omotola, B. D.  
**Title:** Effectiveness of Different Approaches to Mass Delivery of Praziquantel Among school-aged Children in Rural Communities in Nigeria.  
**Journal Title:** Acta Trop.  
**Date of Publication:** 2005  
**Volume ID:** 93  
**Issue ID:** 2  
**Page(s):** 180-90  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Schistosomiasis is hyperendemic in Nigeria. The national policy on schistosomiasis control has adopted praziquantel as the main drug of use in the control strategy aimed at reducing morbidity. However, the best delivery channel for praziquantel in schistosomiasis control in Nigeria is yet to be determined. This study assessed different channels for praziquantel delivery in a mass treatment effort. Three groups, each of two communities, were assigned to one of the following three channels: health facility (HF), school, and community for mass

delivery of praziquantel to school-aged children. Distributors were trained on all aspects of praziquantel distribution and sufficient praziquantel tablets were provided for the drug distribution within 3 weeks following which an evaluation of the drug distribution by the different treatment channels was conducted. Overall, the community channel of delivery achieved the best coverage of 72.2% (range: 69-73%) compared to 44.3% (range: 39.5-62%) and 28.5% (range: 26.3-74.5%) for the HF and school channels, respectively. Community channel of praziquantel delivery as shown in this study ensures good coverage of both in and out-of-school children.

**Keywords:** Schistosomiasis, Praziquantel

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**Record Number:** 253  
**Author(s):** Akinyemi, K.O. Smith, S. I. Oyefolu, A. O. Coker, A. O.  
**Title:** Multidrug resistance in *Salmonella Enterica* Serovar Typhi Isolated from Patients with Typhoid Fever Complications in Lagos, Nigeria.  
**Journal Title:** Public Health.  
**Date of Publication:** 2005  
**Volume ID:** 119  
**Issue ID:** 4  
**Page(s):** 321-7  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The aim of this study was to determine the prevalence of *Salmonella enterica* serovar typhi in patients with pyrexia of unknown origin (PUO), and antimicrobial resistance in strains isolated from patients with *S. typhi* in Lagos, Nigeria.  
**Keywords:** Multidrug, *Salmonella*, Typhoid Fever, Nigeria.

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**Record Number:** 254  
**Author(s):** Ekanem, E. E. Afolabi, B. M. Nuga, A. O. Adebajo, S. B.  
**Title:** Sexual behaviour, HIV-Related Knowledge and Condom Use by Intra-city Commercial Bus Drivers and Motor Park Attendants in Lagos, Nigeria.  
**Journal Title:** Afr J Reprod Health.  
**Date of Publication:** 2005  
**Volume ID:** 9  
**Issue ID:**  
**Page(s):** 78-87  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A study was undertaken among 395 intra-city commercial bus drivers, conductors and motor park attendants in a sub-urban community in Lagos, Nigeria. It was aimed at ascertaining the level of knowledge of the participants on sexually transmitted diseases including AIDS, their sexual practices and perceived vulnerability to these diseases and, in particular, their attitude to and use of condoms. A semi-structured interview schedule was used for data collection. The men were found to have a strongly woven network of sexual relationships. Their sexual network included, apart from their wives and regular partners, commercial sex workers, young female hawkers, schoolgirls, and market women within and outside the motor parks. More than two thirds (74.3%) of the men had multiple sex partners and many of them had had sexually transmitted diseases at one time or another. Condom ever-use rate was 65.6% but consistent and regular use rate with casual partners was 11.6%. Almost all the respondents (96.4%) knew themselves to be at high risk of contracting STDs, while 87.6% felt that it was impossible for them to "catch" AIDS. Poor knowledge of risk factors for STDs was exhibited, as many of them attributed their previous STDs to excessive exposure to the sun, having sex in the sun, and their partners remaining in the bath for too long. Intra-city commercial bus operators and men at motor parks are a high risk group for acquiring HIV infection. Their

sexual networking with a variety of women within and outside the parks also seems to suggest that they play a major role in transmitting HIV infection in urban communities in Nigeria. There is a need for intervention programmes with a focus on men at motor parks and similar high risk groups.

**Keywords:** Sexual behaviour, HIV, Condom, Nigeria.

**Record Number:** 255

**Author(s):** Idigbe, E. O. Adewole, T. A. Eisen, G. Kanki, P. Odunukwe, N. N. Onwujekwe, D. I. Audu, R. A. Araoyinbo, O. I. D. Onyewuche, J. I. Salu, O. B. Adedoyin J. A. Musa, A. Z.

**Title:** Management of HIV-1 Infection with a Combination of Nevirapine, Stavudine, and Lamivudine: A Preliminary Report on the Nigerian Antiretroviral Program.

**Journal Title:** J Acquir Immune Defic Syndr.

**Date of Publication:** 2005

**Volume ID:** 40

**Issue ID:** 1

**Page(s):** 65-9

**Address/Availability:**

**Location/URL:**

**Abstract:**

**OBJECTIVE:** To evaluate treatment outcome in the first 12 months among HIV-positive patients managed with a combination of nevirapine + stavudine + lamivudine under the current national antiretroviral (ARV) program in Nigeria. **DESIGN:** This was a prospective observational, cohort study on 50 ARV-naive patients who met the inclusion criteria for the program and had given informed consent. All patients were in stage 2 or stage 3 periods of infection based on World Health Organization clinical classification. The patients were treated with the generic brands of ARVs and treatment consisted of oral nevirapine (Nevimal, Cipla, Mumbai, India), 200 mg daily, lamivudine (Lamivir, Cipla), 150 mg twice daily, and stavudine (Stavir, Cipla), 40 mg twice daily. Prior to initiation of treatment, the clinical history and baseline data for each patient were documented. The levels of plasma HIV-1 RNA, CD4 cell counts, frequency of opportunistic infections, and estimated body mass index were recorded at baseline and subsequently at intervals during treatment. Data obtained at the various sampling times for each parameter were compared against their baseline values. **RESULTS:** Data on the plasma HIV-1 RNA levels indicated that between baseline and week 24, the median viral load of the patients decreased by 1.79 log(10) copies/mL. Equally between baseline and week 48 the median CD4 cell counts increased by 186 x 10(6) cells/L, the frequency of opportunistic infections decreased by 82%, the median body mass index increased by 4.8 kg/m(2), and 36% experienced side effects, which were minor and transient. The most prevalent side effect recorded was skin rash associated with nevirapine. Good adherence to this triple regimen was recorded in >85% of the patients. **CONCLUSIONS:** The overall results within the 12-month treatment period indicated an effective suppression of viral replication, the reconstitution of the immune system, and improvement of the physical well-being of the study population. Though there may be differences in global distribution of the infecting HIV-1 subtypes, the clinical and biologic results of this study compared favorably to those documented in cohorts treated with branded and generic ARV drugs in some developed and developing countries. The cumulative data in this study further confirmed that the correct use of generic brands of ARVs is a feasible option in HIV care and support programs in resource-poor countries.

**Keywords:** Management, HIV-1 infection, Nevirapine, Stavudine, Lamivudine, Nigeria, Antiretroviral program.

**Record Number:** 256

**Author(s):** Adewale, B. Mafe, M. A. Oyerinde, J. P.

**Title:** Identification of the Forest Strain of *Onchocerca Volvulus* using the Polymerase Chain Reaction Technique.

**Journal Title:** West Afr J Med

**Date of Publication:** 2005

**Volume ID:** 24

**Issue ID:** 1  
**Page(s):** 21-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Annual mass treatment with ivermectin for 12-15 years in endemic communities is the control strategy adopted by the African Programme for Onchocerciasis Control (APOC) for the control of onchocerciasis in Nigeria. This long-term treatment necessitates the use of Polymerase Chain Reaction (PCR) for the proper identification of the *Onchocerca* species and strains in endemic areas and also for monitoring recrudescence of infection in areas where infection has been controlled. This study, which forms part of a larger study on transmission of onchocerciasis identifies the *Onchocerca volvulus* strain in Ondo state using the Polymerase Chain Reaction (PCR) technique. Deoxyribonucleic acid (DNA) was extracted from the adult worm of *Onchocerca* parasite using the glass bead method of extraction. The repeated sequence family present in the genome of the parasite designated as 0-150bp was amplified by the polymerase chain reaction (PCR). The amplified parasites produced significant products visible as bands in a 2% agarose gel stained with ethidium bromide. Hybridization of the PCR products with specific DNA probe identified the products as forest strain of *Onchocerca volvulus*. The epidemiological implication of this is that there would be more of the skin lesions and low blindness rate in the area.

**Keywords:** **Forest Strain, *Onchocerca volvulus*, polymerase.**

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**Record Number:** 257  
**Author(s):** Otuonye, N. M. Odunukwe, N. N. Adeneye, A. K. Smith, S. I. Chigbo, R. C. Onwuatuelo, R. I. Oparaugo, C. T. Onwuamah, C. K. Fowora, M. A. Uwah, H. Idigbe, E. O  
**Title:** **Knowledge, Perception and Acceptability of Microbicides Among Healthcare Workers in Lagos, Nigeria.**  
**Journal Title:** Br J Biomed Sci.  
**Date of Publication:** 2006  
**Volume ID:** 63  
**Issue ID:** 3  
**Page(s):** 140-1  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Microbicides.**

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**Record Number:** 258  
**Author(s):** Oyewole, I. O. Awolola T. S.  
**Title:** **Impact of Urbanisation on Bionomics and Distribution of Malaria Vectors in Lagos, Southwestern Nigeria.**  
**Journal Title:** J Vector Borne Dis.  
**Date of Publication:** 2006  
**Volume ID:** 43  
**Issue ID:** 4  
**Page(s):** 173-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The patterns of annual, rainfall as well as average daily temperature have not changed drastically in the study area since 1960 when detailed baseline entomological surveys were carried out. However, the increase in human population from 1.2 to 10 million has resulted in both expansion of land and tremendous ecological and environmental change. This has led to drastic changes in vectors' densities as well as species' composition while the preferred larval habitat of malaria vectors has shifted to water reservoirs. A longitudinal study was carried out

to investigate the impact of urbanisation on bionomics and distribution of malaria vectors in Lagos, a mega city in Nigeria. Mosquitoes were collected indoors and outdoors using WHO standard techniques in the selected areas between January and December 2000. Specimens were identified using the morphological keys and PCR assays. ELISA tests were used for Plasmodium falciparum sporozoite infection. The Anopheles gambiae species-specific PCR identified 56% (435/777) of the An. gambiae s.l. as An. gambiae s.s. and 44% (342/777) as An. arabiensis. The molecular M and S forms represented 35.3 and 64.7% of the An. gambiae s.s. population, respectively. The An. funestus species-specific PCR identified 60% (239/401) of the An. funestus group as An. funestus s.s. and 40% (162/401) as An. rivulorum. The biting activity of An. funestus s.s. both indoors and outdoors attained a peak at 0200 and 2200 hrs, respectively, with a significant increase in the "pre-bed time" collections indoors ( $\text{Chi}^2 = 6.15$ ,  $\text{df} = 1$ ,  $p < 0.05$ ) and outdoors ( $\text{Chi}^2 = 6.28$ ,  $\text{df} = 1$ ,  $p < 0.05$ ). The overall outdoor collection was significantly higher ( $\text{Chi}^2 = 28.23$ ,  $\text{df} = 3$ ,  $p < 0.05$ ) than that recorded indoors. The overall sporozoite rates for An. gambiae s.s., An. arabiensis and An. funestus were significantly different in both localities ( $\text{Chi}^2 = 0.58$ ,  $\text{df} = 2$ ,  $p < 0.01$ ). Infection rates in both indoor and outdoor collections were also different statistically ( $\text{Chi}^2 = 0.67$ ,  $\text{df} = 2$ ,  $p < 0.01$ ). Large number and species of anopheline mosquitoes collected in the study area may be associated with the availability of aquatic breeding sites. A phenomenon leading to an increase in man-vector contact and a high level of risk to the crowded urban population is observed.

**Keywords:** Urbanisation, Bionomics, Malaria, Vectors, Nigeria.

**Record Number:** 259

**Author(s):** Adeneye, A. A. Ajagbonna, O.P. Mojiminiyi, F.B. Odigie, I.P. Ojabor, P.D. Etarrh, R. R. Adeneye, A. K.

**Title:** The Hypotensive Mechanisms for the Aqueous Stem Bark Extract of Musanga Cecropioides in Sprague-Dawley Rats.

**Journal Title:** Journal of Ethnopharmacology

**Date of Publication:** 2006

**Volume ID:** 106

**Issue ID:**

**Page(s):** 203-207

**Address/Availability:**

**Location/URL:**

**Abstract:** The present study was designed to evaluate the hypotensive properties and the mechanisms of action of the stem bark aqueous extract of Musanga cecropioides R.Br. Apud Tedlie (MCW) in anesthetized rats of Sprague-Dawley strain, through an invasive direct blood pressure measuring procedure. Thirty adult rats, weighing 150-230 g, were grouped into five groups of six rats each. The effects of the intravenous graded doses (0.0005-0.05 mg/kg) of the extract on the blood pressure indices were investigated. Its underlying mechanisms were also studied using additional five groups of rats. The results showed that the extract caused a dose dependent fall in the systolic blood pressure (SBP), diastolic blood pressure (DBP), mean arterial pressure and heart rate of the rats. Bilateral carotid artery occlusion (BCO) caused a reflex increase in mean arterial pressure and heart rate which were significantly attenuated by the extract injection. Angiotensin Converting Enzyme (ACE) blockade with 5 mg/kg of Captopril and cholinergic blockade with 0.2 mg/kg of atropine significantly attenuated the hypotensive response to MCW. However, the pattern of MAP fall in rats pretreated with a combination of Promethazine (1 mg/kg) and Cimetidine (15 mg/kg) was not significant. The results of the study was able to demonstrate dose dependent hypotensive effect of MCW and that its vasorelaxant effects may be through inhibition of sympathetic, cholinergic control of the arterial pressure and most significantly through ACE blockade. However, the phytochemical, elemental and toxicological studies of this potential antihypertensive still needed to be investigated.

**Keywords:** Hypotensive, Stem Bark, Musanga Cecropioides, Sprague-Dawley, Rats

**Record Number:** 260  
**Author(s):** Akinwale, O. P. Nock, I. H. Esievo, K. A. Edeghere, H. U. Olukosi, Y. A.  
**Title:** Study on the Susceptibility of Sahel Goats to Experimental *Trypanosoma vivax* Infection.  
**Journal Title:** Vet Parasitol.  
**Date of Publication:** 2006  
**Volume ID:** 137  
**Issue ID:** 3-4210-3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Sahel goats, also known as Borno whites are found in the northern semi-arid, tsetse free Sahel region of Nigeria. They are transported alongside cattle from this zone to all other zones in the country, including the tsetse-infested zones, for commercial purposes and are kept for some time in these tsetse-infested zones until they are sold. This study therefore assessed the susceptibility of this breed of goats to trypanosome infection and its response to treatment with Berenil. Six bucks were inoculated intravenously with *Trypanosoma vivax* through the jugular vein while two served as uninfected control. The mean pre-patent period was 4.5 days and increasing parasitaemia followed the establishment of infection. Onset of parasitaemia was associated with increase in rectal temperature in all the infected goats and the temperature peak coincided with the only parasitaemic peak second week post-infection. The infected goats were treated with Berenil (Hoechst, Germany) 3.5mg/kg body weight at 4 weeks post-infection. The packed cell volume (PCV) continued to fall from a mean 30.73+/-0.01% pre-infection to a mean 13.21+/-0.18% at 1 week post-treatment. Deaths were recorded for 4 of the infected goats 1 week post-treatment while the remaining two died 2 weeks post-treatment, not responding to treatment.  
**Keywords:** Susceptibility, Sahel, Goats, *Trypanosoma vivax*, infection.

**Record Number:** 261  
**Author(s):** Agomo, P. U. Enya, V. N. Egbuna, K. N. Akindele, S. K. Agomo, C. O. Okoh. H. I. Aina, O. O. Olukosi, Y. A. Afolabi, I. S. Akinyele, M. O. Iwalokun, B. A. Okechuku, A. N  
**Title:** Evaluation of Rapid Diagnostic kit in Assessment of Efficacy of Artesunate-Mefloquine Combination.  
**Journal Title:** Journal of Malaria in Africa and the Tropics  
**Date of Publication:** 2006  
**Volume ID:** 2  
**Issue ID:** 47-54  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** This study was done to evaluate Binax Now © ICT Malaria Test, a rapid diagnostic test kit, in the assessment of clinical efficacy of a combination of artesunate and mefloquine in treating uncomplicated *Plasmodium falciparum* mono-infection. The drug trial carried out between June and December 2005 in a remote malaria endemic area of Lagos, Nigeria with high levels of chloroquine and sulphadoxine-pyrimethamine resistance. Ethical approval was given by Nigerian Institute of Medical Research (NIMR) Institutional Review Board. A total of fifty adults and children who were febrile or had history of fever within 24hours, with uncomplicated *P.falciparum* mono-infection and body weight.  $\geq$  15kg were enrolled following informed consent by the participants or their parents as the case may be. Blood was collected by finger prick and a subject was considered positive if found positive by microscopy. Data generated were analyzed with EPI-Info 2002 software at P=0.05. the sensitivity, specificity, positive and negative predicitive values pf the Binax Now ICT test

were assessed using finger prick blood samples collected before treatment on day 0, after treatment on days 7 and 14, specificity and negative predictive value only were assessed because there was no true positive result obtained on these days. The results obtained were as follows: pre-treatment with the artesunate plus mefloquine on day 0, sensitivity indicated 73.9%, specificity 85.2%, positive predictive value 81.0% and negative predictive value 79.3%. After administration of the study treatment, the following results were recorded: specificity 37.5% and positive predictive value 100%. Due to persistent false positive up to day 14, Binax Now ICT test is not recommended for monitoring drug therapeutic efficacy studies.

**Keywords:** **Diagnostic kit, Artesunate-Mefloquine Combination.**

**Record Number:** 262  
**Author(s):** Iwalokun, B. A. Ogunfemi, M. K. Gbajabiamila, B. Olukosi, Y.  
**Title:** Incidence and Evaluation of Risk Factors of Microalbuminuria Among Diabetics and Non Diabetics in Lagos Nigeria.  
**Journal Title:** Nigerian Journal of Health and Biomedical Science.  
**Date of Publication:** 2006  
**Volume ID:** 5  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Contrary to African diabetic situation, clinical studies in developed countries have recognized microalbuminuria as a risk factor of renal dysfunction and pathogenic agent for deterioration of diabetes mellitus in diabetic and non-diabetic populations. This clinical understanding has enabled optimization of clinical practices that improve prognosis of diabetic management and reduce susceptibility to renal disease. This present study has investigated the incidence and risks of microalbuminuria in 115 diabetic patients aged 5 – 65 years with illness duration of < 1 yr, 1 – 5 yr and > 5 yr and 50 age and sex-matched non-diabetic subjects attending General Hospitals, Lagos, Nigeria. Blood pressures (SBP & DBP) and plasma levels of total cholesterol (TC), triglycerides (TAG), low-density lipoprotein (LDL-C) and high-density lipoprotein (HDL-C) as well as body mass index (BMI) were determined to establish associations with microalbuminuria. The incidence of microalbuminuria was found to be 22.2%, 31.6% and 59.1% ( $P < 0.05$ ) among the diabetic groups, suggesting a linear relationship with the duration of diabetes in these patients. 26% of non-diabetics had microalbuminuria of no significant disparity ( $P > 0.05$ ) when compared to diabetics of < 1 yr-old duration. Multiple regression analyses indicate significant association ( $P < 0.05$ ) between SBP, DBP, TC, LDL-C and microalbuminuria in diabetic > 5 yr. While all the atherogenic parameters except LDL-C associate strongly ( $P < 0.05$ ) with microalbuminuria in diabetics of 1 – 5 yr. The lipid atherogenic components minus TAG were found to relate strongly with microalbuminuria in diabetics of < 1yr duration. Elevated BMI strongly predicts the risk of microalbuminuria in the non-diabetics examined.

**Keywords:** **Microalbuminuria, Diabetics, Non diabetics, Lagos, Nigeria.**

**Record Number:** 263  
**Author(s):** Onwuamah, C. K. Ofojebe, J. O. Idika, N. Ekedum, T. C. Nathan, E Odibo, M E. A. Ekoh, F. A. E. Ugwuozor, E. Senjobi, A. Rasak, A.  
**Title:** Intestinal Helminths in School Children in Lagos State, Nigeria: Survey and Drug Intervention.  
**Journal Title:** African Journal of Clinical and Experimental Microbiology.  
**Date of Publication:** 2006  
**Volume ID:** 7  
**Issue ID:** 1

**Page(s):****Address/Availability:** 7-11**Location/URL:****Abstract:**

This study was designed to obtain data on the occurrence of parasitic intestinal helminthes among school children within Lagos Mainland L.G.A., in order to produce base-line data that could be used to formulate a school health policy by the L.G.A. Two sets of stool samples (pre and post treatment with levamisole) were collected from school children aged 6 - 16 years within a one-month interval. The Formol-Ether concentration method was used to prepare the samples for microscopy. Overall prevalence of 53.0% was obtained. Parasite eggs identified were *Ascaris lumbricoides*, *Trichuris trichiura*, *Taenia* spp. and hookworm, occurring as single and mixed infections. The incidence of 12.4% was obtained at the follow-up. Single infections with *Ascaris* and *Trichuris* were highest at the pre and post treatment samplings respectively. Co-infection with *Ascaris* and *Trichuris* was highest at both sampling. The intervention brought about a 65.4% reduction in infection within the one-month period. Parasite clearance rate varied for the different parasite types. School deworming programmes at 3 - 4 months intervals with a broad-spectrum anthelmintic drug is recommended. Onwuamah et al Intestinal Helminths: survey and intervention 3

**Keywords:****Intestinal, Helminths, School-children, Lagos, Nigeria.****Record Number:****264****Author(s):****Iwalokun, B. A. Olukosi Y. A. Ogunsanwo, B. Banjo, S. Afolabi, A. S. Aina O. O.****Title:****A Rodent Malaria Model of Plasmodium Berghei for the Development of Pyrimethamine and Sulfadoxine-Pyrimethamine Resistant Malaria in Mice.****Journal Title:**

Nigerian Journal of Health and Biomedical Science.

**Date of Publication:**

2006

**Volume ID:**

5

**Issue ID:**

2

**Page(s):**

30-38

**Address/Availability:****Location/URL:****Abstract:**

This study investigated the development of pyrimethamine (pyr) and sulphadoxine-pyrimethamine (S/P) resistance in *Plasmodium berghei*, a rodent parasite in mice using a serial technique (3.50 10mg/kgpyrimethamine) and a single treatment course approach with 125/6.25mg/kg S/P. The stability of resistance phenotypes, parasite pathogenic disposition and host leukocyte response were also investigated. The sequential and continuous increased-dose exposure of drug naïve parasites to pyrimethamine resulted in the development of two distinct resistant clone generations: PB10-1 and PB10-2 (3.5mg/kg pyr bypassclone) in 66.7% and 41.7% ( $P < 0.05$ ) of drugged mice intraperitoneally challenged with 106 parasitized erythrocytes and producing slow ascending parasitaemia ( $20.4 \pm 1.7$  vs.  $19.1 \pm 3.8$  %RBC;  $P > 0.05$ ) on days 13 - 18 post inoculation that was significantly ( $P < 0.05$ ) lower than the fulminating parasitaemia ( $27.3 \pm 2.1$ %RBC) occurring on days 3 - 5 post inoculation in undrugged mice. The pyr resistance phenotype in PB10-1 and PB10-2 were observed to exhibit stability of > 10 and 3 - 5 weekly passages respectively in undrugged mice. The two clones further exhibited virulence disparity in their ability to cause significant ( $P < 0.05$ ) increases in ALT ( $70.4 - 80.2 \pm 3.4 - 3.8$  vs.  $31.8 \pm 1.1$  U/L) and AST ( $78.7 - 84.1 \pm 3.1 - 3.7$  vs.  $38.6 \pm 2.4$  U/L) and reduction in total peripheral leukocyte count ( $3.2 - 4.6 \times 10^3$  vs.  $1.8 \times 10^4$  /mm<sup>3</sup>) when compared to the control. Resistance to S/P by 10%, 50% and 70% in sensitive, PB10-2 and PB10-1 clones was also observed, suggesting a non-requirement of pyr resistance for the development but necessity for the intensification of S/P resistance.

**Keywords:****Rodent, Malaria model, Malaria.****Record Number:****265****Author(s):****Adeneye, A.A. Amole, O.O. Adeneye, A.K.**

**Title:** Hypoglycemic and hypocholesterolemic activities of the aqueous leaf and seed extract of *Phyllanthus amarus* in mice  
**Journal Title:** Fitoterapia  
**Date of Publication:** 2006  
**Volume ID:** 77  
**Issue ID:**  
**Page(s):** 511-514  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The effect of the aqueous leaf and seed extracts of *Phyllanthus amarus* at oral dose of 150, 300 and 600 mg/kg was investigated for their antidiabetic and anti-lipidemic potentials. The extract produced a dose-dependent decrease in the fasting plasma glucose and cholesterol, and reduction in weights in treated mice. The results suggest that the extract could be enhancing peripheral utilization of glucose but the mechanisms on how this works remain unclear.  
**Keywords:** Hypoglycemic, hypocholesterolemic, *Phyllanthus, amarus*, mice.

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**Record Number:** 266  
**Author(s):** Idigbe, E. O. Odutolu, O. Okonkwo, P. Folayan, M. O. Uwakwe, C. B. R. Audu, R. A. Jolayemi, O. M. Osagbemi, M.  
**Title:** Evaluation of the Nigerian National Antiretroviral (arv) Treatment Training Programme.  
**Journal Title:** Sahara Journal  
**Date of Publication:** 2006  
**Volume ID:** 3  
**Issue ID:** 3  
**Page(s):** 488-502  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** There is an understanding that greater availability of HIV treatment for the 40.3 million people currently infected with HIV is a humanitarian imperative that could prolong the lives of millions, restore economic productivity, and stabilize societies in some of world's hardest-hit regions. The Nigerian government recognizes that the country has the third highest burden of infection, with people living with HIV estimated to total 4.0 million and so in 2002 commenced the implementation of Africa's largest antiretroviral (ARV) treatment programmes. A successful ARV programme requires that all components of a functional management system be put in place for effective and efficient functioning. This would include logistics, human resources, financial planning and monitoring and evaluation systems, as well as sustainable institutional capacities. The Nigerian national ARV treatment training programme was conceived to meet the human resource needs in hospitals providing ARV therapy. This paper reports on the evaluation of the training programme. It examines knowledge and skills gained, and utilization thereof. Recommendations are made for improved training effectiveness and for specific national policy on training to meet the demand for scaling up therapy to the thousands who need ARV.  
**Keywords:** HIV, Antiretroviral, Treatment, Nigeria.

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**Record Number:** 267  
**Author(s):** Afolabi, B. M. Amajoh, C. N. Adewole, T. A Salako, L. A.  
**Title:** Seasonal and Temporal variations in the Population and Biting Habit of Mosquitoes on the Atlantic Coast of Lagos, Nigeria.  
**Journal Title:** Med Princ Pract.  
**Date of Publication:** 2006  
**Volume ID:** 15  
**Issue ID:** 3

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**Page(s):** 200-8

**Address/Availability:**

**Location/URL:**

**Abstract:**

**OBJECTIVES:** To determine the hourly density of vector mosquitoes in coastal Nigeria, compare seasonal human-biting and sporozoite rates in the vector density, locate breeding sites of mosquitoes, and determine larval population at breeding sites. **MATERIALS AND METHODS:** Indoor and outdoor mosquitoes of a coastal Nigerian community were caught during early and late wet seasons and in the harmattan period, a time of dusty wind from the Sahara on the western coast of Africa. Larvae were collected from various locations during the study period. The mosquitoes were physically characterized and their salivary glands dissected for sporozoite rate. Larvae density was calculated. Human-biting rate was calculated for *Anopheles gambiae* complex. **RESULTS:** Of the 4,317 female *A. gambiae* complex collected during the night bait catches, 3,543 (82.1%) were from outdoors and 774 (17.9%) from indoors during the three seasons. The maximum human-biting rate approached 25/h and the sporozoite rate was almost 3.0%. These vector mosquitoes were mainly outdoor biting and midnight feeding. Of the 1,269 *Anopheles* mosquitoes collected with pyrethrum spray catches, 1,245 (98.1%) were *A. gambiae* complex. There was no significant difference in the entomological inoculation or sporozoite rates during the three seasons of study. There was a preponderance of *A. gambiae* complex larvae from larval collection. **CONCLUSION:** Findings from this study should be useful in the implementation of Integrated Vector Management for the control of malaria in coastal and noncoastal areas of Nigeria.

**Keywords:**

**Mosquitoes, Malaria.**

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**Record Number:** 268

**Author(s):**

**Audu, R. A. Salu, O. B. Musa, A. Z. Onyewuche, J. Funso-Adebayo, E. O. Iroha, E. O. Ezeaka, V. C. Adetifa, I. M. Okoeguale, B. Idigbe, E. O.**

**Title:**

**Estimation of the Rate of Mother to Child Transmission of HIV in Nigeria.**

**Journal Title:**

Afr J Med Med Sci.

**Date of Publication:**

2006

**Volume ID:**

35

**Issue ID:**

2

**Page(s):**

121-4

**Address/Availability:**

**Location/URL:**

**Abstract:**

Definitive diagnosis of HIV infection in infants < 18 months of age who were born to HIV-infected mothers is still posing some difficulty in Nigeria and other developing countries. Within this age definitive diagnosis can only be carried out by antigen based techniques which are indeed not available in these developing countries. This has resulted in the absence of authoritative data on the rate of mother-to-child transmission in these countries. Nigeria inclusive. The present pilot study was therefore carried out to generate some information on the rate of mother to child transmission in Nigeria using the PCR technique. Plasma samples were obtained from 68 children of both sexes less than 18 months of age and who were born to HIV infected mothers. The samples were collected from two pediatric departments. in Lagos and in Benin. The presence of HIV 1 RNA in each of the samples was determined using the Amplicor Monitor V 1.5 technique (Roche Diagnostics). Data showed that HIV-1 RNA was detected in 15 of the 68 samples tested. This gave an HIV-1 RNA detection rate of 22%. Among women who had some intervention, the rate of transmission of infection was 11% while the rate among those without intervention was 30%. The 22% transmission rate recorded in this study is close to the range of 25 to 35% that has been reported in several developed and a few developing countries. A multicenter nationwide study will still be needed to determine the national mother to child transmission rate in Nigeria.

**Keywords:**

**HIV, Nigeria.**

**Record Number:** 269  
**Author(s):** Adeneye, A. K. Mafe, M.A. Appelt, B. Idowu, E. T. Akande, D. O.  
**Title:** Willingness to pay for Praziquantel Treatment in a Hyperendemic Community of Ogun State, Nigeria.  
**Journal Title:** Res Social Adm Pharm.  
**Date of Publication:** 2006  
**Volume ID:** 2  
**Issue ID:** 1  
**Page(s):** 83-95  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** BACKGROUND: Schistosomiasis is highly endemic in Nigeria. However, very little is known about the usage and social marketing of praziquantel in the control of schistosomiasis in endemic communities and on the persons willingness to pay for the drug to support its extensive use and thus aid control efforts in Nigeria. OBJECTIVE: The study examined the willingness of people in a hyperendemic community, to pay for treatment with praziquantel before and after provision of the drug, with a view to assess the feasibility of achieving widespread coverage. METHODS: Data were collected through focus group discussions among household heads and other adult family members and through the use of a questionnaire to survey household heads in Imala-Odo, a community hyperendemic for schistosomiasis, in southwest Nigeria. The main outcome measure was the respondents' willingness to pay for schistosomiasis treatment. RESULTS: The results showed that in contrast to the 92.3% of respondents who expressed willingness to buy the drug in the preintervention study, only 46.5% actually purchased the drug during intervention for the treatment of their infected household members. The respondents' level of education, occupation, and income influenced their willingness to pay ( $P < .05$ ). Statistical tests showed that those willing to pay for treatment had a higher income score than those unwilling to do so. Most respondents preferred their community head and reliable persons chosen by the community as convenient outlets for drug distribution. The number of household members respondents were willing to treat increased from 4 to 6 at N320.00 (US \$2.52) in the preintervention and postintervention phases, respectively. Gender factor was found to influence the respondents' perceived average treatment cost; the females wanted N300.00 (US \$2.36) against N100.00 (US \$0.79) among the males. CONCLUSION: Efforts need to be made and sustained to ensure that all families can afford to praziquantel drug to achieve the ultimate goal of controlling the infection in endemic communities of Nigeria.  
**Keywords:** Praziquantel, Treatment, Hyperendemic, Nigeria.

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**Record Number:** 270  
**Author(s):** Adeneye, A.K. Mafe, M.A. Adeneye, A.A. Salami, K.K. Brieger, W.R. Titiloye, M.A. Adewole, T.A. Agomo, P.U.  
**Title:** Knowledge and perception of HIV/AIDS among pregnant women attending antenatal clinics in Ogun State, Nigeria  
**Journal Title:** African Journal of AIDS Research  
**Date of Publication:** 2006  
**Volume ID:** 5  
**Issue ID:** 3  
**Page(s):** 273-279  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** HIV/AIDS, Pregnant, Women, Antenatal clinics, Ogun State, Nigeria.

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**Record Number:** 271

**Author(s):** Idigbe, E. O. Audu, R. A. Salu, O. B. Onyewuche, J. I. Oparaugo, C. T. Musa, A. Z. Meschack, E. H. Sylvester-Ikundu, U. F.  
**Title:** Profile of Baseline CD4 T-lymphocyte and Viral Load Levels in HIV Infected Treatment Naive Patients in Lagos, Nigeria.  
**Journal Title:** Saudi Med J.  
**Date of Publication:** 2006  
**Volume ID:** 27  
**Issue ID:** 5  
**Page(s):** 733-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Baseline CD4, T-lymphocyte, HIV, Nigeria.

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**Record Number:** 272  
**Author(s):** Idigbe, E. O Audu, R.A. Oparaugo, C. T. Onwujekwe, D. Onubogu, C. C. Adedoyin, J. et. al.  
**Title:** Comparison of Dynabeads and Capcellia methods with Facscount for the Estimation of cd4 t Lymphocyte levels in Hiv/Aids Patients in Lagos, Nigeria.  
**Journal Title:** East Afr. Med. J.  
**Date of Publication:** 2006  
**Volume ID:** 83  
**Issue ID:** 4  
**Page(s):** 105-111  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Objective: To compare the efficacy of the Capcellia assay and the Dynabeads technique against the FACScout technique in the estimation of CD4<sup>+</sup> T-lymphocytes within a Nigerian setting. Design: Prospective Study. Setting: urban area in Nigeria. Subjects: Ninety seven subjects (51 HIV seronegative and 46 HIV seropositive adults) seen in the blood banks and two out patient clinics in Lagos within the study period. Results: There was an overall correlation coefficient of r=0.75 for CD4 cell counts as determined by the Dynabeads technique in comparison with the FACScout method. Also, an overall correlation coefficient of r=0.17 for CD4 cell counts as determined by the Capcellia technique against the FACScout method. Conclusion: Dynabeads technique is simple to carry out and cheaper in terms of demand for human expertise and infrastructural requirements than the FACScouts. Therefore, it was recommended for use in the laboratory for monitoring of ARV therapy in Nigeria and any other resource poor country.  
**Keywords:** Dynabeads, Capcellia methods, Facscount, cd4 t lymphocyte, hiv/aids patients, Lagos, Nigeria.

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**Record Number:** 273  
**Author(s):** Smith, S. I. Oyedeji, K. S. Odeniyi O. A. Arigbabu, A. O. Coker A. O.  
**Title:** Diagnosis of Helicobacter pylori Infection Among Patients With Dental Caries by Stool Antigen Test.  
**Journal Title:** Br J Biomed Sci.  
**Date of Publication:** 2006  
**Volume ID:** 63  
**Issue ID:** 3  
**Page(s):** 144-5  
**Address/Availability:**  
**Location/URL:**  
**Notes:**

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**Abstract:** Out of a total of 41 patients presenting with various dental problems, stool samples were obtained there from. The stool samples were screened for H.pylori stool antigen test (HpSA), while biopsies and dental plaques obtained were screened for CLO test and culture. All patients were positive for HpSA test, while the dental plaque samples showed culture to be 5%, CLO 56%. The biopsy samples showed that culture was 10%, CLO test 61%. The stool antigen test showed some promise of being a better option for the non-invasive diagnosis of H. pylori infection in Nigeria.

**Keywords:** **Helicobacter pylori, Infection, Dental, Stool, Antigen test.**

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**Record Number:** 274

**Author(s):** Afolabi, A. S. Iwuanyanwu, S. A. Anumudu, C. Onwumah, C. K. Aina, O. O. Okoh, H. I. Olukosi, Y. A. Iwalokun, B. A. Akindele, S. K. Agomo, C. O. Adewole, T. A. Agomo, P.U.

**Title:** **Development of Chloroquine Resistance by Cyclical Passaging and Sub-Curative Treatment of Plasmodium Berghei in Mice.**

**Journal Title:** Journal of Malaria in Africa and the Tropics

**Date of Publication:** 2006

**Volume ID:** 2

**Issue ID:**

**Page(s):** 75-81

**Address/Availability:**

**Location/URL:**

**Abstract:** Development of chloroquine resistance through subcurative drug pressure was carried out during continuous cyclical transmission of P. berghei in mice. Mice infected with chloroquine-sensitive parasite were grouped into four after the onset of parasitaemia (parasite density >2000 parasite/µl of blood) Group I was not treated, Group II was treated with curative dose (10mg/kg daily for 2 days and 5mg/kg the third day; 25mg/kg). Group III was treated with subcurative dose 1 (10mg/kg daily for 2 days and 5mg/kg the third day; 25mg/kg). Group III was treated with subcurative dose 1 (10mg/kg once) and group IV was treated with subcurative doses II (10mg/kg daily for 2 days; 20mg/kg). Group showed the potency of the curative dose of chloroquine with high parasitological response by day 3-7 after inoculation Group II showed the potency of the curative dose of chloroquine with total clearance of parasites by 7-14 after chemotherapy. Group III showed inconsistent parasitaemia that was attributed to subcurativeness of the chloroquine dose used, resulting in the group's selection withdrawal. The parasites in group IV develop recrudescence after day 7 of chemotherapy. A total of 3 cyclical passaging of subcurative doses II (20mg/kg) were carried out during recrudescence. The blood sample from the third recrudescence set was passaged into two sets of four 'neat' animal. The animals developed parasitaemia (parasite density ≥2000 parasite/µl of blood), cured following treatment with curative dose of chloroquine (10mg daily for 2 days and 5mg the third day; 25mg/kg) but developed resistance by day after chemotherapy. These results showed that cyclical exposure of parasites to subcurative doses II (20mg/kg) may result in development of drug resistance and could pave the way for studies on the amelioration of the problem resistance.

**Keywords:** **Chloroquine Resistance, Plasmodium berghei, Mice.**

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**Record Number:** 275

**Author(s):** Ogunro, P. S. Adeneye, A.K. Ogunbamigbe, T.O Adewole, T. A Musa, A.Z. Isikwei, J. I

**Title:** **Perceptions of the benefits and affordability of antiretrovirals among HIV positive persons in a rural area of South-West Nigeria**

**Journal Title:** African Journal of AIDS Research

**Date of Publication:** 2006

**Volume ID:** 5

**Issue ID:** 3

**Page(s):** 233-236

**Address/Availability:**

**Location/URL:**

**Abstract:** To assess the affordability of antiretroviral drugs (ARVs) and accessibility to treatment for opportunistic infections (OIs) among HIV-1 seropositive persons, we used semi-structured interviewer-administered questionnaires to interview 154 individuals seeking ARV treatment at the Daughter of Charity German Leprosy and Tuberculosis Centre in South-West Nigeria. The respondents' mean age was 37 years (range 13–65 years) and their average monthly income was NGN9 603 (approx. US\$73). One hundred and eleven respondents (72.1%) had sought care elsewhere before seeking ARV therapy: 67 (60.4%) from private hospitals, 26 (23.4%) from public hospitals, 17 (15.3%) from traditional healing homes, and one from an NGO; the remaining 43 (27.9%) had not sought medical care before ARV therapy. Thirty-nine respondents (25.3%) had symptomatic AIDS with evidence of opportunistic infections (OIs), and 115 (74.7%) were HIV-1 seropositive only. One hundred and twenty-six (81.8%) believed that ARV treatment would prolong their lives, of which 27 anticipated a cure for AIDS; eight (11.7%) had no knowledge of the benefits of ARV therapy, six (3.9%) had strong fears of stigmatisation and discrimination as a consequence of ARV therapy, and four (2.6%) did not express any opinion. Sixty-three respondents (40.9%) perceived the cost of ARVs as expensive and unaffordable, 58 (37.7%) wanted free drugs, 20 (12.9%) wanted to pay a maximum of NGN2 000 (US\$15) for monthly supplies (while the actual cost was NGN13 000 or US\$98), and 13 (8.5%) did not comment. There was a strong association between literacy level and knowledge of ARV therapy. The more educated tended to have higher incomes and their perception of ARV therapy was laudable despite having sought other treatment elsewhere, while the less educated tended to earn less and perceived ARV therapy as unaffordable, and therefore had not bothered to seek previous treatment. We urge that ARVs be made more affordable to enhance their accessibility and treatment compliance, especially among lower-income patients.

**Keywords:** **Antiretrovirals, HIV positive, rural, South-West Nigeria.**

**Record Number:** 276

**Author(s):** Samuel, S. O. Aboderin, A. O. Akanbi, A. A. Adegboro, B. **Smith, S. I.** Coker, A. O.

**Title:** **Campylobacter Enteritis in Ilorin, Nigeria.**

**Journal Title:** East Afr Med J.

**Date of Publication:** 2006

**Volume ID:** 83

**Issue ID:** 9

**Page(s):** 478-84

**Address/Availability:**

**Location/URL:**

**Abstract:** Twenty five (8.2%) of the patients and none of the controls had the organism. *Campylobacter jejuni* and *C. coli* were 56% and 44% respectively. All the isolates were susceptible to erythromycin and ciprofloxacin. None of the isolates harboured plasmids.

**Keywords:** **Campylobacter enteritis, Ilorin, Nigeria.**

**Record Number:** 277

**Author(s):** **Idowu, E. T. Mafe, M. A.** Otubanjo O. A. **Adeneye A. K.**

**Title:** **Herbal Remedy in the Treatment of Malaria: Cross Sectional Survey of Residents of Lagos State, Nigeria.**

**Journal Title:** Afr J Med Med Sci

**Date of Publication:** 2006

**Volume ID:** 35

**Issue ID:** 2

**Page(s):** 149-53

**Address/Availability:****Location/URL:****Abstract:**

Semi structured questionnaires designed to capture information on the type, composition, method of preparation, dosage, mode of administration. and frequency of use of herbal preparations in malaria treatment, were administered to 1,593 adults of the 3 main ethnic groups and a fourth group comprising other smaller ethnic groups designated as "others", all resident in Lagos metropolis in a cross sectional survey. The 1,593 respondents were made up of 892 males and 701 females and their ages ranged from 19 to 60 years. A high percentage in all the ethnic groups especially the Yorubas admitted to the use of herbs in treating malaria [Yoruba (69%), Hausa (47%), others (32%) and Igbo (30%)]. Effectiveness of herbs in treating malaria episodes featured as the major factor for their use. as claimed by the majority (>50%) of the respondents in each of the ethnic groups, while cost consideration was the next most important factor. Other factors mentioned included the absence of side effect in herbal use. to avoid the itchy side effect and ineffectiveness of chloroquine and some other anti-malarials. An appreciable percentage across the ethnic groups had no idea of the constituents of the herbal remedies they use for treating their malaria episodes since they buy these from traditional herbalists. Varied combinations of these herbs in combination with different types of fruits and other substances are claimed to be used, the main ones of which are Azadirachta indica and pineapple. A large majority of respondents in all the ethnic groups claimed to use the same herbs for the treatment and prevention of malaria and great improvement is experienced after use [Hausas (90%). Igbos (83%). Yorubas (77%) and the others (88%)]. There is usually no specific dose or dose regimen. However a high proportion in all the ethnic groups use herbal preparation thrice a day and a few of the respondents take unspecified measures at arbitrary intervals. The lack of standards in the use of these herbal preparations needs to be urgently addressed especially as use continued until the malaria symptoms and signs are deemed to have disappeared. There is also need to standardize the usage of herbs if they are to play a significant role in malaria prevention and treatment.

**Keywords:****Malaria.****Record Number:** 278**Author(s):** Manafa, O. U. Ahmed, O. A. Omotola, B. D.**Title:** Post-Intervention Survey on the Knowledge, Attitudes, Beliefs and Practices of People in Lagos State Nigeria about HIV/AIDS.**Journal Title:** World Health and Population**Date of Publication:** 2006**Volume ID:****Issue ID:****Page(s):** 1-11**Address/Availability:****Location/URL:****Abstract:****Keywords:** HIV, AIDS, Nigeria.**Record Number:** 279**Author(s):** Okoh, H. I. Onyejebu, O. Osineye, O. Aina, O. O. Olukosi, Y. A. Onwuamah, C. K. Ogbonna, F. N. Omonigbehin, E. A.**Title:** Preliminary Investigations of the Antibacterial Activity of Acalypha Hispidia Leaf Extracts Against Local Bacterial Isolates from Skin Infections.**Journal Title:** Nigerian Journal of Health and Biomedical Science.**Date of Publication:** 2006**Volume ID:** 5**Issue ID:** 2**Page(s):** 12-16

**Address/Availability:****Location/URL:** <http://dx.doi.org/10.4314/njhbs.v5i2.11591>

**Abstract:** *Acalypha hispida* leaf extracts are used locally for the treatment of skin infections. We sought to obtain laboratory-based evidence for this practice by evaluating the antibacterial activity of this extract against local isolates of bacteria obtained from skin lesions and wounds. Aqueous and ethanolic extracts were evaluated using the agar well diffusion method against *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Streptococcus pyogenes*, *Escherichia coli*, *Klebsiella* species, and *Salmonella typhimurium*. *S. aureus* (ATCC standard and local) and *Ps. Aeruginosa* isolates were sensitive to all the extracts but one. *E. coli* (ATCC standard and local), *S. enterica* serovar *typhimurium* and *Klebsiella* species were only sensitive to the soxhlet leaf extracts while *S. pyogenes* was sensitive to only the ethanolic soxhlet extract. Though there was no statistically significant difference in the antibacterial activity of the 5-days and 14-days neat extracts obtained by soaking in water ( $p = 0.13$ ) and ethanol ( $p = 0.08$ ), their antibacterial activity decreased with longer soaking periods. Likewise, there was no significant difference in the antibacterial activity of the neat water and ethanolic soxhlet extracts ( $p = 0.48$ ). The results show that *A. hispida* leaf extracts showed some *in vitro* antibacterial activity and that aqueous extraction using heat would be the preferred option.

**Keywords:** **Antibacterial, *Acalypha hispida* leaf, Bacterial, Skin infections.**

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**Record Number:** 280**Author(s):** Adeneye, A. K. Adewole, T. A. Musa, A. Z. Onwujekwe, D. Odunukwe, N. N. Araoyinbo, I. D. Gbajabiamila, T. A. Ezeobi, P. M Idigbe, E. O**Title:** Limitations to Access and Use of Antiretroviral Therapy (ART) Among HIV Positive Persons in Lagos, Nigeria.**Journal Title:** World Health Popul.**Date of Publication:** 2006**Volume ID:** 8**Issue ID:** 2**Page(s):** 46-56

**Abstract:** The study was designed to examine the knowledge and perception of HIV positive persons about the antiretroviral therapy (ART) program and to determine their ability to pay for ART and the treatment of other opportunistic infections in Nigeria. This is aimed at identifying factors that may impede effective delivery and utilization of ART in the country. One hundred and twenty-five HIV positive persons seeking ART at the Nigerian Institute of Medical Research (NIMR) clinic, Lagos, were studied using questionnaires. Respondents' average monthly income was N11,253.00 (US\$90.00). Almost 26% (25.6%) were unwilling to seek ART at the nearest hospital because of fear of stigmatization. While 9% wanted the therapy for free, the majority was willing to pay N500.00 (US\$4.00) per month. The average affordable price based on the subjects' assessment was N905.00 (US\$7.24), while the median was N500.00 (US\$4.00) per month. Eighty-eight percent believed ART would prolong their lives. The ART drugs need to be affordable and building on the positive perceptions of ART is imperative.

**Keywords:** **Antiretroviral Therapy, HIV Positive, Lagos, Nigeria.**

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**Record Number:** 281**Author(s):** Akinwale, O. P. Omotola, B. D. Manafa, O. U. Adeneye, A. K. Idowu, E. T. Sulyman, M. A. Adewale, D. B.**Title:** An Assessment of Parent-child Communication on Sexuality in Lagos, Nigeria.**Journal Title:** World Health Popul.**Date of Publication:** 2006**Volume ID:** 8**Issue ID:** 1**Page(s):** 58-61

**Address/Availability:****Location/URL:**

**Abstract:** This study is the first phase of a project designed to help parents acquire skills necessary for comfortable and effective communication about adolescents' sexuality. It assessed parent-child communication on sexuality among the in-school adolescents in Lagos, Nigeria. It was observed that a high proportion of the adolescents interviewed receive information on sexuality from friends and the mass media and also communicate more with their friends on sexuality than with their parents.

**Keywords:** **Communication, Sex, Nigeria.**

**Record Number:** 282

**Author(s):** Fajolu, I. B. Grange, O. A. Renner, J. K. Odunukwe, N. W. Njokanma, O. F. Ahmed, O. A. Efenemokwu C.

**Title:** **Prevalence of Iron Deficiency in Children 6-24 Months in Lagos.**

**Journal Title:** Nig Q J Hosp Med.

**Date of Publication:** 2007

**Volume ID:** 17

**Issue ID:** 3

**Page(s):** 97-100

**Address/Availability:****Location/URL:**

**Abstract:** **BACKGROUND:** Iron deficiency is the commonest cause of nutritional anaemia in children worldwide particularly in developing countries. Infants and toddlers are prone to developing iron deficiency anaemia (IDA). This study was carried out to determine the prevalence of IDA and some factors associated with it in this group of children. **STUDY DESIGN:** Haemoglobin concentration and mean corpuscular volume (MCV) estimations carried out in 282 apparently well children aged 6-24 months. Estimations of serum iron (SI), total iron binding capacity (TIBC), serum ferritin (SF) and transferrin saturation (TS) were also determined in children with anaemia (Hb concentration < 11.0 g/dl). Information on current diet was also obtained using a diet record. **RESULTS:** Two hundred and twenty three (79.1%) children had anaemia. The mean Hb concentrations of all the age groups were less than 11.0 g/dl. Forty (14.9%) children had IDA (defined as anaemia plus 2 or more of the following-- MCV < 70fl, Ts < 10% or SF < 10 microg/dL). The mean age of children with IDA (8.96 +/- 2.54 months) was statistically lower than for those without the condition 10.94 +/- 4.55 months (p = 0.016). Inclusion of vegetables and animal protein less than three times a week in the diet were both significantly associated with IDA. **CONCLUSION:** The prevalence of IDA in this study is high especially before the age of 12 months and an average weekly intake less than 3 times a week or iron rich foods like animal protein and vegetables was significantly associated with IDA. Emphasis should be on the inclusion of iron rich foods in the diet following exclusive breastfeeding to reduce the prevalence of IDA in these children.

**Keywords:** **Iron, Deficiency, Children, Nigeria.**

**Record Number:** 283

**Author(s):** Audu, R. A Idigbe E. O. Akanmu, A. S. Mafe A. G. Onyewuche, J. Oparaugo, C. T. Dele, A. Z et. al

**Title:** **Values of cd4+ t lymphocyte in apparently healthy individuals in Lagos, Nigeria.**

**Journal Title:** European Journal of Scientific Research

**Date of Publication:** 2007

**Volume ID:** 16

**Issue ID:** 2

**Page(s):** 168-173

**Address/Availability:**

**Location/URL:****Abstract:**

This pilot study was aimed at establishing the normal values of CD4<sup>+</sup> T Lymphocytes among healthy Nigerians. This was necessary to give a better indication of the border between health and disease. One hundred and seventy nine blood samples were collected from apparently healthy blood donors who tested negative for HIV, Hepatitis B surface antigen and Syphilis. The CD4<sup>+</sup> and CD8<sup>+</sup> counts were enumerated by the use of FACScount machine. The lymphocyte and white blood cell counts were also enumerated. The samples were also screened for malaria parasite. The mean CD4<sup>+</sup> and CD8<sup>+</sup> counts were 742±209 and 430 ± 172 cells/ul respectively. The mean CD4:CD8 ratio was 1.9 ± 0.6. The CD4<sup>+</sup> counts of subjects with and without malaria parasitaemia were not significantly different. We conclude that the range of absolute CD4<sup>+</sup> counts of healthy Nigerians is between 324 and 1160cells/ul, however a larger study will be required to confirm this finding.

**Keywords:**

**cd4, t lymphocyte, Healthy, Lagos, Nigeria.**

**Record Number:**

**284**

**Author(s):**

**Brai, B. I. Odetola, A. A. Agomo, P. U.**

**Title:**

**Hypoglycemic and Hypocholesterolemic Potential of Persea Americana Leaf Extracts.**

**Journal Title:**

J Med Food.

**Date of Publication:**

2007

**Volume ID:**

10

**Issue ID:**

2

**Page(s):**

356-6

**Address/Availability:****Location/URL:****Abstract:**

The effect of aqueous and methanolic leaf extracts of *Persea Americana* on plasma glucose, total cholesterol, low-density lipoprotein cholesterol (LDL-CHOL), and high-density lipoprotein cholesterol (HDL-CHOL) in rats was investigated. Albino rats were fed a diet containing 20% groundnut oil, 0.5% cholesterol, and 0.25% cholic acid to induce hypercholesterolemia. They were then treated daily with aqueous or methanolic extract of *P. Americana* leaf (10 mg/kg of body weight) for 8 weeks. There were no significant ( $P > .05$ ) differences in the overall body weight gain of the hypercholesterolemic rats compared to normal control. Liver to body weight ratio, plasma glucose, total cholesterol (T-CHOL), and LDL-CHOL levels were significantly ( $P < .05$ ) elevated in rats fed hypercholesterolemic diet compared to normal controls. The administration of aqueous and methanolic leaf extracts of *P. americana* induced reductions in plasma glucose (16% and 11%, respectively), T-CHOL (8% and 5%, respectively), and LDL-CHOL (19% and 20%, respectively) in the treated rats compared to the hypercholesterolemic controls. Also, plasma HDL-CHOL concentrations increased by 85% and 68%, respectively, in the aqueous and methanolic extract-treated rats compared to the hypercholesterolemic controls. These results suggest that aqueous and methanolic leaf extracts of *P. americana* lower plasma glucose and influence lipid metabolism in hypercholesterolemic rats with consequent lowering of T-CHOL and LDL-CHOL and a restoration of HDL-CHOL levels. This could represent a protective mechanism against the development of atherosclerosis.

**Keywords:**

**Hypoglycemic, Hypocholesterolemic, Persea Americana, Leaf.**

**Record Number:**

**285**

**Author(s):**

**Adeneye, A. K. Akinwale, O. P. Idowu, E. T. Adewale, B. Manafa, O. U. Sulyman, M. A. Omotola, B. D. Akande, D. O. Mafe, M. A. Appelt, B.**

**Title:**

**Sociocultural Aspects of Mass Delivery of Praziquantel in Schistosomiasis Control: the Abeokuta Experience.**

**Journal Title:**

Res Social Adm Pharm.

**Date of Publication:**

2007

**Volume ID:**

3

**Issue ID:** 2  
**Page(s):** 183-98  
**Address/Availability:**  
**Location/URL:**

**Abstract:** BACKGROUND: Schistosomiasis is a public health problem in Nigeria. Although there is an ongoing national program for its control, disease control programs in other countries have shown the need to understand the sociocultural aspects of disease transmission, prevention, and treatment in endemic communities before control efforts are undertaken. OBJECTIVE: To describe sociocultural factors that influence the distribution process of praziquantel for the mass treatment of schistosomiasis infection. METHODS: Data for the study were collected through focus group discussions held separately with adult males and females, male and female adolescents (13-19 years), and male and female children (5-12 years). In-depth interviews were similarly held with the drug distributors of praziquantel for mass treatment and with community/opinion leaders of six hyperendemic communities in Ogun State, Southwest Nigeria on mass treatment using praziquantel. These focus group discussions and in-depth interviews were held both before and following the drug distribution. The data were analyzed using the textual analysis program, Textbase Beta. RESULTS: Following a 3-week period of mass treatment in six communities, we observed an increased awareness of rivers/streams as a source of schistosomiasis. In addition, the communities reported overwhelming support for the mass treatment after receiving treatment. The reasons for this acceptance appear to include the perceived efficacy of praziquantel against the disease and its availability free of charge. The drug's distributors adhered to the originally specified systems-based protocol for mass treatment in only two of the six communities. The systems-based protocol adhered to strict distribution through primary health centers and schools. The four other communities used a community-based approach for mass treatment with praziquantel and attained greater coverage of treatment as a result. CONCLUSION: Obtaining community support and involvement before the implementation of mass treatment of schistosomiasis with praziquantel contributes to an ineffective treatment strategy for this disease. A detailed assessment of a community's health needs, before the initiation of the control efforts against endemic infections, should be undertaken.

**Keywords:** Praziquantel, Schistosomiasis, Nigeria.

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**Record Number:** 286  
**Author(s):** Adeneye, A. K. Brieger W. R. Mafe, M. A. Adeneye, A. A. Salami, K. K. Titiloye, M. A. Adewole, T. A. Agomo, P. U.  
**Title:** Willingness to seek HIV Testing and Counseling Among Pregnant Women Attending Antenatal Clinics in Ogun State, Nigeria.  
**Journal Title:** Int Q Community Health Educ.  
**Date of Publication:** 2006-2007  
**Volume ID:** 26  
**Issue ID:** 4  
**Page(s):** 337-53  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** HIV counseling and testing (CT) is slowly being introduced as one of several key components of the comprehensive package of HIV/AIDS prevention and care in Nigeria, particularly in the prevention of mother-to-child transmission of HIV (PMTCT). A cross-sectional survey of 804 women attending antenatal clinics (ANC) in Ogun State, Nigeria was done using questionnaires to assess their willingness to seek and undergo CT and know the determinants. Focus group discussions were also held in the general community: 84.3% of respondents believed in AIDS reality, while 24.3% thought they were at risk of HIV infection. Only 27% knew about MTCT, while 69.7% of 723 who had heard of HIV/AIDS did not know about CT. Only 71 (8.8%) had thought about CT and 33 (4.5%) mentioned HIV testing as one of antenatal tests. After health education on CT, 89% of the women expressed willingness to be

tested. Their willingness for CT was positively associated with education ( $p < 0.05$ ), ranging from 77% (no education) to 93% (post-secondary). More of those with self-perceived risk expressed willingness to test for HIV ( $p < 0.05$ ). Those willing to be tested had a higher knowledge score on how HIV spreads than those not willing. Multiple regressions identified four key factors that were associated with willingness for CT: increasing educational level; not fearing a blood test; perception that the clinic offered privacy; and perceptions of higher levels of social support from relatives and peers. Those unwilling or undecided about CT expressed strong fear of social stigma/rejection if tested positive. The results provided insights for planning promotional programs and showed that not only are IEC efforts needed to boost knowledge about HIV/AIDS, but that change in clinic setting and community are imperative in creating supportive environment to encourage uptake of CT services.

**Keywords:** HIV, Testing, Counseling, Pregnant, Antenatal, Nigeria.

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**Record Number:** 287  
**Author(s):** Oyewole, I. O. Awolola, T. S. Ibidapo, C. A. Oduola, A. O. Okwa, O. O. Obansa, J. A.  
**Title:** Behaviour and Population Dynamics of the Major Anopheline Vectors in a Malaria Endemic Area in Southern Nigeria.  
**Journal Title:** J Vector Borne Dis.  
**Date of Publication:** 2007  
**Volume ID:** 44  
**Issue ID:** 1  
**Page(s):** 56-64  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Anopheline mosquitoes consist of a large number of species each of which differs from another in population, resting and feeding behaviour in relation to the prevailing conditions in the locality. A longitudinal study was carried out to investigate the population dynamics, resting and feeding behaviour of the major anopheline species found in a rain forest zone of Nigeria. Mosquitoes resting and biting indoors were collected using WHO standard techniques and supplemented with outdoor-biting collections in the study areas between January and December 2004. Samples were sorted and identified microscopically for morphological features while molecular identification was carried out using polymerase chain reaction (PCR) techniques. PCR-based tests showed that both indoor and outdoor collections constitute three groups of Anopheles mosquitoes, *An. gambiae* s.l. Giles (68.6%), *An. funestus* Giles (30.7%) and *An. moucheti* Evans (0.7%). Of the 1342 female Anopheles mosquitoes collected indoors, 799 were caught resting and 543 were caught biting. The outdoor-biting population accounted for 28.8% of the total collections ( $n=1885$ ). There was no significant difference ( $p > 0.05$ ) in the biting activities (indoors and outdoors) of these species in four villages. However, *An. arabiensis* and *An. moucheti* were more exophagic with  $>60\%$  of their biting occurring outdoors while *An. gambiae* and *An. funestus* were more endophagic with  $>55\%$  of their biting occurring indoors. The human-vector contact with *An. gambiae* and *An. funestus* (indoors) was about 73.3 and 66.7%, respectively as against 27.7% in *An. arabiensis* and 25.3% in *An. moucheti*. This gave the corresponding man-biting rates (MBR) of 17.5 bites/man/night for *An. gambiae*, 14.6 bites/man/night for *An. funestus*, 6.7 bites/man/night for *An. arabiensis* and 4.3 bites/man/night for *An. moucheti*. Moreover, the number of *An. gambiae* and *An. funestus* caught resting indoors was significantly higher than the other two species ( $p < 0.05$ ). The wet season collections showed that *An. gambiae* caught were more than 67% of the total catch while *An. arabiensis* was predominant in the dry season ( $\chi^2 = 75.44$ ,  $df = 3$ ,  $p < 0.01$ ). The present study highlights some aspects of the behaviour of anopheline mosquitoes in southern Nigeria which is an important component of epidemiological study of malaria. This information provides basis to the understanding of the role played by the identified anopheline species in malaria transmission and a baseline to formulate malaria control programme.

**Keywords:** Behaviour, Anopheline, Vectors, Malaria, Endemic, Nigeria.

**Record Number:** 288  
**Author(s):** Adeneye, A. K Jegede, A. S. Mafe, M. A. Nwokocho, E. E.  
**Title:** A Pilot Study to Evaluate Malaria Control Strategies in Ogun state, Nigeria.  
**Journal Title:** World Health Popul.  
**Date of Publication:** 2007  
**Volume ID:** 9  
**Issue ID:** 2  
**Page(s):** 83-94  
**Address/Availability:**  
**Location/URL:**

**Abstract:** With limited evidence of decreases in malaria-related mortality and morbidity, and nearly half the time to the 2010 deadline of Roll Back Malaria (RBM) targets now past, we conducted this study to assess the awareness, accessibility and use of malaria control strategies among at-risk groups within the context of RBM in Nigeria. It was a descriptive, cross-sectional pilot study of 34 registered women attending antenatal clinics and 34 mothers of children less than five years old, using a questionnaire in a malaria holo-endemic community of Ogun State, Nigeria. Results showed that 14.7% and 16.2% of all respondents interviewed were aware of the home management of malaria (HMM) program (17.6% of mothers of children under five years vs. 11.8% of pregnant women) and the change in policy on malaria treatment (23.5% of mothers of children under five years vs. 8.8% of pregnant women) respectively. Younger respondents knew more about HMM than older ones ( $p < .05$ ). Most (63.2%) of the 68 respondents (64.7% of mothers of children under five years vs. 61.8% of pregnant women) interviewed knew about insecticide treated nets (ITNs); however, only 22.1% were using the treated material. Reasons given by those not using ITNs included: they did not know about ITN prior to the interview (43.3%), they had no money (41.5%) and they did not know where to get it (7.6%). Only 5.8% of mothers of children less than five years old, and none of the pregnant women, had taken the new combination drug. Eight (23.5%) of the 34 pregnant women interviewed knew about intermittent preventive treatment of malaria for pregnant women (IPT), while two (25.0%) of these eight women had received a preventive treatment dose. The results of this pilot study showed that efforts need be intensified to make adequate information and materials relating to the different malaria control strategies more available and accessible at the community level to achieve and sustain the RBM goals, both in Ogun State and in Nigeria in general. However, a larger study is needed to provide more generalized findings.

**Keywords:** Malaria, Nigeria.

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**Record Number:** 289  
**Author(s):** Oyefolu, A. O. B Nwaeke, A. C. Audu, R. A. Akinyemi, K. O. Salu, O. B. Muller, C. P. Omilabu, S. A.  
**Title:** Evaluation of Measles Vaccine Cold Chain in Lagos State, Nigeria.  
**Journal Title:** Afr. J. Clin & Exp. Micro.  
**Date of Publication:** 2007  
**Volume ID:** 8  
**Issue ID:** 1  
**Page(s):** 1-7  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The National (level 1), State (L2) and Local government vaccine cold stores (L3) as well as some vaccination centres (L4) were physically inspected in Lagos state, Nigeria and the potency of the live attenuated measles vaccine was tested. Both the L1 and L2 storage facilities were formally adequately equipped and maintained. This was also reflected in the potency of the vaccines. However, many vaccines at L1 were within weeks from expiration. Considerable problems with refrigeration and delayed forwarding became apparent at level L3 causing loss in potency both at L3 and L4: although, all L4 stores check-list met all the

EPI/NPI accreditation criteria, 1 of the vaccines were sub-potent and this situation did not improve over the three year study period (1996-98). Time to expiration did not seem to be the main cause of loss of potency but rather poor and delayed handling. It is recommended that vaccines are moved more rapidly through the system and used well before expiration. Because of frequent power failures despite standby generators, we further recommend to include in the WHO criteria, book-keeping of periods of power failures, running time of generators and a complete recording of fuel consumption. Attitudes among vaccinating staff and handling of vaccines should also be improved by continued training.

**Keywords:** Measles, Vaccine, Cold chain, Lagos, Nigeria.

**Record Number:** 290  
**Author(s):** Agomo, P.U. Mustafa, R.A.S Omoloye, B.G. Okechukwu, A.N.Mafe, A.G. Ijale, S.I. Egbuna, K.N. Olukosi, Y.A. Okoh, H.I. Aina, O.O. Agomo, C.O. Akindele, S.K. Akinyele, M.O. Afolabi, A.S. Enya, V.N. Idika, N. Ezeiru, V.A  
**Title:** Efficacy and Safety of Artesunate + Mefloquine (artequin®) in the Treatment of Uncomplicated Falciparum Malaria in Ijede Community, Ikorodu LGA, Lagos state Nigeria.  
**Journal Title:** Journal of Medical Sciences.  
**Date of Publication:** 2007  
**Volume ID:** 7  
**Issue ID:** 5  
**Page(s):** 816-8245  
**Address/Availability:**  
**Location/URL:**  
**Notes:**  
**Abstract:** Artequin® is a combination of Artesunate and Mefloquine has been reported to be very effective against multi-drug resistant Plasmodium falciparum malaria in other countries but not in Nigeria. We have now evaluated the efficacy and safety of this drug in the treatment of malaria in a high malaria transmission area. The WHO protocol was followed and the Health Centre of the Community was used. Out-patients having amongst other criteria, a pre-treatment parasite density of  $\geq 1000\mu\text{L}^{-1}$  of blood were enrolled for the study. Informed consent was obtained and the drugs were given on days 0, 1 and 2. Each patient was followed up to day 28. Results showed that of the 1453 patients screened, 120 met the enrolment criteria but 115 (58 adults and 57 children) completed the trial. The 100 and 98.3% respectively. The success rates in adults on D1, D2, D3, D7, D14 and D28 were 53.4, 94.8, 100, 100, 100 and 98.3% respectively. The success rates in children were 22.8, 98.25, 100, 100, 100 and 93.0% respectively. Parasite clearance times in adults and children were 36.4 and 42.9h, respectively. The mean fever clearance times were 11.75 and 12.25h, respectively. Artequin® exhibit marked antigametocyte activity, with a gametocyte clearance time of 51.0h. There were no major adverse reactions. The values of haematological and clinical indices of safety were within normal ranges. We conclude that Artequin® is efficacious, safe and well tolerated. Its use in the treatment of malaria is therefore recommended.

**Keywords:** Malaria.

**Record Number:** 291  
**Author(s):** Anorlu, R. I. Igwilo, C. I. Akanmu, A. S. Banjo, A. A. Odunukwe, N. N. Okany, C. C. Abudu, O. O. Dim, S. T.  
**Title:** Prevalence of Abnormal Cervical Smears Among Patients with HIV in Lagos, Nigeria.  
**Journal Title:** West Afr J Med.  
**Date of Publication:** 2007  
**Volume ID:** 26  
**Issue ID:** 143-7  
**Page(s):**

**Address/Availability:****Location/URL:****Abstract:**

**BACKGROUND:** There are over four million people living with HIV/AIDS in Nigeria. Cervical cancer is the most common genital cancer in Nigeria. There are many reports on the association of HIV with increased risk of cervical dysplasia. **OBJECTIVE:** To determine the prevalence of abnormal cervical smears in Nigerian women who are HIV positive in Lagos. **METHODS:** Cervical smears were taken from 233 HIV positive women and 235 HIV negative women who attended the HIV clinic and the family planning clinic respectively of the Lagos University Teaching Hospital during the period January-April 2004. Proportions were compared with the X<sup>2</sup> test. **RESULTS:** Data were complete for analysis in 227 of HIV positive and 228 of HIV negative women. Mean (SD) ages of HIV positive and HIV negative patients were respectively 35.2 (9.81) and 34.5 (7.37) years. Prevalence of squamous intraepithelial lesion (SIL) was higher in those who were HIV positive than in those who were HIV negative, 10.9% vs 4.3% (X<sup>2</sup>, 7.04; p=0.00798). Prevalence of high grade SIL was higher in HIV positive than HIV negative subjects, 7.9% vs 2.6% (X<sup>2</sup>, 6.38; p=0.0115). There was no significant difference in the prevalence of inflammatory smears, 15.7% in HIV positive vs 16.2% in HIV negative. **CONCLUSION:** Prevalence of cervical dysplasia is high in women who harbour HIV.

**Keywords:****HIV.****Record Number:** 292**Author(s):** Onwuamah, C.K. Okwuzu, J. O. Idika, N. Meshack, E. Gbajabiamilaa, T.**Title:** Intestinal Helminthiasis in Children in a Suburb of Lagos, Nigeria: Evaluation of Risk factors and Habits.**Journal Title:** African Journal of Clinical and Experimental Microbiology.**Date of Publication:** 2007**Volume ID:** 8**Issue ID:** 2**Page(s):** 107-113**Address/Availability:****Location/URL:** <http://dx.doi.org/10.4314/ajcem.v8i2.7471>**Abstract:****Keywords:** Intestinal, Helminthiasis, Children, Nigeria**Record Number:** 293**Author(s):** Idowu, E. T. Mafe, M. A. Appelt B. Adewale, B. Adeneye, A. K. Akinwale, O. P. Manafa, O. U. Akande, D. O.**Title:** Height as a Substitute for Weight for Estimating Praziquantel Dosage.**Journal Title:** World Health Popul.**Date of Publication:** 2007**Volume ID:** 9**Issue ID:** 3**Page(s):** 19-26**Address/Availability:****Location/URL:****Abstract:**

The study evaluated height and weight measurements of 750 school children from five rural communities in western Nigeria. The measurements were taken by 12 trained community members designated as distributors in determining treatment dose with praziquantel for these children. A very strong correlation value,  $r=0.97$ , was obtained for the weight of treated children measured by the distributors and the research team. The distributors obtained a correlation coefficient value of  $r=0.87$  on weight and height measurements, showing that height can be used by community distributors in lieu of weight for correct dose determination

**Keywords:****Height, Praziquantel, Dosage.**

- Record Number:** 294  
**Author(s):** Kengne, P. Antonio-Nkondjio, C. Awono-Ambene, H. P. Simard, F. Awolola, T. S. Fontenille, D.  
**Title:** **Molecular Differentiation of Three Closely Related Members of the Mosquito Species Complex, Anopheles Moucheti, by Mitochondrial and Ribosomal DNA Polymorphism.**  
**Journal Title:** Med Vet Entomol.  
**Date of Publication:** 2007  
**Volume ID:** 21  
**Issue ID:** 2  
**Page(s):** 177-82  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Distinction between members of the equatorial Africa malaria vector *Anopheles moucheti* (Evans) s.l. (Diptera: Culicidae) has been based mainly on doubtful morphological features. To determine the level of genetic differentiation between the three morphological forms of this complex, we investigated molecular polymorphism in the gene encoding for mitochondrial cytochrome oxidase b (CytB) and in the ribosomal internal transcribed spacers (ITS1 and ITS2). The three genomic regions revealed sequence differences between the three morphological forms similar in degree to the differences shown previously for members of other anopheline species groups or complexes (genetic distance  $d = 0.047-0.05$  for CytB,  $0.084-0.166$  for ITS1 and  $0.03-0.05$  for ITS2). Using sequence variation in the ITS1 region, we set up a diagnostic polymerase chain reaction (PCR) for rapid and reliable identification of each subspecies within the *An. moucheti* complex. Specimens of *An. moucheti* s.l. collected in Cameroon, the Democratic Republic of Congo (DRC), Uganda and Nigeria were successfully identified, demonstrating the general applicability of this technique.  
**Keywords:** **Molecular, Differentiation, Mosquito Species, Anopheles moucheti, Mitochondrial, Ribosomal DNA, Polymorphism.**

- Record Number:** 295  
**Author(s):** Adesida, S. A. Abioye, O. A. Bamiro, B. S. Brai, B. I. Smith, S. I. Amisu, K. O. Ehichioya, D. U. Ogunsola, F. T. Coker, A. O.  
**Title:** **Associated Risk Factors and Pulsed Field gel Electrophoresis of Nasal Isolates of Staphylococcus aureus from Medical Students in a Tertiary Hospital in Lagos, Nigeria.**  
**Journal Title:** Braz J Infect Dis.  
**Date of Publication:** 2007  
**Volume ID:** 11  
**Issue ID:** 1  
**Page(s):** 63-9  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** *Staphylococcus aureus* infections are growing problems worldwide with important implications in hospitals. The organism is normally present in the nasal vestibule of about 35% of apparently healthy individuals and its carriage varies between different ethnic and age groups. Staphylococcal nasal carriage among health workers is particularly important to establish new clones and track origin of infections during outbreak situations. To determine the carriage rate and compare the pulsed field gel patterns of the strains, nasal swabs were collected from 185 medical students in a teaching hospital in Lagos, Nigeria. Isolates of *S. aureus* were tested for hemolysin production, methicillin sensitivity and Pulsed Field Gel Electrophoresis (PFGE) was performed. The results showed *S. aureus* nasal carrier rate of 14% with significant rate among males compared to females. All the isolates produced hemolysin. Antibiotic susceptibility pattern revealed that majority of the isolates was susceptible. Five strains (19%) harboured resistant determinants to penicillin and tetracycline. None of the strains was resistant to methicillin. 44% of the isolates typed by PFGE had type B, the most predominant pulsotype. PFGE A clone exhibited a single resistance phenotype

suggesting a strong clonal relationship that could punctuate an outbreak in the hospital. The results speculate that nasal carriage among medical personnel could be a function of various risk factors. Personal hygiene and behaviour may however be the means to reducing colonization and spread of *S.aureus* in our hospitals.

**Keywords:** Gel Electrophoresis, Nasal Isolates, Staphylococcus, Aureus, Medical, Students, Tertiary, Hospital, Nigeria.

**Record Number:** 296  
**Author(s):** Jago, A. A. Ezechi, O.C. Achinge, G.I. Okunlola, M. A.  
**Title:** Effect of oxytocics on the blood pressure of normotensive Nigerian parturients.  
**Journal Title:** J Matern Fetal Neonatal Med.  
**Date of Publication:** 2007  
**Volume ID:** 20  
**Issue ID:** 9  
**Page(s):** 703-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**BACKGROUND:** The single most common direct obstetric disorder accounting for 25% of all maternal deaths globally is severe hemorrhage, generally occurring postpartum. Nearly all these deaths occur in the developing world. The role of oxytocic drugs in the management of the third stage of labor as a strategy to reduce maternal mortality has been emphasized. However, the adverse effects of these oxytocic agents, in particular ergometrine, have not been properly evaluated in our environment. **OBJECTIVES:** To evaluate the effect of ergometrine and oxytocin on the cardiovascular system when used for active management of the third stage of labor. **STUDY DESIGN:** A double-blind, randomized controlled study was carried out at the Federal Medical Centre, Makurdi over 24 months. Five hundred and ten patients were randomized to treatment with either 0.5 mg of intramuscular ergometrine or 10 IU of intravenous oxytocin, respectively, as single injections. Their effects on the cardiovascular system were observed using blood pressure as a marker. **RESULTS:** Ergometrine unlike oxytocin was observed to cause a significant rise in blood pressure, and this effect was most marked in the first 24 hours of the puerperium. **CONCLUSIONS:** These results suggest that ergometrine may be safe in normotensive parturients but hazardous in hypertensive parturients in whom oxytocin would be a safer option.

**Keywords:** Oxytocin, ergometrine, blood pressure, parturient, Nigerian

**Record Number:** 297  
**Author(s):** Ezechi, O.C. Ezeobi, P.M. Kalu, B. K. E. Makinde, O.N  
**Title:** Predictability of birthweight by symphysiofundal height measurement in Nigerian women.  
**Journal Title:** Medipharm Medical Journal  
**Date of Publication:** 2007  
**Volume ID:** 3  
**Issue ID:** 2  
**Page(s):** 263-268  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Birth weight, symphysiofundal

**Record Number:** 298  
**Author(s):** Ezechi, O.C. Kalu, B.K.E. Loto, O.M. Ezeobi, P.M. Nwokoro, C.A.  
**Title:** Obstetric performance in elderly Nigerian women: A comparative study  
**Journal Title:** Nepal Journal of Obstetrics and Gynaecology  
**Date of Publication:** 2007

**Volume ID:** 2  
**Issue ID:** 1  
**Page(s):** 9-12  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **Aims:** To study the obstetric outcome in Nigerian women aged 35 years and above while comparing them with younger women matched for parity, socioeconomic class and body mass index. **Method:** A cohort of 132 pregnant women aged 35 years and above with another 269 pregnant women aged 20-25 years matched for parity, socioeconomic class and body mass index seen at the obstetric unit of a multidisciplinary proprietary hospital in Lagos Nigeria. Results: There were statistically significant difference between the two group in incidence of chronic hypertension (P = 0.02), gestational diabetes (P = 0.05), symptomatic fibroid (P = 0.01), frequent hospitalisation (P = 0.007), caesarean section (P = 0.005), operative vaginal delivery (P = 0.042), Induction of labour (P = 0.024) premature delivery (P = 0.001), low birth weight (P = 0.021) and congenital abnormality but not in Preeclampsia, malpresentation, obstetric haemorrhage, wound infection and multiple pregnancy . **Conclusion:** This study demonstrated that women at 35 years and above are high-risk group and should be closely supervised during pregnancy.

**Keywords:** **Elderly, Nigerians, obstetric performance**

**Record Number:** 299

**Author(s):** Agomo, P. U. Mustafa, R. A. S. Omoloye, B. G. Okechukwu, A. N. Mafe, A. G. Ijale, S. I. Egbuna, K. N. Olukosi, Y. A. Okoh, H. I. Aina, O. O. Agomo, C. O. Akindele, S. K. Akinyele, M. O. Afolabi, A. S. Enya, Y. N. Idika, N. Raheem, T. Y. Emenike, C. C.

**Title:** **An Open Label Trial of a Combination of Artesunate- Amodiaquine (GSUNATE KIT) in the Treatment of Malaria in Lagos State.**

**Journal Title:** International Journal of Malaria and Tropical Diseases

**Date of Publication:** 2008

**Volume ID:** 4

**Issue ID:**  
**Page(s):** 156-169

**Address/Availability:**  
**Location/URL:** **Abstract:**The efficacy, safety and tolerability of a brand of Artesunate and Amodiaquine combination (Gsunate Kit) used in the treatment of uncomplicated malaria has now been well investigated in Nigeria. The co-packaged drugs were administered as 4mg Artesunate and 10mg Amodiaquine per kg body weight once a day for 3 days to children weighing  $15 \leq 30$ kg and adults weighing  $>30$ kg. out-patients enrolled for the study were treated on days (D) 0, 1 and 2. Each patient was followed up to D14. Results showed that of the 517 participants screened, 90 fulfilled the inclusion criteria but 87 completed the trial. The success rate in children (n=62) on D1, D2, D3, D7 and D14 were 64.5%, 98.4%, 100%, 100%, and 100% respectively. Those in adults were 92.0%, 100%, 100%, 100% and 100% respectively. Parasite clearance time in children and adults were 11.7hrs and 10.0hrs respectively. The main non-serious adverse event was dizziness. We conclude that GSUNATE KIT is efficacious, safe and well-tolerated in this high transmission area.

**Keywords:** **Malaria.**

**Record Number:** 300

**Author(s):** Egwari, L. O. Nwokoye, N. N. Obisesan, B. Coker, A. O. Nwaokorie, F. O. Savage, K. O.

**Title:** **Bacteriological and Clinical Evaluation of Twelve Cases of Post-Surgical Sepsis of Odontogenic Tumours at a Referral centre.**

**Journal Title:** East Afr Med J.

**Date of Publication:** 2008

**Volume ID:** 85

**Issue ID:** 6  
**Page(s):** 269-74  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Two categories of patients were identified; those who completed the course of antibiotics prescribed post-surgery and patients who failed to conform to antibiotic prescription. Sepsis developed in the non-compliance group much earlier than in the group that complied ( $p < 0.001$ ). Infections were polybacterial with aerobes accounting for 77.4% (alpha-haemolytic streptococci 29.0%, *Streptococcus pyogenes* 16.1%, *Staphylococcus aureus* 16.1%, diphtheroids 9.7%, *Klebsiella pneumoniae* 6.5%) and anaerobes 22.6% (*Porphyromonas gingivalis* 9.7%, *Peptostreptococcus* spp. 6.5%, *Prevotella melaninogenica* 3.2%, *Clostridium perfringens* 3.2%). Mixed aerobic and anaerobic aetiology occurred more in osteosarcoma and fibrosarcoma. *Clostridium perfringens* was isolated from a case of osteosarcoma with necrotic tissues. The anaerobic bacteria were 100% sensitive to metronidazole, ciprofloxacin and augmentin, 65-85% sensitivity to ampicloxacin, amoxicillin and erythromycin. Over 92% of the streptococci were sensitive to the beta-Lactams contrast low susceptibility with *S. aureus* and *K. pneumoniae*.

**Keywords:** **Bacteriological, Clinical, Referral centre.**

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**Record Number:** 301  
**Author(s):** Ezechi, O. C. Ndububa, V.I. Loto, O. M. Ezeobi, P. M. Kalu, B. K. Njokanma, O. F. Nwokoro, C.A.

**Title:** **Pregnancy, obstetric and neonatal outcome after assisted reproduction in Nigerians.**

**Journal Title:** J Matern Fetal Neonatal Med

**Date of Publication:** 2008

**Volume ID:** 21

**Issue ID:** 4

**Page(s):** 261-6

**Address/Availability:**

**Location/URL:**

**Abstract:** PURPOSE: To evaluate the pregnancy, obstetric and neonatal outcome after assisted reproduction in Nigerians. METHODS: Case control study of all confirmed pregnancies following assisted reproduction managed at the Havana Specialist Hospital (HSH), Lagos over a 7 year period. RESULTS: Adverse obstetric and neonatal outcome occurred in 30.8% of pregnancy following assisted reproduction compared to 12.6% in spontaneously conceived pregnancy ( $p = 0.0003$ ). Multiple pregnancy ( $< 0.001$ ), preterm delivery ( $p < 0.000$ ), placenta praevia (0.00002), antenatal admission (0.02), early pregnancy bleeding (0.04), miscarriage (0.001) and caesarean delivery ( $< 0.001$ ) were significantly commoner in the assisted reproduction group. After adjustment for confounding variables, preterm delivery (OR: 5.95), miscarriage (OR: 5.84), multiple pregnancy (OR: 4.58), placenta praevia (OR: 4.13), caesarean delivery (OR: 3.57), early pregnancy bleeding (OR: 2.18) and antenatal admission (OR: 2.01) retained their significance. CONCLUSION: This study has provided the first evidence from our part of the world showing that assisted pregnancy is associated with poorer obstetric outcome when compared with spontaneously conceived pregnancy.

**Keywords:** **Assisted reproduction, obstetric & neonatal outcome, obstetric complications, Nigeria.**

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**Record Number:** 302  
**Author(s):** Ezechi, O.C. Ezeobi, P.M. Nwokoro, C. A  
**Title:** **Ovulation Induction, Pregnancy and Delivery in a Patient with Partial Hypopituitarism due to Lymphocystic Hypophysitis: A Case Report**  
**Journal Title:** Nepal Journal of Obstetrics and Gynaecology  
**Date of Publication:** 2008  
**Volume ID:** 3

**Issue ID:** 1  
**Page(s):** 46-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Lymphocystic hypophysitis is an unusual autoimmune disease that causes partial or total hypopituitarism and often associated with chronic anovulation. We report a case of ovulation induction, uneventful pregnancy and vaginal delivery in one of our patient with lymphocystic hypophysitis.  
**Keywords:** **Lymphocystic hypophysitis, chronic anovulation and ovulation induction.**

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**Record Number:** 303  
**Author(s):** **Ezechi O. C. Loto, O. M. Amadi, E. N. Nwokoro, C. A. Akinlade Hakeem**  
**Title:** **Induction of late abortion with vaginal misoprostol: experience from Nigeria**  
**Journal Title:** Journal of Postgraduate Medical Institute  
**Date of Publication:** 2008  
**Volume ID:** 22  
**Issue ID:** 1  
**Page(s):** 8-12  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Objective: To evaluate the outcome of induction of late abortion with vaginal misoprostol. Material and Methods: This prospective study of misoprostol induced late abortion at gestational age of 13-27 weeks was conducted in 3 Lagos hospitals. Following a decision to induce, 200mcg of Misoprostol was inserted into the posterior fornix and repeated 12 hourly until expulsion of the fetus. Statistical analysis was performed using SPSS for windows version 7.0. Results: Out of 102 patients, induction of late abortion was done mainly for fetal abnormalities (n=40, 39.2%) and intrauterine death (n=35, 34.3%). The age of the women ranged from 21 to 39 years. The modal gestational age was 15 weeks with a range of 13 to 27 weeks. Majority of the patients were multiparae (65.7%). The dose required to achieve expulsion ranged from 200 to 1000mcg with a mean of 364.7±102.4mcg. The mean induction expulsion interval (IEI) was 16±4 hours and 78.4% (80/102) expelled within 24 hours. The multiparous patients and cases of fetal deaths were associated with significantly shorter IEI. Gestational age more than 23 weeks was associated with fewer retained product rate Linear logistic regression analysis shows that multiparity (p<0.01), advanced gestation age (p=0.00) and fetal status (p<0.01) had independent association with IEI. Complete abortion rate was independently associated with gestational age (p<0.001) but not with parity and fetal status. Conclusion: Vaginal misoprostol alone is a safe and effective method of late abortion termination in areas where mifepristone is not available.  
**Keywords:** **Abortion, vaginal misoprostol.**

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**Record Number:** 304  
**Author(s):** **Ezechi, O.C. Loto, O.M. Ezeobi, P.M. Okogbo, O. F. Gbajabiamila, T. Nwokoro, C. A.**  
**Title:** **Safety and efficacy of misoprostol in induction of labour in prelabour rupture of fetal membrane in Nigerian women: a multicenter study**  
**Journal Title:** Iranian Journal of Reproductive Medicine  
**Date of Publication:** 2008  
**Volume ID:** 6  
**Issue ID:** 2  
**Page(s):** 83-87  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Background:** Misoprostol, a prostaglandin E1 analogue compared to prostaglandin E2, has the advantage of being inexpensive and stable at room temperature, with its proven efficacy

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and safety. However studies on the effect of pH on the efficacy of misoprostol have yielded conflicting results. Thus its use in the induction of labour in patients with premature rupture of membrane requires further investigation. **Objective:** To evaluate the safety and efficacy of misoprostol in induction of labour in Nigerian women with prelabour rupture of membrane after 34 weeks of gestation. **Materials and Methods:** Three hundred and forty six Nigerian women with prelabour rupture of membrane who consented to participate in the trial were randomised into two arms of misoprostol and oxytocin. Labour was managed with WHO partograph. The primary outcome was the caesarean section rate and induction vaginal delivery interval. **Results:** The mean induction to vaginal delivery interval was significantly shorter in the misoprostol arm (504 mins) compared to 627 mins in the oxytocin arm ( $t=3.97$ ;  $p=0.005$ ). The caesarean section rate of 18.1% among the misoprostol arm was also significantly lower than the 41.4% recorded in the oxytocin arm ( $p=0.002$ ). Among patients with Bishop score greater than 6 there were no statistically significant differences between the two groups in the outcomes measured. **Conclusion:** Misoprostol is not only effective but also safe when compared with titrated

**Keywords:** Misoprostol, Prelabour rupture of membrane, Induction of labour.

**Record Number:** 305  
**Author(s):** Ezechi, O. C. Gab-Okafor, C. Onwujekwe, D. I. Adu, R. A. Amadi, E. Herbertson, E.  
**Title:** Intimate partner violence and correlates in pregnant HIV positive Nigerians.  
**Journal Title:** Arch Gynecol Obstet.  
**Date of Publication:** 2008  
**Volume ID:** 280  
**Issue ID:** 5  
**Page(s):** 745-52  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

OBJECTIVE: To determine the prevalence, types and correlates of intimate partner violence (IPV) in pregnant Nigerian living with HIV. DESIGN: Cross sectional study. POPULATION: HIV positive pregnant women. SETTING: A large HIV comprehensive treatment centre. METHODS: A cross sectional study of 652 HIV positive pregnant Nigerians seen at Nigerian Institute of Medical Research, Lagos, Nigeria over a 24 months period. MAIN OUTCOME MEASURES: Prevalence of intimate partner violence after HIV diagnosis. RESULTS: Among the women interviewed, 423 (65.8%) reported abuse. In 74.0% of abused women, the abuse started after HIV diagnosis. Though having a HIV negative spouse and disclosure of HIV status were associated with abuse, only having a HIV negative partner retained its association with IPV (OR 3.1; CI 2.4-5.3) after controlling for confounding variables. Sixty-two (9.6%) women have not disclosed their HIV status because of fear of rejection. Verbal abuse (51.7%), threat of violence in 97 (22.9%) and sexual deprivation in 91 (21.5%) were the common forms of abuse reported. CONCLUSION: IPV is common among HIV positive pregnant Nigerians; with a threefold increased risk in women in HIV serodiscordant relationship.

**Keywords:** Intimate partner violence, HIV, Pregnant women, Nigerian.

**Record Number:** 306  
**Author(s):** Oladepo, D. K. Idigbe, E. O. Audu, R. A. Inyang, U. S. Imade, G. E. Philip, A. O. Okafor, G. O. Olaleye, D. Mohammed, S. B et. al.  
**Title:** Establishment of Reference Values of cd4 and cd8 Lymphocyte Subsets in Healthy Nigerian Adults.  
**Journal Title:** Clinical and Vaccine Immunology.  
**Date of Publication:** 2009  
**Volume ID:** 16  
**Issue ID:** 9

**Page(s):** 1374-1377  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A total of 2,570 apparently healthy human immunodeficiency virus-negative adults from the six geopolitical zones in the country were enrolled in our study in 2006. The samples were assayed using the Cyflow technique. Data were analyzed using the statistical Package for Social Scientists (SPSS). The majority (64%) of the participants had CD4<sup>+</sup> counts within the range of 501 to 1,000 cells/ $\mu$ l. The reference range for CD4<sup>+</sup> was 365 to 1,571 cells/ $\mu$ l, while the reference range for CD8 was 145 to 884 cells/ $\mu$ l.  
**Keywords:** **Reference values, cd4, cd8, Lymphocyte, Adults, Nigerian.**

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**Record Number:** 307  
**Author(s):** Jawara, M. Smallegange, R. C. Jeffries, D. Nwakanma, D. C. Awolola T. S. Knols, B. G. Takken, W Conway, D. J.  
**Title:** **Optimizing Odor-baited Trap Methods for Collecting Mosquitoes during the Malaria Season in The Gambia.**  
**Journal Title:** PLoS One.  
**Date of Publication:** 2009  
**Volume ID:** 4  
**Issue ID:** 12  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **BACKGROUND:** MBaited traps are potential tools for removal or surveillance of disease vectors. To optimize the use of counter-flow traps baited with human odor (nylon socks that had been worn for a single day) to capture wild mosquitoes in the Gambia, investigations were conducted at a field experimental site. **METHODOLOGY/PRINCIPAL FINDINGS:** Experiments employing Latin square design were conducted with a set of six huts to investigate the effects of the following on overnight mosquito trap catches: (1) placement of traps indoors or immediately outdoors, CO(2) supply, and presence of a human subject in the hut; (2) trap height for collecting mosquitoes immediately outdoors; (3) height and distance from hut; (4) interaction between multiple traps around a single hut and entry of mosquitoes into huts. A total of 106,600 adult mosquitoes (9.1% *Anopheles gambiae* s.l., 4.0% other *Anopheles* species) were collected over 42 nights. The high numbers of *An. gambiae* s.l. and other mosquitoes collected by odor-baited traps required CO(2) but were largely independent of the presence of a person sleeping in the hut or of trap placement indoors or outdoors. For outdoor collection that is considered less intrusive, traps opening 15 cm above the floor of the hut veranda were more highly effective than traps at other heights or further from the hut. There was no significant evidence of saturation or competition by the traps, with multiple traps around a hut each collecting almost as many mosquitoes as single traps and no effect on the numbers of mosquitoes entering the huts. **CONCLUSIONS/SIGNIFICANCE:** The outdoor trapping protocol is convenient to compare attractiveness of different odors or synthetic chemicals to malaria vectors and other wild mosquitoes. The finding that such traps are reliably attractive in the presence or absence of a human volunteer encourages their potential development as standardised surveillance tools.  
**Keywords:** **Odor-baited trap, Mosquitoes, Malaria, Gambia.**

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**Record Number:** 308  
**Author(s):** Egwari, L. O. Obisesan, B. Nwokoye, N. N.  
**Title:** **Microbiological Status of Periodontal Diseases in Lagos, Nigeria.**  
**Journal Title:** West Indian Med J.  
**Date of Publication:** 2009  
**Volume ID:** 54

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**Issue ID:** 4  
**Page(s):** 392-7  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **RESULTS:** The incidence of periodontal diseases was more in females than males with a ratio of 0.53 though the difference was not significant. A high incidence of gingivitis (55.9%) occurred within the first 29 years with a cluster of cases (48.6%) between 10 and 29 years of age with incidence tending to decline with advancing age. Though the incidence of periodontitis was highest amongst adults over 40 years (42.6%), the incidence of 8.5% in children below 10 years of age was high. Polybacterial aetiology was characteristic; aerobes were the predominant flora in gingivitis with a preponderance of *Streptococcus* spp, while anaerobes predominated in periodontitis with such species as *Porphyromonas*, *Prevotella*, *Fusobacterium* and *Actinobacillus*. Significant reduction in duration of treatment was obtained when patients were treated based on susceptibility results as opposed to empirical knowledge ( $p < 0.05$ ).

**Keywords:** **Microbiological, Periodontal Diseases, Lagos, Nigeria.**

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**Record Number:** 309

**Author(s):** **Agomo, P. U.** Meremikwu, M. M. Watila, I. M, Omalu, I. J. Odey, F. A. Oguiche, S. Ezeiru, V. I. Aina, O. O.

**Title:** **Efficacy, Safety and Tolerability of Artesunate-Mefloquine in the Treatment of Uncomplicated Plasmodium falciparum Malaria in Four Geographic Zones of Nigeria.**

**Journal Title:** Malar J.

**Date of Publication:** 2008

**Volume ID:** 7

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** **BACKGROUND:** The combination of artesunate and mefloquine has been reported to be effective against multi-drug resistant *Plasmodium falciparum* malaria, which has been reported in Nigeria. The objective of this multi-centre study was to evaluate the efficacy, safety and tolerability of the co-packaged formulation of artesunate and mefloquine in the treatment of uncomplicated malaria in two weight groups: those between 15 - 29 kg and  $\geq$  or = 30 kg respectively. **METHODS:** The trial was conducted in rural communities in the north-east, north-central, south-west and south-eastern parts of Nigeria. The WHO protocol for testing antimalarial drugs was followed. Outpatients having amongst Mother criteria, parasite density of  $\geq$  or = 1,000 microl were enrolled. The co-packaged drugs were administered for 3 days at a dosage of artesunate, 4 mg/kg body wt/day and mefloquine, 25 mg/kg/body wt total) on days 0, 1 and 2. Patients were followed up for 28 days with the assessment of the parasitological parameters on days 1, 2, 3, 7, and 28. **RESULTS:** Four hundred and forty-six (446) patients were enrolled and 431 completed the study. Cure rates in both treatment groups was  $>90\%$  at day 28. The mean parasite clearance times in treatment groups I and II were 40.1 and 42.4 hours respectively. The combination of artesunate and mefloquine showed good gametocidal activity, (gametocyte clearance time of 42.0 & 45.6 hours in treatment groups I and II respectively). There were no serious adverse events. Other adverse events observed were headache, dizziness, vomiting and abdominal discomfort. There was no significant derangement in the haematological and biochemical parameters. **CONCLUSION:** This co-packaged formulation of artesunate + mefloquine (Artequin) is highly efficacious, safe and well-tolerated. It is recommended for the treatment of uncomplicated *P. falciparum* malaria in Nigeria.

**Keywords:** **Artesunate-mefloquine, Plasmodium falciparum, Malaria, Nigeria.**

**Record Number:** 310  
**Author(s):** Smith, S. I. Alao, F. Goodluck, H. T. Fowora, M. Bamidele, M. Omonigbehin, E. Coker, A. O.  
**Title:** Prevalence of Salmonella Typhi Among Food Handlers From Bukkas in Nigeria.  
**Journal Title:** Br J Biomed Sci.  
**Date of Publication:** 2008  
**Volume ID:** 65  
**Issue ID:** 3  
**Page(s):** 158-60  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Salmonella Typhi, Food Handlers, Bukkas, Nigeria.

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**Record Number:** 311  
**Author(s):** Akinwale, O. P. Oliveira, G. C. Ajayi, M. B. Akande, D. O. Oyebadejo, S. Okereke, K. C.  
**Title:** Squamous Cell Abnormalities in Exfoliated Cells from the Urine of Schistosoma Haematobium-Infected Adults in a Rural Fishing Community in Nigeria.  
**Journal Title:** World Health Popul.  
**Date of Publication:** 2008  
**Volume ID:** 10  
**Issue ID:** 1  
**Page(s):** 18-22  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Schistosoma haematobium infection is endemic in Nigeria, with substantial transmissions in all the states of the federation and a high prevalence rate in schools. Literature has linked bladder cancer, mostly squamous cell type, with long-term S. haematobium infections. The objective of this descriptive study was to screen exfoliated cells in the urine of S. haematobium-infected patients for squamous cell abnormalities through cytopathological examinations. Study participants were drawn from Imala Odo, a community near Oyan Dam in Abeokuta North Local Government Area, Ogun state, Southwest Nigeria. Due to a considerable day-to-day variation of S. haematobium eggs in urine, 3 rounds of 200 ml of urine samples were collected on 3 different days from 32 infected patients and 10 uninfected controls and examined. Cytological preparations of the infected 15 males and 8 females and 10 controls (5 males and 5 females) were screened for squamous cell abnormalities. Severely dysplastic to frankly malignant squamous cells were observed in 1 (3.1%) male and 2 (6.3%) females, while no abnormality was observed in the controls.  
**Keywords:** Squamous cell, Cells, Urine, Schistosoma haematobium-infected, Adults, Rural, Fishing, Nigeria.

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**Record Number:** 312  
**Author(s):** Adeleye, A. Smith, S.I. Akanmu, S. Bamiro, S. Sobande, O. Igbinosum, E. Inem, V.  
**Title:** Chromosomally Mediated Antibiotic Resistance in Non-Typhoidal Salmonellae Isolated from HIV Patients in Lagos.  
**Journal Title:** West Indian Med J.  
**Date of Publication:** 2008  
**Volume ID:** 57  
**Issue ID:** 5  
**Page(s):** 519-20  
**Address/Availability:**  
**Location/URL:**

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**Abstract:** Out of 201 cultured blood samples and 48 stool samples from HIV-1 positive patients, six non-typhoid *Salmonella* spp (NTS) (3%), comprising four *S. Typhimurium* and two *S. Enteritidis* from blood samples and three *S. Typhimurium* (6.2%) and two *Shigella flexneri* (4.1%) from stool samples. Nine (100%) of the NTS were resistant to ampicillin, eight (88.9%) to trimethoprim/sulfamethoxazole and 7 (77.7%) to tetracycline. None of the isolates had detectable plasmids.

**Keywords:** Chromosomally, Antibiotic, Non-typhoidal Salmonellae, HIV, patients, Lagos.

**Record Number:** 313

**Author(s):** Adewale, B. Oyerinde, J. P Mafe, M. A.

**Title:** Seasonal Biting pattern of *Simulium damnosum* s.l and its Implications on Onchocerciasis Treatment with Ivermectin.

**Journal Title:** West Afr J Med.

**Date of Publication:** 2008

**Volume ID:** 27

**Issue ID:** 4

**Page(s):** 229-9

**Address/Availability:**

**Location/URL:**

**Abstract:** **BACKGROUND:** The current control strategy adopted by African Programme for Onchocerciasis Control (APOC) is the mass distribution of ivermectin in all endemic areas for between 12-15 years. One of the major obstacles of the strategy, is the ability of the fly to migrate long distances and this brings about the possibility of flies migrating from uncontrolled areas to controlled areas. **OBJECTIVE:** To assess the impact of annual ivermectin treatment of onchocerciasis and to ascertain the seasonality of transmission and its impact on the current control strategy in the forest zone around a dam in Southern Nigeria. **METHODS:** A 36 x 11-hour entomological survey was carried out in the study area. *Simulium damnosum* s.l were caught using two human baits from 07.00 hours-18.00 hours, three days of every month for 12 months according to the method of Walsh et al. The head, thorax and abdomen of each insect were dissected separately. Catches were made from dawn to dusk. **RESULTS:** Catches yielded a total of 2,807 female *S. damnosum* s.l. Higher mean biting rates (2,486 flies/man/year) occurred during the dry season. The mean monthly distribution of parous flies also showed distinct seasonality with preponderance of parous flies during the dry season (61.8%) as compared to the rainy season (38.6%). Flies harbouring developing and infective larvae were observed during the dry season in October and December when the monthly transmission potential recorded was 31 larvae/man/month. This dropped to 28 larvae man/month and 25 larvae/man/month in January and February respectively. An annual transmission potential of 115 larvae/man/year was recorded. **CONCLUSION:** In spite of the ivermectin treatment in the area at the time of study, the transmission of *Onchocerca volvulus* continued unabated in the area with a higher transmission in the dry season than the rainy season. The distribution of ivermectin should be intensified through improved coverage while other control measures may be necessary during the dry season which is the peak of transmission in the area.

**Keywords:** *Simulium damnosum*, Onchocerciasis, Ivermectin.

**Record Number:** 314

**Author(s):** Idowu, E. T. Awolola, T. S. Mafe, M. A. Otubanjo O. A.

**Title:** Identification of Three Members of the *Simulium damnosum* (Diptera Simuliidae) Group in South Western Nigeria.

**Journal Title:** Afr J Med Med Sci.

**Date of Publication:** 2008

**Volume ID:** 37

**Issue ID:** 1

**Page(s):** 71-6  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Identification of the specific Simulium species at play in the transmission of Onchocerca volvulus is important because it helps to explain the epidemiology and clinical presentation of the disease and guides in monitoring of long term impact of ivermectin treatment on onchocerciasis transmission. The study therefore sought to use molecular markers for vector identification. A combination of Polymerase Chain Reaction (PCR) assay and Restriction fragment Length polymorphism (RFLP) was used to identify members of Simulium damnosum complex in forest area of south western Nigeria. The results revealed the presence of three members of the Simulium damnosum complex: S. yahense, S. sirbanum and S. damnosum ss. S. yahense was the predominant and major vector in the study sites. This provides baseline data for future monitoring vector of human onchocerciasis in the area.  
**Keywords:** **Simulium damnosum, (Diptera Simuliidae), Nigeria.**

**Record Number:** 315  
**Author(s):** Akinwale, O. P. Laurent, T. Mertens, P. Leclipteux, T. Rollinson, D. Kane, R. Emery, A. Ajayi, M. B. Akande, D. O. Fesobi, T. W.  
**Title:** **Detection of Schistosomes polymerase chain reaction Amplified DNA by Oligochromatographic Dipstick.**  
**Journal Title:** Molecular and Biochemical Parasitology.  
**Date of Publication:** 2008  
**Volume ID:** 160  
**Issue ID:** 2  
**Page(s):** 160-70  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The applications of highly specific and sensitive molecular techniques based on polymerase chain reaction (PCR) have constituted a valuable tool for the diagnosis of schistosomiasis and also for the detection of schistosome infections in the snail intermediate hosts. The common method of detecting PCR amplicons is gel electrophoresis in the presence of ethidium bromide, a carcinogen, which is followed by UV transillumination. Other methods, which are available for detecting PCR products, are real-time PCR, PCR-enzyme-linked immunosorbent assay (PCR-ELISA) and mass spectrometry but they are cumbersome while they are sometimes complex and expensive. Therefore, a simple method of PCR product detection would be a welcome idea and a most valuable tool particularly in disease endemic countries with limited research facilities and resources. In this study, we applied a simple and rapid method for the detection of Schistosoma haematobium and Schistosoma mansoni PCR amplified DNA products using oligochromatographic (OC) dipstick. The amplicons are visualized by hybridization with a gold conjugated probe, while a control for the chromatographic migration is incorporated in the assay. The lower detection limit observed was 10fg of genomic DNA from each of the two species, while the dipstick was also specific for each of the species used in this study.  
**Keywords:** **DNA, Oligochromatographic, Dipstick, Schistosomes.**

**Record Number:** 316  
**Author(s):** Ojesina, A. I. Chaplin, B. Sankalé, J. L. Murphy, R. Idigbe, E. Adewole, I. Ekong, E. Idoko, J. Kanki, P. J.  
**Title:** **Interplay of Reverse Transcriptase Inhibitor Therapy and gag p6 Diversity in HIV type 1 subtype G and CRF02\_AG.**  
**Journal Title:** AIDS Res Hum Retroviruses.  
**Date of Publication:** 2008  
**Volume ID:** 24

**Issue ID:** 9  
**Page(s):** 1167-74  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The gag p6 region of HIV-1 has various nonsubstitutionary mutations, including insertions, duplications, deletions, and premature stop codons. Studies have linked gag p6 mutations to reduced susceptibility to antiretroviral therapy in HIV-1 subtype B. This study examined the relationship between antiretroviral therapy and gag p6 diversity in HIV-1 CRF02\_AG and subtype G. p6 data were generated for secondary analyses following Viroseq genotyping of pol gene sequences in plasma samples from HIV-1-infected Nigerians on reverse transcriptase inhibitor therapy, with virologic failure (repeat VL > 2000 copies/ml). p6 sequence chromatograms were available for 40 CRF02\_AG and 43 subtype G-infected individuals. Subjects who had not received their supply of antiretroviral drugs for at least 2 months prior to the plasma sampling were classified as nonadherent. p6 sequences from therapy-adherent individuals had more nonsubstitutionary mutations than sequences from drug-naive individuals ( $p = 0.0005$ ). The P5L/T mutation was inversely correlated with the presence of K27Q/N in p6, with each mutation being more prominent in subtype G and CRF02\_AG, respectively. The data also suggested that P5L/T may be a compensatory mutation for the loss of an essential phosphorylation site in p6. In addition, there was an inverse association between P5L/T mutations in p6 and thymidine analog mutations in reverse transcriptase ( $p = 0.0001$ ), and drug nonadherence was associated with an 8-fold lower risk of having a nonsubstitutionary mutation in p6 (95% CI = 1.27-52.57). Our data suggest that antiretroviral therapy influences gag p6 diversity, but further studies are needed to clarify these observations.

**Keywords:** gag p6, HIV, type 1, subtype G, CRF02\_AG.

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**Record Number:** 317  
**Author(s):** Adeneye, A. A. Adeleke, T. I. Adeneye, A. K.  
**Title:** Hypoglycemic and hypolipidemic effects of the aqueous fresh leaves extract of *Clerodendrum capitatum* in Wistar rats  
**Journal Title:** Journal of Ethnopharmacology  
**Date of Publication:** 2008  
**Volume ID:** 116  
**Issue ID:**  
**Page(s):** 7-10  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Diabetes mellitus, the most common endocrine disorder of carbohydrate metabolism, is treated in the African traditional phytotherapies with the cold water decoction of *Clerodendrum capitatum* (CC). In the current study, the hypoglycemic and hypolipidemic effects of fresh leaves aqueous extract of CC were studied in four groups of six adult Wistar rats per group and weighting 120–150 g, by administering graded oral doses (100, 400 and 800 mg/kg/day) of the extract for 14 days. On the 15th day, the fasted rats were anesthetized under inhaled halothane and blood samples obtained through cardiac puncture. Phytochemical analysis of CC extract was conducted using standard procedures while the preliminary acute oral toxicity study was also conducted using limit dose test of Up and Down Procedure at a limit dose of 5000 mg/kg body weight/oral route. Results of the study showed CC to cause significant ( $p < 0.05$ ,  $p < 0.001$ ) dose dependent hypoglycemic and hypolipidemic effects but had no effect on the pattern of weight gain in the treated rats. Although no lethal effect was recorded with CC oral administration for up to 5000 mg/kg body weight/oral route, but there was an associated transient somatomotor and behavioral toxicities. Phytochemical results revealed the presence of saponins, flavonoids, alkaloids, tannin, glycosides and reducing sugars in the extract. Thus, the folkloric use of *Clerodendrum capitatum* in the treatment of suspected type 2 diabetics has a positive correlation with scientific data generated in this

study.  
**Keywords:** Hypoglycemic, hypolipidemic, Clerodendrum capitatum, Wistar rats

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**Record Number:** 318  
**Author(s):** Oladele, D. Adeiga, A. Ricketts, F, Goodluck, H  
**Title:** Adolescent Girls Self Reported STI Symptoms and Mothers Perception of Their HIV Risk in an Urban Market in Lagos, Nigeria

**Journal Title:** Research Journal of Medical Sciences

**Date of Publication:** 2008

**Volume ID:** 2

**Issue ID:** 5

**Page(s):** 220-223

**Address/Availability:**

**Location/URL:**

**Abstract:** Young women in Sub-Saharan Africa are vulnerable to HIV infection because of their immature reproductive system, difficulty of negotiating condom use and the presence of untreated Sexually Transmitted Infection (STI) as well as the 'culture of silence' on open discussion of reproductive health issues with their parent. The study assesses women account of STI symptoms received from their adolescent girls and their perception of the risk of their daughter contacting HIV infection through heterosexual contact. Interviewer administered questionnaires were used to gather information from 230 women who have adolescent girls selected through stratified random sampling method. Average age of respondent is 42 years and 75.1% are in stable marital relationship while 63% have at least secondary school education. There was low report of STI symptoms from adolescent girls to their mothers (15% for Vaginal discharge, 23.5% for vaginal itching and 4.3% for genital ulcer) and elderly as well as widowed women were found to likely receive the complaint of STI symptoms. Also, 48% of respondents believe that heterosexual contact is the major route of HIV transmission, 90.7% also believe that healthy looking individual could transmit HIV and 53.6% agree that condom could protect their daughters from HIV infection. However, 89.3% believe that abstinence is the best method of protecting their girls from STI and HIV infection. It follows that parent-child communication about STI and condom use need to be reinforced while not undermining mother's traditional belief of abstinence till marriage.

**Keywords:** Adolescent Girls, STI Symptoms, Mothers, HIV, Urban Market in Lagos, Nigeria.

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**Record Number:** 319  
**Author(s):** Ezechi, O. C. Edet, A. Akinlade, H. Gab-Okafor, C.V. Herbertson, E.  
**Title:** Incidence and risk factors for caesarean wound infection in Lagos Nigeria.

**Journal Title:** BMC Res Notes

**Date of Publication:** 2009

**Volume ID:** 2

**Issue ID:** 1

**Page(s):** 186

**Address/Availability:**

**Location/URL:**

**Abstract:** BACKGROUND: Post caesarean wound infection is not only a leading cause of prolonged hospital stay but a major cause of the widespread aversion to caesarean delivery in developing countries. In order to control and prevent post caesarean wound infection in our environment there is the need to access the relative contribution of each aetiologic factor. Though some studies in our environment have identified factors associated with post caesarean wound infection, none was specifically designed to address these issues prospectively or assess the relative contribution of each of the risk factors. FINDINGS: Prospective multicentre study over a period of 56 months in Lagos Nigeria. All consecutive and consenting women

scheduled for caesarean section and meeting the inclusion criteria were enrolled into the study. Cases were all subjects with post caesarean wound infection. Those without wound infection served as controls. Data entry and analysis were performed using EPI-Info programme version 6 and SPSS for windows version 10.0. Eight hundred and seventeen women were enrolled into the study. Seventy six (9.3%) of these cases were complicated with wound infection. The proportion of subjects with body mass index greater than 25 was significantly higher among the subjects with wound infection (51.3%) than in the subjects without wound infection (33.9%)  $p = 0.011$ . There were also significantly higher proportions of subjects with prolonged rupture of membrane ( $p = 0.02$ ), prolonged operation time ( $p = 0.001$ ), anaemia ( $p = 0.031$ ) and multiple vaginal examinations during labour (0.021) among the women that had wound infection compared to the women that did not have wound infection. After adjustment for confounders only prolonged rupture of membrane (OR = 4.45), prolonged operation time (OR = 2.87) and body max index > 25 (2.34) retained their association with post caesarean wound infection. **CONCLUSION:** Effort should be geared towards the prevention of prolonged rupture of fetal membrane and the reduction of prolonged operation time by the use of potent antibiotics, early intervention and use of good surgical technique. In obese women improved surgical technique and use of non absorbable sutures may suffice.

**Keywords:** Caesarean wound, infection, Lagos, Nigeria.

**Record Number:** 320  
**Author(s):** Ezechi, O. C. Kalu, B. K. E. Njokanma, F.O.Nwokoro, C.A.Okeke, G.C.E  
**Title:** Uncomplicated Caesarean Section: is Delayed Return to Oral Feeding Necessary?  
**Journal Title:** Sudan Journal of Medical Sciences.  
**Date of Publication:** 2009  
**Volume ID:** 4  
**Issue ID:** 3  
**Page(s):** 263-7  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**OBJECTIVE:** To assess the feasibility and practicability of resuming oral feeding six hours after caesarean section. **METHODS:** Eighty five women undergoing primary caesarean section at proprietary hospital in Lagos Nigeria were randomised into two groups of commencement of oral feeding six hours after surgery and waiting for at least 24 hours for bowel sounds to return. **RESULTS:** In 27 (64.3%) of the 42 patients in the routine feeding group, normal bowel sounds were present about 24 hours after the operation as against 37 (86.0%) of 43 in the early feeding group ( $X^2 = 5.41; p = 0.02$ , OR = 3.43; 1.06 – 11.5). While 93.0% (40) of the patients in early feeding group had bowel motion within 48 hours, only 69.0% (29) of the patients in the routine feeding group had bowel motion within same period ( $X^2 = 6.50$ ;  $p = 0.01$ ). The percentage of mothers that were ambulant within 48 hours were more in the early feeding group (83.7%) compared to the routine feeding group (61.9%) ( $X^2 = 5.12$ ;  $p = 0.02$ ). The overall gastrointestinal morbidity among the early feeding group was higher (18.6%) compared to routine feeding group (11.9%) but the difference was not statistically significant ( $X^2 = 0.13$ ;  $p = 0.72$ , OR = 1.54; CI = 0.38 – 6.33). **CONCLUSION:** Early oral feeding is not only feasible but practicable.

**Keywords:** Caesarean Section, Oral Feeding

**Record Number:** 321  
**Author(s):** Adeneye, A.K. Oke, E.A. Adeneye, A.A.  
**Title:** Socio-economic Factors Associated With the Practice of Female Genital Mutilation (FGM) in Oyo State, Nigeria: Implications for the Practice Eradication.  
**Journal Title:** Journal on Female Genital Mutilation and Other Harmful Traditional Practices  
**Date of Publication:** 2009

**Volume ID:** 2  
**Issue ID:** 1  
**Page(s):** 2-13  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Female genital mutilation (FGM) is still widespread, particularly in Nigeria, despite extensive efforts to discourage and eradicate it. This paper discusses the socio-economic factors associated with FGM and how these work as limitations of a successful eradication of the practice. Data were collected through household survey using semi-structured questionnaires, indepth interviews and focus group discussions in Bere community in Oyo State, South-Western Nigeria. Results showed that FGM is a common cultural practice in the study community. 93% of women interviewed were circumcised. FGDs showed that men played significant role in the decision making of performing FGM. 96.0% reported men who acquired the skills as a family trade as the main circumcisers, while 4.0% reported that trained and licensed health workers. Circumcisers charge an average of ₦300.00 (US\$2.16) for FGM. 100% of the women circumcised reported that FGM did not affect their health. 70.7% respondents knew about the campaign that FGM should be discontinued, and 76% wanted it to continue. Respondents' level of education and spouses' level of education significantly determined the likelihood to have circumcised their daughters ( $p < 0.05$ ). Men were more likely to support the continuation of FGM than women. Women with FGM were more likely to support its practice than those without FGM ( $p < 0.05$ ). Results showed that the persistence of FGM reflects the socio-cultural and economic importance of the practice. The findings suggest the need for economic interventions through alternative employment targeting the circumcisers, extensive cooperative relationships with traditional, political and religious leaders in the community in order to use them as advocates of change, and health education on the consequences of FGM targeting the general population.

**Keywords:** Female, Genital Mutilation, Oyo.

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**Record Number:** 322  
**Author(s):** Betson, M. Jawara, M. Awolola, T. S.  
**Title:** Status of Insecticide Susceptibility in *Anopheles gambiae* s.l. from Malaria Surveillance Sites in The Gambia.  
**Journal Title:** Malar J.  
**Date of Publication:** 2009  
**Volume ID:** 8  
**Issue ID:** 187  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**BACKGROUND:** Vector control is an effective way of reducing malaria transmission. The main vector control methods include the use of insecticide-treated bed nets and indoor residual spraying (IRS). Both interventions rely on the continuing susceptibility of *Anopheles* to a limited number of insecticides. However, insecticide resistance, in particular pyrethroid-DDT cross-resistance, is a challenge facing malaria vector control in Africa because pyrethroids represent the only class of insecticides approved for treating bed nets and DDT is commonly used for IRS. Here baseline data are presented on the insecticide susceptibility levels of malaria vectors prior to The Gambian indoor residual spraying intervention programme. **METHODS:** *Anopheles* larvae were collected from six malaria surveillance sites (Brikama, Essau, Farafenni, Mansakonko, Kuntaur and Basse) established by the National Malaria Control Programme and the UK Medical Research Council Laboratories in The Gambia. The mosquitoes were reared to adulthood and identified using morphological keys and a species-specific polymerase chain reaction assay. Two- to three-day old adult female mosquitoes were tested for susceptibility to permethrin, deltamethrin and DDT using

standard WHO protocols, insecticide susceptibility test kits and treated papers. **RESULTS:** All Anopheles mosquitoes tested belonged to the Anopheles gambiae complex. Anopheles arabiensis was predominant (54.1%), followed by A. gambiae s.s. (26.1%) and Anopheles melas (19.8%). Anopheles gambiae s.s. and An. arabiensis were found at all six sites. Anopheles melas was recorded only at Brikama. Mosquitoes from two of the six sites (Brikama and Basse) were fully susceptible to all three insecticides tested. However, DDT resistance was found in An. gambiae from Essau where the 24 hours post-exposure mortality was <80% but 88% for permethrin and 92% for deltamethrin. **CONCLUSION:** This current survey of insecticide resistance in Anopheles provides baseline information for monitoring resistance in The Gambia and highlights the need for routine resistance surveillance as an integral part of the proposed nation wide IRS intervention using DDT.

**Keywords:** Insecticide, Anopheles gambiae s.l., Malaria, Gambia.

**Record Number:** 323  
**Author(s):** Oyedeji, K. S. Smith S. I. Coker A. O. Arigbabu A. O.  
**Title:** Antibiotic Susceptibility Patterns in Helicobacter pylori Strains from Patients with Upper Gastrointestinal Pathology in Western Nigeria.  
**Journal Title:** Br J Biomed Sci.  
**Date of Publication:** 2009  
**Volume ID:** 66  
**Issue ID:** 1  
**Page(s):** 10-3  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

A total of 186 Helicobacter pylori isolates and 532 gastric biopsies recovered from 532 patients with varying degrees of gastroduodenal pathology are subjected to in vitro antibiotic susceptibility testing using the disc-diffusion method, Etest (MIC breakpoints) and molecular testing using the polymerase chain reaction (PCR). In the isolates studied, antibiotic resistance was as follows: piperacillin (72%), amoxicillin (66%), erythromycin (78%), tetracycline (100%) and metronidazole (95%). All isolates were sensitive to ofloxacin, ciprofloxacin and norfloxacin. None of the 245 amplicons (positive for H. pylori) from the biopsies were digested with the Bbs1 and BsaI restriction enzyme used in the polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) technique, showing sensitivity to clarithromycin. However, a 238 bp fragment from H. pylori chromosomal DNA (corresponding to the quinolone resistance determining region [QRDR]) of the gyrA gene was amplified successfully. Twelve (4.9%) of the 245 strains studied had the described mutation at position 91, from asparagine (Asn) to glycine (Gly). The study showed that all the H. pylori strains were sensitive to clarithromycin and ciprofloxacin. It also highlighted PCR as a potential tool for faster diagnosis and determination of antibiotic susceptibility (within 24 h) of H. pylori from biopsies and/or isolates recovered from peptic ulcer and gastritis patients.

**Keywords:** Antibiotic, Helicobacter pylori, Gastrointestinal, Pathology, Nigeria.

**Record Number:** 324  
**Author(s):** Tornero, C. Mafe, M.C. Castejón, P. Alonso, C.  
**Title:** Strategies for the Detection and Treatment of Sexually Transmitted Disease in Persons who Engage in Prostitution.  
**Journal Title:** Enferm Infecc Microbiol Clin.  
**Date of Publication:** 2009  
**Volume ID:** 27  
**Issue ID:** 10  
**Page(s):** 606-7  
**Address/Availability:**

**Location/URL:****Abstract:****Keywords:** Sexually transmitted, Disease, Prostitution.**Record Number:** 325**Author(s):** Afolabi, B. M. Sofola, O. T. Fatunmbi, B. S. Komakech, W. Okoh, F. Saliu, O. Otsemobor, P. Oresanya, O. B. Amajoh, C. N. Fasiku, D. Jalingo, I.**Title:** Household possession, Use and Non-use of Treated or Untreated Mosquito Nets in Two Ecologically Diverse Regions of Nigeria--Niger Delta and Sahel Savannah.**Journal Title:** Malar J.**Date of Publication:** 2009**Volume ID:****Issue ID:****Page(s):****Address/Availability:****Location/URL:****Abstract:**

**BACKGROUND:** Current use of treated mosquito nets for the prevention of malaria falls short of what is expected in sub-Saharan Africa (SSA), though research within the continent has indicated that the use of these commodities can reduce malaria morbidity by 50% and malaria mortality by 20%. Governments in sub-Sahara Africa are investing substantially in scaling-up treated mosquito net coverage for impact. However, certain significant factors still prevent the use of the treated mosquito nets, even among those who possess them. This survey examines household ownership as well as use and non-use of treated mosquito nets in Sahel Savannah and Niger Delta regions of Nigeria. **METHODOLOGY:** This survey employed cross-sectional survey to collect data from households on coverage and use of mosquito nets, whether treated or not. Fever episodes in previous two weeks among children under the age of five were also recorded. The study took place in August 1 - 14 2007, just five months after the March distribution of treated mosquito nets, coinciding with the second raining period of the year and a time of high malaria transmission during the wet season. EPI INFO version 2003 was used in data analysis. **RESULTS:** The survey covered 439 households with 2,521 persons including 739 under-fives, 585 women in reproductive age and 78 pregnant women in Niger Delta Region and Sahel Savannah Region. Of the 439 HHs, 232 had any mosquito nets. Significantly higher proportion of households in the Niger Delta Region had any treated or untreated mosquito nets than those in the Sahel Savannah Region. In the Niger Delta Region, the proportion of under-fives that had slept under treated nets the night before the survey exceeded those that slept under treated nets in the Sahel Savannah Region. Children under the age of five years in the Niger Delta Region were four times more likely to sleep under treated nets than those in the Sahel Savannah Region. **CONCLUSION:** This study found that despite the fact that treated nets were distributed widely across Nigeria, the use of this commodity was still very low in the Sahel Savannah region. Future campaigns should include more purposeful social and health education on the importance and advantages of the use of treated nets to save lives in the Sahel Savannah region of Nigeria.

**Keywords:****Malaria, Sahel Savannah.****Record Number:** 326**Author(s):** Awolola, T. S. Oduola, O. A. Strode, C. Koekemoer, L. L. Brooke, B. Ranson, H.**Title:** Evidence of multiple pyrethroid resistance mechanisms in the malaria vector *Anopheles gambiae sensu stricto* from Nigeria.**Journal Title:** Trans R Soc Trop Med Hyg.**Date of Publication:** 2009**Volume ID:** 103**Issue ID:** 11**Page(s):****Address/Availability:**

**Location/URL:****Abstract:**

Pyrethroid insecticide resistance in *Anopheles gambiae sensu stricto* is a major concern to malaria vector control programmes. Resistance is mainly due to target-site insensitivity arising from a single point mutation, often referred to as knockdown resistance (kdr). Metabolic-based resistance mechanisms have also been implicated in pyrethroid resistance in East Africa and are currently being investigated in West Africa. Here we report the co-occurrence of both resistance mechanisms in a population of *An. gambiae s.s.* from Nigeria. Bioassay, synergist and biochemical analysis carried out on resistant and susceptible strains of *A. gambiae s.s.* from the same geographical area revealed >50% of the West African kdr mutation in the resistant mosquitoes but <3% in the susceptible mosquitoes. Resistant mosquitoes synergized using piperonyl butoxide before permethrin exposure showed a significant increase in mortality compared with the non-synergized. Biochemical assays showed an increased level of monooxygenase but not glutathione-S-transferase or esterase activities in the resistant mosquitoes. Microarray analysis using the *An. gambiae* detox-chip for expression of detoxifying genes showed five over-expressed genes in the resistant strain when compared with the susceptible one. Two of these, CPLC8 and CPLC#, are cuticular genes not implicated in pyrethroid metabolism in *A. gambiae s.s.*, and could constitute a novel set of candidate genes that warrant further investigation.

**Keywords:**

**Pyrethroid, malaria, *Anopheles gambiae*, Nigeria.**

**Record Number:** 327

**Author(s):** Ude, E. A. G., **Akinwale, O. P.** Ukaga, C. N. **Ajayi, M. B. Akande, D. O. Adeleke, M. A., Gyang, P. V.** and Dike, A. A.

**Title:** **Prevalence of Urinary Schistosomiasis in Umuowele, Agulu Community, Anambra State, Nigeria.**

**Journal Title:** International Journal of Health Research

**Date of Publication:** 2009

**Volume ID:** 2

**Issue ID:** 4

**Page(s):** 347 - 353

**Address/Availability:**

**Location/URL:**

**Abstract:**

**Keywords:** **Urinary, Schistosomiasis.**

**Record Number:** 328

**Author(s):** **Akinwale, O.P. Adeneye, A. Omotola, D. Manafa, O. Idowu, T. Adewale, B. Sulyman, M. Akande, D.**

**Title:** **Parental Perception and Practices on Sexual Health Communication with their Children in Lagos, Nigeria.**

**Journal Title:** Journal of Family and Reproductive Health

**Date of Publication:** 2009

**Volume ID:** 3

**Issue ID:** 4

**Page(s):** 123 – 128

**Address/Availability:**

**Location/URL:**

**Abstract:**

Objective: This study aimed at contributing to the promotion of positive communication between parents and children in order to help the children establish individual values and make sexually healthy decisions. Materials and method: Ninety six out of 300 in-school adolescents previously interviewed were selected for follow-up interview with their respective parents/guardians using a simple random sampling technique. Semi-structured questionnaires were administered on the parents/guardians after obtaining their informed consents. Results: Of the 93 respondents that freely discuss with their children, the

frequencies were: regularly (68.8%); occasionally (28.0%); and (3.2%) could not recall. More of those that discussed about sexuality issues were younger with a mean age of 45.5 years compared to 48.3 years for those who did not ( $\chi^2 = 40.91$ ,  $df = 50$ ,  $p < 0.05$ ). Similarly, younger respondents perceived sexuality education more important than older respondents ( $\chi^2 = 61.81$ ,  $df = 75$ ,  $p < 0.05$ ). Very few discussed HIV/AIDS with their male children while none had such discussion with their female children. About one-quarter of the parents did not believe in children knowing about contraceptives, stating that such exposure is unnecessary because it will initiate the children into early sexual activities. This communication gap was more evident when about one-third of the respondents insisted they will not counsel their children about contraceptives. Conclusions: Parents should be assisted in developing specific knowledge and skills to support their adolescents' sexual decision making. Intervention programs should target particularly the older ones, who are usually not too comfortable in discussing issues relating to sexuality with their children.

**Keywords:** Parental, Sex, Health Communication, Children, Nigeria.

**Record Number:** 329  
**Author(s):** Akinwale, O. P. Ajayi, M. B. Akande, D. O. Adeleke, M. A. Gyang, P. V. Adeneye. Dike, A. A.  
**Title:** Prevalence of Schistosoma Haematobium Infection in a Neglected Community, South western Nigeria.  
**Journal Title:** International Journal of Health Research  
**Date of Publication:** 2009  
**Volume ID:** 149-155  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**Purpose:** Schistosomiasis ranks second to malaria among parasitic diseases of socio-economic and public health importance. In Nigeria, urinary schistosomiasis caused by Schistosoma haematobium is endemic. This study aimed at producing an accurate data on the prevalence of urinary schistosomiasis in Apojula, a neglected community located around Oyan Dam, southwest Nigeria, using parasitological and molecular techniques. **Methods:** Parasitological examinations were carried out on urine samples from 63 participants whose ages ranged between 7 and 63 years. Matched blood and urine samples were also screened for S. haematobium infection by polymerase chain reaction (PCR) amplification of the schistosome Dra1 repeat. **Results:** Of the 63 participants, 33 (52.4%) were positive for haematuria while 6 (9.5%) had S. haematobium ova in their urine. PCR amplification of S. haematobium Dra1 repeat from their urine and blood samples showed that 59 (93.65%) and 62 (98.4%) were infected respectively. **Conclusion:** There was a high prevalence of S. haematobium infection as detected by PCR amplification of schistosome Dra1 repeat from the urine and blood samples of the study participants. In addition, the PCR was able to detect schistosome infection in cases otherwise shown to be negative by parasitological examinations thereby making them also to receive chemotherapy.

**Keywords:** Schistosomiasis.

**Record Number:** 330  
**Author(s):** Oyibo, W. A. Agomo, C. Oladipo, O. Oladosu, Teslim, O. O. Adekunle, O. Sanyaolu, Ajuluchuckwu, J. Adetayo, F. Fagbenro-Beyioku, A.F. Otigbua, I.  
**Title:** Human African Trypanosomes: Challenges Posed to the Human Immune System  
**Journal Title:** Int. J. Biol. Chem. Sci.  
**Date of Publication:** 2009  
**Volume ID:** 3  
**Issue ID:** 1

**Page(s):** 156-167

**Address/Availability:**

**Location/URL:**

**Abstract:** Human infection by either *Trypanosoma brucei gambiense* (Tbg) or *Trypanosoma brucei rhodesiense* (Tbr) and the establishment of disease is made possible by the intermittent switching of their variant surface glycoprotein (VSG) and expression of serum resistance associated (SRA) protein (by Tbr) which nullifies the lytic action of the normal human serum. The ability to switch expression from one VSG to the other is recognized to be the major mechanism that permits the parasite to evade the otherwise efficient host antibody, hence preventing parasite elimination and allowing the establishment of a chronic infection. These changes were reported to: disable the host's capacity to mount a protective anti-parasite antibody response and prevent the development of effective B-cell memory against encountered variant antigenic parasite types (VATs). Both B cell-mediated antibody response and the Th1 cell responses leading to the production of interferon-gamma (IFN-) are required for maximum host resistance to trypanosomes, with IFN- acting to induce macrophage trypanolytic and trypanostatic activities. High levels of both tumor necrosis factor alpha (TNF) and interleukin 10 (IL-10) have been associated with trypanosomal infection. Trypanosomal genetics (including the parasite's intrinsic characteristics), human immune response polymorphisms and geographical locations are important elements that describe the severity or mildness of HAT. As the parasite devices ways to evade the human immune system, and in the absence of a suitable vaccine, surveillance, prompt diagnosis and treatment with available drugs and vector control efforts will go along way in reducing the incidence of HAT.

**Keywords:** African trypanosomes, Variant surface glycoprotein, Serum resistance associated (SRA) protein, Trypanosomal genetic \_\_polymorphisms, Immune response polymorphisms.

**Record Number:** 331

**Author(s):** Smith, S. I. Opere, B. Goodluck, H. T. Akindolire, O. T. Folaranmi, A. Odekeye, O. M. Omonigbehin, E. A.

**Title:** Antibiotic Susceptibility Pattern of *Staphylococcus* Species Isolated from Telephone Receivers.

**Journal Title:** Singapore Med J.

**Date of Publication:** 2009

**Volume ID:** 50

**Issue ID:** 2

**Page(s):** 208-11

**Address/Availability:**

**Location/URL:**

**Abstract:** 1,591 isolates were obtained from roadside telephone booths in 16 different locations in the Lagos metropolis. They were all characterised using the Cowan and Steel's manual, after which the antimicrobial susceptibility pattern of the most frequently-occurring isolate was determined.

**Keywords:** Antibiotic, *Staphylococcus*, Telephone, Receivers.

**Record Number:** 332

**Author(s):** Oyibo, W O. Ajuluchukwu, J. Adu, O. O. Okun, E. I. Adeniji, A. Chukwu, j. Otaigbe, I Fagbenro-Beyioku, A. F. Bamiro, S. B. Agomo, C. O. Oladosu, O. O Okangba, C. C. Ojuromi, O. T. Osibogun, A. Anorlu, R. Mezilliara, C Ogunleye, P.

**Title:** Evaluation of a Merozoite Surface Protein Antibody Detection Malaria Pf/Pv Device for Rapid Diagnosis of Malaria in Nigeria

**Journal Title:** International Journal of Malaria and Tropical Diseases (IJMTD)

**Date of Publication:** 2009

**Volume ID:** 5

**Issue ID:**  
**Page(s):** 94-98  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The malaria rapid diagnostic test (RDT), SD Bioline Malaria Pf/Pv, antibody-capture device currently available in the Nigerian market has not been evaluated for its performance in the diagnosis of malaria. Other available malaria RDTs target the antigen of the malaria parasite, namely: the Histidine-rich protein-2 and the Plasmodium lactate dehydrogenase (pLDH)/aldolase. In this study the antibody detection test was evaluated for its sensitivity, specificity and predictive values when compared with the standard malaria microscopy. Blood samples of 140 febrile patients suspected to have malaria were tested with the SD Bioline Malaria Pf/Pv RDT antibody detection device and compared with Giemsa stained blood films using microscopy as the comparative standard. The blood films examined by microscopy showed that 53 (37.9%) of the patients were positive for Plasmodium falciparum which included a case of mixed infection with P. malariae and P. ovale, while 78(55.7%) were positive with the RDT. The sensitivity, specificity, positive- and negative predictive values (PPV and NPV) of the SD Bioline Malaria Pf/Pv, antibody-capture malaria RDT for P.falciparum was 66%, 53%, 44% and 29% respectively. The test showed a high rate of false positive/negative as it detected circulating antibodies. The SD Bioline antibody detection device may not be a useful RDT in Nigeria because of its poor performance since a number of non-malaria patients with fever could have antibodies to the parasite due to previous exposure. Knowledge of the mechanism of malaria RDTs, policy and regulatory guidelines will guide the sales and use of RDTs in malaria endemic countries.

**Keywords:** Merozoite, Protein, Antibody, Detection, Malaria, Diagnosis, Nigeria.

**Record Number:** 333  
**Author(s):** Raheem, T.Y. Adedeji, S. O. Oluwadun, A. Daini, O. A. Iwalokun, B. A. Ahmed, O. A. Akinsinde, K. A. Smith, S. I.  
**Title:** Plasmid Profile of Escherichia coli Isolated from Stool samples of Apparently Health School Children in Lagos State.  
**Journal Title:** International Journal of Malaria and Tropical Diseases  
**Date of Publication:** 2009  
**Volume ID:** 197-201  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Plasmid, Escherichia coli, Stool, Health, School, Lagos State, Nigeria.

**Record Number:** 334  
**Author(s):** Agomo, C. O. Oyibo, W. A. Anorlu, R. I. Agomo, P. U.  
**Title:** Prevalence of Malaria in Pregnant Women in Lagos, South-West Nigeria.  
**Journal Title:** Korean J Parasitol.  
**Date of Publication:** 2009  
**Volume ID:** 47  
**Issue ID:** 2  
**Page(s):** 179-83  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Prevalence rates reported for malaria in pregnancy in Nigeria vary considerably. The accuracy of results of malaria diagnosis is dependent on training, experience, and motivation of the microscopist as well as the laboratory facility available. Results of training programmes on malaria microscopy have shown low levels of sensitivity and specificity of those involved in malaria diagnosis routinely and for research. This study was done to ascertain the true

prevalence of malaria in pregnancy in Lagos, South-West Nigeria. A total of 1,084 pregnant women were recruited into this study. Blood smears stained with Giemsa were used for malaria diagnosis by light microscopy. Malaria infection during pregnancy presents mostly as asymptomatic infection. The prevalence of malaria in this population was 7.7% (95% confidence interval; 6.2-9.4%). Factors identified to increase the risk of malaria infection include young maternal age (< 20 years), and gravidity (primigravida). In conclusion, this study exposes the over-diagnosis of malaria in pregnancy and the need for training and retraining of laboratory staffs as well as establishing the malaria diagnosis quality assurance programme to ensure the accuracy of malaria microscopy results at all levels.

**Keywords:** Nigeria, Diagnosis, Malaria, Pregnancy, Prevalence Rate.

**Record Number:** 335  
**Author(s):** Mutahir, J. T. Aisien, A. O. Ujah, I. A.  
**Title:** Experience with Norplant at a Nigerian Teaching Hospital.  
**Journal Title:** East Afr Med J.  
**Date of Publication:** 2010  
**Volume ID:** 87  
**Issue ID:** 11  
**Page(s):** 456-60  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **OBJECTIVES:** To determine the acceptance of Norplant implants while it was in use and share our experience with other Norplant providers. **DESIGN:** Retrospective descriptive study. **SETTING:** The family planning clinic of the Jos University Teaching Hospital, Jos, Nigeria. **RESULTS:** During the 21-year period, January 1985 to December 2005, a total of eighteen thousand, two hundred and ninety one (18,291) new clients accepted various modern contraceptive methods in the family planning clinic of Jos University Teaching Hospital, Nigeria. Norplant was accepted by 1,333 clients (4.9%) as against the intrauterine devices (IUDs) 25.4%, and Oral Contraceptive Pills (OCP) 22.9%. Female sterilisation was a contraceptive method of choice in 21.2%, the injectables in 13.9%, and the male condom in 9.3%. Failure rate was 0.37% and continuity rate was high among users. The Norplant contraceptive implant was accepted by women of mean age of 29.6 years and women of all parity. The acceptance pattern demonstrated a multi-nodal pattern from the time of introduction in 1985 to December 2005 when supply came to an abrupt stop. The greatest barriers to Norplant use were non-availability and high cost of the commodity. **CONCLUSION:** Norplantimplants provided contraceptive protection with high reliability, safety, independence from user compliance, rapid return of pre-existing fertility after removal, good tolerability, and relatively simple and quick insertion and removal. The capsules will definitely be used as a reference for similar contraceptive products in the contraceptive market.

**Keywords:** Norplant, Nigeria, Teaching hospital.

**Record Number:** 336  
**Author(s):** Smith, S. I. Emmanuel, A. Omonigbehin, Helen, A. Fatimah, G. Abdulkareem, B. Onyekwere, C. A. Agomo, C. Ndububa, D. A. Fowora, M. A. Otegbayo, J. A. Contreras, M. Haas, R. Rieder, G  
**Title:** Diagnostic Methods for the Detection of Helicobacter pylori in Nigeria  
**Journal Title:** Tropical Gastroenterology  
**Date of Publication:** 2010  
**Volume ID:** 31  
**Issue ID:** 2  
**Page(s):** 113-115  
**Address/Availability:**

**Location/URL:****Abstract:****Keywords:** Diagnostic, *Helicobacter pylori*, Nigeria**Record Number:** 337**Author(s):** Tornero, C. Ventura A. Mafe, M.**Title:** Aspirin is Indicated for Primary Prevention of Cardiovascular Events in HIV-Infected Patients.**Journal Title:** J Acquir Immune Defic Syndr.**Date of Publication:** 2010**Volume ID:** 54**Issue ID:** 5**Page(s):****Address/Availability:****Location/URL:****Abstract:****Keywords:** Aspirin, Cardiovascular, HIV.**Record Number:** 338**Author(s):** Tornero, C. Ventura A. Mafe, M.**Title:** Outpatient Blood Pressure Monitoring of the HIV Patient.**Journal Title:** Enferm Infecc Microbiol Clin**Date of Publication:** 2010**Volume ID:** 28**Issue ID:** 9**Page(s):** 664-5**Address/Availability:****Location/URL:****Abstract:****Keywords:** Blood pressure, HIV.**Record Number:** 339**Author(s):** Niemogha, M. T. Adewole, T. A. Ikea, J. A. Olukoya, D. K. Atoyebi, O. A. Iwalokun, B. A. Egbuna, K. N. Olukosi, Y. A.**Title:** Trends in Co-trimoxazole Resistance among clinical isolates of *Escherichia coli* from Nigeria: 1989 -2009.**Journal Title:** International Journal of Malaria and Tropical Diseases**Date of Publication:** 2010**Volume ID:** 6**Issue ID:****Page(s):** 181-188**Address/Availability:****Location/URL:****Abstract:**

This study surveyed for co-trimoxazole (Trimethoprim/sulphamethoxazole) resistance among clinical isolates of *Escherichia coli* from six locations in northern and southern Nigeria for a 10-year period: 1989-1999. This was done in order to understand trends in co-trimoxazole resistance in Nigeria and to inform appropriate subsequent treatment empirical practices involving this drug against *E. coli* infections such as urinary tract and gastrointestinal tract infections in the country. In years between 1989 to 1999, a total of 872 strains of *Escherichia coli* associated with infections were isolated from six locations in northern and southern Nigeria. From these 407 strains were resistant to co-trimoxazole. Strains of *E. coli* remained increasingly resistant to the drug with a 40% resistance in 1989 to 76% resistance in 1999. More than 50% of the isolates were transferred by conjugation with significant high transfers. Strains also co-transferred to other antibiotics. The result of this study showed a gradual increase in resistance of *E. coli* to Trimethoprim-sulfamethoxazole over time with plasmid

mediating this resistance and transfer to other members of Enterobacteriaceae. This study recommends stoppage in the empirical use of co-trimoxazole in the management of E.coli-associated diseases in Nigeria.

**Keywords:** Co-trimoxazole Resistance, Clinical isolates, Escherichia coli, Nigeria.

**Record Number:** 340  
**Author(s):** Akinwale, O.Ajayi, M. Akande, D. Gyang, P. Adeleke, M. Adeneye, A. Adebayo, M. Dike, A.  
**Title:** Urinary Schistosomiasis around Oyan Reservoir, Nigeria: Twenty Years after the First Outbreak.  
**Journal Title:** Iranian Journal of Public Health.  
**Date of Publication:** 2010  
**Volume ID:** 39  
**Issue ID:** 1  
**Page(s):** 92-95  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**BACKGROUND:** Oyan reservoir, South-West Nigeria was constructed in 1984 to generate electricity but has altered the existing physical, biological and socio-economic environment of the people. This study, carried out between October 2006 and March 2008, aimed at investigating the current status of Schistosoma haematobium infection around the reservoir. **METHODS:** Urine samples from 536 participants in five communities were examined for haematuria using reagent strips and S. haematobium ova was detected using sedimentation by gravity method. The participants were drawn from Abule Tuntun (n= 115), Ibaro (n= 156), Imala Odo (n= 88), Imala (n= 103) and Apojula (n= 74) communities. **RESULTS:** Prevalence rates by haematuria were (Abule Tuntun- 33.04%; Ibaro- 73.07%; Imala odo- 60.22%; Imala- 7.77%; Apojula - 39.19%) and by presence of parasite ova were (Abule Tuntun- 39.13%; Ibaro- 83.97%; Imala Odo- 62.5%; Imala- 20.39%; Apojula- 54.05%). **CONCLUSION:** S. haematobium transmission has been sustained in the reservoir since the outbreak was first reported in 1988. Mass treatment with praziquantel was conducted 8 years ago (2001) in two of the communities. However, the infection has persisted due to lack of pipe borne water and safe waste disposal system.

**Keywords:** Urinary, Schistosomiasis, Oyan Reservoir, Nigeria.

**Record Number:** 341  
**Author(s):** Adenibuyan, O. A. Adegbesan, M. A. Salu, O. B. Omilabu, S. A.  
**Title:** Efficacy of HIV PCR Techniques to Diagnose HIV in Infants Born to HIV Infected Mothers at LASUTH.  
**Journal Title:** Nig Q J Hosp Med.  
**Date of Publication:** 2010  
**Volume ID:** 20  
**Issue ID:** 3  
**Page(s):** 129-323  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **METHOD:** Ninety (90) whole blood samples were obtained from 45 HIV positive mothers and 45 infants born to these mothers from the Department of Obstetrics and Gynaecology, Lagos State University Teaching Hospital (LASUTH), Ikeja, Lagos. The presence of HIV was determined using the Amplicor HIV-1 DNA test and an in-house RNA PCR method.  
**Keywords:** Efficacy, HIV PCR, HIV, infected mothers, LASUTH.

**Record Number:** 342  
**Author(s):** Olopade, J. O. Ozegbe, P. C. Nssien, M. A. Igado, O. O. Akpan, M. O. Olukole, S. G. Aina,

**Author(s):** O. O. Onwuka, S. K. Oke, B. O.  
**Title:** A Rare Case of Left Additional Renal Artery in a Nigerian Goat.  
**Journal Title:** Ital J Anat Embryol.  
**Date of Publication:** 2010  
**Volume ID:** 115  
**Issue ID:** 3  
**Page(s):** 241-4  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The report of the occurrence of additional renal arteries in domestic animals is rare in the literature. We report a case of an additional renal artery in the left kidney found in a Red Sokoto goat cadaver. The additional renal artery originated from the abdominal aorta 3.80 cm cranial to the origin of the main renal artery. The additional renal artery was relatively long, being 6.30 cm from its origin to the cranial pole region of the kidney where it supplied the kidney. This to the best of our knowledge is the first report in the literature indexed in the Medline of an additional renal artery in a goat.  
**Keywords:** Renal artery, Goat.

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**Record Number:** 343  
**Author(s):** Olukole, S. G. Oyeyemi, M. O. Oke, B. O.  
**Title:** Gonadal and Extragonadal Sperm Reserves of the Domesticated Adult African Greater Cane Rat (*Thryonomys swinderianus*).  
**Journal Title:** Reprod Biol.  
**Date of Publication:** 2010  
**Volume ID:** 10  
**Issue ID:** 2  
**Page(s):** 155-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Gonadal and extragonadal sperm reserves were determined in twenty sexually matured domesticated African greater cane rats. Mean (+/-SD) sperm numbers in testes and epididymides were 150.40+/-12.93x10(9) and 259.33+/-13.68x10(9), respectively. The mean epididymal distribution of spermatozoa was found as follows: 67.53+/-12.43x10(9) in caput, 89.10+/-13.20x10(9) in corpus, and 102.70 +/-13.71x10(9) in cauda. This study provides baseline data essential for effective selection of male cane rats for breeding purpose  
**Keywords:** Gonadal, Extragonadal, Sperm, Greater Cane Rat (*Thryonomys swinderianus*).

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**Record Number:** 344  
**Author(s):** Adeleke, M.A. Mafiana, C.F. Sam-Wobo, S. O. Olatunde, G.O. Akinwale, O.P.  
**Title:** Morphotaxonomic Studies on *Simulium damnosum* Theobald complex (Diptera: Simuliidae) along Oshun River, Southwestern Nigeria.  
**Journal Title:** Acta Entomologica Sinica  
**Date of Publication:** 2010  
**Volume ID:** 53  
**Issue ID:** 11  
**Page(s):** 1319 - 1324  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Morphotaxonomic, *Simulium damnosum*, Oshun River, Nigeria.

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**Record Number:** 345

**Author(s):** Adeleke, M. A. Mafiana, C. F. Sam-Wobo, S. O. Akinwale, O. P. Olatunde, G. O. Sanfo, S. M. Adjami, A. Toe, V.  
**Title:** **Molecular Characterization of the Simulium Damnosum complex (Diptera: Simuliidae) found along the Osun River System, in South–Western Nigeria.**  
**Journal Title:** Annals of Tropical Medicine and Parasitology  
**Date of Publication:** 2010  
**Volume ID:** 104  
**Issue ID:** 8  
**Page(s):** 679 - 683  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Molecular characterization, Simulium Damnosu, Osun River, Nigeria.**

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**Record Number:** 346  
**Author(s):** Raheem, T. Y Adedeji, S. O. Oluwadun, A. Daini, O. A. Iwalokun, B. A. Ahmed, O. A. Mafe A. G.  
**Title:** **Intestinal helminthiasis and concurrent bacteria agent among healthy school children in a local government in Lagos State.**  
**Journal Title:** International Journal of Malaria and Tropical Diseases.  
**Date of Publication:** 2010  
**Volume ID:** 5  
**Issue ID:** 104-108  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Intestinal, Helminthiasis, Bacteria, Healthy, School, Children, Local Government, Lagos State.**

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**Record Number:** 347  
**Author(s):** Ezechi, O. C. Jogo, A. Gab-Okafor, C. Onwujekwe, D. I. Ezeobi, P. M. Gbajabiamila, T. Audu R. A. Musa, A. Z. Salu, O. B. Meschack, E. Herbertson, E. Odunukwe, N. Idigbe, O. E.  
**Title:** **Effect of HIV-1 Infection and Increasing Immunosuppression on Menstrual Function.**  
**Journal Title:** J Obstet Gynaecol Res.  
**Date of Publication:** 2010  
**Volume ID:** 36  
**Issue ID:** 5  
**Page(s):** 1053-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **AIM:** The aim of this study was to determine the prevalence, pattern and determinants of menstrual abnormalities in HIV-positive Nigerian women.**METHODS:** A cross-sectional study was carried out involving 3473 (2549 HIV-seropositive and 924 seronegative) consecutive and consenting women seen at the HIV treatment centers at the Nigerian Institute of Medical Research, Lagos and the Federal Medical Centre, Markurdi. **RESULTS:** The sociodemographic characteristics of the two groups were comparable, except for body mass index (BMI): the HIV-negative women ( $28.1 \pm 8.1$ ) had statistically significantly ( $P < 0.005$ ) higher BMI compared to the HIV-positive women ( $21.9 \pm 7.5$ ). Menstrual abnormalities were significantly more common in women living with HIV/AIDS (29.1%) compared to the HIV-negative (18.9%) women ( $P < 0.001$ ). The proportions of women in the two groups with intermenstrual bleeding, menorrhagia, hypermenorrhagia, and postcoital bleeding were similar ( $P > 0.005$ ), however amenorrhagia, oligomenorrhagia, irregular

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periods and secondary dysmenorrhea were more common in the HIV-positive women ( $P < 0.02$ ). Primary dysmenorrhea was less common in HIV-positive women ( $P < 0.03$ ). Among the HIV-positive women, menstrual dysfunction was more common in women living with HIV/AIDS with opportunistic infections, CD4 count  $< 200$ , not undertaking therapy, symptomatic disease and BMI  $< 20$ . However, after controlling for cofounders, only CD4  $< 200$  (odds ratio [OR], 3.65; 95% confidence interval [CI], 1.2-9.7), BMI  $< 20$  (OR, 2.4; 95%CI, 1.3-3.5) and not taking antiretroviral drugs (OR, 2.05; CI, 1.7-6.5) were associated with amenorrhea, oligomenorrhea, irregular periods and secondary dysmenorrhea. **CONCLUSION:** HIV-positive women in this study experienced more menstrual abnormalities of amenorrhea, oligomenorrhea, and irregular periods compared to the HIV-negative controls. HIV-positive women with CD4 count  $< 200$ , BMI  $< 20$  and who do not take antiretroviral drugs are at the greatest risk.

**Keywords:** HIV-1, Infection, Immunosuppression, Menstrual.

**Record Number:** 348  
**Author(s):** Ogunyemi, A. Amund, O. Joy, O. Adeiga, A. Idika, N. Ahmed, O.  
**Title:** Physico-Chemical Properties of Municipal Refuse in Lagos Metropolis and Cellulolytic Activities of Resident Microorganisms Associated with Organic Matter Degradation.  
**Journal Title:** International Journal of Biological and Chemical Sciences  
**Date of Publication:** 2010  
**Volume ID:** 4  
**Issue ID:** 1  
**Page(s):** 209-217  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Physico-chemical, Municipal, Refuse, Lagos, Cellulolytic, Microorganisms, Organic matter, Degradation.

**Record Number:** 349  
**Author(s):** Adeleke, M. A. Mafiana, C. F. Sam-Wobo, S.O Olatunde, G.O. Ekpo, U.F. Akinwale, O. P. Toe, L  
**Title:** Biting Behaviour of Simulium Damnosum Complex and Onchocerca Volvulus Infection Along the Osun River, Southwest Nigeria.  
**Journal Title:** Parasites and Vectors  
**Date of Publication:** 2010  
**Volume ID:** 3  
**Issue ID:** 93  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Biting, Behaviour, Simulium Damnosum, Onchocerca Volvulus.

**Record Number:** 350  
**Author(s):** Oladipo, N.A. Olukoya D.K. Odunfa, S. A.  
**Title:** Plasmid profiles of Bacteriocin - Producing Lactobacillus isolates form Afdcan Fermented Foods.  
**Journal Title:** Folio Microbiology  
**Date of Publication:** 1994  
**Volume ID:** 39  
**Issue ID:** 3  
**Page(s):** 181-183

**Address/Availability:****Location/URL:****Abstract:****Keywords:****Record Number:** 351**Author(s):** Aina, O. O. Akintonwa, A. Akinyede, A. Olayemi, S. O. Agbaje, E. O. Olukosi, Y. A. Okoh, H. I. Agomo, C. O. Azu, O. O. Mojekwu, T. O. Egbuna, K. N. Agomo, P. U**Title:** **Comparative Effect of Dihydroartemisinin plus Mefloquine Combination and Dihydroartemisinin Alone on Electrocardiogram in Healthy Nigerian Volunteers.****Journal Title:** International Journal of Malaria and Tropical Diseases (IJMTD)**Date of Publication:** 2010**Volume ID:** 5**Issue ID:****Page(s):** 204-209**Address/Availability:****Location/URL:****Abstract:**

This study evaluated the cardiotoxic effect of dihydroartemisinin (DHA) and the combination of dihydroartemisinin plus mefloquine (MQ) in healthy Nigerian volunteers. Twenty healthy aged 22-29 years from the college of medicine, University of Lagos, participated in the study. Participants were allotted to one of the two treatments groups: DHA versus DHA plus MQ combination. Heart rates were comparable after treatment in DHA and DHA plus MQ combination groups, no clinically relevant study drug related changes in heart were observed after either treatment. The mean  $\pm$ SD baseline of QTc interval was  $395 \pm 25.2$  ms, there was a decrease in the QTc interval 72 hours after drug administration. The mean  $\pm$ SD ratio of QT/QTc at baseline was  $0.91 \pm 0.03$  ms, this value increased to  $0.96 \pm 0.10$  ms in the DHA plus MQ group. In the DHA group, the mean  $\pm$ SD measurement of QTc at baseline was  $393 \pm 20.5$  ms, there was an increase in QTc to  $397 \pm 25.2$  ms after drug administration. There was no change in ratio of QT and QTc at baseline and after drug administration. It was  $0.97 \pm 0.1$  ms. There was no significant difference in pre-treatment and post-treatment of QTc values between the groups in DHA and DHA plus MQ combination. The results of this study indicate that neither DHA nor DHA plus MQ elicit cardiotoxic effects in healthy effects in Nigerian volunteers.

**Keywords:** **Dihydroartemisinin plus, Mefloquine, Electrocardiogram, Health, Nigerian.****Record Number:** 352**Author(s):** Chigor, V. N. Umoh, V. J. Smith, S. I. Igbinosa, E. O. Okoh, A. I.**Title:** **Multidrug Resistance and Plasmid Patterns of Escherichia coli O157 and other E. coli Isolated from Diarrhoeal Stools and Surface Waters from Some Selected Sources in Zaria, Nigeria.****Journal Title:** Int J Environ Res Public Health.**Date of Publication:** 2010**Volume ID:** 7**Issue ID:** 10**Page(s):** 3831-41**Address/Availability:****Location/URL:****Abstract:**

We have assessed the prevalence of Escherichia coli O157 in diarrhoeal patients and surface waters from some selected sources in Zaria (Nigeria), evaluating the antibiotic susceptibility and plasmid profiles of 184 E. coli isolates, obtained from 228 water samples and 112 diarrhoeal stool specimens (collected from children aged <15 years), using standard methods. The detection rate of E. coli O157 in surface waters was 2.2% and its prevalence in children with diarrhoea was 5.4%. The most active antibiotics were gentamicin, chloramphenicol and fluoroquinolones. Seventy-nine (42.9%) of 184 E. coli isolates were resistant to four or more

antibiotics. Multidrug resistance (MDR) was higher amongst aquatic isolates than the clinical isolates. Out of 35 MDR isolates (20 of which were O157 strains), 22 (62.9%) harboured plasmids all of which were no less than 2.1 kb in size. Amongst the 20 E. coli O157 strains, only seven (35.0%) contained multiple plasmids. An aquatic O157 isolate containing two plasmids was resistant to seven drugs, including ampicillin, cefuroxime, ciprofloxacin, cotrimoxazole, nalidixic acid, nitrofurantoin and tetracycline. Loss of plasmid correlated with loss of resistance to antibiotics in cured (mutant) strains selected in tetracycline (50 µg/mL)-nutrient agar plates. Our findings revealed that plasmids were prevalent in both the aquatic and clinical isolates, and suggest that the observed MDR is plasmid-mediated. The occurrence of plasmid-mediated multidrug resistant E. coli O157 in surface waters used as sources for drinking, recreation and fresh produce irrigation heightens public health concern.

**Keywords:** **E. coli O157, Multidrug resistance, Plasmid-mediated, Public health Impact, Surface Water.**

**Record Number:** 353  
**Author(s):** Idigbe, E. O. Audu, R. A. Iroha, E. O. Akinsulie, A. O. Temiye, E. O. Ezeaka, V. C. Adetifa, I. M. Musa, A. Z. Onyewuche, J. Ikundu S. U.  
**Title:** T-lymphocyte Subsets in Apparently Healthy Nigerian Children.  
**Journal Title:** Int J Pediatr.  
**Date of Publication:** 2010  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Population studies showed that there are differences in T-lymphocytes subpopulation of normal children in different regions, and reference values in an area might be different from another. This study compared the values in our population with CDC and WHO reference values. Blood samples from 279 healthy, HIV-negative children <12 years of age were analysed for complete blood count, CD3+, CD4+, CD8+ counts and percentages. Except for CD8%, mean values for all parameters measured significantly decreased with age. CD4+ counts were higher in females than males,  $P < .05$ . Using the WHO criteria, 15.9% of subjects had low total lymphocyte count and 20.6% had low CD4 count. Children <3 years had median CD4% lower than WHO normal values. Our median CD4+ counts correlated with CDC values. Values used by WHO in infants are higher than ours. We suggest that our children be assessed using CDC reference values which correlate with ours.

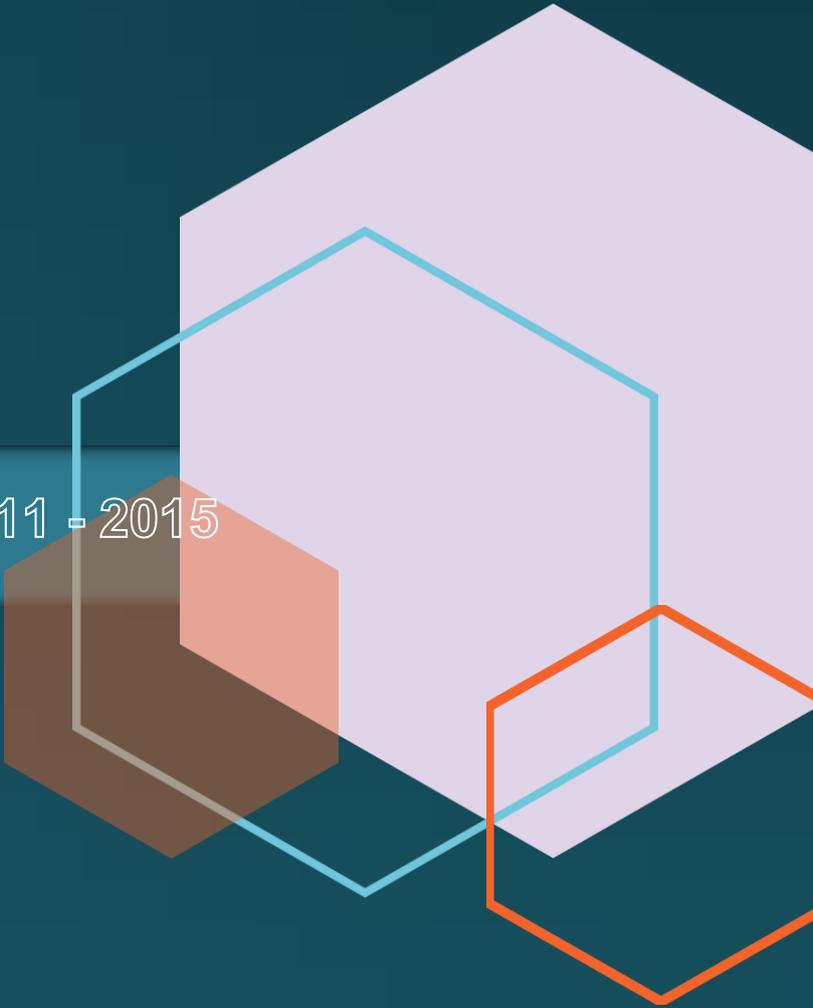
**Keywords:** **T-lymphocyte, Healthy, Nigerian, Children.**

**Record Number:** 354  
**Author(s):** Chika, K. Onwuamah, Agomo, P. U. Peter, G. C. Odeigah  
**Title:** Mouse Mortality from a High Plasmodium Berghei inoculum Density may be due to Immune Suppression in the Host  
**Journal Title:** International Journal of Medicine and Medical Sciences  
**Date of Publication:** 2010  
**Volume ID:** 2  
**Issue ID:** 5  
**Page(s):** 162-166  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Patients' malaria parasite burden on hospital presentation has been implicated in human artemisinin monotherapy failure rather than any drug resistance-conferring genetic mutation in the infecting Plasmodium species. We investigated this observation using a mouse-

*Plasmodium berghei* model at varying inocula abundance and monitored the pathogenesis without intervention. Three inoculums abundance levels were used: 107, 105 and 103 highly parasitized blood (4000 parasites/μl). All 107 inoculum mice died within 12.7 days. The 103 inoculum and the 105 inoculum mice cleared their malaria parasitaemia between days 12 - 14 and between days 34 - 36 post-inoculation respectively. The 103 inoculum and 105 inoculum mice had changes in baseline value of 1.71 and 2.02 in total white blood cells count between days 6 - 10 respectively, compared to 1.33 for the 107 inoculum mice. Monocytes counts (cells/mm<sup>3</sup>) on day 6 was 223.3, 1254 and 40.7 for the 103 inoculum, 105 inoculum and 107 inoculum mice, while 152.5, 1073 and 477.5, respectively on day 10. Immunosuppression by the parasite might be the cause of the in appropriate immune response by 107 inoculum mice.

**Keywords:****Key words: Malaria, Mice, Parasite density, Immune response, Immune suppression.**

2011 - 2015



- Record Number:** 355  
**Author(s):** Ogunro, P.S. **Adeneye, A. K.** Akinwusi, P.O. Ogungbamigbe, T.O.  
**Title:** **Willingness To Seek Human Immunodeficiency Virus (HIV) Voluntary Counselling and Testing (VCT) Among Urban Residents in Osogbo, South-West Nigeria.**  
**Journal Title:** Journal of Community Medicine and Primary Health Care  
**Date of Publication:** 2011  
**Volume ID:** 23  
**Issue ID:** 1&2  
**Page(s):** 68-78  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Sub-Saharan Africa is home to two-thirds of all people living with HIV/AIDS. Nigeria has the third highest population of People Living with HIV/AIDS (PLWHAs). Voluntary counselling and testing (VCT) is rapidly becoming an important component of HIV/AIDS prevention and care strategy. The objective of this study was to assess the knowledge and perception of HIV/AIDS and the factors that may affect willingness to seek VCT among residents of an urban community in Nigeria. **Methodology:** A cross-sectional descriptive study was conducted in Osogbo, Nigeria. Structured questionnaires were used to gather information from 332 residents. A multistage sampling technique was used for the selection of respondents. A total of 350 houses were selected from the 26 wards. **Results:** A high proportion (97.6%) of the respondents confirmed that they have heard of HIV/AIDS, 91.1% believed that AIDS is real. Knowledge of HIV/AIDS by the respondents was related to their level of educational attainment and their professions. Only 28.4% of the respondents are aware of VCT, but (66.9%) were willing to seek VCT services if the services are available; 66.7% confirmed that they would go ahead even if a fee is attached. However, 47.2% of those that think otherwise are scared of confidentiality, stigmatization and lack of fund. Willingness was also related to level of educational attainment, professionalism and age group. **Conclusion:** Programme managers should ensure that councillors have good knowledge on how to alleviate the fear of clients. Counselling should be the first step and if necessary test should follow.
- Keywords:** **Immunodeficiency, Virus, Counselling, Testing, Urban Residents, Osogbo, South-West Nigeria.**

- Record Number:** 356  
**Author(s):** **Oladele, D.A. Gab-Okafor, C.V. Gbajabiamila, T.I. Ezechi, O. C.**  
**Title:** **Management of Tuberculosis in HIV infected pregnant women Nigerian.**  
**Journal Title:** Journal of Clinical and Biomedical Research  
**Date of Publication:** 2011  
**Volume ID:** 5  
**Issue ID:** 1  
**Page(s):** 11-21  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** **Tuberculosis, HIV.**

- Record Number:** 357

**Author(s):** **Herbertson, E.C. Ekama, S. O. Addeh, E.J.** Okwuonu, U, Egbonrelu, N.Okpalla, C, Martin, C. **Olojo, I. I. Onwujkwke, D.I. Ezechi, O.C.**

**Title:** Chemotherapy of Tuberculosis: Review Article

**Journal Title:** Nigerian Journal of Clinical & Biomedical Research

**Date of Publication:** 2011

**Volume ID:** 5

**Issue ID:** 1

**Page(s):** 28-30

**Address/Availability:**

**Location/URL:**

**Abstract:** The fight against humanity's oldest and deadliest disease, tuberculosis (TB), which was considered to have begun when Robert Koch discovered a staining technique for the bacterial causative agent, has evolved over the years. TB chemotherapy which started as monotherapy for very long duration with the discovery of streptomycin, now involves the use of combination chemotherapy with shorter duration of therapy. Combination therapy for a right duration of treatment and adherence are very important principles in anti-TB chemotherapy. The primary goals of anti-TB chemotherapy are to kill tubercule bacilli rapidly; prevent the emergence of drug resistance and eliminate persistent bacilli from hosts' tissues (sterilization) to prevent relapse. Directly observed treatment short course (DOTS) strategy is recommended by W.H.O to ensure adherence to anti-TB chemotherapy.

**Keywords:** **Tuberculosis, Chemotherapy.**

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**Record Number:** 358

**Author(s):** **Smith, S. I. Fowora, M. A.** Otegbayo, J. A. Abdulkareem, F. B. **Omonigbehin, E. A.** Adegboyega, A. Contreras, M. Haas, R.

**Title:** **Comparison of PCR with other Diagnostic Techniques for the Detection of H. pylori Infection in Patients Presenting with Gastroduodenal Symptoms in Nigeria.**

**Journal Title:** Int J Mol Epidemiol Genet.

**Date of Publication:** 2011

**Volume ID:** 2

**Issue ID:** 2

**Page(s):** 178-84

**Address/Availability:**

**Location/URL:**

**Notes:**

**Abstract:** The study was aimed at comparing PCR methods of direct detection from biopsy using the boiling method and one other method with two known gold standards (histology and CLO test) for the diagnosis of H. pylori in Nigeria. A total of 168 biopsies (three from antrum and one from corpus each) were taken from 42 patients presenting with various gastroduodenal symptoms after informed consent was obtained from them. The biopsies were analysed using the CLO test kit and histology, while the boiling method as described by Holmes and Quigley (1981) was used to obtain DNA and then PCR using the 16S rRNA gene, glmM gene and cagA gene. With CLO test 15/42 (35.71%) were positive, histology 13/42 (30.95%) were positive, 16S rRNA 22/42 (52.38%) were positive, glmM 19/42 (45.24%) were positive, cagA 19/42 (45.24%) were positive. The sensitivity and specificity of the PCR tests with CLO as the gold standard showed that the tests were 100% sensitive and varied between 74.1% to 84.1% in specificity. The PPV and NPV showed that the NPV was almost 100%, while the PPV was between 68.2% and 75%. Using the histology as the gold standard, the sensitivity was almost 100% while the specificity, the PPV were reduced in comparison to the CLO test. The PCR test using the glmM gene appears to be the most reliable test for diagnosis of H. pylori in Nigeria most especially where culture is difficult due to the power outages.

**Keywords:** **CLO test, PCR, Biopsies, Histology.**

**Record Number:** 359  
**Author(s):** Nwaokorie, F. O. Coker A. O. Ogunsola, F. T. Avika-Campos, M. J. Gaetti-Jardim, E. Jr. Ayanbadejo, P. O. Umezudike, K. A Abdurrazaq, O. T.  
**Title:** **Isolation and Molecular Identification of Fusobacterium nucleatum from Nigerian Patients with Oro-facial Infections.**  
**Journal Title:** West Afr J Med.  
**Date of Publication:** 2011  
**Volume ID:** 30  
**Issue ID:** 2  
**Page(s):** 125-9  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **METHODS:** Fusobacterium nucleatum specie from 50 patients presenting with oro-facial infections were studied by culture on Fusobacterium selective agar and fastidious anaerobe agar. The isolates were characterised based on colonial morphology, microscopy, lipase production, susceptibility to kanamycin and colistin and resistance to vancomycin. Biochemical tests were performed using a commercial test kit. The identity of the isolates was confirmed based on molecular characterization performed using polymerase chain reaction (PCR) analysis.  
**Keywords:** **Molecular identification, Fusobacterium nucleatum, Nigerian, Oro-facial infections.**

**Record Number:** 360  
**Author(s):** Idika, N. Ezeugwu, S. M. C. Bankole, M. Ogbonna, F. N. Enya, V. Agomo, C. O. Agomo, W. U. Adesanmi, A  
**Title:** **Pattern of Bacterial, Parasitic and Fungal Pathogens found in Febrile Children Under Five Years in Ijede Community, LagosState: A Pilot Study.**  
**Journal Title:** Nigerian Journal of Health and Biomedical Sciences  
**Date of Publication:** 2011  
**Volume ID:** 10  
**Issue ID:** 1&2  
**Page(s):** 50-53  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Under five mortality remains high in the developing countries. In Nigeria, it is 201/1000 live births and causes are malaria, acute respiratory infections, diarrhea and vaccine preventable diseases. Presumptive treatment of febrile children with anti malaria is one of the key strategies for malaria control in Sub Saharan Africa. But fever being a symptom of many acute childhood illnesses, a pilot study was required to identify other pathogens in febrile children under five years. With informed consent, blood, stool/anal swabs and throat swabs collected from 228 (139 test, 98 control) children under five years in Ijede were processed for malaria parasite, bacterial, fungal and other parasitic pathogens using standard microbiological methods. Results show only 40% of the febrile children and 1% of the control group had malaria parasites in their blood. Bacterial and fungal respiratory pathogens were found in about one third of the febrile children, 13.3% bacterial and 32% fungal in the control. The stool bacterial pathogens were similar in the two groups. Co infection of malaria with bacterial (8.5%) and fungal (6.2%) respiratory pathogens was observed. Study highlights the need for laboratory diagnosis of febrile under fives to ensure appropriate care for non malarial fevers.  
**Keywords:** **Febrile, Malaria, Children, Bacterial, Pathogens. Lagos**

**Record Number:** 361  
**Author(s):** Oyibo, W. A. Agomo C. O.  
**Title:** **Scaling up of Intermittent Preventive Treatment of Malaria in Pregnancy Using**

**Sulphadoxine-pyrimethamine: Prospects and Challenges.**

**Journal Title:** Matern Child Health J.  
**Date of Publication:** 2011  
**Volume ID:** 15  
**Issue ID:** 4  
**Page(s):** 542-52  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Intermittent preventive treatment of malaria during pregnancy with sulphadoxine-pyrimethamine (IPTpSP) is one of the major strategies of malaria control in most African countries where malaria is endemic. The use of sulphadoxine-pyrimethamine (SP) for intermittent preventive treatment of malaria during pregnancy was adopted when proof of its superiority to weekly prophylactic dosing with either chloroquine or pyrimethamine became evident from studies in different malaria endemic countries. The administration of 2 and 3 treatment doses of SP for HIV-negative and HIV-positive pregnant women respectively, given after quickening and at an interval not less than 4 weeks was recommended. The prospects of this control strategy lies on the efficacy of SP, convenient treatment dose and high compliance rate. However, the implementation of this strategy and the efficacy of SP are faced with challenges such as: timing of SP administration, rising levels of parasite resistance to SP in the general population, effect of folate supplementation, adequacy of the recommended doses with regards to malaria endemicity and HIV status, interactions between SP and antiretroviral drugs and low coverage in the bid to scale-up its use. This review highlights the prospects and challenges of scaling up IPTp-SP.

**Keywords:** **Malaria.**

**Record Number:** 362  
**Author(s):** Killeen, G. F. Okumu, F. O. N'Guessan, R. Coosemans, M. Adeogun, A. Awolola, T. S. Etang, J. Dabiré, R. K. Corbel, V.  
**Title:** **The Importance of Considering Community-level Effects when Selecting Insecticidal Malaria Vector Products.**  
**Journal Title:** Parasit Vectors.  
**Date of Publication:** 2011  
**Volume ID:** 4  
**Issue ID:** 160  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**BACKGROUND:** Insecticide treatment of nets, curtains or walls and ceilings of houses represent the primary means for malaria prevention worldwide. Direct personal protection of individuals and households arises from deterrent and insecticidal activities which divert or kill mosquitoes before they can feed. However, at high coverage, community-level reductions of mosquito density and survival prevent more transmission exposure than the personal protection acquired by using a net or living in a sprayed house. **METHODS:** A process-explicit simulation of malaria transmission was applied to results of 4 recent Phase II experimental hut trials comparing a new mosaic long-lasting insecticidal net (LLIN) which combines deltamethrin and piperonyl butoxide with another LLIN product by the same manufacturer relying on deltamethrin alone. **RESULTS:** Direct estimates of mean personal protection against insecticide-resistant vectors in Vietnam, Cameroon, Burkina Faso and Benin revealed no clear advantage for combination LLINs over deltamethrin-only LLINs ( $P = 0.973$ ) unless both types of nets were extensively washed (Relative mean entomologic inoculation rate (EIR)  $\pm$  standard error of the mean (SEM) for users of combination nets compared to users of deltamethrin only nets =  $0.853 \pm 0.056$ ,  $P = 0.008$ ). However, simulations of impact at high coverage (80% use) predicted consistently better impact for the

combination net across all four sites (Relative mean EIR  $\pm$  SEM in communities with combination nets, compared with those using deltamethrin only nets =  $0.613 \pm 0.076$ ,  $P < 0.001$ ), regardless of whether the nets were washed or not ( $P = 0.467$ ). Nevertheless, the degree of advantage obtained with the combination varied substantially between sites and their associated resistant vector populations. **CONCLUSION:** Process-explicit simulations of community-level protection, parameterized using locally-relevant experimental hut studies, should be explicitly considered when choosing vector control products for large-scale epidemiological trials or public health programme procurement, particularly as growing insecticide resistance necessitates the use of multiple active ingredients.

**Keywords:** **Insecticide, Malaria, Vector products.**

**Record Number:** 363

**Author(s):** Butali, A. Mossey, P. A. Adeyemo, W. L. Jezewski, P. A. **Onwuamah**, C. K. Ogunlewe, M. O. Ugboko, V. I. Adejuyigbe, O. Adigun, A. I. Abdur-Rahman, L. O. Onah, I. I. **Audu**, **R. A. Idigbe**, E. O. Mansilla, M. A. Dragan, E. A. Petrin, A. L. Bullard, S. A. Uduezue, A. O. Akpata, O. Osaguona, A. O. Olasoji, H. O. Ligali, T. O. Kejeh, B. M. Iseh, K. R. Olaitan, P. B. Adebola, A. R. Efunkoya, E. Adesina, O. A. Oluwatosin, O. M. Murray, J. C.

**Title:** **Genetic Studies in the Nigerian Population Implicate an MSX1 Mutation in Complex Oral Facial Clefting Disorders.**

**Journal Title:** Cleft Palate Craniofac J.

**Date of Publication:** 2011

**Volume ID:** 48

**Issue ID:** 6

**Page(s):** 646-53

**Address/Availability:**

**Location/URL:**

**Abstract:** **BACKGROUND:** Orofacial clefts are the most common malformations of the head and neck, with a worldwide prevalence of 1 in 700 births. They are commonly divided into CL(P) and CP based on anatomic, genetic, and embryologic findings. A Nigerian craniofacial anomalies study (NigeriaCRAN) was set up in 2006 to investigate the role of gene-environment interaction in the origin of orofacial clefts in Nigeria. **SUBJECTS AND METHODS:** DNA isolated from saliva from Nigerian probands was used for genotype association studies and direct sequencing of cleft candidate genes: MSX1, IRF6, FOXE1, FGFR1, FGFR2, BMP4, MAFB, ABCA4, PAX7, and VAX1, and the chromosome 8q region. **RESULTS:** A missense mutation A34G in MSX1 was observed in nine cases and four HapMap controls. No other apparent causative variations were identified. Deviation from Hardy Weinberg equilibrium (HWE) was observed in these cases ( $p = .00002$ ). A significant difference was noted between the affected side for unilateral CL ( $p = .03$ ) and bilateral clefts and between clefts on either side ( $p = .02$ ). A significant gender difference was also observed for CP ( $p = .008$ ). **CONCLUSIONS:** Replication of a mutation previously implicated in other populations suggests a role for the MSX1 A34G variant in the development of CL(P).

**Keywords:** **Genetics, Mutation, Oral facial, Clefting, Disorders.**

**Record Number:** 364

**Author(s):** Asp, G. Sandberg, J. **Ezechi**, O. Pettersson, K. O.

**Title:** **Challenges of immediate newborn care in maternity units in Lagos, Nigeria: An observational study.**

**Journal Title:** Journal of Obstetrics and Gynaecology

**Date of Publication:** 2011

**Volume ID:** 31

**Issue ID:** 7

**Page(s):** 612-6

**Address/Availability:**

**Location/URL:****Abstract:**

Substandard newborn care has been identified as a major contributor to the estimated annual 4 million neonatal deaths and 1 million fresh stillbirths. Low-income countries, including Nigeria account for more than 95% of all cases. A cross-sectional comparative study utilising non-participant observation methods was used to study perinatal care at two maternity centres in Lagos, Nigeria. Data on 63 mother-baby pairs were included in the study. Two stillbirths and two early neonatal deaths occurred during the study period, equally divided between the two hospitals. The partograph, a crucial tool for monitoring progress of labour, was in use in 77.4% vs 50% of cases at the two centres. The only interventions utilised for the prevention of hypothermia were drying and covering newborns with towels. Hygiene routines were poor and caring procedures did not demonstrate adequate knowledge related to a newborn's health. An enabling environment and supportive supervision is urgently required.

**Keywords:**

**Hygiene, hypothermia, midwife, newborn care, Nigeria, partograph.**

**Record Number:**

**365**

**Author(s):**

Ezechi, L.O. **Gab-Okafor, C.V.** Obinabo, E. Ebuehi, O. A. T. **Ezechi, O. C.**

**Title:**

**Effect of some pregnancy disorders on the blood lipid profiles of pregnant Nigerian women. Nigerian**

**Journal Title:**

Journal of Clinical and Biomedical Research

**Date of Publication:**

2011

**Volume ID:**

5

**Issue ID:**

1

**Page(s):**

68-72

**Address/Availability:****Location/URL:****Abstract:****Keywords:**

**Pregnancy disorders, Blood lipid.**

**Record Number:**

**366**

**Author(s):**

**Okwuraiwe, A.P. Salu, O.B. Onwuamah, C.K. Amoo, O. S. Odunukwe N.N. Audu, R. A.**

**Title:**

**Experience with Hepatitis B Viral Load Testing in Nigeria.**

**Journal Title:**

African Journal of Clinical and Experimental Biology.

**Date of Publication:**

2011

**Volume ID:**

12

**Issue ID:**

3

**Page(s):**

101-105

**Address/Availability:** <http://dx.doi:10.4314/ajcem.v12i3.3>**Location/URL:****Abstract:**

**Background:** Quantification of the viral burden is an important laboratory tool in the management of hepatitis B virus (HBV)-infected patients. However, widespread use of assays is still hampered by the high cost. Treatment reduces viral load to undetectable levels. HBV infected patients tend to have high HBV DNA levels, and severe liver disease. **Objectives:** This study was carried out to determine the pattern of HBV viral load levels of patients assessing management in Nigeria. **Method:** Variables included sociodemographics like age, sex, religion, income, educational background and residence. The COBAS Amplicor automated Analyzer (PCR based) was used to assay the virus quantitatively. **Results:** 594 patients were tested from 2008 to 2009. Statistical analysis was done using Epi info version 2002 and test of significance by Kruskal-Wallis. Mean age of the patients was 36.8 (ranging from 9 to 69) years. HBV viral titre ranged between 4,145 and 68,011,800 DNA copies/ml. **Conclusion:** There was a high occurrence of viral titre in the population studied. High viral load is a risk factor for hepatocellular carcinoma. A policy earmarked to combat this virus in Nigeria is hereby solicited.

**Keywords:**

**HBV infection, HBV DNA, Nigeria.**

**Record Number:** 367  
**Author(s):** Chaplin, B. Eisen, G. Idoko, J. Onwujekwe, D. Idigbe, E. Adewole, I. Gashau, W. Meloni, S. Sarr, A. D. Sankalé, J. L. Ekong, E. Murphy, R. L. Kanki P.  
**Title:** **Impact of HIV type 1 Subtype on Drug Resistance Mutations in Nigerian Patients Failing First-line Therapy.**  
**Journal Title:** AIDS Res Hum Retroviruses.  
**Date of Publication:** 2011  
**Volume ID:** 27  
**Issue ID:** 1  
**Page(s):** 71-80  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** A diverse array of non-subtype B HIV-1 viruses circulates in Africa and dominates the global pandemic. It is important to understand how drug resistance mutations in non-B subtypes may develop differently from the patterns described in subtype B. HIV-1 reverse transcriptase and protease sequences from 338 patients with treatment failure to first-line ART regimens were evaluated. Multivariate logistic regression was used to examine the effect of subtype on each mutation controlling for regimen, time on therapy, and total mutations. The distribution of HIV-1 subtypes included CRF02\_AG (45.0%), G (37.9%), CRF06\_cpx (4.4%), A (3.6%), and other subtypes or recombinant sequences (9.2%). The most common NRTI mutations were M184V (89.1%) and thymidine analog mutations (TAMs). The most common NNRTI mutations were Y181C (49.7%), K103N (36.4%), G190A (26.3%), and A98G (19.5%). Multivariate analysis showed that CRF02\_AG was less likely to have the M41L mutation compared to other subtypes [adjusted odds ratio (AOR)=?0.35; p=?0.022]. Subtype A patients showed a 42.5-fold increased risk (AOR=?42.5, p=?0.001) for the L210W mutation. Among NNRTI mutations, subtype G patients had an increased risk for A98G (AOR=?2.40, p=?0.036) and V106I (AOR=?6.15, p=?0.010), whereas subtype CRF02\_AG patients had an increased risk for V90I (AOR=?3.16; p=?0.003) and a decreased risk for A98G (AOR=?0.48, p=?0.019). Five RT mutations were found to vary significantly between different non-B West African subtypes. Further study to understand the clinical impact of subtype-specific diversity on drug resistance will be critically important to the continued success of ART scale-up in resource-limited settings.  
**Keywords:** **HIV type 1, Drug resistance, Mutations, Therapy, Nigerian.**

**Record Number:** 368  
**Author(s):** Iwalokun, B. A. Oluwadun, A. Akinsinde, K. A. Niemogha, M. T. Nwaokorie, F. O.  
**Title:** **Bacteriologic and Plasmid Analysis of Etiologic Agents of Conjunctivitis in Lagos, Nigeria.**  
**Journal Title:** J Ophthalmic Inflamm Infect.  
**Date of Publication:** 2011  
**Volume ID:** 1  
**Issue ID:** 3  
**Page(s):** 95-103  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **METHODOLOGY:** A total of 83 consecutive and non-duplicate conjunctival specimens were collected from patients attending eye clinics at three different hospitals in Lagos, Nigeria, between February and September 2010. Specimens were cultured on standard bacteriologic media and the recovered isolates speciated using standard techniques. Susceptibility of pathogens to antibiotics and plasmid DNA extraction were carried out by

disk diffusion and alkaline lysis methods. Conjugation experiment was done with rifampicin-resistant *Escherichia coli* DH5 $\alpha$  as the recipient cell. Data were analyzed using the chi-square test.

**Keywords:** Bacteriologic, Plasmid Analysis, Etiologic Agents, Conjunctivitis, Lagos, Nigeria.

**Record Number:** 369

**Author(s):** Vanderjagt, D. J. Ujah I. A. Ikeh, E. I. Bryant, J. Pam, V. Hilgart, A. Crossey, M. J. Glew, R. H.

**Title:** Assessment of the vitamin B12 Status of Pregnant Women in Nigeria Using Plasma Holotranscobalamin.

**Journal Title:** ISRN Obstet Gynecol

**Date of Publication:** 2011

**Volume ID:**

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** Maternal vitamin B12 deficiency during pregnancy is an independent risk factor for neural tube defects and other neurological problems in infants. We determined the vitamin B12 status of 143 pregnant women in Nigeria representing all trimesters who presented to an antenatal clinic in Jos, Nigeria, using holotranscobalamin II levels (holoTCII), which is a measure of the vitamin B12 that is available for uptake into tissues. The holoTCII concentration ranged from 13 to 128 pmol/L. Using a cutoff of 40 pmol/L, 36% of the women were classified as vitamin B12-deficient. HoloTCII concentrations correlated negatively with plasma homocysteine levels ( $r = -0.24$ ,  $P = 0.003$ ) and positively with red blood cell folate concentrations ( $r = 0.28$ ,  $P < 0.001$ ). These data underscore the importance of supplementing pregnant women in Nigeria with vitamin B12 in order to ensure adequate vitamin B12 status and decrease the risk for neural tube defects.

**Keywords:** Assessment, Vitamin B12, Pregnant Women, Nigeria, Plasma Holotranscobalamin.

**Record Number:** 370

**Author(s):** Smith, S. I. Fowora, M. A. Goodluck, H. A. Nwaokorie, F. O. Aboaba, O. O. Opere, B.

**Title:** Molecular typing of *Salmonella* spp Isolated From Food Handlers and Animals in Nigeria.

**Journal Title:** Int J Mol Epidemiol Genet.

**Date of Publication:** 2011

**Volume ID:** 2

**Issue ID:** 1

**Page(s):** 73-7

**Address/Availability:**

**Location/URL:**

**Notes:**

**Abstract:** A total of 61 isolates of *Salmonella* spp (made up of 26 clinical isolates and 20 food handler and 15 animal isolates) were typed by RAPD-PCR for the purpose of screening for epidemiologically related isolates. The RAPD -PCR typing method used comprised six primers namely 787, 797, 784, 1254, RAPD 1 and RAPD 2 but 784 and 1254 did not produce discriminatory patterns and so were dropped. From the 61 strains, RAPD fingerprinting with primers RAPD 1, 2 produced 22 and 24 fingerprint patterns respectively. RAPD fingerprinting with primers 787, 797 produced 17, 11 fingerprinting patterns respectively. Combinations of the two RAPD 1 and 2 primers increased the discrimination of *Salmonella* strains to 32 patterns rather than the other primers used. Primer 797 was the least discriminatory. This study showed that the RAPD 1 and 2 primers would be useful for epidemiological typing of the *Salmonella* spp in Nigeria.

**Keywords:** RAPD-PCR, *Salmonella*, animals, food handlers.

**Record Number:** 371  
**Author(s):** Iwalokun, B. A. Oluwadun, A. C. Iwalokun, S. O. Aina, A. O. Olukosi, Y. A. Agomo P. U.  
**Title:** **Reduction in Febrile Episodes and Dynamics of Pyrogenic Threshold in Nigerian Children with Plasmodium falciparum.**  
**Journal Title:** Journal of Pediatric Infectious Disease  
**Date of Publication:** 2011  
**Volume ID:** 6  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** This study determined the trends of fever in relation to parasitaemia and established pyrogenic threshold (PYT) for malaria in Nigerian child. Two cross sectional surveys of malaria and fever were carried out during the dry and rainy seasons of 2007 and 2008 in children aged 6mo to 11years attending two primary health care centers (PHC) in Lagos, Nigeria. Structured questionnaires were used to capture data. A total of 505 children attending PHC during the rainy (n=385) and dry (n=116) seasons were studied. Unlike in the dry season, the parasite rate increased with age until 59 mo during the rainy season, while both fever rate (19.7-25.4% vs 14.1-17.7%) and parasite and fever rate combined (13.4-16.7% vs 9.2-11.2%) showed those within the 24-59 mo age bracket during the rainy season only (p<0.05). for all the age groups combined, mean PYT of 2675 and 3000 parasite/uL in 2007 and 2008 during the rainy season and 610 parasites/uL during the dry season (both years) were found. The use of non-artemisinin based combination interventions by caregivers increased the PYT, by 0.5-8.4%. we conclude that fever has become less reliable for syndromic diagnosis of malaria in children below 5yr in this environment and that laboratory confirmation of the diagnosis should be mandatory in all cases.  
**Keywords:** **Malaria.**

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**Record Number:** 372  
**Author(s):** Akinwale, O. P. Kane, R. A. Rollinson, D. Stothard, J. R. D. O. Ajayi, M. B. Akande, D.O. Ogungbemi, M. O. Duker, C. Gyang, P. V. Adeleke, M. A.  
**Title:** **Molecular Approaches to the Identification of Bulinus species in South-west Nigeria and Observations on Natural Snail infections with Schistosomes.**  
**Journal Title:** J Helminthol.  
**Date of Publication:** 2011  
**Volume ID:** 85  
**Issue ID:** 3  
**Page(s):** 283-93  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The current study considers the distribution of a small sample of 138 Bulinus snails, across 28 localities within eight Nigerian states. Snails were identified using a combination of molecular methods involving both DNA sequencing of a partial cytochrome oxidase subunit 1 (cox1) fragment and restriction profiles obtained from ribosomal internal transcribed spacer (its) amplicons. The results showed that the majority of Bulinus samples tested belonged to the species Bulinus truncatus while only two were Bulinus globosus. The use of RsaI restriction endonuclease to cleave the ribosomal its of Bulinus, as a method of species identification, was adopted for the majority of samples, this being a quicker and cheaper method better suited to small laboratory environments. Polymerase chain reaction (PCR)

amplification of the schistosome DnaI repeat within each of the collected *Bulinus* samples was employed to determine the extent and distribution of infected snails within the sample areas. Successful amplification of the DnaI repeat demonstrated that 29.7% of snails were infected with schistosomes. Sequencing of the partial schistosome ITS from a small subset of snail samples suggested that some snails were either penetrated by both *Schistosoma haematobium* and *Schistosoma bovis* miracidia or hybrid miracidia formed from the two species.

**Keywords:** Molecular, *Bulinus*, Snail, Schistosomes.

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**Record Number:** 373  
**Author(s):** Akinwale, O. P. Akpunonu, V. N. Ajayi, M. B. Akande, D. O. Adeleke, M. A. Gyang, P. V. Adebayo, M. O. Dike, A. A.  
**Title:** Urinary Schistosomiasis Transmission in Epe an Urban Community Southwest Nigeria.  
**Journal Title:** Tropical Parasitology  
**Date of Publication:** 2011  
**Volume ID:** 1  
**Issue ID:** 2  
**Page(s):** 99-103  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Schistosomiasis, Epe.

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**Record Number:** 374  
**Author(s):** Smith, S. I. Oyedeji, K. S. Goodluck, H. A. Fowora, M. A. Anomneze, E. Lesi, O. A.  
**Title:** The Use of *Helicobacter pylori* Stool Antigen Test for the Diagnosis of *Helicobacter pylori* in Lagos, Nigeria.  
**Journal Title:** West Indian Med J.  
**Date of Publication:** 2011  
**Volume ID:** 60  
**Issue ID:** 1  
**Page(s):** 33-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The proportion of patients that were positive at the pretest, 520 (70.3%) was significantly higher (Fisher's exact  $p = 0.001$ ) than those positive at the post-test, 44 (53%). There was a significant difference ( $F = 4.106$ ,  $p = 0.043$ ) between the mean age of those that came for the pretest (40.0 +/- 14.5 years) and those that came for the post-test, 43.6 +/- 11.6 years. More males than females had the tendency to come back for a post-eradication test.  
**Keywords:** *Helicobacter pylori*, stool, Antigen test, Diagnosis, Lagos, Nigeria.

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**Record Number:** 375  
**Author(s):** Agomo, C. O. Oyibo, W. A. Odukoya-Maije, F.  
**Title:** Parasitologic Assessment of Two-Dose and Monthly Intermittent Preventive Treatment of Malaria During Pregnancy with Sulphadoxine-Pyrimethamine (IPTP-SP) in Lagos, Nigeria.  
**Journal Title:** Malar Res Treat  
**Date of Publication:** 2011  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**

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**Location/URL:****Abstract:**

Intermittent preventive treatment of malaria with sulphadoxine-pyrimethamine (IPTP-SP) is a key strategy in the control of malaria in pregnancy. However, reports of increasing level of resistance to SP using nonpregnant populations have made it imperative for the continuous monitoring of the efficacy of SP in pregnant women. This study assessed using microscopy, monthly dosing and the standard two-dose regimen among 259 pregnant women attending antenatal clinics in Lagos, Nigeria that consented 122 in the two-dose arm (Arm A) and 137 in the monthly dose arm (Arm B). Baseline parasitaemia in the two groups was 5 (4.1%) and 3 (2.2%) in Arms A and B, respectively. Few of the women developed parasitaemia after the initial SP dose in Arms A 4 (3.3%) and B 2 (1.5%). However, none of the women had malaria infection after the second dose in both Arms. Although IPTP-SP is suggestive of protecting the women from malaria infection, there was no significant difference observed between the two dosing schemes.

**Keywords:**

**Parasitologi, Malaria, Pregnancy, Sulphadoxine-Pyrimethamine (IPTP-SP), Lagos, Nigeria.**

**Record Number:**

376

**Author(s):**

Dah, T. Akiode, A. Awah, P. Fetters, T. Okoh, M. Ujah, I. Oji, E.

**Title:****Introducing Misoprostol for the Treatment of Incomplete Abortion in Nigeria.****Journal Title:**

Afr J Reprod Health.

**Date of Publication:**

2011

**Volume ID:**

15

**Issue ID:**

4

**Page(s):**

45-50

**Address/Availability:****Location/URL:****Abstract:**

Despite legal restriction, induced abortions and resulting complications are common in Nigeria. Misoprostol administration for incomplete abortion was introduced in 3 Nigerian hospitals. The feasibility of the hospitals, patient and provider acceptability were assessed using questionnaire and interview guides administered to 205 women and 17 providers respectively. Amongst the women, 194 (95%) were satisfied and very satisfied with misoprostol, 176 (86%) would choose misoprostol again if another incomplete abortion occurred and 191 (93%) would recommend it to another woman in a similar situation. Providers were highly satisfied with misoprostol. The ease of use and ability to redirect surgical resources to more complicated issues were positive features cited by them. The providers agreed that integration of misoprostol was straightforward and required few resources. Therefore, misoprostol for incomplete abortion is safe, efficacious and acceptable to providers and patients. In remote areas of Nigeria with limited post-abortion care (PAC), misoprostol administration is an important potential PAC treatment modality. Features of misoprostol-low cost, room temperature stability, and ease of introduction-render it an important treatment option, particularly in low resource and rural settings.

**Keywords:**

**Misoprostol, Abortion, Nigeria.**

**Record Number:**

377

**Author(s):**

Otuonye, N.M. Enabulele, O. Aluyi, H. Onwuamah, C.

**Title:****Sexual Transmitted Infections and HIV Among Female Commercial Sex Workers in Lagos, Nigeria.****Journal Title:**

Nigerian Journal of Clinical and Biomedical Research.

**Date of Publication:**

2011

**Volume ID:**

5

**Issue ID:**

1

**Page(s):**

73-80

**Address/Availability:**

**Location/URL:****Abstract:****Keywords:** Sexual transmitted Infections, HIV, Sex workers, Nigeria.**Record Number:** 378**Author(s):** Jawara, M. Awolola T. S. Pinder, M. Jeffries, D. Smallegange, R. C. Takken, W. Conway, D. J.**Title:** Field Testing of Different Chemical Combinations as Odour Baits for Trapping Wild Mosquitoes in The Gambia.**Journal Title:** PLoS One.**Date of Publication:** 2011**Volume ID:** 6**Issue ID:** 5**Page(s):****Address/Availability:****Location/URL:****Abstract:**

Odour baited traps have potential use in population surveillance of insect vectors of disease, and in some cases for vector population reduction. Established attractants for human host-seeking mosquitoes include a combination of CO<sub>2</sub> with L-lactic acid and ammonia, on top of which additional candidate compounds are being tested. In this field study in rural Gambia, using Latin square experiments with thorough randomization and replication, we tested nine different leading candidate combinations of chemical odorants for attractiveness to wild mosquitoes including anthropophilic malaria vectors, using modified Mosquito Magnet-X (MM-X) counterflow traps outside experimental huts containing male human sleepers. Highest catches of female mosquitoes, particularly of *An. gambiae* s.l. and *Mansonia* species, were obtained by incorporation of tetradecanoic acid. As additional carboxylic acids did not increase the trap catches further, this 'reference blend' (tetradecanoic acid with L-lactic acid, ammonia and CO<sub>2</sub>) was used in subsequent experiments. MM-X traps with this blend caught similar numbers of *An. gambiae* s.l. and slightly more *Mansonia* and *Culex* mosquitoes than a standard CDC light trap, and these numbers were not significantly affected by the presence or absence of human sleepers in the huts. Experiments with CO<sub>2</sub> produced from overnight yeast cultures showed that this organic source was effective in enabling trap attractiveness for all mosquito species, although at a slightly lower efficiency than obtained with use of CO<sub>2</sub> gas cylinders. Although further studies are needed to discover additional chemicals that increase attractiveness, as well as to optimise trap design and CO<sub>2</sub> source for broader practical use, the odour-baited traps described here are safe and effective for sampling host-seeking mosquitoes outdoors and can be incorporated into studies of malaria vector ecology.

**Keywords:** Chemical, Mosquitoes, Malaria, Gambia.**Record Number:** 379**Author(s):** Adeleke, M. A. Sam-Wobo, S. O. Olatunde, G. O. Akinwale, O. P. Ekpo, U. F. Mafiana, C. F.**Title:** Bioecology of *Simulium damnosum* Theobald Complex Along Osun River, Southwest Nigeria.**Journal Title:** Journal of Rural and Tropical Public Health**Date of Publication:** 2011**Volume ID:** 10**Issue ID:****Page(s):** 39 - 43**Address/Availability:****Location/URL:****Abstract:**

**Keywords:** Bioecology, *Simulium damnosum*, Osun River, Southwest, Nigeria.

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**Record Number:** 380

**Author(s):** Iwalokun, B. A. Agomo, P. U. Egbuna, K. N. Iwalokun, S. O. Adebodun V. Olukosi, Y. A. Aina, O. O. Okoh, H. I. Agomo, C. O. Ajibaye, O. Orok, B. Enya, V. N. V. Akindele, S. Akinyele, M.

**Title:** Environmental Survey and Health Seeking Behavior of Caregivers of Children Suspected to have Malaria in Takwa-bay, Lagos State

**Journal Title:** Journal of Medicine and Medical Sciences

**Date of Publication:** 2011

**Volume ID:** 2

**Issue ID:** 2

**Page(s):** 675-687

**Address/Availability:**

**Location/URL:**

**Abstract:** Malaria is the single most important cause of illness and deaths in Nigerian children especially in rural areas where effective case management and prevention are compromised by delayed recognition of the disease and poor treatment decisions, poor access to integrated malaria vector control and therapeutic intervention strategies. To design efficacious and cost-effective malaria control activity with potentials for optimal social benefits in a rural area, an understanding of perception of malaria and health seeking behaviours of caregivers is highly imperative. This study was carried out to characterize Takwa-Bay for malaria risk factors and document existing knowledge, attitudes and practices related to malaria recognition, control and treatment in the area. This cross-sectional descriptive study enrolled 112 respondents from 47 households of 171 under 5 years of age children that were selected by multistage random sampling method from 11 clusters drawn from the 4 major settlements in Takwa bay: takwa bay, ebute-oko, abagbo and ogogoro in Lagos, Nigeria. The respondents, who were caregivers were administered open/close-ended pilot tested questionnaire that was designed based on key informant interview to capture demographic and socio-economic variables coupled with their knowledge of malaria and health seeking behaviour. The area was also environmentally assessed to capture malaria transmission indicators. Data were analysed statistically using SPSS software version 11.0. a total of 112 respondents aged 21-53 years (mean<sup>±</sup> SD age = 32.9<sup>±</sup>8.7 years) were studied. Of the 112 respondents, 59 (52.7%) were females ( $P > 0.05$ ), 76.8% had formal education predominated by primary school attendance (50.9%;  $p < 0.05$ ), 27.7% were traders, 13.4% were artisans, 18.8% were housewives and 8% were unemployed. The respondents (88.5%) were ranked between the 1<sup>st</sup> and 2<sup>nd</sup> quartiles of wealth index suggesting poor to moderately poor socio-economic status. The respondents had good knowledge of malaria aetiology (77.7%-100%) and classical symptoms of uncomplicated malaria such as fever, malaise, headache and loss of appetite (87.5%-96.4%). But knowledge of danger signs seen in severe malaria such as convulsion, coma, jaundice, and respiratory distress (28.6%-57.6%) were significantly low ( $P < 0.05$ ). Community members and the health post were mentioned as the major sources of information by the respondents compared to radio, television and traditional medicine practitioners (4.5-11.6 vs 19.6-58%;  $P < 0.05$ ). data on health seeking behaviour indicated that the respondents employed allopathic medicines (71.4%), traditional medicines (20.5%), or both (8%) to treat their sick children. Self medication was practiced by 57.1% of the respondents. Reasons given for self medication included timeliness, knowledge about treatment of malaria, non-availability of doctors in the health post, poor attitude of health workers and lack of drugs at the health post, while the use of traditional medicines were based on cultural belief of efficacy of natural products, and the free to low cost associated with their procurement. Western medicines used were CQ (32.5%), SP (42.5%), artemisinin

monotherapy (13.8%), and ACT (3.8%), analgesics (75%), antibiotics (46.3%) and haematinics (51.3%). The use of allopathic medicine was associated with having a formal education (OR (95%CI) = 11.6 (3.8-36.4) and younger age [OR (95%CI) = 5.0 (1.5-16.3)], while self medication was favourably practiced by the male gender [(OR (95%CI) = 5.4 (2.2-13.4)]. Leaves of *Vernonia amygdalina*, *Morinda lucida* and *Azadirachta indica* were among the plants used for malaria treatments. More than 60% of the households' survey were located <400 m to water bodies and surrounded by mosquito breeding promoting factors. We conclude that Takwa bay is a malaria prone and poor rural area that is currently characterized by poor home management of the disease despite good awareness of malaria among the caregivers. Therefore, there is a need to improve perception of malaria and bridge the existing gap between knowledge and health seeking behaviour in Takwa bay through provision of health education with emphasis on danger signs of malaria and training of health care providers with emphasis on the procurement and sales of ACTs as nationally approved therapies for malaria in Nigeria. Home management of malaria (HMM) by caregivers should also be improved through provision of key messages regarding malaria treatment using information, education and communication (IEC) materials. The formal health system in Takwa-bay should also be strengthened through regular supply of ACT to avert stock outs, provision of doctors and training of health personnel on the treatment guidelines and client friendliness. Ownership and use of long lasting insecticidal nets (LLIN) should also be improved in the area.

**Keywords:** **Malaria.**

**Record Number:** 381  
**Author(s):** Iwalokun, B. A. Gbenle, G. O. Adewole, T. A. Smith S. I. Akinsinde, K. A. Omonigbehin, E. O.  
**Title:** Effects of *Ocimum Gratissimum* L essential oil at Subinhibitory Concentrations on Virulent and Multidrug-resistant *Shigella* Strains from Lagos, Nigeria.  
**Journal Title:** APMIS.  
**Date of Publication:** 11  
**Volume ID:** 4  
**Issue ID:** 477-82  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** *Ocimum gratissimum* leaf extracts have been extensively demonstrated to be effective against the various aetiologic agents of diarrhoea, including *Shigellae*. However, the mechanism of the shigellocidal action of this plant remains to be understood. This study investigated the effects of *O. gratissimum* essential oil (EO) at subinhibitory concentrations of 0.75 and 1.0 microg/ml on virulence and multidrug-resistant strains of 22 *Shigella* isolates from Nigeria. Compared with untreated *Shigella* strains, *O. gratissimum* EO caused significant decreases ( $p < 0.01$ ) in extracellular protease activity, o-lipopolysaccharide rhamnose content and incidence of invasiveness mediated as keratoconjunctivitis in guinea pig. The disparity in extracellular protease activity and o-lipopolysaccharide rhamnose between the two treatment groups was also found to be significant ( $p < 0.05$ ), suggesting greater anti-virulent effects of *O. gratissimum* oil at 1.0 microg/ml. Antibiotic susceptibility testing revealed that the EO of *O. gratissimum* reduced the MICs of antibiotics to which *Shigellae* showed resistance by 9.8-53.1% and fluoroquinolones by 18.2-45.5%. The results of this study strongly suggest inhibition of extracellular protease and expression of O-LPS rhamnose in *Shigellae* by *O. gratissimum* EO. The future use of *O. gratissimum*- antibiotic combinations as a therapeutic measure against shigellosis is discussed.  
**Keywords:** ***Ocimum Gratissimum*, L essential oil, Subinhibitory, Virulent, Multidrug-resistant, *Shigella* strains, Nigeria.**

**Record Number:** 382

**Author(s):** Okogbo, F. O. Ezechi, O.C. Loto, O.M. Ezeobi, P. M  
**Title:** Uterine Leiomyomata in South Western Nigeria: a clinical study of presentations and management outcome  
**Journal Title:** Afr Health Sci  
**Date of Publication:** 2011  
**Volume ID:** 11  
**Issue ID:** 2  
**Page(s):** 271-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **BACKGROUND:** Uterine leiomyoma is remarkably common, however only a subset of women have their fibroids clinically detected, symptomatic, or warrant surgical treatment. Its removal is commonly associated with complications. To prevent or control the occurrence of this complication requires the understanding of the factors associated with the complications. **OBJECTIVE:** To evaluate the sociodemographic, clinical characteristics, management outcome and its determinants in southwestern Nigeria. **METHODS:** Study was carried out at two large tertiary hospitals in the south west region of Nigeria. Retrospective review of case records of all surgically managed cases of uterine leiomyoma over a period of 25 years. One hundred and fifty nine women with uterine leiomyoma seen and managed surgically in South-Western Nigeria were the participants. **RESULTS:** The common presenting complaints were menstrual irregularities (47.7%), abdominal swelling (39.1%) and infertility (31.9%). The average uterine size at presentation was 15±9.7 weeks. The majority (79.9%) of the women presented with multiple leiomyomata. The commonest anatomical position of the nodules were multiple positions and intramural in 707(60.9%) and 172(14.8%) respectively. Myomectomy was performed in 54.7% of cases. Postoperative complications occurred in 20.9 % of cases with postoperative pyrexia (13.5%), blood loss warranting transfusion (12.8%) and postoperative anaemia (10.4%) been the most common complications. **CONCLUSION:** Uterine fibroid is common in our environment and its removal is commonly associated with post-operative pyrexia, blood loss, and anaemia and wound infection. Midline incision, closure of rectus sheet with chromic catgut and myomectomy were associated with postoperative complications in this review.

**Keywords:** Leiomyomata, Uterine fibroid.

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**Record Number:** 383  
**Author(s):** Smith, S. I. Bamidele, M. Fowora, M. Goodluck, H. T.Omonigbehin, E. A. Akinsinde, K. A. Fesobi, T. Pastoor, R. Abdoel, T. H. Smits, H. L.  
**Title:** Application of a point-of-care test for the serodiagnosis of typhoid fever in Nigeria and the need for improved diagnostics.  
**Journal Title:** J Infect Dev Ctries.  
**Date of Publication:** 2011  
**Volume ID:** 5  
**Issue ID:** 7  
**Page(s):** 520-6  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** There is an urgent need for affordable point-of-care diagnostics for the differentiation of febrile illnesses and the confirmation of typhoid in endemic countries. Blood samples were collected from febrile patients with clinical suspicion of typhoid and screened for typhoid fever using the Widal and Typhi Dri Dot tests, while stool and blood samples were screened for Salmonella Typhi using the culture method as well as PCR as a confirmatory test. A high proportion of febrile patients from Lagos with clinical suspicion of typhoid fever reacted positively in a simple and rapid latex agglutination assay for typhoid fever, indicating that this illness is a common and presumably under-diagnosed health problem in this metropolis. Seropositivity was 19.2% in the rapid test compared with 22.9% in the classical Widal test.

The confirmation of typhoid in these seropositive patients appeared cumbersome because of negative blood cultures and low DNA yield in molecular testing. A review of the literature revealed that in Nigeria seroprevalence rates can be high in the normal population and that pathogens other than *S. Typhi* are often isolated from the blood of seropositive febrile patients. **CONCLUSION:** The simplicity and the relatively high specificity (97.8%) of the rapid test as determined in a study performed in Indonesia calls for a further validation of this promising test for use in Africa.

**Keywords:** Serodiagnosis, Typhoid fever, Nigeria, Diagnostics.

**Record Number:** 384  
**Author(s):** Afea, A.J. Adewumbi, N. Emokpae, A. Fagoralad, T. Disu B. A.E. Abidoyeb, G. Ganikalee, I. Audu, R.  
**Title:** Outcome of PMTCT Services and Factors Affecting Vertical Transmission of HIV Infection in Lagos, Nigeria.  
**Journal Title:** HIV & AIDS Review  
**Date of Publication:** 2011  
**Volume ID:** 10  
**Issue ID:** 1  
**Page(s):** 14-18  
**Address/Availability:**  
**Location/URL:** doi:10.1016/j.hivar.2011.02.001

**Abstract:** With the global focus on PMTCT as a means of reducing the burden of pediatric HIV infection and the scale up of PMTCT services in Nigeria, there is need for a review of the work already done to inform an effective programme. This is a retrospective analysis of the HIV DNA PCR results of 733 HIV exposed babies seen between February 2007 and February 2008 at six public hospitals in Lagos, Nigeria. Of the 733 HIV-exposed babies, 165 (22.5%) had positive HIV DNA PCR result (HIV infected vertically) while 568 (77.49%) had negative HIV DNA PCR result. Of the 165 babies with vertical HIV infection, 21 (12.7%) had caesarean delivery, 144 (87.3%) had vaginal delivery, 91 (55.2%) were breastfed, 74 (44.8%) had replacement feeding, 16(9.7%) had mothers that had PMTCT services while 149(90.3%) had mothers without the PMTCT services. While in the category of the 568 babies with negative HIV DNA PCR result, 204 (35.9%) had caesarean delivery and 364 (64.1%) were delivered vaginally, 99 (17.4%) were breastfed and 469 (86.6%) had replacement feeding, 410 (72.2%) had mothers who had PMTCT services and 158(27.8%) babies' mothers did not go through the PMTCT programme. More boys 391,53%) than girls(342,47%) were HIV-exposed but equal number were HIV infected(girls-82,boys-83) and same proportions were HIV negative (boys - 308, girls - 260). The modal age group among the exposed babies was 6-16 weeks. The average rate of vertical HIV transmission was 22.5%, but for babies whose mothers had PMTCT service the rate was 9.6%. Higher transmission rates were associated with vaginal delivery, breastfeeding and lack of PMTCT services to the mothers. The PMTCT service should therefore be strengthened and scale up to more centers.

**Keywords:** PMTCT Services, Vertical Transmission, HIV Infection, Lagos, Nigeria.

**Record Number:** 385  
**Author(s):** Ebenezer, A. Okiwelu, S. N. Agi, P. I. Noutcha, M. A. Awolola, T. S. Oduola, A. O.  
**Title:** Species Composition of the *Anopheles gambiae* Complex Across Eco-Vegetational Zones in Bayelsa State, Niger Delta Region, Nigeria.  
**Journal Title:** J Vector Borne Dis.  
**Date of Publication:** 2012  
**Volume ID:** 49  
**Issue ID:** 3  
**Page(s):** 164-7

**Address/Availability:****Location/URL:****Abstract:**

**BACKGROUND & OBJECTIVES:** Correct vector identification is an important task in the planning and implementation of malaria vector control programmes. This study was designed to provide baseline information on the species composition and distribution of members of the *Anopheles gambiae* complex in three eco-vegetational zones in Bayelsa state, Nigeria. **METHODS:** Adult mosquitoes were collected by pyrethrum spray catch (PSC) in randomly selected houses during September 2009-August 2010. *Anopheles* mosquitoes were identified using standard morphological keys. Mosquitoes identified as *An. gambiae* s.l. were used for species specific PCR-assays. **RESULTS:** Out of 203 *Anopheles gambiae* s.l. successfully amplified, 180 (88.7%) were *Anopheles gambiae* s.s., 14 (6.9%) were *An. melas* and 9 (4.4%) were *An. arabiensis*. The variation in the sibling species composition of *An. gambiae* s.l. was not significant ( $p > 0.05$ ). *Anopheles gambiae* s.s. was predominant in all the collections with three sibling species occurring in all the eco-vegetational zones. **INTERPRETATION & CONCLUSION:** The observation of *An. melas* in the fresh water swamp forest of Yenagoa is of importance in malaria epidemiology. These findings are of importance in the planning and implementation of malaria vector control strategy in the three eco-vegetational zones of Bayelsa state.

**Keywords:****Anopheles, Malaria.****Record Number:**

386

**Author(s):****Ekama, S.O. Herbertson, E. C. Addeh, E.J. Gab-Okafor, C.V. Onwujekwe, D. I. Tayo, F. Ezechi, O.C.****Title:**

Pattern and determinants of antiretroviral drug adherence among Nigerian Pregnant women

**Journal Title:**

Journal of Pregnancy

**Date of Publication:**

2012

**Volume ID:**

2012

**Issue ID:****Page(s):****Address/Availability:****Location/URL:****Abstract:**

**Background:** The need for a high level of adherence to antiretroviral drugs has remained a major hurdle to achieving maximal benefit from its use in pregnancy. This study was designed to determine the level of adherence and identify factors that influence adherence during pregnancy. **Method:** This is a cross-sectional study utilizing a semistructured questionnaire. Bivariate and multiple logistic regression models were used to determine factors independently associated with good drug adherence during pregnancy. **Result:** 137 (80.6%) of the interviewed 170 women achieved adherence level of  $\geq 95\%$  using 3 day recall. The desire to protect the unborn child was the greatest motivation (51.8%) for good adherence. Fear of being identified as HIV positive (63.6%) was the most common reason for nonadherence. Marital status, disclosure of HIV status, good knowledge of ART, and having a treatment supporter were found to be significantly associated with good adherence at bivariate analysis. However, after controlling for confounders, only HIV status disclosure and having a treatment partner retained their association with good adherence. **Conclusion:** Disclosure of HIV status and having treatment support are associated with good adherence. Maternal desire to protect the child was the greatest motivator for adherence.

**Keywords:****Antiretroviral drug, Adherence, Pregnant, Nigeria.****Record Number:**

387

**Author(s):****Ezechi O, Petterson, K.O. Byamugisha, J.****Title:****HIV/AIDS, tuberculosis, and malaria in pregnancy.****Journal Title:**

Journal of Pregnancy

**Date of Publication:**

2012

**Volume ID:**

2012

**Issue ID:**

3

**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** HIV/AIDS, Tuberculosis, Malaria, Pregnancy.

**Record Number:** 388  
**Author(s):** Ezechi, O.C. David, A.N.  
**Title:** Overview of Global Perinatal Mortality  
**Journal Title:** InTech  
**Date of Publication:** 2012  
**Volume ID:**  
**Issue ID:**  
**Page(s):** 1-0  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Perinatal, Mortality.

**Record Number:** 389  
**Author(s):** Ezechi, O. Kalejaiye, O.  
**Title:** Management of anaemia in pregnancy.  
**Journal Title:** InTech.  
**Date of Publication:** 2012  
**Volume ID:**  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Anaemi, Pregnancy

**Record Number:** 390  
**Author(s):** Gab-Okafor, C. Ezechi, O. Onwujekwe, D. Adu, R. Herbertson, E. Ezeobi, P. Gbajabiamila, T. Ekama, S.  
**Title:** The outcome and choice of initial combination anti-retroviral therapy in treatment-naïve HIV-infected individuals.  
**Journal Title:** Journal of the International AIDS Society.  
**Date of Publication:** 2012  
**Volume ID:** 15  
**Issue ID:** 6  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Background:** Optimization of initial highly active antiretroviral therapy (HAART) for complete viral suppression and better tolerability is paramount for the prognosis of HIV-infected patients. Durable suppression of HIV therefore depends on the use of potent, well-tolerated antiretroviral regimens to which patients can easily adhere. The aim is to determine the outcome and factors influencing the choice of initial combination antiretroviral drugs in the treatment-naïve HIV patients. **Methods:** The outcome and factors influencing the choice of initial antiretroviral drugs were investigated in HIV-infected treatment-naïve individuals in a large HIV treatment clinic in south-western Nigeria using a cross-sectional design between January to December 2010. **Results:** 432 patients were analyzed (mean age 38 years  $\pm$  9.010),

67.6% females, 50.1% prior AIDS. Mean CD4 cells and HIV RNA were 146 cells/mm<sup>3</sup> and 194312 copies/ml respectively. Zidovudine-lamivudine-nevirapine regimen (ZDV-3TC-NVP) was prescribed in 34.3%, followed by tenofovir-emtricitabine-efavirenz (TDF-FTC-EFV) 26.9%, TDF-FTC-NVP (17.6%), TDF-3TC-NVP (8%), ZDV-3TC-EFV (4.6%), abacavir (ABC)-3TC-EFV (3.7%), ABC-3TC-NVP (2.8%). Difference in prescription was noted among the doctors. Compared with TDF-3TC-NVP, starting TDF-FTC-EFV was mainly associated in multivariate analysis with reduced pill burden (P<0.001), and HIV RNA copies >200,000 copies/ml (P=0.0015). TDF-3TC-NVP and TDF-3TC-ZDV-atazanavir (ATV)-ritonavir (RTV) were more likely in patients with drug substitution and switch programs respectively (P<0.001; P<0.001). ABC-3TC-EFV was more likely in patients with deranged creatinine levels (P=0.002). At 6 months and 12 months, 364 (84.3%) and 392 (90.7%) achieved virologic suppression respectively (HIV RNA copies <200 copies/ml). CD4 cells increased by 138 cells/mm<sup>3</sup> and 198 cells/mm<sup>3</sup> at 6 months and 12 months respectively. Virologic suppression was more likely with TDF-FTC-EFV (93.7%) while CD4 cells increase was higher with ZDV-3TC-NVP. The 2 most common often prescribed regimens, TDF-FTC-EFV and ZDV-3TC-NVP, had virologic response rates of 93.7% and 84.2% (P<0.001). **Conclusion:** Factors such as physician preference and patient-reported features play a role in the choice of initial HAART regimen. Identification of these features and simplification of treatment regimens will be necessary in order to maximize the effectiveness of HAART regimens.

**Keywords:** Anti-retroviral therapy, HIV.

**Record Number:** 391  
**Author(s):** Herbertson, E.C. Ohihoin, A.G. Gbajabiamila, T.A. David, A.N Odubela, O.Ekama, S.O. Gab-Okafor, C.V. Owhodo, H. Ezechi, O. C.  
**S.O.**  
**Title:** Success rate of an Outreach PMTCT Program in Nigeria  
**Journal Title:** BMC Infectious Diseases  
**Date of Publication:** 2012  
**Volume ID:** 14  
**Issue ID:** 2  
**Page(s):** 97  
**Address/Availability:**  
**Location/URL:** <http://www.biomedcentral.com/1471-2334/14/S2/P9>  
**Abstract:** **Introduction:** Prevention of mother-to child transmission (PMTCT) of HIV is an important strategy to achieving zero new HIV infection and has been an important strategy in preventing the upsurge of HIV infection in Nigeria. **Method:** This study is an 8 year (2004-2012) review to evaluate the outcome of PMTCT outreach services offered by the Nigerian Institute of Medical Research (NIMR). It is a retrospective review of PMTCT and infant follow-up databases. PMTCT enrollees (from the NIMR adult antiretroviral clinic and referrals from public and private antenatal clinics) were placed on routine PMTCT care and subsequent infant prophylaxis, based on the WHO/National PMTCT guidelines. While ANC services are provided at the clinic, labor and delivery services are provided by partner institutions. The women are referred out at 36 weeks with delivery protocol. They are referred back after delivery with complete delivery summary form. Infants were followed up for 18 months and had HIV DNA PCR done at 6 weeks and 6 months. **Results:** There were a total of 4139 records for PMTCT uptake. 257 of these had incomplete data and were excluded from analysis. The delivery outcomes include: miscarriage-107 (2.8%); still birth 134 (3.5%); live births-3641 (94%), neonatal deaths-68 (1.8%). Only 2623 (73%) of the live births were presented at the clinic for followup; of these, 21 (0.8%) tested HIV positive by DNA at an average age of 12 weeks. **Conclusion:** The PMTCT success rate of 99% achieved is comparable to that in developed countries. In low income countries where it is not possible to implement full PMTCT protocol, a strategy where a public institution is the center and provides services for other smaller institutions is recommended.

**Keywords:** PMTCT, Nigeria.

**Record Number:** 392  
**Author(s):** Smith, S. I. Opere, B. Fowora, M. Aderohunmu, A. Ibrahim, R. Omonigbehin, E. Bamidele, M. Adeneye, A.  
**Title:** Molecular Characterization of Salmonella spp Directly from Snack and Food Commonly Sold in Lagos, Nigeria.  
**Journal Title:** Southeast Asian J Trop Med Public Health.  
**Date of Publication:** 2012  
**Volume ID:** 43  
**Issue ID:** 3  
**Page(s):** 718-23  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Food borne Salmonella infection is an important cause of morbidity and mortality. A total of 200 food samples commonly sold in Lagos, Nigeria comprising raw and cooked meat as well as meat products and spoilt meat were analysed for the presence of Salmonella spp using REVEAL serology kit, culture methods employing RPVA (Rappaport Vassiliadis agar), SSA (Salmonella-Shigella agar) and BSA (brilliant sulphite agar) and PCR method for direct detection from samples using primer salm3/4 and ST11/ST15 sets. Using the REVEAL serology kit, 74% of the samples were positive for Salmonella spp, while culture methods showed only 19% to be Salmonella spp. The PCR method revealed that Salmonella spp was present in 62% and 54% of the samples using primer set salm3/4 and ST11/ST15, respectively. However, the primer set ST11/ST15 was more reliable in the identification of Salmonella spp directly from food samples. These tools should prove useful in the continuous monitoring and control strategies especially for ready-to-eat foods, as well as in retail meat outlets, slaughter houses, fast food restaurants for the prevention and reduction of this pathogen that is of significant importance in the food industry.  
**Keywords:** Molecular, characterization, Salmonella spp, Snack, Food, Nigeria.

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**Record Number:** 393  
**Author(s):** Onyekwere, C. A. Audu, R. A. Duro-Emmanuel, F. Ige F. A.  
**Title:** Hepatitis D infection in Nigeria.  
**Journal Title:** Indian J Gastroenterol.  
**Date of Publication:** 2012  
**Volume ID:** 31  
**Issue ID:** 1  
**Page(s):** 34-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Hepatitis, Nigeria.

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**Record Number:** 394  
**Author(s):** Oladele, D. A. Oyedeji, K. S. Niemogha, M. T. Nwaokorie, F. Bamidele, M. Musa, A. Z. Adeneye, A. K. Bamidele, T. A. Ochoga, M. Akinsinde, K. A. Brai, B. I. Omonigbehin, E. A. Fesobi, T. W. Smith, S. I. Ujah, I. A.  
**Title:** An Assessment of the Emergency Response Among Health Workers Involved in the 2010 Cholera Outbreak in Northern Nigeria.  
**Journal Title:** J Infect Public Health.  
**Date of Publication:** 2012  
**Volume ID:** 5  
**Issue ID:** 5  
**Page(s):** 346-53  
**Address/Availability:**

**Location/URL:****Abstract:**

**BACKGROUND:** The 2010 cholera outbreak in northern Nigeria affected over 40,000 people, with a case fatality rate (CFR) of =3.75%. We assessed the emergency response of health care workers (HCWs) involved in case management. **METHOD:** This was a cross-sectional study with data collected through a self-administered questionnaire. Data entry and analysis were performed using Epi info software. **RESULTS:** A total of 56 HCWs were interviewed. The mean age was 31 years (SD±8.16 years). The majority of the HCWs (80%; n=45) were aged 18-39 years. Most were community health extension workers (60%), and 3.6% (n=2) were medical doctors. Many of the HCWs had less than 2 years of work experience (42%). Additionally, 82% of the respondents had <1 week of cholera emergency response training, and 50% of the HCWs managed >20 suspected cases of cholera per day. Although 78% of HCWs reported the practice of universal safety precautions, 32% (n=18) knew HCWs who developed symptoms of cholera during the epidemic, most of which was believed to be hospital acquired (78%). We also found that 77% (n=43) of HCWs had no access to the required emergency response supplies. **CONCLUSION:** Inadequate training, a lack of qualified HCWs and a limited supply of emergency response kits were reported. Therefore, the government and stakeholders should address the gaps noted to adequately control and prevent future epidemics.

**Keywords:**

**Emergency response, Health workers, 2010, Cholera outbreak, Nigeria.**

**Record Number:**

**395**

**Author(s):**

Chia-Kwung Fan, Lin-Wen Lee, Chien-Wei Liao, Ying-Chieh Huang, Yueh-Lun Lee, Yu-Tai Chang, Ângela dos Santos Ramos José da Costa, Vilfrido Gil, Li-Hsing Chi, Takeshi Nara, Akiko Tsubouchi, **Akinwale, O.P**

**Title:**

**Toxoplasma Gondii Infection: Relationship Between Sero-Prevalence and Risk Factors Among Primary School Children in the Capital Areas of Democratic Republic of Sao Tome and Principe, West Africa.**

**Journal Title:**

Parasites and Vectors

**Date of Publication:**

2012

**Volume ID:**

13

**Issue ID:**

5

**Page(s):**

1414

**Address/Availability:****Location/URL:****Abstract:****Keywords:**

**Toxoplasma, Gondii, Infection, Sero-Prevalence Primary School, Children, Democratic Republic of Sao Tome Principe, West Africa.**

**Record Number:**

**395**

**Author(s):**

Dinic, L. **Akande, P. Idigbe, E. O. Ani, A. Onwujekwe, D. Agbaji, O. Akanbi, M. Nwosu**, R. Adeniyi, B. Wahab, M. Lekuk, C. Kunle-Ope, C. Nwokoye, N. Kanki, P.

**Title:**

**Genetic Determinants of Drug-resistant Tuberculosis among HIV-Infected Patients in Nigeria.**

**Journal Title:**

J Clin Microbiol.

**Date of Publication:**

2012

**Volume ID:**

50

**Issue ID:**

9

**Page(s):**

2905-9

**Address/Availability:****Location/URL:****Abstract:**

Tuberculosis (TB) is the most common opportunistic infection in human immunodeficiency virus (HIV)-infected patients and the emergence of drug-resistant tuberculosis (DR-TB) is a growing problem in resource-limited settings. Adequate infrastructure for testing drug

sensitivity and sufficient evidence of first-line resistance are currently unavailable in Nigeria. We collected sputum samples from HIV-infected patients enrolled in the Harvard PEPFAR/APIN Plus program over 12 months at two PEPFAR antiretroviral therapy (ART) clinics in the southwest and north central regions in Nigeria. Smear-positive sputum samples were submitted for GenoType MTBDRplus testing (n = 415); mutations were confirmed through sequencing. Our results show high rates of DR-TB in Nigerian HIV-infected individuals (7.0% for rifampin [RIF] and 9.3% for RIF or isoniazid [INH]). Total RIF resistance indicative of MDR-TB in treatment-naïve patients was 5.52%, far exceeding the World Health Organization predictions (0 to 4.3%). RIF resistance was found in 6/213 (2.8%) cases, INH resistance was found in 3/215 (1.4%) cases, and MDR-TB was found in 8/223 (3.6%) cases. We found significantly different amounts of DR-TB by location (18.18% in the south of the country versus 3.91% in the north central region [ $P < 0.01$ ]). Furthermore, RIF resistance was genetically distinct, suggesting possible location-specific strains are responsible for the transmission of drug resistance ( $P < 0.04$ ). Finally, GenoType MTBDRplus correctly identified the drug-resistant samples compared to sequencing in 96.8% of cases. We found that total DR-TB in HIV-infection is high and that transmission of drug-resistant TB in HIV-infected patients in Nigeria is higher than predicted.

**Keywords:** Genetic, Tuberculosis, HIV, Nigeria.

**Record Number:** 396  
**Author(s):** Oluyemi, A. Anomneze, E. **Smith, S.** Fasanmade, O.  
**Title:** Prevalence of a Marker of Active *Helicobacter pylori* Infection Among Patients with type 2 Diabetes Mellitus in Lagos, Nigeria.  
**Journal Title:** BMC Res Notes.  
**Date of Publication:** 2012  
**Volume ID:** 11  
**Issue ID:** 5  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**BACKGROUND:** There appears to exist a potentially important interplay between diabetes mellitus (DM) and *Helicobacter pylori* (*H. pylori*) infection. Findings from previous studies have been conflicting. Only a few studies have examined the topic in a sub-Saharan African population. This study sought to determine the prevalence of *H. pylori* infection among Type 2 diabetes mellitus (T2DM) patients in Lagos, Nigeria. **FINDINGS:** *H. pylori* infection was detected in 18% of T2DM patients and 13% of controls but there was no statistical significance in this difference ( $p = 0.52$ ). The prevalence of *H. pylori* was neither associated with the known duration of T2DM nor was it associated with age, gender, body mass index (BMI), smoking status. T2DM was not shown to be a risk factor independently associated with risk for *H. pylori* infection (OR = 0.87, 95% CI = 0.58-1.31,  $p = 0.57$ ). **CONCLUSIONS:** The lack of a statistical significant difference between the *H. pylori* infection rates in T2DM patients and controls suggests that the infection is not increased in T2DM. Larger studies need to be conducted to confirm the study findings.

**Keywords:** Active helicobacter pylori, Infection, Patients, type 2 diabetes mellitus, Lagos, Nigeria.

**Record Number:** 397  
**Author(s):** Otuonye, M. N. Onwuamah, C. K. Okwuzu, J. A. Oparaugo, C. T. Adeneye, A. K. Fowora, M. A. Akintunde, G. B. Adesesan, S. E. Uwandu, M. O. Ohiku, F. O. Chigbo, R. C.  
**Title:** Vaginal Products and Hygiene Practices: Implications for Microbicides Acceptability amongst Nigeria women.  
**Journal Title:** Nigerian Journal of Clinical & Biomedical Research  
**Date of Publication:** 2012  
**Volume ID:** 6

**Issue ID:** 1  
**Page(s):** 47-53  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Use of vaginal products and or vaginal practices in cleansing, tightening and or drying the vagina could interfere with the use of newly initiated HIV preventive technologies for women. This study assessed vaginal practices, the use of other vaginal products and its implications on the acceptability of microbicides among Nigerian women. There hundred and seventy women aged 19-45 were randomly selected and interviewed about vaginal practices, using questionnaire. Each participant completed a questionnaire to provide information on demography, knowledge and use of male/female condom vaginal hygiene practice and use of intra-vaginal products. Also, knowledge and willingness to use microbicides when available were assessed. This information was collated and analyzed using EPI INFO 2002 software. Of the 370 respondents 51.6% were married, 61.4% had tertiary education. At baseline, vaginal douching was practiced by 77.8% of the women. The commonest agent used for douching was soap and water. Two out of 40% of HIV positive women reported having bruises after douching with lemon juice. A total of 12.4% of the women reported inserting tightening substances to increase sexual pleasure. Use of tightening substances and douching practices were not significantly associated with microbicide acceptability ( $p > 0.335$ ,  $p > 0.609$ ). Contrarily, 49.7% women who use lubricated inserts was significantly associated with microbicide acceptability  $p < 0.05$ . Willingness to accept and use microbicides were also significantly associated with previous knowledge, education, religion, age, marital status as well as family planning methods ( $p < 0.005$ ). The use of lubricated inserts may indicate willingness to accept and use hypothetical microbicides, contrarily, use of tightening substances may indicate negative implication for microbicides and calls for public health intervention.

**Keywords:** Vagina, Hygiene, Vaginal products, Microbicides, Women

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**Record Number:** 398  
**Author(s):** Otuonye, M. N. Onwuatuolo, I. R. Onwuamah, C. K. Okwuzu, J. O. Adeneye A. K' Oparaugo, C. T. Adesesan, A. A. Akintunde, G. B. Ohiku, F. O. Uwandu, M. Fowora, M. A. Otuonye, E. L.  
**Title:** Sexual Violence and HIV/STIs in Girls and Young Women: Trends and Association in South Western Nigeria.  
**Journal Title:** Nigerian Journal of Clinical & Biomedical Research  
**Date of Publication:** 2012  
**Volume ID:** 6  
**Issue ID:** 2  
**Page(s):** 47-52  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Sexual violence put girls and young women at risk of long-lasting consequences in their reproductive health. The study focused on the trend of sexual violence and its' association with STIs/HIV amongst girls and young women in Western, Nigeria. Data was obtained from in and out school girls and young women age =10 to 28 years, using a cross sectional study design. 400 respondents were randomly selected and individually interviewed using a structured administered questionnaire which examined demographics, types of sexual violence, cases reported to authorities and infections with STIs/HIV. These were collated and analyzed using EPI INFO 2002. Out of 400 respondents, sexually violence cases were reported from 389 (97.4%) respondents out of which rape and Incest accounted for 33.0% and 14.0% (47%) respectively. Out of these 47% respondents 30.42% of them reported being infected with HIV and other STIs, HIV/STIs among those who had incest and were raped were 3 significantly associated with sexual violence ( $p < 0.005$ ). Other sexual practices were significantly associated with sexual violence ( $< 0.05$ ) Fathers and neighbors` were the most

prevalent perpetrators of sexual violence ( $p < 0.05$ ) in girls and young women. The study indicated a significant trend in sexual violence over time. Sexual violence within age bracket =10 is on the increase while ages =26 are on the decline. The study also suggests that sexual violence is one of the factors that increase the acquisition of HIV/STIs in girls and young women. Regular surveys would help in developing new strategies for control and prevention of sexual violence in girls and young women in Lagos Nigeria.

**Keywords:** Sexual violence, Girls, Young Women, HIV, STIs, Nigeria

**Record Number:** 399  
**Author(s):** Pam, V. K. Akpan, J. U. Oduyebo, O. O. Nwaokorie, F. O. Fowora, M. A. Oladele, R. O. Ogunsola, F. T. Smith, S. I.  
**Title:** Fluconazole Susceptibility and ERG11 Gene Expression in Vaginal Candida species Isolated From Lagos Nigeria.  
**Journal Title:** Int J Mol Epidemiol Genet.  
**Date of Publication:** 2012  
**Volume ID:** 3  
**Issue ID:** 1  
**Page(s):** 84-90  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Fluconazole resistance is an important type of resistance in Candida because in most countries, fluconazole is the drug of choice for vulvo vaginal candidiasis. Candida species resist fluconazole by various mechanisms but there is paucity of data on these in our environment. Such mechanisms include among others, over-expression of the ERG11 gene, which codes for synthesis of the target enzymes in the fungus. The aim of this study was to screen Candida spp. resistant to fluconazole for the expression of ERG11 gene. Fluconazole susceptibility test was performed on 28 clinical strains of Candida species previously obtained from students of a School of Nursing in Lagos, Nigeria. They were identified by API Candida, CHROMagar candida and germ tube test. Using 25 mcg discs, fluconazole susceptibility was determined by the disc diffusion method and results were interpreted in accordance with the Clinical Laboratory Standard Institute (CLSI) criteria; sensitive (S), resistant (R) and susceptible dose dependent (SDD). The R and SDD isolates were subsequently evaluated for the presence of ERG11 gene. Of the 28 clinical isolates, 14 were identified as *C. albicans* and six as *C. tropicalis*. The remaining isolates were identified as *C. glabrata* (2), *C. famata* (2) *C. kefyr* (2) one each of *C. parapsilosis* and *C. guilliermondii* respectively. In this study, 18 were susceptible (S) to fluconazole, eight were SDD and two were resistant to the antifungal agent. Out of the 14 *C. albicans* isolates, 12 were susceptible, one showed high level resistance and similar number showed susceptible dose dependence. ERG11 was detected in three susceptible dose dependent Candida species. This analysis demonstrates that susceptible dose dependence should not be overlooked as it may be associated with the presence of ERG11 gene and resistance to fluconazole. There is a need to consider routine antifungal susceptibility testing for Candida species causing vulvovaginitis.

**Keywords:** Candida species, ERG11 Gene, Fluconazole, Antifungal susceptibility

**Record Number:** 400  
**Author(s):** Smith, S. Ganiyu, O. John, R. Fowora, M. Akinsinde, K. Odeigah, P.  
**Title:** Antimicrobial Resistance and Molecular Typing of Pseudomonas Aeruginosa Isolated from Surgical Wounds in Lagos, Nigeria.  
**Journal Title:** Acta Med Iran.  
**Date of Publication:** 2012  
**Volume ID:** 50  
**Issue ID:** 6

**Page(s):** 433-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The aim of the study was to determine the resistance patterns of *Pseudomonas aeruginosa* isolates recovered from patients with surgical wounds in hospitals and also to investigate their epidemiological relatedness using molecular typing techniques. Twenty *Pseudomonas* sp. isolated from surgical wounds were subjected to antibiotic susceptibility testing by disk diffusion, plasmid profile, SDS-PAGE and PCR using the *parC*, *gyr A* gene and RAPD using the 1254 primer. The isolates showed resistance to 12 different antibiotics with six being 100% resistant. Plasmids were detected in 16 (80%) of the isolates. The RAPD-PCR using the primer 1254, SDS-PAGE classified the 20 *Pseudomonas* spp. into 5 and 6 types respectively. *Pseudomonas aeruginosa* strains isolated from surgical wounds were generally resistant to a broad range of antibiotics and this is rather worrisome. The typing techniques classified the 20 isolates into 5 and 6 groups.  
**Keywords:** Antimicrobial, Molecular typing, *Pseudomonas Aeruginosa*, Surgical, Wounds, Nigeria.

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**Record Number:** 401  
**Author(s):** Smith, S. I. Fowora, M. A. Lesi, O. A. Agbebaku, E. Odeigah, P. Abdulkareem, F. B. Onyekwere, C. A. Agomo C. A. Contreras, M.  
**Title:** Application of Stool-PCR for the Diagnosis of *Helicobacter pylori* From Stool in Nigeria- A Pilot Study.  
**Journal Title:** Springerplus.  
**Date of Publication:** 2012  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** There are various methods for detection of *Helicobacter pylori* and the gold standard for non-invasive detection is the urea breath test (UBT). The aim of the study is therefore to detect *H. pylori* from the stool of patients with dyspepsia by PCR and compare results obtained with UBT. A total of 97 stool samples from patients presenting with dyspeptic symptoms in Lagos University Teaching Hospital (LUTH) were screened for urea breath test (UBT) and the presence of *H. pylori* DNA using stool-PCR. Out of 97 stool samples analysed, 38 (39.2%) were positive for *Helicobacter* spp. and 20 (20.6%) positive for *H. pylori* by PCR, through amplification of 16S rRNA and *glmM* genes respectively. Of the 20 positive by *glmM* gene, the *cagA* gene was detected in 8 (40%) samples, while 47 (48.5%) out of 97 stool samples were positive for *H. pylori* by UBT. The sensitivity and specificity of the *glmM* gene compared with UBT as the gold standard is 42.6% and 100% respectively. The positive predictive value (PPV) was 100% while the negative predictive value (NPV) was 60%. The method may be useful for detecting *H. pylori* from stool amongst children especially where most hospitals lack endoscope for children although the method is expensive.  
**Keywords:** *Helicobacter pylori*, Nigeria, Stool-PCR, UBT.

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**Record Number:** 402  
**Author(s):** Okwuraiwe, A. P. Audu, R. A. Salu, O. B. Onwuamah, C. K. Amoo, O. S. Ige, F. A. Meshack, E. H. Jamda, P. D. Odunukwe, N. N. Onwujekwe, D. I. Ezechi, O. C. Idigbe, E. O.  
**Title:** Immunological and Virological Response to Haart in HIV-1 Patients Co-Infected with Hepatitis B and C Viruses.  
**Journal Title:** West Afr J Med.  
**Date of Publication:** 2012  
**Volume ID:** 31

**Issue ID:** 2  
**Page(s):** 124-8  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **BACKGROUND:** Among the countries highly endemic for viral hepatitis, Nigeria is found. Information on how triple infected persons (HIV, HBV, and HCV) fare on HAART in the country is lacking. Laboratory based investigation was carried out to assess the virological and immunological parameters of HIV-1 infected patients co-infected with Hepatitis B and C, accessing care at the Nigerian Institute of Medical Research. It was a case controlled study. **OBJECTIVES:** The study aimed to compare the laboratory data of HIV-HBV-HCV patients seen between 2006 and 2009 with HIV-1 monoinfected patients in the same period, on HAART according to the national guideline and followed up for 12 months. **METHODS:** Detection of Hepatitis B surface Antigen (HBsAg) and Hepatitis C Virus Antibody (HCVAb) were assayed using ELISA techniques (Bio Rad and DIA PRO respectively). The CD4 and HIV viral load were determined using the Cyflow Counter/Kits (Partec) and the Amplicor HIV-1 Monitor Test V1.5 (Roche) techniques respectively. **RESULTS:** Forty-one (0.4%) of the 10,214 HIV-1 patients seen during the period were co-infected with both HBV and HCV. Over the 12 month-period, median HIV-1 viral load and CD4 count reduced and increased respectively (12,205-200 RNA copies/mL; 210-430 cells/mL from baseline - 12th month), and for the HIV-1 monoinfected patients (36,794-200 RNA copies/mL [p=0.5485] and 206-347 cells/mL [p=0.7703] from baseline - 12th month). **CONCLUSION:** There seems to be no significant influence of hepatitis B and C in HIV infection on HAART judging by the CD4 and viral load profiles which were similar in the two groups.

**Keywords:** **HBV, HCV, HIV, CD4, Viral load, HAART.**

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**Record Number:** 403  
**Author(s):** Igado, O. O. Olopade, J. O. Adesida, A. Aina, O. O. Farombi, E. O.  
**Title:** **Morphological and Biochemical Investigation into the Possible Neuroprotective effects of kolaviron (Garcinia kola bioflavonoid) on the Brains of rats exposed to Vanadium.**  
**Journal Title:** Drug Chem Toxicol.  
**Date of Publication:** 2012  
**Volume ID:** 35  
**Issue ID:** 4  
**Page(s):** 371-80  
**Address/Availability:**  
**Location/URL:**

**Abstract:** In this study, the morphological and biochemical susceptibility of the rat brain to vanadium, in the form of sodium metavanadate, and the comparative ameliorative effect of *Garcinia kola* and kolaviron (*G. kola* extract), was examined. Brain regions examined were the cerebrum, cerebellum, hippocampus and the olfactory bulb. We showed that vanadium administration caused cellular vacuolation, congestion, and Purkinje cell degeneration and a marked reduction in myelin tracts. Biochemical tests revealed increased lipid peroxidation induced by vanadium, which was ameliorated with the administration of *G. kola* and kolaviron. Vanadium administration caused an increase in thiobarbituric acid-reactive substances (TBARS) in the cerebrum and hippocampus, whereas the administration of kolaviron resulted in a reduction of the TBARS level by 65.7 and 80%, respectively, in the regions aforementioned. Also, the administration of kolaviron resulted in an increased activity of superoxide dismutase (61.24%) in all brain regions assessed, when compared with the group administered vanadium alone. Results obtained from this study led to the conclusion that kolaviron reduces vanadium-induced oxidative stress in the brain.

**Keywords:** **Morphological, Biochemical, Kolaviron (Garcinia kola bioflavonoid), rats, Vanadium.**

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**Record Number:** 404

**Author(s):** Audu, R. A. Sylvester-Ikundu, U. Onwuamah, C.K. Salu, O.B. Ige, F.A.Meshack, E. Aniedobe, M. Amoo, O. S. Okwuraiwe, A.P. Okhiku, F. Okoli, C.L. Fasela, E.O. Odewale, E.O. Aleshinloye, R.O. Olatunji, M. Idigbe, E.O.

**Title:** Experience of Quality Management System in a Clinical Laboratory in Nigeria.

**Journal Title:** African Journal of Laboratory Medicine.

**Date of Publication:** 2012

**Volume ID:** 1

**Issue ID:** 1

**Page(s):** 1-5

**Address/Availability:** <http://dx.doi.org/10.4102/ajlm.v1i1.18>

**Location/URL:**

**Abstract:** Issues: Quality-management systems (QMS) are uncommon in clinical laboratories in Nigeria, and until recently, none of the nation's 5 349 clinical laboratories have been able to attain the certifications necessary to begin the process of attaining international accreditation. Nigeria's Human Virology Laboratory (HVL), however, began implementation of a QMS in 2006, and in 2008 it was determined that the laboratory conformed to the requirements of ISO 9001:2000 (now 2008), making it the first diagnostic laboratory to be certified in Nigeria. The HVL has now applied for the World Health Organization (WHO) accreditation preparedness scheme. The experience of the QMS implementation process and the lessons learned therein are shared here. Description: In 2005, two personnel from the HVL spent time studying quality systems in a certified clinical laboratory in Dakar, Senegal. Following this peer-to-peer technical assistance, several training sessions were undertaken by HVL staff, a baseline assessment was conducted, and processes were established. The HVL has monitored its quality indicators and conducted internal and external audits; these analyses (from 2007 to 2009) are presented herein. Lessons learned: Although there was improvement in the pre-analytical and analytical indicators analysed and although data-entry errors decreased in the post-analytical process, the delay in returning laboratory test results increased significantly. There were several factors identified as causes for this delay and all of these have now been addressed except for an identified need for automation of some high-volume assays (currently being negotiated). Internal and external audits showed a trend of increasing non-conformities which could be the result of personnel simply becoming lax over time. Application for laboratory accreditation, however, could provide the renewed vigour needed to correct these non-conformities. Recommendation: This experience shows that sustainability of the QMS at present is a cause for concern. However, the tiered system of accreditation being developed by WHO-Afro may act as a driving force to preserve the spirit of continual improvement.

**Keywords:** Quality Management System, Clinical, Laboratory

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**Record Number:** 405

**Author(s):** Adagbada, A. O. Adesida, S. A. Nwaokorie, F. O. Niemogha, M. T. Coker, A. O.

**Title:** Cholera Epidemiology in Nigeria: An Overview.

**Journal Title:** Pan Afr Med J.

**Date of Publication:** 2012

**Volume ID:** 12

**Issue ID:** 59

**Address/Availability:**

**Location/URL:**

**Abstract:** Cholera is an acute diarrhoeal infection caused by ingestion of food or water contaminated with the bacterium, *Vibrio cholera*. Cholerae *V. cholera* O1 and O139 are the only causative agents of the disease. The two most distinguishing epidemiologic features of the disease are its tendency to appear in explosive outbreaks and its predisposition to causing pandemics that may progressively affect many countries and spread into continents. Despite efforts to control cholera, the disease continues to occur as a major public health problem in many developing countries. Numerous studies over more than a century have made advances

in the understanding of the disease and ways of treating patients, but the mechanism of emergence of new epidemic strains, and the ecosystem supporting regular epidemics, remain challenging to epidemiologists. In Nigeria, since the first appearance of epidemic cholera in 1972, intermittent outbreaks have been occurring. The later part of 2010 was marked with severe outbreak which started from the northern part of Nigeria, spreading to the other parts and involving approximately 3,000 cases and 781 deaths. Sporadic cases have also been reported. Although epidemiologic surveillance constitutes an important component of the public health response, publicly available surveillance data from Nigeria have been relatively limited to date. Based on existing relevant scientific literature on features of cholera, this paper presents a synopsis of cholera epidemiology emphasising the situation in Nigeria.

**Keywords:** Cholera, Nigeria, *Vibrio cholerae*, Epidemiology.

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**Record Number:** 406  
**Author(s):** Adeleke, M. A. Sam-Wobo, S. O. Olatunde, G. O. **Akinwale, O. P.** Mafiana, C. F.  
**Title:** Attraction of *Simulium Damnosum* Complex To *Pterocarpus Santalinoides*: A preliminary study.  
**Journal Title:** *Munis Entomology and Zoology*  
**Date of Publication:** 2012  
**Volume ID:** 7  
**Issue ID:** 1  
**Page(s):** 368-371  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** *Simulium Damnosum, Pterocarpus Santalinoides*

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**Record Number:** 407  
**Author(s):** Messenger, L. A. Miller, N. P. Adeogun, A. O. Awolola, T. S Rowland, M.  
**Title:** **The Development of Insecticide-Treated Durable Wall Lining for Malaria Control: Insights from Rural and Urban Populations in Angola and Nigeria.**  
**Journal Title:** *Malar J.*  
**Date of Publication:** 2012  
**Volume ID:** 18  
**Issue ID:** 11  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **BACKGROUND:** Durable lining (DL) is a deltamethrin-impregnated polyethylene material, which is designed to cover domestic walls that would normally be sprayed with residual insecticide. The operational success of DL as a long-lasting insecticidal substrate will be dependent on a high level of user acceptability as households must maintain correctly installed linings on their walls for several years. Preliminary trials were undertaken to identify a material to develop into a marketable wall lining and to assess its level of acceptability among rural and urban populations. **METHODS:** In Angola (n=60), prototype DL and insecticide-treated plastic sheeting (ITPS) were installed on urban house walls and ceilings, respectively, and acceptability was compared to indoor residual spraying (IRS) (n=20) using a knowledge, attitude and practice (KAP) questionnaire. In Nigeria (n=178), three materials (prototype DL, ITPS and insecticide-treated wall netting) were distributed among rural and urban households. User opinions were gathered from focus group discussions, in-depth interviews and KAP questionnaires. **RESULTS:** In Angola, after two weeks, the majority of participants (98%) expressed satisfaction with the products and identified the killing of insects as the materials' principal benefits (73%). After one year, despite a loss of almost 50% of households to refugee repatriation, all 32 remaining households still asserted that they had

liked the DL/ITPS in their homes and given the choice of intervention preferred DL/ITPS to IRS (94%) or insecticide-treated nets (78%). In Nigeria, a dichotomy between rural and urban respondents emerged. Rural participants favoured wall adornments and accepted wall linings because of their perceived decorative value and entomological efficacy. By contrast, urban households preferred minimal wall decoration and rejected the materials based upon objections to their aesthetics and installation feasibility. **CONCLUSIONS:** The high level of acceptability among rural inhabitants in Nigeria identifies these communities as the ideal target consumer group for durable wall linings. The poorer compliance among urban participants suggests that wall linings would not be readily adopted or sustained in these regions. If DL is as well received by other rural populations it could overcome some of the logistical constraints associated with spray campaigns and has the potential to become a long-lasting alternative to IRS in malaria endemic areas.

**Keywords:** Lining, Malaria, Insecticide.

**Record Number:** 408

**Author(s):** Ojuromi, O. T. Izquierdo, F. Fenoy, S. Fagbenro-Beyioku, A. Oyibo, W. Akanmu, A. Odunukwe, N. Henriques-Gil N. del Aguila C.

**Title:** Identification and Characterization of Microsporidia From Fecal Samples of HIV-positive Patients from Lagos, Nigeria.

**Journal Title:** PLoS One.

**Date of Publication:** 2012

**Volume ID:** 7

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** **BACKGROUND:** Microsporidia are obligate intracellular parasites that infect a broad range of vertebrates and invertebrates. They have been increasingly recognized as human pathogens in AIDS patients, mainly associated with a life-threatening chronic diarrhea and systemic disease. However, to date the global epidemiology of human microsporidiosis is poorly understood, and recent data suggest that the incidence of these pathogens is much higher than previously reported and may represent a neglected etiological agent of more common diseases indeed in immunocompetent individuals. To contribute to the knowledge of microsporidia molecular epidemiology in HIV-positive patients in Nigeria, the authors tested stool samples proceeding from patients with and without diarrhea. **METHODOLOGY/PRINCIPAL FINDINGS:** Stool samples from 193 HIV-positive patients with and without diarrhea (67 and 126 respectively) from Lagos (Nigeria) were investigated for the presence of microsporidia and *Cryptosporidium* using Weber's Chromotrope-based stain, Kinyoun stain, IFAT and PCR. The Weber stain showed 45 fecal samples (23.3%) with characteristic microsporidia spores, and a significant association of microsporidia with diarrhea was observed (O.R. = 18.2; CI: 95%). A similar result was obtained using Kinyoun stain, showing 44 (31,8%) positive samples with structures morphologically compatible with *Cryptosporidium* sp, 14 (31.8%) of them with infection mixed with microsporidia. The characterization of microsporidia species by IFAT and PCR allowed identification of *Enterocytozoon bienersi*, *Encephalitozoon intestinalis* and *E. cuniculi* in 5, 2 and 1 samples respectively. The partial sequencing of the ITS region of the rRNA genes showed that the three isolates of *E.bienersi* studied are included in Group I, one of which bears the genotype B. **CONCLUSIONS/SIGNIFICANCE:** To our knowledge, this is the first report of microsporidia characterization in fecal samples from HIV-positive patients from Lagos, Nigeria. These results focus attention on the need to include microsporidial diagnosis in the management of HIV/AIDS infection in Nigeria, at the very least when other more common pathogens have not been detected.

**Keywords:** Microsporidia, HIV-positive, Patients, Nigeria.

**Record Number:** 409

- Author(s):** Adeleke, M. A. Sam-Wobo, S. O. **Akinwale, O. P.** Olatunde, G. O. **Mafiana, C. F.**  
**Title:** **Biting on human body parts of Simulium Vectors and its Implication for the Manifestation of Onchocerca Nodules along Osun River, Southwestern Nigeria.**
- Journal Title:** J Vector Borne Dis.  
**Date of Publication:** 2012  
**Volume ID:** 49  
**Issue ID:** 3  
**Page(s):** 140-2  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **BACKGROUND:** The biting preference of Simulium vectors has been known to influence the distribution of Onchocerca nodules and microfilariae in human body. There is, however, variation in biting pattern of Simulium flies in different geographical locations. This study investigates the biting pattern on human parts by Simulium vectors along Osun river system where Simulium soubrense Beffa form has been implicated as the dominant vector and its possible implication on the distribution of Onchocerca nodules on human body along the river. **METHODS:** Flies were collected by consented fly capturers on exposed human parts namely head/neck region, arms, upper limb and lower limb in Osun Eleja and Osun Budepo along Osun river in the wet season (August-September) and the dry season (November-December) in 2008. The residents of the communities were also screened for palpable Onchocerca nodules. **RESULTS:** The results showed that number of flies collected below the ankle region was significantly higher than the number collected on other exposed parts ( $p < 0.05$ ) while the least was collected on head/neck region in both seasons. The lower trunk was the most common site (60%) for nodule location at Osun Eleja followed by upper trunk (40%). Nodules were not found in the head and limb regions. At Osun Budepo, the upper trunk was the most common site of the nodule location (53.8%) followed by the lower trunk (38.5%) and head region (7.7%). **CONCLUSION:** Though, most of the flies were caught at the ankle region, the biting of other parts coupled with the presence of nodules at the head and upper trunk regions showed that Simulium vectors could obtain microfilariae from any part of the body, thus increasing the risk of onchocerciasis transmission.
- Keywords:** **Simulium vectors, Onchocerca, Osun River, Nigeria.**

- Record Number:** 410  
**Author(s):** Fan, C. K. Lee, L. W. Liao, C. W. Huang, Y. C. Lee, Y. L. Chang, Y. T. da Costa Âdos, S. Gil, V. Chi, L. H. Nara, T. Tsubouchi A. **Akinwale, O. P.**  
**Title:** **Toxoplasma Gondii Infection: Relationship Between Seroprevalence and Risk Factors Among Primary School Children in the Capital Areas of Democratic Republic of São Tomé and Príncipe, West Africa.**
- Journal Title:** Parasit Vectors.  
**Date of Publication:** 2012  
**Volume ID:** 13  
**Issue ID:** 5  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **BACKGROUND:** The status of Toxoplasma gondii infection among primary schoolchildren (PSC) of the Democratic Republic of São Tomé and Príncipe (DRSTP), West Africa, remains unknown to date. **METHODS:** A serologic survey and risk factors associated T. gondii infection among PSC in the DRSTP was assessed by the latex agglutination (LA) test and a questionnaire interview including parents' occupation, various uncomfortable symptoms, histories of eating raw or undercooked food, drinking unboiled water, and raising pets, was conducted in October 2010. Schoolchildren from 4 primary schools located in the capital areas were selected, in total 255 serum samples were obtained by venipuncture, of which 123 serum samples were obtained from boys ( $9.8 \pm 1.4$  yrs) and 132 serum samples were obtained

from girls ( $9.7 \pm 1.3$  yrs). **RESULTS:** The overall seroprevalence of *T. gondii* infection was 63.1% (161/255). No significant gender difference in seroprevalence was found between boys (62.6%, 77/123) and girls (63.6%, 84/132) ( $p = 0.9$ ). The older age group of 10 years had insignificantly higher seroprevalence (69.9%, 58/83) than that of the younger age group of 8 year olds (67.7%, 21/31) ( $p = 0.8$ ). It was noteworthy that the majority of seropositive PSC (75.8%, 122/161) had high LA titers of =1: 1024, indirectly indicating acute or repeated *Toxoplasma* infection. Parents whose jobs were non-skilled workers (73.1%) showed significantly higher seroprevalence than that of semiskilled- (53.9%) or skilled workers (48.8%) ( $p < 0.05$ ). Children who had a history of raising cats also showed significantly higher seroprevalence than those who did not ( $p < 0.001$ ). Children who claimed to have had recent ocular manifestation or headache, i.e. within 1 month, seemed to have insignificantly higher seroprevalence than those who did not ( $p > 0.05$ ). **CONCLUSIONS:** Parents' educational level and cats kept indoors seemed to be the high risk factors for PSC in acquisition of *T. gondii* infection. While, ocular manifestation and/or headache of PSC should be checked for the possibility of being *T. gondii* elicited. Measures such as improving environmental hygiene and intensive educational intervention to both PSC and their parents should be performed immediately so as to reduce *T. gondii* infection of DRSTP inhabitants including PSC and adults.

**Keywords:** **Toxoplasma, Gondii Infection, Seroprevalence, Primary school, Democratic Republic of São Tomé and Príncipe, West Africa.**

**Record Number:** 411  
**Author(s):** Adeneye, A.K. Jegede, A.S. Mafe, M.A. Nwokocha, E. E.  
**Title:** Knowledge and Utilisation of long Lasting Insecticide Nets and Intermittent Preventive Treatment of Malaria in Pregnancy among Pregnant Women and Children under Five years in Selected communities of Ogun State, Nigeria  
**Journal Title:** International Journal of Malaria and Tropical Diseases  
**Date of Publication:** 2012  
**Volume ID:** 6  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

There are very few evidence from studies on the knowledge, accessibility and use of LLIN and IPTp in communities of Ogun State in the context of the roll back malaria (RBM) programme following the promotion of the malaria control strategies through the RBM initiative across the country for over a decade. The aim of this study was to determine the knowledge, accessibility and use of malaria control strategies that include Long-Lasting Insecticidal Nets (LLINs), and Intermittent Preventive Treatment of Malaria in pregnancy (IPTp) within the context of roll back malaria (RBM) programme in Ogun State, Nigeria. This was a descriptive cross-sectional study conducted in communities of Ijebu North and Yewa North local government areas (LGAs) of Ogun State. Data collection involved the use of semi-structured questionnaire and focus group discussions among pregnant women attending antenatal clinics and mothers of under-five children. Secondary data were also collected through hospital records. Quantitative and qualitative data were analysed using EpiInfo 6.04a and Textbase Beta softwares respectively. Hospital stock records showed inadequate and inconsistent supplies of ACTs to hospitals surveyed. While 45.5% (61.1% Yewa North vs. 29.2% Ijebu North) knew LLIN, only 23.6% (27.9% mothers of under-five vs. 19.8% pregnant women) used it. Lack of awareness was the major reason for non-use of LLINs (71.3%). Nearly half (47.3%) of the pregnant women knew about IPTp, while 43.5% (30.5% private vs. 52.2% public) had received at least one dose of IPTp. Their awareness and use of LLIN and IPTp were significantly determined by locality, age, education and health facility visited for antenatal care ( $p < 0.05$ ). This study has revealed awareness and use of LLIN and IPTp below the RBM targets in the studied communities. We

recommend improve awareness and availability of LLIN and IPT commodities at community and health facilities levels in Ogun State, Nigeria.

**Keywords:** Insecticide, Nets, Malaria.

**Record Number:** 412

**Author(s):** Hassan, A. O. Amoo, A. O. J.Akinwale, O. P. Deji-Agboola, A. M. Adeleke, M. A. Gyang, P. V. Oluwadun, A.

**Title:** Human Water Contact Activities and Urinary Schistosomiasis around Erinle and Eko-ende Dams

**Journal Title:** Global Advanced Research Journal of Medicine and Medical Sciences.

**Date of Publication:** 2012

**Volume ID:** 1

**Issue ID:** 4

**Page(s):** 77-84

**Address/Availability:**

**Location/URL:**

**Abstract:**

**Keywords:** Schistosomiasis

**Record Number:** 413

**Author(s):** Oduola, A. O. Idowu, E. T. Oyebola, M. K. Adeogun, A. O. Olojede, J. B. Otubanjo O. A. Awolola, T.S.

**Title:** Evidence of Carbamate Resistance in Urban Populations of Anopheles gambiae s.s. Mosquitoes Resistant to DDT and Deltamethrin Insecticides in Lagos, South-Western Nigeria.

**Journal Title:** Parasit Vectors

**Date of Publication:** 2012

**Volume ID:** 11

**Issue ID:** 5

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:**

**BACKGROUND:** Resistance monitoring is essential in ensuring the success of insecticide based vector control programmes. This study was carried out to assess the susceptibility status of urban populations of Anopheles gambiae to carbamate insecticide being considered for vector control in mosquito populations previously reported to be resistant to DDT and permethrin. **METHODS:** Two - three day old adult female Anopheles mosquitoes reared from larval collections in 11 study sites from Local Government Areas of Lagos were exposed to test papers impregnated with DDT 4%, deltamethrin 0.05% and propoxur 0.1% insecticides. Additional tests were carried out to determine the susceptibility status of the Anopheles gambiae population to bendiocarb insecticide. Members of the A. gambiae complex, the molecular forms, were identified by PCR assays. The involvement of metabolic enzymes in carbamate resistance was assessed using Piperonyl butoxide (PBO) synergist assays. The presence of kdr-w/e and ace-1R point mutations responsible for DDT-pyrethroid and carbamate resistance mechanisms was also investigated by PCR. **RESULTS:** Propoxur resistance was found in 10 out of the 11 study sites. Resistance to three classes of insecticides was observed in five urban localities. Mortality rates in mosquitoes exposed to deltamethrin and propoxur did not show any significant difference ( $P > 0.05$ ) but was significantly higher ( $P < 0.05$ ) in populations exposed to DDT. All mosquitoes tested were identified as A. gambiae s.s (M form). The kdr -w point mutation at allelic frequencies between 45%-77% was identified as one of the resistant mechanisms responsible for DDT and pyrethroid resistance. Ace-1R point mutation was absent in the carbamate resistant population. However, the possible involvement of metabolic resistance was confirmed by synergistic assays

conducted.**CONCLUSION:** Evidence of carbamate resistance in *A. gambiae* populations already harbouring resistance to DDT and permethrin is a clear indication that calls for the implementation of insecticide resistance management strategies to combat the multiple resistance identified.

**Keywords:** Carbamate, *Anopheles gambiae*, Malaria, Nigeria.

**Record Number:** 414

**Author(s):** Ezechi, O. C. David A. N. Gab-Okafor C. V. Ohwodo, H. Oladele, D. A. Kalejaiye, O. O. Ezeobi, P. M. Gbajabiamila, T. A. Audu, R. A. Oke, B. Musa, Z. A. Ekama, S. O. Ilesanmi, O. Odubela, O. Somefun, E. O. Herbertson, E. C. Onwujekwe, D. I. Ujah, I. A.

**Title:** Incidence of and Socio-biologic Risk factors for Spontaneous Preterm Birth in HIV Positive Nigerian Women.

**Journal Title:** BMC Pregnancy Childbirth.

**Date of Publication:** 2012

**Volume ID:** 9

**Issue ID:** 12

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:**

**BACKGROUND:** Recent studies have identified HIV as a leading contributor to preterm delivery and its associated morbidity and mortality. However little or no information exists in our sub-region on this subject. Identifying the factors associated with preterm delivery in HIV positive women in our country and sub-region will not only prevent mother to child transmission of HIV virus but will also reduce the morbidity and mortality associated with prematurity and low birth weight. This study was designed to determine the incidence and risk factors for preterm delivery in HIV positive Nigerians. **METHOD:** The required data for this retrospective study was extracted from the data base of a cohort study of the outcome of prevention of mother to child transmission at the Nigerian Institute of Medical Research, Lagos. Only data of women that met the eligibility of spontaneous delivery after 20 weeks of gestation were included. Ethical approval was obtained from the Institution's Ethical Review Board. **RESULTS:** 181 women out of the 1626 eligible for inclusion into the study had spontaneous preterm delivery (11.1%). The mean birth weight was  $3.1 \pm 0.4$  kg, with 10.3% having LBW. Spontaneous preterm delivery was found to be significantly associated with unmarried status (cOR: 1.7; 1.52-2.57), baseline CD4 count  $<200$  cells/mm<sup>3</sup> (cOR: 1.8; 1.16-2.99), presence of opportunistic infection at delivery (cOR: 2.2; 1.23-3.57), multiple pregnancy (cOR 10.4; 4.24 - 26.17), use of PI based triple ARV therapy (eOR 10.2; 5.52 - 18.8) in the first trimester (cOR 2.5; 1.77 - 3.52) on univariate analysis. However after multivariate analysis controlling for potential confounding variables including low birth weight, only multiple pregnancy (aOR: 8.6; CI: 6.73 - 12.9), presence of opportunistic infection at delivery (aOR: 1.9; CI: 1.1 - 5.7), and 1st trimester exposure to PI based triple therapy (aOR: 5.4; CI: 3.4 - 7.8) retained their significant association with preterm delivery. **CONCLUSION:** The spontaneous preterm delivery rate among our cohort was 11.1%. HIV positive women with multiple pregnancies, symptomatic HIV infection at delivery and first trimester fetal exposure to PI based triple therapy were found to be at risk of spontaneous preterm delivery. Early booking and non-use of PI based triple therapy in the first trimester will significantly reduce the risk of preterm delivery.

**Keywords:** Socio-biologic, Preterm, Birth, HIV Positive, Nigeria, Women.

**Record Number:** 415

**Author(s):** Orok, A. Fagbenro- Beyioku, A. Godswill Iboma, Adedayo Mayowa Okoh, H. Ajibaye, O. Iwalokun, B. Egbuna, K. Agomo, C. Olukosi, Y. Aina, O. Akindele, S. Enya, V. Akinyem, J. Agomo, P.

**Title:** Glucose-6-phosphate Dehydrogenase (G6PD) Deficiency and Adverse Reactions to Antimalarial Drugs in Lagos State, Nigeria.

**Journal Title:** Asian Journal of Pharmaceutical and Health Sciences  
**Date of Publication:** 2013  
**Volume ID:** 3  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:** www.ajphs.com  
**Abstract:** Individuals lacking in Glucose-6-phosphate dehydrogenase (G6PD) enzyme are selective to the use of drugs as deficiency can predispose to oxidation and subsequent hemolysis of their red blood cell. This study was undertaken to evaluate the effect of G6PD enzyme deficiency and correlation with adverse drug reaction to anti-malarial drugs. G6PD determination was done using Randoxdiaagnostic kits while malaria diagnosis was done using standard microscopy technique. A total of 100 participants, comprising 44 males and 56 females (designated as group A& B) were recruited for the study. Of these numbers, 28 were G6PD deficient and 72 had normal G6PD activity G6PD deficiency were similar in males 12 (27.3%) and in females 16(28.6%) (P=0.885). There was no statistical difference in G6PD activity with malaria parasite density (MPD) estimation (P=0.585) despite the fact that those with low G6PD activity also had low MPD than those with normal G6PD activity ( $415.57 \pm 297.07$  and  $697.86 \pm 1516.42$  respectively). Also, among the 12 individuals who reported to having adverse drug reaction to some anti-malarials, the outcome was not statistically significant (P=0.659 and P=0.528). In conclusion, there was no relationship between G6PD activity and adverse drug reaction  
**Keywords:** **Glucose-6-phosphate Dehydrogenase (G6PD), Antimalaria Drugs, Lagos State, Nigeria.**

**Record Number:** 416  
**Author(s):** Iribhogbe, O. I. Agbaje, E. O. Oreagba, I. A. Aina, O. O. Ota, A. D.  
**Title:** **Oxidative Stress and Micronutrient Therapy in Malaria: an in Vivo Study in Plasmodium Berghei Infected Mice.**  
**Journal Title:** Pak J Biol Sci  
**Date of Publication:** 2013  
**Volume ID:** 16  
**Issue ID:** 4  
**Page(s):** 160-7  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Free radical production from oxidative stress induced by malaria infection plays a major role in the pathogenesis of malaria. However, the use of agents with antioxidant activity may interfere with malaria progression. The study involves an in vivo evaluation of the role of some antioxidant micronutrients in the modulation of malaria infection. Rodent malaria model using Plasmodium bergheiNK-65 strain (chloroquine sensitive) was used for the study. Forty five mice of either sex weighing  $20.05 \pm 0.02$  g were procured for the study. Forty mice were inoculated intraperitoneally with  $1 \times 10^7$  million Plasmodium berghei infected erythrocyte and were administered with 0.2 mL of distilled water, 0.2 mL of vehicle; Tween 80 (control and vehicle group), chloroquine 25 mg kg<sup>-1</sup> and artesunate 4 mg kg<sup>-1</sup> (standard drug group), vitamin A 60 mg kg<sup>-1</sup>, vitamin E 100 mg kg<sup>-1</sup>, selenium 1 mg kg<sup>-1</sup>, zinc 100 mg kg<sup>-1</sup> (test group F, G, H and I, respectively) 72 hours post inoculation. Antioxidant micronutrients demonstrated significant ( $p < 0.05$ ) schizonticidal activity when compared with negative control during the 4 day curative test. Erythrocyte membrane disability was most markedly elevated in the tween 80 group (426.15%), followed closely by the chloroquine (373.85%) treated group and artesunate group (329.23%) and least in the zinc treated group (32.31%). There was no significant ( $p > 0.05$ ) difference in MCFI values ( $0.115 \pm 0.002$ ;  $0.114 \pm 0.002$  g dL<sup>-1</sup>) between vitamin A treated group and selenium treated group respectively. However, this was significant ( $p < 0.05$ ) between the micronutrient treated

groups and the control (negative, positive and vehicle). Conclusively, antioxidant micronutrients have antimalarial activity which may be due potentiation of erythrocyte membrane stabilization.

**Keywords:** Malaria.

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**Record Number:** 417  
**Author(s):** Ezechi, O. C. Gab-Okafor, C. V. Oladele, D. A. Kalejaiye, O. O. Oke, B. O. Ekama, S. O. Audu, R. A. Okoye, R. N. Ujah, I. A  
**Title:** Prevalence and Risk Factors of Asymptomatic Bacteriuria Among Pregnant Nigerians Infected with HIV.  
**Journal Title:** J Matern Fetal Neonatal Med.  
**Date of Publication:** 2013  
**Volume ID:** 26  
**Issue ID:** 4  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **OBJECTIVE:** There are conflicting report on the association of HIV infection and asymptomatic bacteriuria (ASB). Most of these studies were from areas with low HIV burden. This study determined the prevalence and risk factors of ASB in HIV positive pregnant women.**METHODS:** A cross sectional study among HIV positive pregnant women seen at a large PMTCT clinic in Lagos Nigeria. The women were evaluated for ASB at first clinic attendance. Blood samples were also collected for viral load, CD4 count and hemoglobin levels assessment. Data were managed with SPSS for windows version 19. **RESULTS:** 102 (18.1%) women out of 563 studied were found positive for asymptomatic bacteriuria. Ninety-seven (95.1%) of the positive samples yielded single bacterial isolates. Escherichia coli (44.3%) and Proteus mirabilis (21.6%) were the most common bacterial isolates. Previous urinary tract infection (OR: 4.3), HIV-1 RNA greater than 10,000 copies/ml (OR: 3.9), CD4 count <200 cells/mm<sup>3</sup> (OR: 1.4) and maternal hemoglobin <11?g/dl (OR: 1.4) were factors significantly associated with ASB after controlling for possible confounders. **CONCLUSION:** ASB is common in HIV positive pregnant women in our environment and is associated with previous UTI, high viral load, low CD4 count and maternal hemoglobin <11?g/dl.

**Keywords:** Asymptomatic Bacteriuria, Pregnant, HIV, Nigerians.

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**Record Number:** 418  
**Author(s):** Ezechi, O. C. Gab-Okafor, C. V. Oladele, D. A. Kalejaiye, O. O. Oke, B. O. Ohwodo, H. O. Audu R. A. Ekama, S. O. Musa, Z. Onwujekwe, D. I. David, A. N. Ujah, I. A.  
**Title:** Pregnancy, Obstetric and Neonatal Outcomes in HIV Positive Nigerian Women.  
**Journal Title:** Afr J Reprod Health.  
**Date of Publication:** 2013  
**Volume ID:** 17  
**Issue ID:** 3  
**Page(s):** 160-8  
**Address/Availability:**  
**Location/URL:**

**Abstract:** While the effect of HIV infection on some maternal outcomes is well established, for some others there is conflicting information on possible association with HIV. In this study we investigated pregnancy and neonatal outcome of HIV positive women in large HIV treatment centre over a period of 84 months. They were managed according to the Nigerian PMTCT protocol. Adverse obstetric and neonatal outcome were observed in 48.3% HIV positives compared 30.3% to the negatives (OR: 2.08; CI: 1.84-2.34). Low birth weight ( OR:2.95; CI:1.95-3.1), preterm delivery (OR:2.05; CI:1.3-3.1), perinatal death (OR:1.9;CI:1.3-3.2), and

spontaneous abortion (OR:1.37; CI:1.1-2.3) were factors found to be independently associated with HIV. Low CD4 count (OR: 2.45; CI: 1.34- 4.56) and opportunistic infections (OR: 2.11; CI: 1.56-3.45) were to be associated with adverse obstetric and neonatal outcome. This study confirms the association of HIV, severe immunosuppression and opportunistic infection and adverse obstetric and neonatal outcome.

**Keywords:** **Pregnancy, Obstetric, Neonatal, HIV positive, Nigeria, Women.**

**Record Number:** **419**

**Author(s):** Ventura, A. Mafe, M. C. Bourguet, M. Tornero, C.

**Title:** **Wernicke's Encephalopathy Secondary to Hyperthyroidism and Ingestion of Thiaminase-Rich Products.**

**Journal Title:** Neurologia.

**Date of Publication:** 2013

**Volume ID:** 28

**Issue ID:** 4

**Page(s):** 257-9

**Address/Availability:**

**Location/URL:**

**Abstract:**

**Keywords:** **Wernicke's, Encephalopathy secondary, Hyperthyroidism, Ingestion, Thiaminase-rich products.**

**Record Number:** **420**

**Author(s):** Nwakanma, D. C. Neafsey, D. E. Jawara, M. Adiamoh, M. Lund, E. Rodrigues, A. Loua, K. M. Konate, L. Sy N. Dia I. Awolola T. S. Muskavitch, M. A. Conway, D. J.

**Title:** **Breakdown in the Process of Incipient Speciation in *Anopheles gambiae*.**

**Journal Title:** Genetics.

**Date of Publication:** 2013

**Volume ID:**

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:**

Understanding genetic causes and effects of speciation in sympatric populations of sexually reproducing eukaryotes is challenging, controversial, and of practical importance for controlling rapidly evolving pests and pathogens. The major African malaria vector mosquito *Anopheles gambiae sensu stricto* (s.s.) is considered to contain two incipient species with strong reproductive isolation, hybrids between the M and S molecular forms being very rare. Following recent observations of higher proportions of hybrid forms at a few sites in West Africa, we conducted new surveys of 12 sites in four contiguous countries (The Gambia, Senegal, Guinea-Bissau, and Republic of Guinea). Identification and genotyping of 3499 *A. gambiae* s.s. revealed high frequencies of M/S hybrid forms at each site, ranging from 5 to 42%, and a large spectrum of inbreeding coefficient values from 0.11 to 0.76, spanning most of the range expected between the alternative extremes of panmixia and assortative mating. Year-round sampling over 2 years at one of the sites in The Gambia showed that M/S hybrid forms had similar relative frequencies throughout periods of marked seasonal variation in mosquito breeding and abundance. Genome-wide scans with an Affymetrix high-density single-nucleotide polymorphism (SNP) microarray enabled replicate comparisons of pools of different molecular forms, in three separate populations. These showed strong differentiation between M and S forms only in the pericentromeric region of the X chromosome that contains the molecular form-specific marker locus, with only a few other loci showing minor differences. In the X chromosome, the M/S hybrid forms were more differentiated from M than from S forms, supporting a hypothesis of asymmetric introgression and backcrossing.

**Keywords:** **Genetics, *Anopheles***

- Record Number:** 421  
**Author(s):** Ekpo, U. F. Hürlimann, E. Schur, N. Oluwole, A. S. Abe, E. M. Mafe, M. A. Nebe, O. J. Isiyaku, S. Olamiju, F. Kadiri, M. Poopola, T. O Braide, E. I. Saka, Y. Mafiana, C. F. Kristensen, T. K. Utzinger, J. Vounatsou, P.  
**Title:** **Mapping and Prediction of Schistosomiasis in Nigeria Using Compiled Survey Data and Bayesian Geospatial Modelling.**  
**Journal Title:** Geospat Health.  
**Date of Publication:** 2013  
**Volume ID:** 7  
**Issue ID:** 2  
**Page(s):** 355-66  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Schistosomiasis prevalence data for Nigeria were extracted from peer-reviewed journals and reports, geo-referenced and collated in a nationwide geographical information system database for the generation of point prevalence maps. This exercise revealed that the disease is endemic in 35 of the country's 36 states, including the federal capital territory of Abuja, and found in 462 unique locations out of 833 different survey locations. *Schistosoma haematobium*, the predominant species in Nigeria, was found in 368 locations (79.8%) covering 31 states, *S. mansoni* in 78 (16.7%) locations in 22 states and *S. intercalatum* in 17 (3.7%) locations in two states. *S. haematobium* and *S. mansoni* were found to be co-endemic in 22 states, while co-occurrence of all three species was only seen in one state (Rivers). The average prevalence for each species at each survey location varied between 0.5% and 100% for *S. haematobium*, 0.2% to 87% for *S. mansoni* and 1% to 10% for *S. intercalatum*. The estimated prevalence of *S. haematobium*, based on Bayesian geospatial predictive modelling with a set of bioclimatic variables, ranged from 0.2% to 75% with a mean prevalence of 23% for the country as a whole (95% confidence interval (CI): 22.8-23.1%). The model suggests that the mean temperature, annual precipitation and soil acidity significantly influence the spatial distribution. Prevalence estimates, adjusted for school-aged children in 2010, showed that the prevalence is <10% in most states with a few reaching as high as 50%. It was estimated that 11.3 million children require praziquantel annually (95% CI: 10.3-12.2 million).  
**Keywords:** Schistosomiasis, Nigeria.

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- Record Number:** 422  
**Author(s):** Uwandu, MO., Okwuraiwe, AP., Amoo, O.S. Audu, RA., Okoye, RN., Oparaugo, C.T. Onwuamah, C.K. Magbagbeola, O.A.  
**Title:** **Lipid Profile of Drug Naive HIV Patients in a Tertiary Health Facility in Lagos, Nigeria.**  
**Journal Title:** African Journal of Clinical And Experimental Microbiology.  
**Date of Publication:** 2013  
**Volume ID:** 14  
**Issue ID:** 2  
**Page(s):** 51-55  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Aim:** To determine the effect of HIV syndrome on lipid profile in a cohort of Nigerians. **Objective:** To determine the concentrations of total cholesterol (Tchol), triglyceride (TGL), high density lipoprotein (HDL), and low density lipoprotein (LDL) in HIV positive drug naïve patients as against HIV negative people. **Methods:** This study examined the lipid profiles of 50 HIV positive individuals (test group), and 50 HIV negative individuals (control group) at the Human Virology Laboratory of Nigerian Institute of Medical Research (NIMR), Lagos, Nigeria. Informed consent was obtained and the Institutional Review Board (IRB) of NIMR approved the study. A questionnaire based assessment was provided for the individuals to complete, before 5 ml of

blood was taken by venopuncture. Blood collected in plain tubes was centrifuged at 3500 rpm for 10 minutes and the serum obtained, used for the various lipid profile tests mentioned above. Statistical analysis on data from the questionnaire was done using Epi info 2000 (CDC). Results: The median lipid profile values for the control group were 168, 85, 99 and 58 mg/dl for Tchol, TGL, HDL and LDL respectively. Conversely, median lipid profile values for the HIV positive patients were 145, 98, 53, and 67 mg/dl for Tchol, TGL, HDL and LDL respectively. P values greater than 0.05 were taken to indicate an insignificant difference between the lipid profiles of the two groups. **Conclusion:** Based on results obtained, there were significant differences in the Tchol and HDL values between the two groups, indicating a possible effect of HIV on lipid profile for drug naive patients.

**Keywords:** lipid profile, HIV, TGL, HDL, LDL, Tcho.

**Record Number:** 423  
**Author(s):** Olaleye, O. A. Kuti, O. Makinde, N. O. Ujah A. O. Olaleye, O. A. Badejoko, O. O. Akintayo, A. A. Audu, R.A.  
**Title:** Perinatal transmission of hepatitis B virus infection in Ile-Ife, South Western, Nigeria.  
**Journal Title:** J Neonatal Perinatal Med.  
**Date of Publication:** 2013  
**Volume ID:** 6  
**Issue ID:** 3  
**Page(s):** 231-6  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **AIM:** To determine the perinatal transmission risk of hepatitis B virus (HBV) and the maternal characteristics influencing it. **METHOD:** During routine antenatal screening, women who tested positive for hepatitis B surface antigen (HBsAg) were identified and followed through pregnancy. Maternal and cord blood samples were obtained at delivery. The sera of each mother-baby pair were analyzed for HBsAg, HBeAg, HBeAb, HBsAb and HBcAb using an immunochromatographic 5-in-1 panel kit. Quantitative HBV-DNA was assessed using polymerase chain reaction technique. Intrauterine infection was defined when neonatal blood test positive for HBsAg positivity and/or HBV-DNA. Confidence level was set at 95% ( $p < 0.05$ ). **RESULTS:** Of the 716 pregnant women screened 73 (10.2%) were HBsAg-positive. Fifty of these HBsAg-positive women completed the study. Intrauterine infections were detected in 36 (72%) newborns; of them only twelve (24%) had positive HBsAg whereas all of them ( $n = 36$ ) neonates had detectable HBV-DNA ( $>100$  copies/ml). High maternal HBV-DNA titre was associated with increased neonatal HBV-DNA titre ( $p = 0.001$ ). Parity, maternal age, and mode of delivery showed no association with perinatal transmission. **CONCLUSION:** The risk of perinatal HBV transmission in this study was high. Perinatal transmission was associated with high maternal viremia. Appropriate prophylaxis for HBsAg-positive mothers and their newborns is advocated.

**Keywords:** Hepatitis B, Nigeria, Intra-uterine Infection, Perinatal, Vertical Transmission

**Record Number:** 424  
**Author(s):** Akinwale, O.P. Adeneye, A. K. Musa, Z.A. Oyedeji, K.S. Sulyman, M.A. Oyefara, J.O. Adejoh, P.E. Adeneye, A.A.  
**Title:** Living Conditions and Public Health Status in Three Urban Slums of Lagos, Nigeria.  
**Journal Title:** South East Asia Journal of Public Health (SEAJPH)  
**Date of Publication:** 2013  
**Volume ID:** 3  
**Issue ID:** 1  
**Page(s):** 36-41  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Lagos metropolis, southwestern Nigeria, is faced with environmental problems ranging from slums and informal settlements, to crime and delinquency. The aim of the study was to explore the demographic characteristics, migration history and living conditions of 2,434 residents of Ajegunle, Ijora Oloye and Makoko in Lagos metropolis. A cross-sectional survey was conducted between June 2010 and October 2012 using a semi-structured questionnaire. Units of analysis used were households. Many of the respondents are low-income earners working in the informal service sectors, and living in unhygienic conditions. The communities are densely populated, with more than five people living in a room. Residents make use of poor and overstressed facilities and inadequate water and electricity supplies. They also lack appropriate garbage disposal facilities and good drainage. Personal hygiene habits are very poor; open defecation in ditches and the lagoon is widely practiced. Respondents are faced with perennial flooding due to blocked drainage systems resulting in a number of diseases, such as malaria, diarrhea, cold and cough. Migration has led to uncontrolled and unplanned developments of slums in metropolitan Lagos. This in turn has led to poverty, unemployment, illiteracy, polluted environment, uncontrolled population growth and health problems in the slums as are observed in this study. There is an urgent need for comprehensive interventions from the government and other organizations to strengthen existing programs to improve the health and quality of life of this vulnerable population.

**Keywords:** **Public health, Urban slums, Lagos, Nigeria.**

**Record Number:** 425  
**Author(s):** Ezechi, O. C. Kalejaiye, O. O. Gab-Okafor, C. V. Oladele, D. A. Oke, B. Ekama, S. O. Odunukwe, N. N Ujah I. A.  
**Title:** The Burden of Anaemia and Associated Factors in HIV Positive Nigerian Women.  
**Journal Title:** Arch Gynecol Obstet.  
**Date of Publication:** 2013  
**Volume ID:** 287  
**Issue ID:** 2  
**Page(s):** 239-44  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

**BACKGROUND:** Anaemia is the most common complication of pregnancy and predictor of poor maternal and foetal outcomes. HIV infection is now recognized as one of the major contributors to anaemia in pregnancy. It is therefore important to determine the burden and risk factors of anaemia in maternal HIV infection in others to plan effective prevention strategies as well as optimize management outcomes. **OBJECTIVE:** To determine the prevalence and risk factors of anaemia in pregnant HIV positive Nigerians. **METHODS:** The prevalence and possible risk factors of anaemia were investigated in HIV positive pregnant Nigerian women at a large HIV treatment clinic in southwestern Nigeria using a cross-sectional design between January 2006 and December 2011. **RESULTS:** Nine hundred and eighty-five (42.5 %) women of 2,318 HIV positive pregnant women seen during the period were anaemic by WHO standard defined by haemoglobin <11 g/dl. Majority were of mild to moderate severity (97.9 %). Short inter birth interval ( $p = 0.002$ ), presence of opportunistic infections (OIs), ( $p = 0.001$ ), use of zidovudine containing regimen ( $p = 0.0005$ ) and CD4 cell count <200 cells/mm<sup>3</sup> ( $p = 0.001$ ) were found to be independently associated with anaemia in HIV positive pregnant women after controlling for confounding variables. **CONCLUSION:** Anaemia was found to be high at 42.5 % among the HIV positive women studied and was found to be independently associated with short inter birth interval, presence of OIs, advanced HIV disease and use of zidovudine containing HAART regimen.

**Keywords:** **Anaemia, HIV, Nigeria, Women.**

**Record Number:** 426

**Author(s):** Dinic, L. **Idigbe O. E.** Meloni S. Rawizza H. **Akande, P.** Eisen, G. **Onwujekwe, D.** Agbaji, O. Ani, A. Kanki, P. J.

**Title:** **Sputum Smear Concentration may Misidentify Acid-Fast Bacilli as Mycobacterium tuberculosis in HIV-infected Patients.**

**Journal Title:** J Acquir Immune Defic Syndr.

**Date of Publication:** 2013

**Volume ID:** 63

**Issue ID:** 2

**Page(s):** 168-77

**Address/Availability:**

**Location/URL:**

**Abstract:**

**BACKGROUND:** Tuberculosis (TB) diagnosis in most resource-limited settings still depends on smear microscopy for identification of acid-fast bacilli (AFB). However, recently developed molecular diagnostics that test for the presence of Mycobacterium tuberculosis (Mtb) DNA have been shown to be superior for confirmation of TB diagnosis. **METHODS:** At regular clinical visits over a 12-month period, we collected sputa from HIV-infected patients presenting with signs or symptoms of TB at 2 Nigerian clinics. Sputa were stained for AFB and tested using the Genotype MTBDRplus to confirm the presence of Mtb. Other species were identified using 16S rRNA sequence. **RESULTS:** In 56% (233/415) of AFB-positive patients, Mtb was confirmed. The patients on antiretroviral therapy were less likely than those not on antiretroviral therapy to be infected with Mtb [odds ratio (OR) = 0.25, P = 0.003]. In a multivariate logistic regression model using clinical features and diagnostic results, abnormal respiratory findings on auscultation (OR = 3.28, P = 0.03) and a direct sputum smear grade >3/100 (OR = 6.4, 4.6, P < 0.02) were significant predictors of Mtb infection. Concentrated sputum smear was predictive of Mtb infection only at the highest grades (2+, 3+). Interestingly, among 65 samples that could not be confirmed for Mtb, 32 (49%) were found to contain other, possibly novel, Actinomycetes, including atypical Mycobacteria, Rhodococcus spp, Nocardia spp, and Corynebacterium spp. **CONCLUSIONS:** We conclude that concentrated sputum smears may misidentify other bacteria as Mtb in HIV-infected patients. The use of molecular diagnostics could reduce unnecessary or inappropriate treatment and improve identification of pathogens in resource-limited settings with high HIV burden.

**Keywords:** **Sputum Smear, Mycobacterium, Tuberculosis, HIV-infected.**

**Record Number:** 427

**Author(s):** **Idowu, E.T, Adeneye, A.K, Adeleke, M.A. Sulyman, M.A.Mafe, M.A.**

**Title:** **Endemicity of Onchocerciasis in Some Communities in Taraba State, Nigeria, Following long-term Treatment with Ivermectin.**

**Journal Title:** The Zoologist

**Date of Publication:** 2013

**Volume ID:** 11

**Issue ID:**

**Page(s):** 21-28

**Address/Availability:**

**Location/URL:**

**Abstract:**

This study examined the effect of long term annual ivermectin mass distribution on morbidity status and factors related to the drug distribution programme. Semi-structured questionnaire, focus group discussions and household survey methods were employed to elicit response on key issues of the control programme in four communities of two endemic Local Government Areas (LGAs), Ardo Kola and Gashaka, in which annual mass ivermectin distribution had been on-going for over a decade in Taraba State, Nigeria. Rapid assessment method was also employed in determining morbidity status. The investigations revealed that Barki Dutse and Sibre communities of Ardo Kola LGA were hypoendemic with nodular rate of 2% while Nyambar and Jimtari communities of Gashaka LGA were mesoendemic, with nodular rate of 26% and 22% respectively and 73.3% of those surveyed claimed to have received ivermectin

treatment during the last treatment exercise, with a higher percentage in Gashaka LGA ( $p < 0.05$ ). Most (85.2%) of the respondents (89.0% in Gashaka LGA and, 81.8% in Ardo Kola LGA) reported disruption in the annual drug distribution in the communities during some years. Nonetheless, majority (79.4%) of the respondents had positive perception of the control programme. It is suggested that sustainability of the annual drug distribution is essential for effective control of the disease in these rural communities.

**Keywords:** **Onchocerciasis, Taraba State.**

**Record Number:** 428

**Author(s):** Aina, O. O. Agomo, C. O. Olukosi, Y. A. Okoh, H. I. Iwalokun, B. A. Egbuna, K. N. Orok, A. B. Ajibaye, O. Enya. V. N. Akindele, S. K. Akinyele, M. O. Agomo P. U.

**Title:** Malariometric Survey of Ibeshe Community in Ikorodu, Lagos state: Dry Season.

**Journal Title:** Malar Res Treat.

**Date of Publication:** 2013

**Volume ID:**

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** Malariometric surveys generate data on malaria epidemiology and dynamics of transmission necessary for planning and monitoring of control activities. This study determined the prevalence of malaria and the knowledge, attitude, and practice (KAP) towards malaria infection in Ibeshe, a coastal community. The study took place during the dry season in 10 villages of Ibeshe. All the participants were screened for malaria. A semistructured questionnaire was used to capture sociodemographic data and KAP towards malaria. A total of 1489 participants with a mean age of years took part in the study. Malaria prevalence was 14.7% (95% CI 13.0–16.6%) with geometric mean density of 285 parasites/ L. Over 97% of participants were asymptomatic. Only 40 (2.7%) of the participants were febrile, while 227 (18.1%) were anemic. Almost all the participants (95.8%) identified mosquito bite as a cause of malaria, although multiple agents were associated with the cause of malaria. The commonest symptoms associated with malaria were hot body (89.9%) and headache (84.9%). Window nets (77.0%) were preferred to LLIN (29.6%). Malaria is mesoendemic in Ibeshe during the dry season. The participants had good knowledge of symptoms of malaria; however, there were a lot of misconceptions on the cause of malaria.

**Keywords:** **Malaria.**

**Record Number:** 429

**Author(s):** Agomo, C. O. Oyibo, W. A.

**Title:** Factors Associated with Risk of Malaria Infection Pmong pregnant Women in Lagos, Nigeria.

**Journal Title:** Infect Dis Poverty

**Date of Publication:** 2013

**Volume ID:** 2

**Issue ID:** 1

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** **METHODS:** Demographic information and malaria prevention practices of the pregnant women studied were captured using structured questionnaire. Microscopy was used to establish malaria infection, species identification and parasite density. Relative risk and multivariate logistic regression analysis were used to compare factors associated with malaria in pregnant women.

**Keywords:** **Malaria, Pregnant women, Nigeria.**

**Record Number:** 430  
**Author(s):** Okonofua, F. E. Ogu, R. N. Fabamwo, A. O. Ujah, I. O. Chama, C. M. Archibong, E. I. Onah, H. E. Galadanci, H. S Akuse, J. T.  
**Title:** **Training Health Workers for Magnesium Sulfate Use Reduces Case Fatality From Eclampsia: Results From a Multicenter Trial.**  
**Journal Title:** Acta Obstet Gynecol Scand.  
**Date of Publication:** 2013  
**Volume ID:** 92  
**Issue ID:** 6  
**Page(s):** 716-20  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **OBJECTIVE:** To investigate the effectiveness of an intervention aimed at improving the case management of eclampsia. **DESIGN:** A multi center intervention study. **SETTING:** Six teaching hospitals in Nigeria. **SAMPLE:** Clinical records of cases of eclampsia treated before and 1 year after the intervention. **METHODS:** Doctors and midwives in selected hospitals were re-trained to manage eclampsia using magnesium sulfate according to the Pritchard protocol. **MAIN OUTCOME MEASURES:** Eclampsia case fatality rates, maternal and perinatal mortality rates before and after the intervention. **RESULTS:** A total of 219 cases of eclampsia were managed over a 12-month period. There were seven maternal deaths. The post intervention case fatality rate of 3.2% was significantly less than the pre-intervention rate of 15.1% ( $p < 0.001$ ). The overall maternal and perinatal mortality ratios and rates respectively in the hospitals declined from 1199.2 to 954 per 100,000 deliveries and 141.5 to 129.8 per 1000 births, respectively ( $p > 0.05$ ). **CONCLUSION:** An intervention to build the capacity of care-providers to use an evidence-based protocol for the treatment of eclampsia in Nigeria was successful in reducing associated case fatality rate. The increased and widespread use of such an intervention in maternity units might contribute to the reduction of maternal mortality in low-income countries.  
**Keywords:** **Training, Health workers, Magnesium sulfate, Eclampsia, Multicenter trial.**

**Record Number:** 431  
**Author(s):** Adeneye A.K. Jegede A.S.Mafe M.A. Nwokocha, E. E.  
**Title:** **Community perceptions and home management of malaria in selected rural communities of Ogun state, Nigeria**  
**Journal Title:** International Journal of Malaria Research and Reviews  
**Date of Publication:** 2013  
**Volume ID:** 1  
**Issue ID:** 3  
**Page(s):** 22-34  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Home Management of Malaria (HMM) is a component of the roll back malaria (RBM) programme being implemented for over a decade to reduce the malaria burden. This study examined the extent to which HMM has raised the ability in promptly recognising and treating malaria at home. This was a descriptive cross-sectional study of 262 pregnant women attending antenatal clinics and 233 mothers of under-five children using semi-structured questionnaire in Ijebu North and Yewa North local government areas of Ogun State. Data collection also involved focus group discussions. Quantitative and qualitative data were analysed using EpiInfo 6.04a and Textbase Beta softwares respectively. Only 32.7% of respondents knew about HMM. About 48% preferred analgesics unlike ACTs (0.6%) for malaria treatment. While 45.5% (61.1% Yewa North vs. 29.2% Ijebu North) knew LLIN, only 23.6% used it. Lack of awareness was the major reason for non-use of ACTs (86.1%) and LLINs (71.3%) in HMM. Locality, age, and education significantly determined

awareness and use of ACTs and LLIN ( $p < 0.05$ ). Adequate information and stock of ACTs and LLINs should be made available and accessible for the RBM and MDG targets to be realised in the study communities.

**Keywords:** Home management, Malaria, Rural, Ogun state, Nigeria.

**Record Number:** 432  
**Author(s):** Adeneye, A.K. Adeneye, A.A. Mafe, M.A. Adeiga A.A.  
**Title:** Pattern of Condom Use and Perceived Risk of HIV Infection among Female Sex Workers in Selected Brothels in Ogun State, Nigeria  
**Journal Title:** International Journal of Public Health and Epidemiology  
**Date of Publication:** 2013  
**Volume ID:** 2  
**Issue ID:** 5  
**Page(s):** 90-100  
**Address/Availability:**  
**Location/URL:**

**Abstract:** In view of the paucity of empirical data on condom use among female sex workers (FSWs) with their clients and regular/trusted sex partners in Nigeria, particularly Ogun State, this study was conducted to examine FSWs' knowledge and perception about HIV/AIDS and find out their pattern of condom use with their clients and regular/trusted sex partners. One hundred and thirty-one FSWs were interviewed using semi-structured questionnaires in Ogun State, South-West Nigeria. Results showed pervasive consistent condom use (95.4%) with high (74.8%) incidence of condom breakage with clients, inconsistent condom use with regular/trusted partners (75.6%), drug/substance abuse as post-exposure prophylaxis, recent STI experiences, and low self-perceived risk of HIV infection among the FSWs studied. A few (1.5%) respondents who were not using condoms with their clients at all were also not using with their regular/trusted sex partners. Results showed the need for urgent educational interventions on proper condom use particularly targeting FSWs who use no condom or often experience condom breakage with clients and deemed it less imperative to use condom with their regular/trusted sex partners. The programmatic response should emphasise the dangers of substance abuse, their vulnerability to STIs and HIV and becoming vessels of spreading such infections.

**Keywords:** Condom, HIV, Female, Sex workers, Ogun State.

**Record Number:** 433  
**Author(s):** Rawizza, H. E. Chaplin, B. Meloni, S. T. Darin, K. M. Olaitan, O. Scarsi, K. K. Onwuamah, C. K. Audu, R. A. Chebu, P. R. Imade, G. E. Okonkwo, P. Kanki, P. J.  
**Title:** Accumulation of Protease Mutations among Patients Failing Second-line Antiretroviral Therapy and Response to Salvage Therapy in Nigeria.  
**Journal Title:** PLoS One.  
**Date of Publication:** 2013  
**Volume ID:** 8  
**Issue ID:** 9  
**Address/Availability:**  
**Location/URL:** <http://dx.plos.org/10.1371/journal.pone.0073582>  
**Abstract:** To date, antiretroviral therapy (ART) guidelines and programs in resource-limited settings (RLS) have focused on 1(st)- and 2(nd)-line (2 L) therapy. As programs approach a decade of implementation, policy regarding access to 3(rd)-line (3 L) ART is needed. We aimed to examine the impact of maintaining patients on failing 2 L ART on the accumulation of protease (PR) mutations. From 2004-2011, the Harvard/APIN PEPFAR Program provided ART to >100,000 people in Nigeria. Genotypic resistance testing was performed on a subset of patients experiencing 2 L failure, defined as 2 consecutive viral loads (VL) > 1000

copies/mL after =6 months on 2 L. Of 6714 patients who received protease inhibitor (PI)-based ART, 673 (10.0%) met virologic failure criteria. Genotypes were performed on 61 samples. Patients on non-suppressive 2 L therapy for <12 months prior to genotyping had a median of 2 (IQR: 0-5) International AIDS Society (IAS) PR mutations compared with 5 (IQR: 0-6) among patients failing for >24 months. Patients developed a median of 0.6 (IQR: 0-1.4) IAS PR mutations per 6 months on failing 2 L therapy. In 38% of failing patients no PR mutations were present. For patients failing >24 months, high- or intermediate-level resistance to lopinavir and atazanavir was present in 63%, with 5% to darunavir. This is the first report assessing the impact of duration of non-suppressive 2 L therapy on the accumulation of PR resistance in a RLS. This information provides insight into the resistance cost of failing to switch non-suppressive 2 L regimens and highlights the issue of 3 L access.

**Keywords:** **Protease mutations, Antiretroviral, Therapy, Nigeria.**

**Record Number:** 434  
**Author(s):** Adeneye, A.K. Mafe, M.A. Adeneye, A.A. Adeiga, A.A.  
**Title:** Factors Associated with willingness to seek HIV counselling and testing among brothel-based female sex workers in urban communities of Ogun State, Nigeria  
**Journal Title:** Nigerian Journal of Clinical and Biomedical Research  
**Date of Publication:** 2013  
**Volume ID:** 7  
**Issue ID:** 1  
**Page(s):** 15-28  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Female sex workers (FSWs) engage in high-risk sexual activity. In spite of consistently high trend of HIV infection in this group in Nigeria, very little is known about the knowledge, perception and acceptability of HIV counselling and testing (HCT) among FSWs. This study examined the willingness to seek HCT and factors associated with readiness to utilize HCT services among FSWs in selected urban communities of Ogun State, South-West Nigeria. One hundred and thirty-one FSWs were interviewed using semi-structured questionnaires. Results showed low self-perceived risk of HIV infection among the FSWs despite their high-risk sexual activity. About one third had heard of HCT and its benefits. Only 10.7% of all respondents interviewed had knowingly been tested. Six (42.9%) of these were health worker-initiated and 35.7% were actually voluntary testing. Following health education on HCT and its benefits, 87.0% were willing to seek HCT if available. Older FSWs were more likely to have ever tested for HIV than younger ones ( $p < 0.05$ ). Results suggest the need for more effective educational interventions targeting this group emphasizing HCT and its benefits. The Health Belief Model is being used for the conceptual framework of the study.

**Keywords:** **HIV, counselling, Female, Sex workers.**

**Record Number:** 435  
**Author(s):** Amoo, O. S. Taiwo, I. A. Salu, O.B. Okwuraiwe, A. Onwuamah, C.K. Awe, M. Oforomeh, O. Onwujekwe, D. I. Ezechi, O. C. Audu, R.A. Ajuma, A.R.  
**Title:** Comparison of the COBAS/Ampliprep Taqman and Amplicor HIV-1 monitor Tests in Lagos, Nigeria.  
**Journal Title:** African Journal of Laboratory Medicine  
**Date of Publication:** 2013  
**Volume ID:** 2  
**Issue ID:** 1  
**Page(s):** 1-4  
**Address/Availability:**  
**Location/URL:** <http://dx.doi.org/10.4102/ajlm.v2i1.68>  
**Abstract:** **Background:** The use of real-time Polymerase chain reaction (PCR) technology options is

increasing in resource-limited settings because they are faster, improve assay sensitivity, have higher throughput, larger dynamic ranges and reduced rates of contamination. In 2010, UNAIDS ranked Nigeria as the second highest population of people living with HIV and AIDS (2.98 million people) in the world. **Objective:** The objective of this study was to compare the analytical performances of the Amplicor HIV-1 Monitor (version 1.5) and the COBAS Ampliprep/Taqman (version 2.0) used in monitoring HIV disease progression in HIV-infected individuals. **Method:** In a cross-sectional study, HIV-1 RNA values obtained with the Amplicor HIV-1 monitor version 1.5 were compared with those of the COBAS/Ampliprep TaqMan HIV-1 version 2.0 in a routine clinical setting. Between May and November 2011, 176 plasma samples collected were analysed in parallel using both techniques. Data analysis was done using statgraphics Centurion XVI and Medcalc version 12.0. **Result:** The correlation coefficient for the two assays was 0.83 and the level of agreement using a Bland–Altman plot was 94.2%. **Conclusion:** These findings suggest that the results from the two methods were comparable, hence the COBAS/Ampliprep Taqman version 2.0 is recommended for high-volume laboratories.

**Keywords:** COBAS/Ampliprep Taqman, Amplicor, HIV-1 Lagos.

**Record Number:** 436  
**Author(s):** Oyedeji, K. S. Niemogha, M. T. Nwaokorie, F. O. Bamidele, T. A. Ochoga, M. Akinsinde, K. A. Brai, B. I Oladele, D. Omonigbehin, E. A. Bamidele, M. Fesobi, T. W. Musa, A. Z. Adeneye, A. K. Smith, S. I Ujah, I. A.  
**Title:** Molecular Characterization of the Circulating Strains of *Vibrio Cholerae* during 2010 Cholera Outbreak in Nigeria.  
**Journal Title:** J Health Popul Nutr.  
**Date of Publication:** 2013  
**Volume ID:** 31  
**Issue ID:** 2  
**Page(s):** 178-84  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** This study aimed at characterizing the phenotypic and toxigenic status of circulating strains of cholera during outbreaks in Nigeria, employing molecular typing techniques. Two hundred and one samples of rectal swabs, stool, vomitus, water (from the well, borehole, sachet, stream, and tap) and disinfectants (sodium hypochlorite) were collected from three states in the country. The samples were inoculated on thiosulphate-citrate bile salt-sucrose (TCBS), Cary-Blair transport medium and smeared on glass slides for direct examination. The *Vibrio cholerae* isolates were serotyped, bityped, and characterized using PCR of the cytotoxin gene A (ctxA), wbeO1, and wbfO139 gene primer. Of the 201 samples screened, 96 were positive for *V cholerae* O1 (48%), with 69 (72%) positive for ctxA gene. The results from this study showed that the circulating strains of cholera in Nigeria were of Ogawa serotype, also observed in other outbreaks in Nigeria (1991, 1992, and 1996). However, the strains were of the Classical biotype and were mainly (72%) ctxA gene-positive. This current investigation has confirmed the production of cholera toxin by the circulating strains, and this could be harnessed for possible cholera vaccine production in Nigeria.  
**Keywords:** Molecular, Characterization, Strains, *Vibrio cholerae*, 2010, Cholera, Outbreak, Nigeria.

**Record Number:** 437  
**Author(s):** Akinwale, O.P. Afilaka, B. Gyang, P.V. Adeleke, M.A. Adeneye, A. Onwujekwe, D. Alimi, A. Akande, D  
**Title:** Human Cytomegalovirus Infection in Nigerians Living with Human Immunodeficiency Virus.  
**Journal Title:** Annals of Tropical Medicine and Public Health

**Date of Publication:** 2013  
**Volume ID:** 6  
**Issue ID:**  
**Page(s):** 59-64  
**Address/Availability:**  
**Location/URL:**

**Abstract:****Context:** Human immunodeficiency virus (HIV) patients are at higher risk for Human cytomegalovirus (HCMV) infection. **Aim:** To identify HCMV and HIV co-infection among Nigerian patients for prompt therapeutic interventions. **Materials and Methods:** The study drew samples from the antiretroviral clinic of Nigerian Institute of Medical Research and patients' informed consent was taken at enrollment. Variables collected included socio-demographic characteristics such as sex, occupation, marital status, educational status, income, and religion, while health-related variables were CD4 counts and HIV viral load. Genomic DNA from whole blood samples of 236 patients, 164 (69.5%) females and 72 (30.5%) males, was subjected to polymerase chain reaction (PCR) amplification of 2 genes within conserved immediate early (IE) and late (LA) transcribed regions of HCMV genome. **Statistical Analysis:** Statistical Package for Social Sciences was used to determine frequencies of HCMV infection, while Chi square was used to examine associations between patient's characteristics and HCMV infection. **Results:** A total of 35 (14.8%) patients; 25 (10.6%) females and 10 (4.2%) males were positive for HCMV infection. Although there was variation in prevalence of HCMV in different marital status, it was statistically insignificant ( $P = 0.734$ ;  $P > 0.05$ ). Results also showed that 22 (62.9%) of HCMV positive patients had HIV viral load greater than 10,000, prevalence of HCMV decreased as CD4 counts increased, while 12 (34.3%) of HCMV positive patients had CD4 counts between 1 and 200. **Conclusions:** This study is the first molecular survey of HCMV/HIV co-infection in Nigeria and has provided valuable information for prompt therapeutic intervention to reduce morbidity among HIV patients.

**Keywords:** Human, Cytomegalovirus, Infection, Immunodeficiency, Virus.

**Record Number:** 438  
**Author(s):** Briët, O. J. Penny, M. A. Hardy, D. Awolola, T. S. Van Bortel, W. Corbel, V. Dabiré, R. K. Etang, J. Koudou, B. G. Tungu, P. K. Chitnis, N.  
**Title:** Effects of Pyrethroid Resistance on the Cost Effectiveness of a Mass Distribution of Long-Lasting Insecticidal Nets: a Modelling Study.  
**Journal Title:** Malar J.

**Date of Publication:** 2013  
**Volume ID:** 12  
**Issue ID:** 77  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **BACKGROUND:** The effectiveness of insecticide-treated nets in preventing malaria is threatened by developing resistance against pyrethroids. Little is known about how strongly this affects the effectiveness of vector control programmes. **METHODS:** Data from experimental hut studies on the effects of long-lasting, insecticidal nets (LLINs) on nine anopheline mosquito populations, with varying levels of mortality in World Health Organization susceptibility tests, were used to parameterize malaria models. Both simple static models predicting population-level insecticidal effectiveness and protection against blood feeding, and complex dynamic epidemiological models, where LLINs decayed over time, were used. The epidemiological models, implemented in OpenMalaria, were employed to study the impact of a single mass distribution of LLINs on malaria, both in terms of episodes prevented during the effective lifetime of the batch of LLINs, and in terms of net health benefits (NHB) expressed in disability-adjusted life years (DALYs) averted during that period, depending on net type (standard pyrethroid-only LLIN or pyrethroid-piperonyl

butoxide combination LLIN), resistance status, coverage and pre-intervention transmission level. **RESULTS:** There were strong positive correlations between insecticide susceptibility status and predicted population level insecticidal effectiveness of and protection against blood feeding by LLIN intervention programmes. With the most resistant mosquito population, the LLIN mass distribution averted up to about 40% fewer episodes and DALYs during the effective lifetime of the batch than with fully susceptible populations. However, cost effectiveness of LLINs was more sensitive to the pre-intervention transmission level and coverage than to susceptibility status. For four out of the six *Anopheles gambiae sensu lato* populations where direct comparisons between standard LLINs and combination LLINs were possible, combination nets were more cost effective, despite being more expensive. With one resistant population, both net types were equally effective, and with one of the two susceptible populations, standard LLINs were more cost effective. **CONCLUSION:** Despite being less effective when compared to areas with susceptible mosquito populations, standard and combination LLINs are likely to (still) be cost effective against malaria even in areas with strong pyrethroid resistance. Combination nets are likely to be more cost effective than standard nets in areas with resistant mosquito populations.

**Keywords:** Pyrethroid, Insecticidal nets.

**Record Number:** 439  
**Author(s):** Ezechi, O.C. Gab-Okafor, C.V. Ostergren, P. O. Pettersson, K.O.  
**Title:** Willingness and acceptability of cervical cancer screening among HIV positive Nigerian women  
**Journal Title:** BMC Public Health.  
**Date of Publication:** 2013  
**Volume ID:** 13  
**Issue ID:** 1  
**Page(s):** 46  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Background: The proven benefit of integrating cervical cancer screening programme into HIV care has led to its adoption as a standard of care. However this is not operational in most HIV clinics in Nigeria. Of the various reasons given for non-implementation, none is backed by scientific evidence. This study was conducted to assess the willingness and acceptability of cervical cancer screening among HIV positive Nigerian women. Methods: A cross sectional study of HIV positive women attending a large HIV treatment centre in Lagos, Nigeria. Respondents were identified using stratified sampling method. A pretested questionnaire was used to obtain information by trained research assistants. Obtained information were coded and managed using SPSS for windows version 19. Multivariate logistic regression model was used to determine independent predictor for acceptance of cervical cancer screening. Results: Of the 1517 respondents that returned completed questionnaires, 853 (56.2%) were aware of cervical cancer. Though previous cervical cancer screening was low at 9.4%, 79.8% (1210) accepted to take the test. Cost of the test (35.2%) and religious denial (14.0%) were the most common reasons given for refusal to take the test. After controlling for confounding variables in a multivariate logistic regression model, having a tertiary education (OR = 1.4; 95% CI: 1.03-1.84), no living child (OR: 1.5; 95% CI: 1.1-2.0), recent HIV diagnosis (OR: 1.5; 95% CI: 1.1-2.0) and being aware of cervical cancer (OR: 1.5; 95% CI: 1.2-2.0) retained independent association with acceptance to screen for cervical cancer. Conclusions: The study shows that HIV positive women in our environment are willing to screen for cervical cancer and that the integration of reproductive health service into existing HIV programmes will strengthen rather than disrupt the services.

**Keywords:** Cervical cancer, Screening, HIV, Acceptability.

**Record Number:** 440

**Author(s):** Ezechi, O. C. Ezeobi, P. M. Gab-Okafor, C.V.Edet, A. Nwokoro, C. A .Akinlade, A.  
**Title:** Maternal and Fetal Effect of Misgav Ladach Cesarean Section in Nigerian Women: A Randomized Control Study  
**Journal Title:** Annals of medical and health sciences research.  
**Date of Publication:** 2013  
**Volume ID:** 3  
**Issue ID:** 4  
**Page(s):** 577-82  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Background: The poor utilisation of the Misgav-Ladach (ML) caesarean section method in our environment despite its proven advantage has been attributed to several factors including its non-evaluation. A well designed and conducted trial is needed to provide evidence to convince clinician of its advantage over Pfannenstiel based methods. Aim: To evaluate the outcome of ML based caesarean section among Nigerian women. Subjects and Methods: Randomised controlled open label study of 323 women undergoing primary caesarean section in Lagos Nigeria. The women were randomised to either ML method or Pfannenstiel based (PB) caesarean section technique using computer generated random numbers. Results: The mean duration of surgery ( $P < 0.001$ ), time to first bowel motion ( $P = 0.01$ ) and ambulation ( $P < 0.001$ ) were significantly shorter in the ML group compared to PB group. Postoperative anaemia ( $P < 0.01$ ), analgesic needs ( $P = 0.02$ ), extra suture use, estimated blood loss ( $P < 0.01$ ) and post-operative complications ( $P = 0.001$ ) were significantly lower in the ML group compared to PB group. Though the mean hospital stay was shorter (5.8 days) in the ML group as against 6.0 days, the difference was not significant statistically ( $P = 0.17$ ). Of the fetal outcome measures compared, it was only in the fetal extraction time that there was significant difference between the two groups ( $P = 0.001$ ). The mean fetal extraction time was 162 sec in ML group compared to 273 sec in the PB group. Conclusions: This study confirmed the already established benefit of ML techniques in Nigerian women, as it relates to the postoperative outcomes, duration of surgery, and fetal extraction time. The technique is recommended to clinicians as its superior maternal and fetal outcome and cost saving advantage makes it appropriate for use in poor resource setting.  
**Keywords:** Cesarean section, Maternal and neonatal morbidity, Misgav Ladach.

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**Record Number:** 441  
**Author(s):** Ezechi, O. C. Gbajabiamilla, T. A. Gab-Okafor, C. V. Oladele, D. A. Ezeobi, P. M. Ujah, I.A.  
**Title:** Contraceptive behavior, practices and associated factors among Nigerian women living with human immunodeficiency virus infection.  
**Journal Title:** Journal of HIV and Human Reproduction.  
**Date of Publication:** 2013  
**Volume ID:** 1  
**Issue ID:** 1  
**Page(s):** 30  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Aim:** Studies outside Nigeria reports that approximately 70% of human immunodeficiency virus (HIV) positives are sexually active and that their use of effective contraception is variable. Unplanned pregnancy and its complications are also common. However, no published study in Nigeria has evaluated the contraceptive use among of HIV positive women. This study aims to establish the pattern of use, knowledge and associated factors of contraception among HIV positive women. **Materials and Methods:** A cross-sectional questionnaire based study in a busy HIV Treatment Centre in cosmopolitan city of Lagos, Nigeria. **Results:** The contraceptive awareness was high at 94.6%; however, the use rate was moderate at 50.6%. Condom (52.9%) and injectable contraceptive (31.4%) were the most

commonly used methods. Weight gain (2.4%) and condom slip off (2.4%) were the most common side-effect reported. Having more than 3 children (odd ratio [OR]: 2.6), being in the program for at least 3 years (OR: 2.0) and previous use of contraception (OR: 2.6) were found to be independently associated with current use of contraception. Women with less than secondary education (OR; 0.2; 0.3-0.5) and a HIV positive partner (OR: 0.4; 0.3-0.6) are less likely to use contraception. **Conclusion:** Contraceptive knowledge and awareness (94.6%) among this women is high, however, the use rate is low at (50.6%). Condom (52.9%) and Injectable contraceptive (31.4%) were the preferred method among women. Having 3 living children, at least a secondary education, negative partner and being in the program for at least 3 years were associated with the use of contraception.

**Keywords:** Contraception, human immunodeficiency virus infection, Nigeria, women.

**Record Number:** 442

**Author(s):** Enwuru, C.A. Iwalokun, B. Enwuru, N.C. Ezechi, O. Idika N. Oluwadun, A.

**Title:** The Occurrence and Modified Method for Phenotypic Identification of Ambler Group A and B Extended Spectrum  $\beta$ -Lactamases Production in Urino-Genital Gram Negative Bacterial Isolates from, Nigeria.

**Journal Title:** Nature & Science

**Date of Publication:** 2013

**Volume ID:** 11

**Issue ID:** 8

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** Beta lactamase enzymes production in gram negative bacteria (GNB) grouped into four Ambler classe: A - D, remains a formidable threat to therapeutic interventions and impact negatively on the course and outcome of infections in patients worldwide. Routine  $\hat{\beta}$ -lactamase screening is a standard for clinical bacteriology laboratories especially for gram negative pathogens of extra-intestinal origin medicated often with third and fourth generation cephalosporins. However, routine phenotypic screening methods (DDT and DDST) as recommended by CLSI for class A and B respectively have been found not sustainable in resource poor settings such as Nigeria, as a result of cost and cumbersomeness. This study was designed to study the occurrence and evaluate the performance of a modified DDT and DDST methods for phenotypic identification of Ambler class A and B -  $\hat{\beta}$ -lactamase production in GNB for routine use in the clinical laboratories. A total of 63 consecutive non-repetitive gram-negative bacterial isolates from urino-genital specimens of men attending fertility clinic were studied. There were 10 different species of bacteria: with *E. coli* 23/63 (36.5%) and *Enterobacter* spp. 12/63 (19%) having the highest occurrence. Groups A and B  $\hat{\beta}$ -Lactamases were screened with CLIS recommended phenotypic methods (DDT and DDST respectively) for Enterobacteriaceae and a modified agar plate (co-detection in a single lawn culture plate) and the results were compared. Of the 63 bacteria screened, 18 (29%) produced Ambler group A and 7 (11%) demonstrated heteroresistant sub-population. Eleven (17.5%) were Ambler group B positive. One (1.5 %) strain showed hetero-resistant subpopulation and negative for Metallo  $\hat{\beta}$ -Lactamase production. Out of the 18 group A and 11 group B ESBLs producing isolates by standard methods, 16 (89 %) and 10 (91%) were positive on the modified method respectively. The sensitivity and specificity were 88.9 % and 100% for group A and 91% and 100% for group B  $\hat{\beta}$ -Lactamases, respectively. The positive predictive values of 100% were recorded for both. The highest co-production of both enzymes was amongst *Serratia* spp. 2/3. The result has demonstrated 29 % group A and 17.5 % group B ESBLs occurrence and that the modified method (less expensive, time saving and less cumbersome) is comparatively sensitive with the standard DDT and DDST methods recommended by CLSI and is equally recommended.

**Keywords:** Bacteria, Antibiotics, ESBLs, Occurrence, Modified, Screening.

**Record Number:** 443  
**Author(s):** Akinwale, O. P. Oyefara, L.J. Adejoh, P. Adeneye, A. Adeniyi, Adeneye, A.K. Musa, Z.A. Oyedeji, K.S. Sulyman, M. A.  
**Title:** Survey of Hypertension, Diabetes and Obesity in three Nigerian Urban Slums  
**Journal Title:** Iranian Journal of Public Health  
**Date of Publication:** 2013  
**Volume ID:** 42  
**Issue ID:** 9  
**Page(s):** 972-979  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Background:** Non-communicable diseases (NCDs) exist in slums as the inhabitants adopt an urbanized lifestyle which places them at a higher risk for. Lack of knowledge about the morbidity, complications and the method of control contributes to a large percentage of undetected and untreated cases. **Methods:** This cross-sectional survey polled 2,434 respondents from Ijora Oloye, Ajegunle and Makoko, three urban slums in Lagos metropolis, southwestern Nigeria between June 2010 and October 2012. We investigated the prevalence of hypertension, diabetes and obesity. Respondents signed consent forms and their health conditions were documented based on self-reported history of diabetes, hypertension and family history using a semi-structured questionnaire. Diagnostic tests; weight and height for body mass index, blood glucose, and blood pressure were performed. **Results:** More than one quarter of the participants were suffering from hypertension and only half of this were diagnosed earlier, while a further few were already on treatment. Therefore on screening, it had been possible to diagnose over three hundred more respondents, who were not previously aware of their health status. The respondents' BMI showed that more than half of them were either overweight or obese and are at risk for diabetes, while 3.3% were confirmed as being diabetic, with their sugar levels greater than the normal range. **Conclusion:** This study therefore revealed the near absence of screening programs for chronic diseases such as hypertension, diabetes and obesity in these urban slums. This was further confirmed by the detection of new and undiagnosed cases of hypertension in about one quarter of the respondents.  
**Keywords:** Hypertension, Diabetes, Obesity, Urban slums.

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**Record Number:** 444  
**Author(s):** Oduola, A. O. Olojede, J. B. Oyewole, I. O. Otubanjo, O. A. Awolola, T. S.  
**Title:** Abundance and diversity of *Anopheles* species (Diptera: Culicidae) Associated with Malaria Transmission in Human Dwellings in Rural and Urban communities in Oyo State, Southwestern Nigeria.  
**Journal Title:** Parasitol Res.  
**Date of Publication:** 2013  
**Volume ID:** 112  
**Issue ID:** 10  
**Page(s):** 3433-9  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Mosquito samples were collected from rural and urban communities in three selected major towns in Southwestern Nigeria to determine the impact of urbanization on the diversity and abundance of *Anopheles* species associated with malaria transmission in human habitations. A total of ten *Anopheles* species were identified in the rural communities, while eight *Anopheles* species were identified in the urban communities. Out of the ten *Anopheles* species identified, only four species, *Anopheles gambiae* (Giles), *Anopheles funestus* (Giles), *Anopheles moucheti* (Evans), and *Anopheles nili* (Theobald), were established to be vectors of malaria occurring in greater than 50% of the rural communities. Only *A. gambiae* occurred

in all the urban communities, while the other three major vectors occurred in not more than 20% of the urban communities. Margalef's and Shannon-Wiener indices showed that diversity and species richness were higher in the rural compared to the urban. Comprehensive information on malaria vector abundance and diversity in rapidly changing communities is an important tool in planning and implementing successful vector control programs.

**Keywords:** Anopheles, Malaria, Nigeria.

**Record Number:** 445  
**Author(s):** Akinwale, O.P. Tang, T.H. Doblin, A.S. Cheah, H.L.  
**Title:** Molecular Survey of Freshwater Snail Intermediate Hosts of Schistosoma Malayensis in Northern Peninsular Malaysia.  
**Journal Title:** Continental Journal of Biological Sciences  
**Date of Publication:** 2013  
**Volume ID:** 6  
**Issue ID:** 2  
**Page(s):** 33-41  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Schistosomiasis

**Record Number:** 446  
**Author(s):** Akinwale, O.P. Tang, T. Hock, Fan Chia-Kwung, Qi Zheng, Shen Haimo, Charles Ezeh and Gyang, P V.  
**Title:** Differentiating Schistosoma Haematobium from Schistosoma Magrebowiei and other closely related Schistosomes by PCR amplification of a Species Specific Mitochondrial Gene.  
**Journal Title:** Tropical Parasitology  
**Date of Publication:** 2014  
**Volume ID:** 4  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Schistosomiasis.

**Record Number:** 447  
**Author(s):** Adebayo, A. O. Akinloye, A. K. Olukole, S. G. Oyeyemi, M. O. Taiwo, V. O. Ihunwo, A. O. Oke B. O.  
**Title:** Gross, Histological and Ultrastructural Features of the Bulbourethral Gland in the Greater Cane Rat (Thryonomys swinderianus).  
**Journal Title:** Anat Histol Embryol.  
**Date of Publication:** 2014  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The present study examines the structure and ultrastructure of the bulbourethral glands in 10 sexually matured male greater cane rats raised in captivity. Following anaesthesia, the rats were perfusion-fixed transcardially and the bulbourethral glands dissected out. Upon morphologic and morphometric analysis, the Cowper's glands were observed to have an average volume of  $0.24 \pm 0.08$  ml, a diameter of  $6.3 \pm 0.6$  mm and weighs  $0.199 \pm 0.06$  g. The paired, gourd-shaped tubuloalveolar glands were surrounded by dense connective tissues and separated into lobules by capsular septae. Each lobule consists of endpiece/secretory units and

excretory ducts lined by simple glandular epithelium and pseudo-stratified epithelium, respectively. The round end pieces consisted of 8-10 pyramidal to columnar epithelial cells with flattened, basally located nuclei and granule-filled cytoplasm that bounded a narrow glandular lumen. The striking ultrastructural features of these secretory cells were the presence of some granules with uniform electron density and those with regions of lesser density as well as the absence of secretory vacuoles. Another unique characteristic of these secretory granules is the presence of electron dense strands radiating from their surfaces. The apical surfaces of the cells were also studded with abundant microvilli. From the findings, the structure of bulbourethral glands in the greater cane rat shows more resemblances to that of humans than to its rodent phylogeny. These findings serve as additional knowledge in the structural interpretation of the bulbourethral gland and its secretory products.

**Keywords:** **Histological, Ultrastructural Features, Bulbourethral Gland, Cane Rat (*Thryonomys swinderianus*).**

**Record Number:** 448  
**Author(s):** Ezechi O. C. Pettersson, K. O. Okolo, C.A, Ujah, I. A. Ostergren, P. O.  
**Title:** **The association between HIV infection, antiretroviral therapy and cervical squamous intraepithelial lesions in South Western Nigerian women.**  
**Journal Title:** PloS one  
**Date of Publication:** 2014  
**Volume ID:** 9  
**Issue ID:** 5  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Introduction: Findings from studies that evaluated the effect of antiretroviral drug use on the development of cervical squamous intraepithelial lesion differed in their conclusions. This study investigated the association between HIV infection, antiretroviral drug use and cervical squamous intraepithelial lesion in a high HIV and cervical cancer burden setting- Nigeria. Methods: A cross sectional study among 1140 women of known HIV status enrolled in a randomised study to determine the test characteristics of visual inspection in detecting cytology diagnosed squamous intraepithelial lesion. Multivariate analysis was used to determine the association between HIV infection, antiretroviral drug use and the twin outcome variables of cervical squamous intraepithelial lesion (SIL) and High grade squamous intraepithelial lesion (HSIL) while controlling for confounders. Results: Prevalence of cervical squamous intraepithelial lesion was 8.5%, with a higher prevalence of 14.3% in HIV positive compared to 3.3% in HIV negative women (aOR: 5.4; 95% CI: 2.9–8.8). Not using antiretroviral drugs was found to be associated with an increased risk of SIL (aOR: 2.1; 95% CI: 1.4–3.5) and HSIL (aOR: 2.6; 95% CI: 1.1–6.4). Participants who had a CD4 cell count <200 cells/mm<sup>3</sup>, were also found to be at increased risk for SIL (aOR: 1.9; 95% CI: 1.1–5.9) and HSIL (aOR: 5.7; 95% CI: 1.1–7.2). Conclusion: HIV infection and severe immunosuppression were found to be associated with increased risk of cervical squamous intraepithelial lesion but not viral load. For the first time, in the West African sub-region with specific HIV type and strains, we established the protective effect of antiretroviral drug use against the development of SIL. Integration of cervical cancer screening programme into HIV services and early initiation of antiretroviral drug in HIV positive women especially those with severe immune-suppression could therefore prove to be useful in preventing and controlling cervical cancer development in HIV positive women.

**Keywords:** **HIV infection, antiretroviral therapy.**

**Record Number:** 449  
**Author(s):** Adeneye A.K. Jegede A. S. Nwokocha E. E. Mafe M.A  
**Title:** **Community Engagement In Malaria Control Programme Implementation In Selected**

**South-Western Nigerian Communities: A Qualitative Study****Journal Title:** International Journal of Malaria Research and Reviews**Date of Publication:** 2014**Volume ID:** 2**Issue ID:** 1**Page(s):** 22-34**Address/Availability:****Location/URL:**

**Abstract:** This research is focused on the dynamics of community engagement in the implementation of malaria control. Research was conducted based on in-depth interviews and focus group discussions (FGDs) with various stakeholders including health decision makers at the State and local government area (LGA) levels, community members, community and opinion leaders and health workers implementing malaria control programme in two communities in Ijebu North and Yewa North LGA respectively in Ogun State, South West Nigeria. Interviews and FGDs revealed that intra-community human factors such social solidarity, community views and trust of health workers, community relationship with health workers, community support, structures and organisations, and contribution of time in voluntary community service impacted on the level of community engagement activities in health programme implementation in the study communities. The findings provided insights into good practices that can be adopted as steps for engendering community engagement in health delivery programme implementation. The poor community engagement reported in some communities should lead the State and LGA Malaria Control Programme managers to strengthen the advocacy for more community responsiveness for malaria control in communities across the State particularly those in Ijebu North LGA to ensure accessible and sustainable malaria control programme in communities of the State.

**Keywords:** **Malaria.****Record Number:** 450**Author(s):** **Oladele, D.A. Gab-okafor, C.V.Oke, B.O. Kalejaye, K.O.** et al.**Title:** Pattern, challenges and correlates of condom use among Nigerians living with HIV infection.**Journal Title:** Asian Pacific Journal of Tropical Biomedicine**Date of Publication:** 2014**Volume ID:** 4**Issue ID:** 1**Page(s):** 198-203**Address/Availability:****Location/URL:**

**Abstract:** **Objective:** To determine the pattern, challenges and correlates of condom use among Nigerians living with HIV Infection. **Methods:** A cross sectional questionnaire study among HIV positive adults attending an HIV treatment centre in Lagos, Nigeria. Data entry and analysis were done with Epi-info version 3.5.1. **Results:** The mean age of respondents was 35 (SD=7.7; range: 17–58 years) and mean age at sexual debut was 20 years old (range: 7–37 years). Majority were women (66.6%), had at least secondary school education(91.1%), married (68.2%), on ART (50.7%) and knew their partners HIV status(60.9%). The rate of condom use at last sex act was 65.9%, but only 48.8% used condom consistently. Factors associated with condom use were male gender (OR=2.43, CI=1.35–4.33, P=0.002), less than secondary school education (OR=3.12, CI=1.04–9.28, P=0.05) and Not knowing partner's HIV status (OR=1.90, CI=1.04–3.80, P=0.04). Refusal to use condom (28.4%) were as a result of pregnancy intention, undesirability of condom in marriage and decreased sexual pleasure. **Conclusion:** There is low consistent condom use rate of 48.8% among this cohort despite their exposure to behavioural change messages. A review of the present counselling strategy and combination prevention is therefore advocated.

**Keywords:** **Condom use; HIV; Nigeria; Positive prevention.**

- Record Number:** 451  
**Author(s):** Ezechi, O. C. Oladele, D. A. Dureke, F. Anenih, J. Ogungbemi, K. Folayan, M.O  
**Title:** Private Sector Engagement in the National HIV Response in Nigeria: Findings from a Nationally Representative Sample of Stakeholders.  
**Journal Title:** Nigerian Journal of Health Sciences  
**Date of Publication:** 2014  
**Volume ID:** 14  
**Issue ID:**  
**Page(s):** 23-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Background:** The private health sector can contribute significantly to antiretroviral therapy (ARV) and Prevention of Mother to Child Transmission (PMTCT) of HIV service delivery in Nigeria. In the present study we evaluated the pattern and challenges of private sector engagement in the provision of ARV and PMTCT services. **Method:** The study was conducted in four states of Nigeria namely: Lagos, Ebonyi, Oyo and Benue using qualitative study technique. In-depth interviews, focus groups and case studies were used to obtain relevant information from the stakeholders identified through snow balling technique. **Results:** The finding of the study showed that private sector engagement with the national ARV and PMTCT of HIV programme was feasible and desirable. Private for profit and faith-based health providers were already engaged in national antiretroviral therapy and PMTCTHIV programme either through the Global Fund or the President's Emergency Plan for AIDS Relief programme but in a very limited capacity. Their engagement were froth with some challenges including the need to make profit despite the provision of free antiretroviral drug and PMTCT HIV services, limited skills and capacity, lack of clear guidelines on the modus of operation, poorly maintained equipment and suboptimal commodity supplies. **Conclusion:** The private sector engagement with the national ARV and PMTCT programme is feasible and some are currently engaged by Global Fund to provide HIV services. However, for programme sustainability and to ensure quality service, the raised concerns need to be appropriately considered. The government needs to be responsive to their commitment to the bargain including ensuring that equipment are functional and drugs are regularly supplied as proposed in the agreements.
- Keywords:** HIV/AIDS, ART, PMTCT, Private sector, National response

- Record Number:** 452  
**Author(s):** Adeneye, A.K.Jegede, A.S. Mafe, M.A. Nwokocho, E.E.  
**Title:** Awareness of Antimalarial Policy and Use of Artemisinin-based Combination Therapy for Malaria Treatment in Communities of Two Selected Local Government Areas of Ogun State, Nigeria  
**Journal Title:** Journal of World Health and Population  
**Date of Publication:** 2014  
**Volume ID:** 15  
**Issue ID:** 1  
**Page(s):** 46-60  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** With limited data on the awareness of changes in the use of antimalaria drugs and availability and use of artemisinin-based combination therapy (ACT) in the context of the Roll Back Malaria (RBM) program, we conducted this descriptive cross-sectional study of 262 registered women attending antenatal clinics and 233 mothers of under-five children. We used a questionnaire to assess the awareness, availability and use of ACT in Ijebu North and Yewa North Local Government Areas (LGAs) of Ogun State. Malaria is holo-endemic in these

areas, and the RBM program has been implemented for years prior to the 2010 RBM deadline. Data were also collected through focus group discussions, along with secondary data from hospital records. Hospital stock records showed inadequate and inconsistent supplies of ACT drugs in hospitals surveyed. Only 23.0% of respondents knew about ACT drugs. About 48% preferred analgesics over ACT drugs (0.6%) for malaria treatment. Lack of awareness was the major reason for non-use of ACT drugs (86.1%). Communities in Yewa North had more supplies of ACT drugs and knew more about ACT than those in Ijebu North. Adequate information on ACT needs to be made available and accessible under a public-private partnership if 2010 RBM targets (now past) and the 2015 Millennium Development Goal (ongoing) for malaria are to be realized in the study communities and Ogun State in general.

**Keywords:** Antimalarial Policy, Artemisinin.

**Record Number:** 453

**Author(s):** Ajibaye, O. Osuntoki, A. Orok, B. Iwalokun, O. Egbuna, N. Olukosi, Y. Aina, O. Okoh, H. Agomo, C. Enya, V. Oladayo, F. Akindele, S. Akinnibosun, O. Oyebola, K. Adenekan, S. Ebuechi, A

**Title:** Malnutrition influences tumor necrotic factor-alpha (TNF- $\alpha$ ) response among Plasmodium falciparum (Pf) malaria patients in Nigeria

**Journal Title:** Malaria Journal

**Date of Publication:** 2014

**Volume ID:** 13

**Issue ID:** 1

**Page(s):**

**Address/Availability:**

**Location/URL** : <http://www.malariajournal.com/content/13/S1/P3>

**Abstract:** Background In malaria endemic regions, malnutrition has also been reported to be a public health problem. Considering that the pattern of host cytokine-mediated innate immunity is critical in determining malaria outcomes, understanding the impact of malnutrition on innate immune response in Plasmodium falciparum (Pf)-infected patients may be helpful for malaria control. This study aims to determine nutritional status and evaluate the influence of malnutrition on the immune response of infected patients in Lagos, Nigeria. Methods Volunteers (1,838) with a history of fever or axillary temperature  $\geq 37^{\circ}\text{C}$  were screened microscopically for Pf in a cross-sectional study at Ijede General Hospital, Lagos, Nigeria. Body mass index (BMI) of patients was determined and used as a measure of nutritional status. A BMI of  $< 18.5 \text{ kg/m}^2$  was taken as an index of malnutrition while participants  $< 20$  years were further classified based on Z-scores (Z-Scores  $\leq -2$ ) into stunted, wasted or underweight. TNF- $\alpha$ , interleukin-1 $\beta$  and interleukin-12 were determined by ELISA and haematological parameters (Full blood count) were measured using Beckman Coulter Closed Tube Automated Hematology System. Statistical analysis was done using SPSS Version 17. The study protocol was approved by NIMR Institutional Review Board. **Results** A total of 364 patients comprising of 47% males and 53% females with a median age of 10 years were recruited for which average BMI was  $18.19 \pm 6.10$ . Malaria prevalence was 20.85% and malnutrition rate 62.5%. In the  $< 20$  years group, 24 (16.7%) were stunted, 30 (20.8%) were underweight and 48 (33.3%) were wasted. TNF- $\alpha$  was associated with age, observed to be higher in  $< 5$  years ( $P = 0.001$ ). Mean levels of TNF- $\alpha$  were significantly higher in malnourished patients ( $P < 0.05$ ). **Conclusion** This study suggests that nutritional status modulates malaria outcomes and pattern of progression in all ages with an inference of high malnutrition rate in the studied population.

**Keywords:** Malaria.

- Record Number:** 454  
**Author(s):** Akinloye, A. K. Oke, B. O.  
**Title:** Ultrastructural Features of Vagina at Different Phases of the Oestrous Cycle in the Female African Giant Rat (*Cricetomys gambianus* Waterhouse).  
**Journal Title:** Anat Rec (Hoboken).  
**Date of Publication:** 2014  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** The ultrastructures of the vagina at various stages of the oestrous cycle in female African giant rats (*Cricetomys gambianus* Waterhouse) were described in the present study. At mid-proestrus, late proestrus (LP)/early estrus (EE) and mid-estrus (ME) as well as late metestrus (LM)/early diestrus (ED) and mid-diestrus (MD), complex interface of epithelium and lamina propria were observed. Cells of the stratum basale formed finger-like extensions into the underlying lamina propria and tips of the extensions displayed hemidesmosome while basal lamina followed the contour of the extensions. At mid-metestrus (MM) and late diestrus/early proestrus, well developed, relatively straight basal lamina interfaced between the stratum basale and the lamina propria without finger-like projections. Polygonal cells with indented nuclei and, cytoplasm containing ribosomes, polysomes, intermediate filaments, and mitochondria were observed in stratum spinosum at all the phases of the oestrus cycle. At MM, LM/ED, and MD, the stratum spinosum had numerous desmosomes with tonofilaments, large microvilli that intermingled at the intercellular spaces and evidence of trapped/migrating neutrophils and lymphocytes. The superficial layer displayed short microvilli at mid-proestrus, cornification at LP/EE and desquamation at ME while it showed condensation of intermediate filaments; projections of large microvilli into the luminal surface at MM, and embedment of neutrophils at LM/ED as well as MD. This study looked into the reproductive biology of female African giant rats to produce baseline information on its reproductive organs and represented the first comprehensive description of the vagina at the ultrastructural level during oestrous cycle.  
**Keywords:** African giant Rat, Oestrous Cycle, Ultrastructure, Vagina.

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- Record Number:** 455  
**Author(s):** Akinwale, O. P. Oyefara, J.O. Adejoh, P.E. Adeneye, A.A. Adeneye, A. K. Musa, Z.A. Oyedeji, K.S. Sulyman, M.A.  
**Title:** Benefits of Using Community-Engaged Research Approach to Promote Healthy Lifestyles in Three Nigerian Urban Slums  
**Journal Title:** Southern African Journal of Epidemiology and Infection.  
**Date of Publication:** 2014  
**Volume ID:** 29  
**Issue ID:** 1  
**Page(s):** 48-50  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Slums are a wide range of low-income settlements with poor living conditions. The quality of the dwellings varies from simple shacks to permanent structures, while access to water, electricity, sanitation and other basic services and infrastructure tends to be limited. Non-communicable diseases (NCDs) exist in slums as the inhabitants adopt an urbanised lifestyle which places them at high risk. Lack of knowledge about the complications of NCDs and how to control them contributes to a large percentage of undetected and untreated cases. Therefore, our recently concluded study aimed to reduce the prevalence of NCDs by promoting a healthy lifestyle in three Nigerian urban slums using a community-engaged research approach. We decided to adopt this approach since community-engaged research

takes place in real-world conditions, thus increasing the applicability of findings to practical applications that improve human health. Literature has shown that meaningful community involvement can improve the research process itself, as well as the ultimate findings. Research questions about health issues that concern the community are developed, and people are more likely to give their support when they understand the purpose of the research, and how the results may positively affect them. Thus, this helps when recruiting participants. In addition, research questions help to identify the health risks that are revealed through people's participation, and helps with the development of appropriate ways to protect participants in this regard. Research questions also assist with improving study and instrument design by producing user-friendly, culturally sensitive, accurate and valid practices and measures. Furthermore, community involvement in analysis and interpretation can provide an important explanation of the results, and provide ideas that the researchers had not even considered. A community-engaged research approach provides an opportunity for greater trust and respect to be built between academic researchers and communities. This can lead to future research collaborations, as well as an improvement in community health.

**Keywords:** **Lifestyles,Urban Slums.**

**Record Number:** 456  
**Author(s):** Mfinanga, S. G. Kirenga, B. J. Chanda, D. M. Mutayoba, B. Mthiyane, T. Yimer, G. Ezechi, O. Connolly, C. Kapotwe, V. Muwonge, C. Massaga, J.  
**Title:** **Early versus delayed initiation of highly active antiretroviral therapy for HIV-positive adults with newly diagnosed pulmonary tuberculosis (TB-HAART): A prospective, international, randomised, placebo-controlled trial**  
**Journal Title:** The Lancet Infectious Diseases  
**Date of Publication:** 2014  
**Volume ID:** 14  
**Issue ID:** 7  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Background: WHO guidelines recommend early initiation of antiretroviral therapy (ART) irrespective of CD4 cell count for all patients with tuberculosis who also have HIV, but evidence supporting this approach is poor quality. We assessed the effect of timing of ART initiation on tuberculosis treatment outcomes for HIV-positive patients with CD4 counts of 220 cells per  $\mu\text{L}$  or more. Methods: We did this randomised, placebo-controlled trial between Jan 1, 2008, and April 31, 2013 at 26 treatment centres in South Africa, Tanzania, Uganda, and Zambia. We enrolled HIV-positive patients with culture-confirmed tuberculosis who had tolerated 2 weeks of tuberculosis short course chemotherapy. Participants were randomly allocated (1:1) to early ART (starting after 2 weeks of tuberculosis treatment) or delayed ART (placebo, then starting ART at the end of 6 months of tuberculosis treatment). Randomisation was computer generated, with permuted blocks of size eight, and stratified by CD4 count (220–349 cells per  $\mu\text{L}$  vs  $\geq 350$  cells per  $\mu\text{L}$ ). Patients and investigators were masked to treatment allocation until completion of 6-months' tuberculosis treatment, after which the study was open label. The primary endpoint was a composite of failure of tuberculosis treatment, tuberculosis recurrence, and death within 12 months of starting tuberculosis treatment in the modified intention-to-treat population. Secondary endpoints included mortality. The study is registered with controlled-trials.com (ISRCTN77861053). Findings: We screened 13 588 patients and enrolled 1675: 834 assigned early ART, 841 delayed ART. The primary endpoint was reached by 65 (8.5%) of 767 patients in the early ART group versus 71 (9.2%) of 771 in the delayed ART group (relative risk [RR] 0.91, 95% CI 0.64–1.30;  $p=0.9$ ). Of patients with a CD4 cell count of 220–349 cells per  $\mu\text{L}$ , 26 (7.9%) of 331 patients versus 33 (9.6%) of 342 reached the primary endpoint (RR 0.80, 95% CI 0.46–1.39;  $p=0.6$ ). For those with 350 cells per  $\mu\text{L}$  or more, 39 (8.9%) of 436 versus 38 (8.9%) of 429 reached the primary endpoint (RR 1.01, 95% CI 0.63–1.62;  $p=0.4$ ). Mortality did not differ significantly between treatment groups (RR 1.4, 95% CI 0.8–2.3;  $p=0.23$ ). Grade 3 and 4

adverse events occurred in 149 (18%) of 834 patients assigned early ART versus 174 (21%) of 841 assigned delayed ART ( $p=0.37$ ). 87 (10%) of 834 versus 84 (10%) of 841 had immune reconstitution inflammatory syndrome ( $p=0.56$ ). Interpretation: ART can be delayed until after completion of 6 months of tuberculosis treatment for HIV-positive patients with tuberculosis who have CD4 cell counts greater than 220 cells per  $\mu\text{L}$ . WHO guidelines should be updated accordingly.

**Keywords:****Record Number:** 457**Author(s):** Folayan, M. O. Adaranijo, A. Durueke, F. Ajuwon, A. Adejumo, A. Ezechi, O. Oyedeji, K. Akanni O.**Title:** Impact of three years training on operations capacities of research ethics committees in Nigeria.**Journal Title:** Developing World Bioethics**Date of Publication:** 2014**Volume ID:** 14**Issue ID:** 1**Page(s):** 1-14**Address/Availability:****Location/URL:**

**Abstract:** This paper describes a three-year project designed to build the capacity of members of research ethics committees to perform their roles and responsibilities efficiently and effectively. The project participants were made up of a cross-section of the membership of 13 Research Ethics Committees (RECs) functioning in Nigeria. They received training to develop their capacity to evaluate research protocols, monitor trial implementation, provide constructive input to trial staff, and assess the trial's success in promoting community engagement in the research. Following the training, technical assistance was provided to participants on an ongoing basis and the project's impacts were assessed quantitatively and qualitatively. Results indicate that sustained investment in capacity building efforts (including training, ongoing technical assistance, and the provision of multiple tools) improved the participants' knowledge of both the ethical principles relevant to biomedical research and how effective REC should function. Such investment was also shown to have a positive impact on the knowledge levels of other RECs members (those who did not receive training) and the overall operations of the RECs to which the participants belonged. Building the capacity of REC members to fulfill their roles effectively requires sustained effort and investment and pays off by enabling RECs to fulfill their essential mission of ensuring that trials are conducted safely and ethically.

**Keywords:** Bioethics; committees; developing world; research ethics; subSaharan Africa**Record Number:** 458**Author(s):** Okwuzu, J. O. Odunukwe, N. N.Ezechi, O. C. Gbajabiamila, T. A.Musa, A. Z.Ezeobi, P. M. Oke, B. A. Somefun, T. Okoye, R.N. Onyeitu, C.C. Adetunji, M.A**Title:** Toxoplasma gondii infection in HIV/AIDS: prevalence and risk factors.**Journal Title:** African Journal of clinical and Experimental microbiology**Date of Publication:** 2014**Volume ID:** 15**Issue ID:** 2**Page(s):** 97-102**Address/Availability:****Location/URL:**

**Abstract:** **BACKGROUND:** Toxoplasmosis is an infection caused by the protozoan Toxoplasma gondii. It is common in severely immunocompromised persons. **OBJECTIVE:** To determine the seroprevalence of T. gondii infection and the risk factors associated with the infection and to investigate the association between T. gondii infection and CD4 cell count. **METHODS:** Sera collected from 242 HIV positive HAART- naive patients were tested for T. gondii

specific immunoglobulin G antibodies. Information was obtained using a structured questionnaire. Baseline CD4 cell counts were obtained from patients case files. Data was managed using SPSS version 20 software and Microsoft Excel worksheet. **RESULTS:** One hundred and sixty eight (69.4%) subjects were females while 74(30.6%) were males. One hundred (41.3%) of study participants were Toxoplasma IgG antibody positive. Thirty two(32) HIV positive pregnant women were among this group studied with 12( 37.5%) being Toxo IgG antibody positive. Toxoplasma seropositivity was higher in females (42.8%) than in males (39.2%),  $P= 0.60$ . CD4 cell count level of  $< 200$  was negatively associated with Toxoplasma seropositivity than CD4 count . 200 by logistic regression (OR= 0.6; 95% CI 0.3-1.0). Living in proximity with cat was positively associated with *T. gondii* infection ( $P= 0.01$ ). **CONCLUSION:** *T. gondii* infection is common in pregnant women indicating greater probability of congenital transmission of *T. gondii*. This could form a basis for recommending intensifying health education and prophylactic treatment for all HIV positive pregnant women. Measures should be taken to prevent stray cats from entering homes.

**Keywords:** **Toxoplasma gondii , IgG, Seroprevalence, HIV positive, CD4 cells.**

**Record Number:** 459

**Author(s):** Ezechi, O. C. Petterson, K. O. Gabajabiamila, T. A. Idigbe, I. E. Kuyoro, O. Ujah, I. A. Ostergren, P. O.

**Title:** **Predictors of default from follow-up care in a cervical cancer screening program using direct visual inspection in south-western Nigeria**

**Journal Title:** BMC health services research

**Date of Publication:** 2014

**Volume ID:** 14

**Issue ID:** 1

**Page(s):** 143

**Address/Availability:**

**Location/URL:**

**Abstract:** Background: Increasingly evidence is emerging from south East Asia, southern and east Africa on the burden of default to follow up care after a positive cervical cancer screening/diagnosis, which impacts negatively on cervical cancer prevention and control. Unfortunately little or no information exists on the subject in the West Africa sub region. This study was designed to determine the proportion of and predictors and reasons for default from follow up care after positive cervical cancer screen. Method: Women who screen positive at community cervical cancer screening using direct visual inspection were followed up to determine the proportion of default and associated factors. Multivariate logistic regression was used to determine independent predictors of default. Results: One hundred and eight (16.1%) women who screened positive to direct visual inspection out of 673 were enrolled into the study. Fifty one (47.2%) out of the 108 women that screened positive defaulted from follow-up appointment. Women who were poorly educated (OR: 3.1, CI: 2.0 – 5.2), or lived more than 10 km from the clinic (OR: 2.0, CI: 1.0 – 4.1), or never screened for cervical cancer before (OR: 3.5, CI:3:1–8.4) were more likely to default from follow-up after screening positive for precancerous lesion of cervix . The main reasons for default were cost of transportation (48.6%) and time constraints (25.7%). Conclusion: The rate of default was high (47.2%) as a result of unaffordable transportation cost and limited time to keep the scheduled appointment. A change from the present strategy that involves multiple visits to a “see and treat” strategy in which both testing and treatment are performed at a single visit is recommended.

**Keywords:** **Cervical cancer, Direct visual inspection, VIAN, VILI, Default**

**Record Number:** 460

**Author(s):** Oke, B. Omilabu, S. Odunukwe, N. Ezechi, O. Salu, O. Okoye, R. Kalejaiye, O. David, N. Anjorin, A. Adesesan, A. James, B.

- Title:** Herpes Simplex Virus-2 Sero-testing among Individuals Presenting for HIV Counselling and Testing in a Centre in Nigeria.
- Journal Title:** International Journal of Prevention and Treatment
- Date of Publication:** 2014
- Volume ID:** 3
- Issue ID:** 1
- Page(s):** 1-7
- Address/Availability:**
- Location/URL:**
- Abstract:** Herpes Simplex Virus-2 (HSV-2) as an ulcerative mucocutaneous disease has been shown to facilitate the transmission of HIV infection. Therefore early identification and treatment of HSV-2 is fast becoming a strategy for preventing HIV transmission. This study aimed to determine the seroprevalence of HSV-2 among attendees of an HIV counselling and testing Centre (HCT), at a large HIV treatment centre in Lagos, Nigeria. It was a cross sectional study among clients presenting for voluntary HCT, who were counselled and screened for HIV and HSV-2. SPSS for window Version 17 was used for data analysis to carry out socio-demographic distribution of participants,  $\chi^2$  for association of variables with HSV-2 and the strength of the association determined by Pearson correlation. Two hundred and fifty eight participants enrolled for the study with 60% of participants being female. The most prominent age group was 24- 29 years (22.6%) for female and 30-35 years for male (25.2%). The prevalence of HIV and HSV-2 among the participants was 29.8% and 9.7% respectively. In addition, 7.8% tested positive to both HSV and HIV, with HSV-2 prevalence among the participants that tested positive to HIV significantly higher than participants that tested negative to HIV ( $P < 0.001$ ). The strength of the association by partial correlation demonstrated a medium correlation for HIV and HSV-2 and a weak correlation for age group and HSV-2 (0.359 and 0.187 respectively). The association between HSV-2 and HIV infection is attested by this study showing a high prevalence of HSV infection among HIV positive participants.
- Keywords:** HSV-2, HIV, Serotesting.

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- Record Number:** 461
- Author(s):** Audu, R.A. Onubogu, C.C. Nwokoye, N.N, et al.
- Title:** Improving quality in national reference laboratories: The role of SLMTA and mentorship.
- Journal Title:** Afr J Lab Med.
- Date of Publication:** 2014
- Volume ID:** 3
- Issue ID:** 2
- Page(s):**
- Address/Availability:**
- Location/URL:** <http://dx.doi.org/10.4102/ajlm.v3i2.200>
- Abstract:** **Background:** The Nigerian Institute of Medical Research houses two reference laboratories: the virology and tuberculosis laboratories. Both were enrolled in the Strengthening Laboratory Management Toward Accreditation (SLMTA) programme. **Objective:** To describe the impact of SLMTA and discuss factors affecting the results, with an emphasis on mentorship. **Methods:** The SLMTA programme was implemented from April 2010 through November 2012. Participants attended three workshops and executed quality improvement projects; laboratory auditors evaluated performance using a standard checklist. The virology laboratory did not receive mentorship; however, the tuberculosis laboratory had an international mentor who visited the laboratory four times during the programme, spending two to four weeks embedded within the laboratory during each visit. **Results:** There was an overall improvement in the performance of both laboratories, with the virology laboratory increasing 13% (from 80% at baseline to 93% at exit audit) and the tuberculosis laboratory increasing 29% (from 66% to 95%). These scores were maintained nine months later at the

surveillance audit. **Conclusion:** The SLMTA programme resulted in improved and sustained quality management performance for both laboratories. Mentoring was a possible factor in the substantial improvement made by the tuberculosis laboratory and should be considered in order to augment the training received from the SLMTA workshop

**Keywords:** SLMTA, mentorship.

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**Record Number:** 462  
**Author(s):** Audu, R.A. Onubogu, C.C. Okoye, R.N. Nwokoye, N.N. Onwuamah, C.K. Musa, A.Z. Raheem, T.Y. Aniedobe, M.N. Nduaga, S.J. Essien, I. Idigbe, E.O.  
**Title:** Proficiency Testing for HIV, Tuberculosis and Malaria Diagnosis in Clinical Laboratories in Nigeria.  
**Journal Title:** African Journal of Laboratory Medicine.  
**Date of Publication:** 2014  
**Volume ID:** 3  
**Issue ID:** 1  
**Page(s):**  
**Address/Availability:**  
**Location/URL:** <http://dx.doi.org/10.4102/ajlm.v3i1.102>

**Abstract:** Background: Proficiency testing (PT) is a means of verifying the reliability of laboratory results, but such programmes are not readily available to laboratories in developing countries. This project provided PT to laboratories in Nigeria. Objectives: To assess the proficiency of laboratories in the diagnosis of HIV, tuberculosis and malaria. Methods: This was a prospective study carried out between 2009 and 2011. A structured questionnaire was administered to 106 randomly-selected laboratories. Forty-four indicated their interest in participation and were enrolled. Four rounds of pre-characterised plasma panels for HIV, sputum films for tuberculosis and blood films for malaria were distributed quarterly by courier over the course of one year. The results were returned within two weeks and scores of  $\geq 80\%$  were reported as satisfactory. Mentoring was offered after the first and second PT rounds. Results: Average HIV PT scores increased from 74% to 95% from the first round to the third round, but decreased in the fourth round. For diagnosis of tuberculosis, average scores increased from 42% in the first round to 78% in the second round; but a decrease to 34% was observed in the fourth round. Malaria PT performance was 2% at first, but average scores increased between the second and fourth rounds, culminating in a fourth-round score of 39%. Many participants requested training and mentoring. Conclusions: There were gross deficiencies in the quality of laboratory services rendered across Nigeria. In-country PT programmes, implemented in conjunction with mentoring, will improve coverage and diagnosis of HIV, tuberculosis and malaria.

**Keywords:** Tuberculosis, Malaria, Clinical, Laboratories, Nigeria.

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**Record Number:** 463  
**Author(s):** Audu R, Onwuamah, C. Salu, O. Okwuraiwe, A. Ou, C. Bolu, O. Bond, K.B. Diallo, K. Lu, L. Jelpe, T. Okoye, M. Ngige, E. Vertefeuille, J.  
**Title:** Development and Implementation Challenges of a Quality Assured HIV Infant Diagnosis Program in Nigeria using Dried Blood Spots and DNA Polymerase Chain Reaction.  
**Journal Title:** AIDS Research and Human Retroviruses.  
**Date of Publication:** 2014  
**Volume ID:** 30  
**Issue ID:** 00  
**Page(s):**  
**Address/Availability:** DOI: 10.1089/aid.2014.0159  
**Location/URL:**  
**Abstract:** Nigeria has one of the highest HIV burdens as well as mother-to-infant transmission rates in

the world. A pilot program using polymerase chain reaction (PCR)-based testing of dried blood spot (DBS) specimens was implemented to enable early identification of HIV-infected infants and timely referral and linkage to care. From February 2007 to October 2008, whole blood was collected by finger prick to prepare DBS from infants <18 months presenting in six public mother-and-child health facilities in Lagos, Nigeria. The DBS were tested using the Roche Amplicor HIV-1 DNA Test, v1.5. To monitor laboratory testing quality, all of the PCR-positive and 10% of the PCR-negative DBS were retested by the same method at another reference laboratory. Three hundred and sixty-five randomly selected infants were screened using HIV rapid tests (RT) according to the national algorithm and RT-negative and PCR-positive specimens were also tested using Genscreen enzyme-linked immunosorbent assay (EIA) (Bio-Rad, France). The turnaround time (TAT) from sample collection, testing, and dispatching of results from each health facility was monitored. A total of 1,273 infants with a median age of 12.6 weeks (1 day to 71.6 weeks) participated in the program and 280 (22.0%) were PCR positive. HIV transmission levels varied greatly in the different health facilities ranging from 7.1% to 38.4%. Infants aged 48 to 72 weeks had the highest level of PCR positivity (41.1%). All PCR-positive specimens were confirmed by retesting. The mean turnaround time from DBS collection to returning of the laboratory result to the health facilities was 25 days. Three infants were found to be HIV antibody negative by rapid tests but were positive by both PCR and the fourth generation EIA. The DBS-based PCR program accurately identified all of the HIV-infected infants. However, many programmatic challenges related to the laboratory and TAT were identified.

**Keywords:** HIV Infant, Dried Blood Spots, DNA, Polymerase, Chain Reaction.

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**Record Number:** 464  
**Author(s):** Ezechi, O.C. Kalejaiye, O.O. Gab-Okafor, C.V. Oladele, D. A. Oke, B.O, Musa, Z.A. Ekama, S.O. Ohwodo, H. Agahowa, E. Gbajabiamilla, T. Ezeobi, P.M. Okwuraiwe, A. Audu, R.A. Okoye, R.N. David, A.N. Odunukwe, N.N. Onwujekwe, D.I. Ujah, I.A.O.  
**Title:** Sero-Prevalence and Factors Associated with Hepatitis B and C co-Infection in Pregnant Nigerian Women Living with HIV Infection.  
**Journal Title:** The Pan African Medical Journal.  
**Date of Publication:** 2014  
**Volume ID:** 17  
**Issue ID:**  
**Page(s):** 197  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Introduction:** Perinatal and horizontal transmission of Hepatitis B occur in areas of high endemicity as most infections are acquired in the first 5 years of life. Unless Hepatitis B and C infected pregnant women identified, and appropriate treatment provided, children born to these women are at high risk of chronic Hepatitis B (and C) virus infection. The objective of this study was to determine the prevalence and the factors associated with Hepatitis B and C Virus infection in pregnant HIV positive Nigerians. **Methods:** A cross sectional study among HIV Positive pregnant women seen at a large PMTCT clinic in Lagos Nigeria. The women were screened for Hepatitis B and C Virus infection at enrollment. HIV viral load, CD4 count, liver transaminases and hemoglobin levels were also determined. Data were managed with SPSS for windows version. Ethical approval was obtained from the Institutions Ethical Review Board. **Results:** Of the 2391 studied subjects, 101(4.2%) and 37(1.5%) respectively were seropositive for Hepatitis B and C Virus infection. Two women (0.08%) had triple infections. blood transfusion, (cOR: 2.3; 95% CI:1.1 - 4.6), history of induced abortion (cOR:2.2;95% CI:1.3 - 3.6), and elevated baseline ALT (cOR:2.2; 95% CI:2.2;4.2) were significantly associated with HBV. History of induced abortion was the only factor found to be associated with HIV/ HCV (cOR: 1.9;95% CI:1.3-3.9). **Conclusion:** Hepatitis B Virus infection (4.2%) is relatively common in our environment and associated with induced abortion, blood transfusion and elevated baseline

transaminase.HepatitisCMVirus infection (1.5%) is less common and associated with only history of induced abortion.

**Keywords:** Sero-prevalence, Hepatitis B, C co-infection, Pregnant, Nigeria, Women, HIV.

**Record Number:** 465

**Author(s):** Ezechi, O. C. Ostergren, P. O. Nwaokorie, F. O.Ujah, I. A. Odberg Pettersson, K.

**Title:** The Burden, Distribution and Risk Factors for Cervical Oncogenic Human Papilloma Virus Infection in HIV positive Nigerian Women.

**Journal Title:** Virol J.

**Date of Publication:** 2014

**Volume ID:**

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:**

**BACKGROUND:** The expected reduction in cervical cancer incidence as a result of increased access to antiretroviral therapy is yet to be seen. In this study we investigated the effect of HIV infection and treatment on high-risk (hr) human papilloma virus (HPV) prevalence and distribution. **METHODS:** Cervical cells from 515 (220 HIV positive and 295 HIV negative) women, recruited during community cervical cancer screening programme in states of Ogun and Lagos and at the cervical cancer screen clinic, Nigerian Institute of Medical Research Lagos were evaluated for the presence of 13 hr HPV genotypes by polymerase chain reaction based assay. **RESULTS:** The prevalence of high-risk HPV was 19.6% in the studied population. HPV 16 (3.9%), 35 (3.5%), 58 (3.3%) and 31 (3.3%) were the most common hr HPV infections detected. We observed that the prevalence of hr HPV was higher in HIV positives (24.5%) than 15.9% in HIV negative women (OR=?1.7; 95% CI: 1.1-2.7). A multivariate logistic regression analysis showed a lower hr HPV prevalence in HIV positive women on antiretroviral drugs (OR=?0.4; 95% CI: 0.3-0.5) and with CD4 count of 500 and above (OR=?0.7; 95% CI: 0.5-0.8). A higher prevalence of hr HPV was also noted in HIV positive women with CD4 count?<?200 cells/mm<sup>3</sup> (OR=?2.4; 95% CI: 1.7-5.9). **CONCLUSION:** HPV 16, 35, 58 and 31 genotypes were the most common hr HPV infection in our study group, which could be regarded as high risk general population sample; with higher prevalence of HPV 16 and 35 in HIV positive women than in HIV negative women. The use of antiretroviral drugs was found to be associated with a lower prevalence of hr HPV infection, compared to those not on treatment. This study raises important issues that should be further investigated to enable the development of robust cervical cancer prevention and control strategies for women in our setting.

**Keywords:** Cervical, Oncogenic, Human papilloma, Virus, Infection, HIV, Nigerian, Women.

**Record Number:** 466

**Author(s):** Fischer, W. Breithaupt, U. Kern, B. Smith, S. I. Spicher, C. Haas, R.

**Title:** A Comprehensive Analysis of Helicobacter pylori Plasticity Zones Reveals that they are Integrating Conjugative Elements with Intermediate Integration Specificity.

**Journal Title:** BMC Genomics.

**Date of Publication:** 2014

**Volume ID:** 15

**Issue ID:** 1

**Page(s):** 310

**Address/Availability:**

**Location/URL:**

**Abstract:**

The human gastric pathogen Helicobacter pylori is a paradigm for chronic bacterial infections. Its persistence in the stomach mucosa is facilitated by several mechanisms of

immune evasion and immune modulation, but also by an unusual genetic variability which might account for the capability to adapt to changing environmental conditions during long-term colonization. This variability is reflected by the fact that almost each infected individual is colonized by a genetically unique strain. Strain-specific genes are dispersed throughout the genome, but clusters of genes organized as genomic islands may also collectively be present or absent.

**Keywords:** **Helicobacter pylori, Bacteria.**

**Record Number:** **467**

**Author(s):** **Nwokoye, N.N. Onubogu, C.C. Nwadike, P.O. Abiodun, A.T Tochukwu, N.E. Ejezie, C.O. Onwuamah, C.K. Gidado, M. Elom, E. Idigbe, O.E.**

**Title:** **Performance and Biosafety Implications of Genexpert MTB/RIF Assay.**

**Journal Title:** International Journal of Microbiology and Epidemiological Research.

**Date of Publication:** 2014

**Volume ID:** 2

**Issue ID:** 3

**Page(s):** 19-27

**Address/Availability:** <http://dx.plos.org/10.1371/journal.pone.0090296>.

**Location/URL:**

**Abstract:**

**Keywords:** **Biosafety, Genexpert MTB/RIF.**

**Record Number:** **468**

**Author(s):** **Okonofua, F. E. Ogu, R. N. Akuse, J. T. Ujah, I. O. Galadanci, H. S. Fabamwo, A. O.**

**Title:** **Assessment of Sublingual Misoprostol as First-Line Treatment for Primary Post-Partum Hemorrhage: Results of a Multicenter Trial.**

**Journal Title:** J Obstet Gynaecol Res.

**Date of Publication:** 2014

**Volume ID:** 40

**Issue ID:** 3

**Page(s):** 718-22

**Address/Availability:**

**Location/URL:**

**Abstract:**

**AIM:** The study investigated the effectiveness of sublingual misoprostol when used as primary treatment of primary post-partum hemorrhage (PPH) in a low-income country. **METHODS:** Maternity care providers in three Nigerian hospitals administered 800µm sublingual misoprostol to women experiencing PPH. The outcome variables were estimated blood loss and the need for additional uterotonic drugs after initial treatment with misoprostol. Entry criteria included women in term spontaneous labor, while exclusion criteria were women with operative delivery and those experiencing PPH not due to atonic uterus. **RESULTS:** One hundred and thirty-one women with PPH were treated over 6 months. Estimated blood loss ranged 500-2500 mL. Twenty women (15.3%) required additional uterotonic drugs to control continuing blood loss. There were no maternal deaths, while seven perinatal deaths were recorded. **CONCLUSION:** We conclude that although sublingual misoprostol is effective in reducing blood loss due to PPH, it does not effectively treat all forms of PPH. Additional uterotonics and other ancillary treatments would be required.

**Keywords:** **Nigeria, Case Management, Maternal Mortality, Misoprostol, Post-partum Hemorrhage.**

**Record Number:** **469**

**Author(s):** **Olukosi, Y. A. Oyebola, M. K. Ajibaye, O.Orok, A. B.Aina, O. O. Agomo, C. O. Iwalokun, B. A. Akindele, S. Enya, V. N. Okoh, H. I**

**Title:** **Persistence of Markers of Chloroquine Resistance Among P falciparum Isolates**

**Recovered from Two Nigerian Communities.**

**Journal Title:** MWJ  
**Date of Publication:** 2014  
**Volume ID:** 5  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

We investigated the prevalence of the major markers of chloroquine resistance years after the withdrawal of the drug in Nigeria. Finger prick blood samples were collected from participants presenting with symptoms of malaria in Lagos, Nigeria. Thick and thin blood smears were prepared for microscopy and dry blood spots made from malaria-positive participants for parasite DNA extraction. The detection of mutations in the Plasmodium falciparum chloroquine resistance transporter (pfcr1) and P.falciparum multidrug resistance (pfmdr1) genes was performed by nested polymerase chain reaction (PCR) and restriction fragment length polymorphism (RFLP). Of the 1527 blood samples that were confirmed by PCR to be P. falciparum positive, 412 and 344 were typed for the molecular detection of pfcr1 and pfmdr1 gene mutations, respectively. The mutant alleles of pfcr1 were present among 290 (70%) parasite carriers while the pfmdr1 mutant allele was found in 117 (34%) of the total population. There were higher distributions of the mutant alleles for the two loci in Ijede than in Lekki. The observed frequencies of pfcr1 mutant alleles in the two parasite populations were in agreement with the expected frequencies predicted by Hardy-Weinberg. In comparing data with studies conducted between 2000 and 2002 in Ijede, we observed an increase in the prevalence of mutant type pfcr1 against a marginal decline in the pfmdr1 mutant type. The high frequencies of pfcr1 mutation are suggestive of a persistent drug pressure and continuing inefficacy of chloroquine as an antimalarial drug.

**Keywords:** Chloroquine, Malaria.

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**Record Number:** 470

**Author(s):** Onwuamah, C. K. Ekama, S. O. Audu, R. A. Ezechi, O. C. Poirier, M. C. Odeigah, P. G.  
**Title:** Exposure of Allium cepa Root Cells to Zidovudine or Nevirapine Induces Cytogenotoxic Changes.

**Journal Title:** PLoS One.

**Date of Publication:** 2014

**Volume ID:** 9

**Issue ID:** 3

**Page(s):**

**Address/Availability:** :HFJ

**Location/URL:**

**Abstract:**

Antiretroviral drugs have proved useful in the clinical management of HIV-infected persons, though there are concerns about the effects of exposure to these DNA-reactive drugs. We investigated the potential of the plant model Allium cepa root tip assay to demonstrate the cytogenotoxicity of zidovudine and nevirapine and as a replace-reduce-refine programme amenable to resource-poor research settings. Cells mitotic index were determined in squashed root cells from Allium cepa bulbs exposed to zidovudine or nevirapine for 48 hr. The concentration of zidovudine and nevirapine inhibiting 50% root growth after 96 hr exposure was 65.0  $\mu$ M and 92.5  $\mu$ M respectively. Root length of all antiretroviral-exposed roots after 96 hr exposure was significantly shorter than the unexposed roots while additional root growth during a subsequent 48 hr recovery period in the absence of drug was not significantly different. By ANOVA, there was a significant association between percentage of cells in mitosis and zidovudine dose ( $p=0.004$ ), but not nevirapine dose ( $p=0.68$ ). Chromosomal aberrations such as sticky chromosomes, chromatin bridges, multipolar mitoses and binucleated cells were observed in root cells exposed to zidovudine and nevirapine for 48 hr. The most notable chromosomal aberration was drug-related increases in sticky chromosomes.

Overall, the study showed inhibition in root length growth, changes in the mitotic index, and the induction of chromosomal aberrations in *Allium* bulbs treated for 96 hr or 48 hr with zidovudine and nevirapine. The study reveals generalized cytogenotoxic damage induced by exposure to zidovudine and nevirapine, and further show that the two compounds differ in their effects on mitosis and the types of chromosomal aberrations induced.

**Keywords:** *Allium cepa* Root, Cell, Zidovudine, Nevirapine, Cytogenotoxic.

**Record Number:** 471  
**Author(s):** Onwuamah, C. K. Ezechi, O.C.Herbertson, E.C.Audu, R.A. Ujah, I.A.O. Odeigah, P.G.C.  
**Title:** Foetal loss and enhanced fertility observed in mice treated with Zidovudine or Nevirapine.  
**Journal Title:** PLOS One.  
**Date of Publication:** 2014  
**Volume ID:** 9  
**Issue ID:** 9  
**Page(s):**  
**Address/Availability:**  
**Location/URL:** <http://dx.plos.org/10.1371/journal.pone.0107899>.  
**Abstract:** Background: Health concerns for HIV-infected persons on antiretroviral therapy (ART) have moved from morbidity to the challenges of long-term ART. We investigated the effect of Zidovudine or Nevirapine on reproductive capacity across two mouse generations. Methods: A prospective mouse study with drugs administered through one spermatogenic cycle. Mouse groups (16 males and 10 females) were given Zidovudine or Nevirapine for 56 days. Males were mated to untreated virgin females to determine dominant lethal effects. Twenty females (10 treated and 10 untreated) mated with the treated males per dose and gave birth to the F<sub>1</sub> generation. Parental mice were withdrawn from drugs for one spermatogenic cycle and mated to the same dams to ascertain if effects are reversible. The F<sub>1</sub> generation were exposed for another 56 days and mated to produce the F<sub>2</sub> generation. Results: Foetal loss was indicated in the dominant lethal assay as early as four weeks into drug administration to the males. At the first mating of the parental generation to produce the F<sub>1</sub> generation, births from 10 dams/dose when the ‘fatheronly’ was exposed to Zidovudine (10, 100 and 250 mg/kg) was 3, 2 and 1 while it was 7, 1 and 4 respectively when both parents’ were exposed. Similarly births from the parental generation first mating when the ‘father-only’ was exposed to Nevirapine (5, 50 and 150 mg/kg) was 2, 2 and 0 while it was 6, 5 and 9 respectively when ‘both-parents’ were exposed. However, fertility was significantly different neither by dose nor by the parental exposure. The F<sub>1</sub> mice mated to produce the F<sub>2</sub> generation recorded only one birth. Conclusion: The dominant lethal analysis showed foetal loss occurred when the ‘fathers-only’ were treated while fertility was enhanced when ‘both-parents’ were on therapy at the time of mating.

**Keywords:** Foetal, Mice Zidovudine, Nevirapine.

**Record Number:** 472  
**Author(s):** Onwuamah, C. K. Ekama, S. O. Audu, R. A. Ezechi, O. C. Poirier, M. C. Odeigah, P. G.  
**Title:** Exposure of *Allium cepa* Root Cells to Zidovudine or Nevirapine Induces Cytogenotoxic Changes.  
**Journal Title:** PLoS One.  
**Date of Publication:** 2014  
**Volume ID:** 9  
**Issue ID:** 3  
**Page(s):**  
**Address/Availability:** HFJ  
**Location/URL:**  
**Abstract:** Antiretroviral drugs have proved useful in the clinical management of HIV-infected persons,

though there are concerns about the effects of exposure to these DNA-reactive drugs. We investigated the potential of the plant model *Allium cepa* root tip assay to demonstrate the cytogenotoxicity of zidovudine and nevirapine and as a replace-reduce-refine programme amenable to resource-poor research settings. Cells mitotic index were determined in squashed root cells from *Allium cepa* bulbs exposed to zidovudine or nevirapine for 48 hr. The concentration of zidovudine and nevirapine inhibiting 50% root growth after 96 hr exposure was 65.0  $\mu\text{M}$  and 92.5  $\mu\text{M}$  respectively. Root length of all antiretroviral-exposed roots after 96 hr exposure was significantly shorter than the unexposed roots while additional root growth during a subsequent 48 hr recovery period in the absence of drug was not significantly different. By ANOVA, there was a significant association between percentage of cells in mitosis and zidovudine dose ( $p=0.004$ ), but not nevirapine dose ( $p=0.68$ ). Chromosomal aberrations such as sticky chromosomes, chromatin bridges, multipolar mitoses and binucleated cells were observed in root cells exposed to zidovudine and nevirapine for 48 hr. The most notable chromosomal aberration was drug-related increases in sticky chromosomes. Overall, the study showed inhibition in root length growth, changes in the mitotic index, and the induction of chromosomal aberrations in *Allium* bulbs treated for 96 hr or 48 hr with zidovudine and nevirapine. The study reveals generalized cytogenotoxic damage induced by exposure to zidovudine and nevirapine, and further show that the two compounds differ in their effects on mitosis and the types of chromosomal aberrations induced.

**Keywords:** **Allium cepa Root, Cell, Zidovudine, Nevirapine, Cytogenotoxic.**

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**Record Number:** 473  
**Author(s):** Onwuamah, C. K. Ezechi, O. C. Herbertson, E. C. Audu, R.A. Ujah, I. A. O. Odeigah, P.G.C.  
**Title:** Foetal loss and enhanced fertility observed in mice treated with Zidovudine or Nevirapine.  
**Journal Title:** PLOS One.  
**Date of Publication:** 2014  
**Volume ID:** 9  
**Issue ID:** 9  
**Page(s):**  
**Address/Availability:**  
**Location/URL:** <http://dx.plos.org/10.1371/journal.pone.0107899>.  
**Abstract:** Background: Health concerns for HIV-infected persons on antiretroviral therapy (ART) have moved from morbidity to the challenges of long-term ART. We investigated the effect of Zidovudine or Nevirapine on reproductive capacity across two mouse generations. Methods: A prospective mouse study with drugs administered through one spermatogenic cycle. Mouse groups (16 males and 10 females) were given Zidovudine or Nevirapine for 56 days. Males were mated to untreated virgin females to determine dominant lethal effects. Twenty females (10 treated and 10 untreated) mated with the treated males per dose and gave birth to the F<sub>1</sub> generation. Parental mice were withdrawn from drugs for one spermatogenic cycle and mated to the same dams to ascertain if effects are reversible. The F<sub>1</sub> generation were exposed for another 56 days and mated to produce the F<sub>2</sub> generation. Results: Foetal loss was indicated in the dominant lethal assay as early as four weeks into drug administration to the males. At the first mating of the parental generation to produce the F<sub>1</sub> generation, births from 10 dams/dose when the 'fatheronly' was exposed to Zidovudine (10, 100 and 250 mg/kg) was 3, 2 and 1 while it was 7, 1 and 4 respectively when both parents' were exposed. Similarly births from the parental generation first mating when the 'father-only' was exposed to Nevirapine (5, 50 and 150 mg/kg) was 2, 2 and 0 while it was 6, 5 and 9 respectively when 'both-parents' were exposed. However, fertility was significantly different neither by dose nor by the parental exposure. The F<sub>1</sub> mice mated to produce the F<sub>2</sub> generation recorded only one birth. Conclusion: The dominant lethal analysis showed foetal loss occurred when the "fathers-only" were treated while fertility was enhanced when "both-parents" were on therapy at the time of mating.

**Keywords:** **Foetal, Mice Zidovudine, Nevirapine.**

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**Record Number:** 474  
**Author(s):** Onyekwere, C. A. Odiagah, J. N. Igetei, R. Duro Emanuel A. O. Ekere, F. **Smith, S.I**  
**Title:** Rabeprazole, Clarithromycin, and Amoxicillin *Helicobacter pylori* Eradication Therapy: Report of an Efficacy Study.  
**Journal Title:** World J Gastroenterol.  
**Date of Publication:** 2014  
**Volume ID:** 20  
**Issue ID:** 13  
**Page(s):** 3615-9  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** To investigate the efficacy of a standard triple therapy (comprising rabeprazole, clarithromycin, and amoxicillin) for *Helicobacter pylori* (*H. pylori*) eradication, noting factors that influence the outcome and documenting any adverse events.  
**Keywords:** **Amoxicillin clarithromycin, Eradication therapy, Helicobacter Pylori, Rabeprazole triple therapy**

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**Record Number:** 475  
**Author(s):** Hassan, A.O. **Amoo, A.O. J Akinwale, O.P.** Deji-Agboola, A. M. Adeleke, M.A. **Gyang, P.V.**  
**Title:** Current status of urinary schistosomiasis in communities around the Erinle and Eko-Ende Dams and the implications for schistosomiasis control in Nigeria.  
**Journal Title:** Southern African Journal of Infectious Diseases 29(4):137-140.  
**Date of Publication:** 2014  
**Volume ID:** 29  
**Issue ID:** 4  
**Page(s):** 137-140  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Schistosomiasis is an endemic disease in many parts of the world and the disease is associated with water resource development projects, such as dams, irrigation schemes, and rice and fish farming. The present study was designed to determine the prevalence and intensity of urinary schistosomiasis in five communities around the Erinle and Eko-Ende Dams in Osun State, Nigeria, using dipstickhaematuria, and parasitological and molecular techniques. A total of 462 participants were screened, of whom 46.3%, 51.1% and 61.5% tested positive when using haematuria, microscopy and PCR respectively. The highest prevalence of the infection and intensity was in Illie (Erinle Dam), while Eko-Ajala (Eko-Ende Dam) had the least. Using analysis of variance and chi-square tests, the differences in the prevalence and intensity of the infection between the five communities was statistically significant ( $p$ -value < 0.05). The prevalence and the intensity of the infection was higher in communities around Erinle Dam when compared with those around Eko-Ende Dam, but the differences were not significant ( $p$ -value > 0.05). The high prevalence and intensity of the infection of schistosomiasis around the two dams underscores the need for urgent public health measures, such as appropriate treatment and the provision of motorised boreholes.  
**Keywords:** **Urinary schistosomiasis, Erinle, Eko-Ende, Nigeria**

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**Record Number:** 476  
**Author(s):** Oyebola, M. K. **Idowu, E. T. Olukosi, Y. A. Iwalokun, B. A. Agomo, C. O. Ajibaye, O. O.** Tola, M. Otubanjo, A. O.  
**Title:** **Genetic Diversity and Complexity of Plasmodium falciparum Infections in Lagos, Nigeria.**

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**Journal Title:** Asian Pac J Trop Biomed.

**Date of Publication:** 2014

**Volume ID:** 4

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** To Analyze the genetic diversity of Plasmodium falciparum(P.falciparum) using msp-1 and msp-2 as antigenic markers.Parasite DNA was extracted from 100 blood samples collected from P. falciparum-positive patients confirmed by microscopy, and followed by PCR-genotyping targeting the msp-1 (block2) and msp-2 (block 3) allelic families. All the families of msp-1 (K1, MAD20 and R033) and msp-2 (FC27 and 3D7) locus were observed. Results revealed that K1 (60/100) was the most predominant genotype of msp-1 allelic family followed by the genotypes of MAD20 (50/100) and R033 (45/100). In the msp-2 locus, FC27 genotype (62/100) showed higher frequency than 3D7 genotype (55/100). The allelic families were detected either alone or in combination with other families. However, no R033/MAD20 combination was observed. Multiplicity of infection (MOI) with msp-1 was higher in the locality of Ikorodu (1.50) than in Lekki (1.39). However, MOI with msp-2 was lower in the locality of Ikorodu (1.14) than in Lekki (1.76).There was no significant difference in the mean MOI between the two study areas (P=0.427).The observation of limited diversity of malaria parasites may imply that the use of antigenic markers as genotyping tools for distinguishing recrudescence and re-infections with P. falciparum during drug trials is subjective.

**Keywords:** **Genetics, Malaria.**

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**Record Number:** 477

**Author(s):** **Smith, S. I. Fowora, M. A.** Atiba, A. Anejo-Okopi, J. TinaFingesi, EhiAdamu, M.Omonigbehin E.A. IteunUgo-Ijeh, M. **Bamidele, M. Odeigah, P**

**Title:** Molecular detection of some virulence genes of Salmonella spp isolated from food samples in Lagos, Nigeria.

**Journal Title:** Animal and Veterinary Sciences

**Date of Publication:** 2015

**Volume ID:** 3

**Issue ID:** 1

**Page(s):** 22-27

**Address/Availability:**

**Location/URL:**

**Abstract:** Food-borne salmonellosis is the most prevalent disease and major source of Salmonella spp in humans and its detection particularly in developing countries is quite cumbersome and time consuming. Molecular methods for its detection as well as the genotypic diversity of some of the genes responsible for Salmonella virulence are necessary. The aim of the study was to screen for Salmonella spp using the 16S rRNA, to determine whether the invA gene is specific for Salmonella detection as well as virulence genotyping of some genes present in Salmonella spp (invA, sitC and spvA, spvB and spvC) from food samples in Lagos, Nigeria. All 76 isolates tested positive for 16S rRNA gene while 53 (69.7%) were positive for salm3 and salm4 (389 bp) gene. PCR analysis of the invA gene (284bp) showed that 73 (96.1% were positive, 38 (50%) of the isolates were positive for sitC gene while none were positive for spvA and spvB and with the multiplex –PCR of invA/spvC gene 25 (33%) were positive for invA (244 bp) gene and none positive for spvC gene. The use of invA gene for Salmonella detection in our food samples is recommended however for most of our isolatesthe virulence genes were not detected.

**Keywords:** **Detection, Food Samples, PCR, Salmonella, Virulence Genes**

**Record Number:** 478  
**Author(s):** Gbaja-Biamila, T.A. David, A.N. Herbertson, E.C. Ohwodo, H.Ezeobi, P. et al.  
**Title:** Long Term Averse Effect to Effavirenz in a HIV infected Adolescent.  
**Journal Title:** Archives of Medical & Biomedical Research.  
**Date of Publication:** 2015  
**Volume ID:** 2  
**Issue ID:** 4  
**Page(s):** 142 - 5  
**Address/Availability:** <http://dx.doi.org/10.4314/ambr.v2i4.5>  
**Location/URL:**

**Abstract:** Efavirenz is one of the medications used in combined antiretroviral therapy (ART) for the management of HIV infection in adolescents. Various central nervous system adverse reactions have been reported in patients commencing antiretroviral therapy with a regimen containing Efavirenz. These reactions tend to be acute, commonly occurring in the first six months of therapy. Adverse reactions following long term use of Efavirenz for ART is rare among adults and rarer still among children and adolescents. There is only one published case of serious adverse reaction to Efavirenz in an adolescent after long-term use. The case of a male HIV Positive Nigerian patient aged 13 years. He presented with five-day history of Difficulty sleeping, abnormal dreams, inability to concentrate, restlessness, irrational behavior and long-term memory loss. There was no previous history of psychiatric illness and no suggestive social or family history. Patient was on Efavirenz containing regimen about 6.5 years till presentation with adverse reaction mainly affecting behavior, thought processes and memory. After discontinuing Efavirenz and replacing with Nevirapine in his combined ART regimen, all neuropsychiatric manifestations ceased. He regained his memory, no longer had bad dreams or demonstrated any irrational behavior or attitude. Physicians who are involved in the care of HIV infected patients need to be aware of the possibility of adverse Drug reactions occurring in patients who have been on antiretroviral drugs for years. This possibility should not be excluded from possible differential diagnosis.

**Keywords:** Adolescent; Efavirenz; HIV Infection; Reactions; Adverse drug; Psychomotor Agitation; Long term.

**Record Number:** 479  
**Author(s):** Fashola, M. O. Coker, A.O. Smith, S.I. Nwaokorie, F.O. Fowora, M. A. Akinyemi, K.O.  
**Title:** Molecular Typing of Salmonella Species Isolated from Stool Samples.  
**Journal Title:** J. Life Sci7 (1-2): 1-5.  
**Date of Publication:** 2015  
**Volume ID:** 7  
**Issue ID:** 1-2  
**Page(s):** 1-5  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

This study aimed at comparing the biochemical characterization of Salmonella spp with the molecular typing method. A total of 57 stool samples were collected from three different health institutions in Nigeria over a period of 3 months. Twenty (35%) Salmonella species consisting of 14 (70%) S. Typhi and 6 (30%) S.Choleraesuiswere identified using standard methods. The isolates were then typed using randomly amplified polymorphic DNA polymerase chain reaction (RAPD-PCR) and the entero-bacteriaceae repetitive intergenic consensus PCR (ERICPCR). The ERIC-PCR differentiated the S.Typhiinto 14 different sub-types with four of them (2s and 6s) and (7s and 11s) belonging to the same sub-types. The S.Choleraesuisshowed no band with the ERIC-PCR while the RAPD-PCR differentiated the isolates into nine sub-types and the remaining isolates showed no visible band. The ERIC-PCR was shown to be more a discriminatory and type-able tool for Salmonella Typhi isolates.

**Keywords:** Polymerase Chain Reaction. ERIC-PCR.RAPD-PCR.S Typhi. S.Choleraesuis

**Record Number:** 480  
**Author(s):** Olalekan, A.O. Taiwo, S. S. **Smith, S.I.** Shittu, A.O. Kolawole, D.O Schamburg, F  
**Title:** Persistent Staphylococcus aureus nasal colonization in ambulatory HIV infected patients in Nigeria: Risk factors and molecular features.  
**Journal Title:** J MicrobiolImmunol Infect.  
**Date of Publication:** 2015  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** This longitudinal study on Staphylococcus aureus colonization in Nigerian human immunodeficiency virus patients (n = 187) found a trend towards a higher proportion of persistent S. aureus carriage in patients with advanced human immunodeficiency virus infection, low CD4+ cell counts, and a predominance of isolates belonging to ST8/spa-CC064 in persistent carriers.  
**Keywords:** Carriage, HIV patients, Persistent, S. aureus

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**Record Number:** 481  
**Author(s):** **Ujah, I. A. O. Nwaokorie, F. Adeneye, A. Oladele, D. Bamidele, T. Musa, S. Akinside, K Iwuora, J. Smith, S.**  
**Title:** A review of perception and myth on causes of cholera infection in endemic areas of Nigeria.  
**Journal Title:** African Journal of Med Res  
**Date of Publication:** 2015  
**Volume ID:** 9  
**Issue ID:** 9  
**Page(s):** 557-564  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:** Myths, aetiology, Vibrio cholerae, epidemic, perception.

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**Record Number:** 482  
**Author(s):** **Smith S. Nwaokorie, F. Awoderu, O. Bamidele, T. Akinsinde, K. Ochoga, M. Oladele, D. Bamidele, M. Fesobi, T. Afocha, E. Amoo, S. Ajayi, M. Atat, P. Ogbonna, F. Nduaga, S. Idika N. Oparaugo, C. Musa, A. Adeneye, A. Ijeh, M. Ujah, I.**  
**Title:** ERIC-PCR Analysis of the Clinical and Environmental strains of V. cholera during 2013 Epidemic in Nigeria.  
**Journal Title:** International Journal of Advances in Health Sciences  
**Date of Publication:** 2015  
**Volume ID:** 2  
**Issue ID:** 6  
**Page(s):** 670-680  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:**

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**Record Number:** 483  
**Author(s):** **Akinwale, O. Oso, O. Salawu, O. Odaibo, A. Petrus Tang, Ting-Wen Chen, Gyang, P**  
**Title:** Molecular characterization of Bulinus snail intermediate hosts of schistosomes in Ogun state,

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Journal Title: southwest Nigeria.  
 Folia Malacologica  
 Date of Publication: 2015  
 Volume ID: 23  
 Issue ID: 2  
 Page(s): 137-147  
 Address/Availability:  
 Location/URL:  
 Abstract:

Freshwater snails of the genus *Bulinus* O. F. Müller, 1781 are intermediate hosts for schistosomes, trematode parasites which cause schistosomiasis. The genus includes closely related species complexes with restricted gene flow between populations of each taxon. Despite their importance as intermediate hosts, unambiguous identification of these snails remains challenging. We applied molecular approach to their identification to achieve a better understanding of the epidemiology of schistosomiasis in an endemic region, south-western Nigeria. A total of 149 snails were collected and their genomic DNA was screened for schistosome infection using PCR amplification of schistosome *DraI* repeat sequence. The snails were identified by PCR-RFLP and/or sequencing of an amplicon of their entire ITS region including the 5.8S ribosomal RNA (rRNA) gene. Four *Bulinus* species, namely *B. globosus* (Morelet, 1866), *B. forskalii* (Ehrenberg, 1831), *B. camerunensis* Mandahl-Barth, 1957 and *B. senegalensis* O. F. Müller, 1781 were identified, and 34.9% (n = 52) of the 149 snails were infected: *B. globosus* 25.5% (n = 38), *B. forskalii* 5.4% (n = 8), *B. camerunensis* 2.7% (n = 4) and *B. senegalensis* 1.3% (n = 2). Restriction fragment profiles of the ribosomal ITS region for *B. globosus* closely matched those obtained in our previous study thus confirming the view that ribosomal ITS region of these snails could be well suited for taxonomic studies. The use of sequencing for species identification was costly and time-consuming, but it was effective in resolving true identities of snails whose restriction profiles were similar and inconclusive.

Keywords: *Bulinus*; ITS; rRNA gene; schistosome; schistosomiasis; Nigeria.

Record Number: 484  
 Author(s): Gyang, V.P. Ting-Wu Chuang, Yueh-Lun Lee. Akinwale, O. P. Orok, A. Ajibaye, O. Chien-Wei Liao, Po-Ching Cheng, Chia-Mei Chou, Ying-Chieh Huang, Kuo-Hua Fan, Chia-Kwung Fan.  
 Title: Intestinal parasitic infections: current status and associated risk factors among schoolchildren in an archetypal African urban slum in Nigeria.

Journal Title:  
 Date of Publication:  
 Volume ID:  
 Issue ID:  
 Page(s):  
 Address/Availability:  
 Location/URL:  
 Abstract:  
 Keywords:

Record Number: 485  
 Author(s): Gyang, P.V. Akinwale, O. P. Yueh-Lun Lee, Ting-Wu Chuang, Orok, A. Ajibaye, O. Chien-Wei Liao, Po-Ching Cheng, Chia-Mei Chou, Ying-Chie Huang, Kuo-Hua Fan and Chia-Kwung Fan.  
 Title: *Toxoplasma gondii* infection: seroprevalence and associated risk factors among primary school children in Lagos City, Southern Nigeria.

**Journal Title:** Revista da Sociedade Brasileira de Medicina Tropical  
**Date of Publication:** 2015  
**Volume ID:** 48  
**Issue ID:** 1  
**Page(s):** 56-63  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **INTRODUCTION:** Toxoplasma gondii infection has been described as the most widespread zoonotic infection of humans and other animals. Information concerning T. gondii infection among schoolchildren is unavailable in Lagos City, Nigeria. **METHODS:** This cross-sectional study investigated the seroprevalence and risk factors associated with T. gondii infection among primary schoolchildren (PSC) from a community located in the center of Lagos, southern Nigeria, from November 2013 to March 2014. A total of 382 PSC were screened for the presence of sera anti-T. gondii antibodies using a latex agglutination test (TOXO Test-MT, Tokyo, Japan). A cutoff titer of  $\geq 1:32$  was considered positive, while titers  $\geq 1:1,024$  indicated high responders. Questionnaires were also used to obtain data on possible risk factors from parents/guardians. **RESULTS:** The overall seroprevalence was 24% (91/382), and 83.5% (76/91) of seropositive PSC were classified as high responders. Among the risk factors tested, including contact with cats and soil, consumption of raw meat and vegetables, and drinking unboiled water, none showed statistical significance after multivariate adjustment. No associations were observed among age, gender, body mass index (BMI), and parents' occupation/educational level. **CONCLUSIONS:** The findings in this study show evidence of active infection, and hence, there is need for urgent preventive measures in this city. Further investigation is required to clarify the transmission routes. Policy makers also need to initiate prevention and control programs to protect pregnant women and immunocompromised patients in particular because they are more severely affected by T. gondii infection.

**Keywords:** **Toxoplasma gondii; Latex agglutination test; Primary schoolchildren; Risk factors; Nigeria.**

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**Record Number:** 486  
**Author(s):** Gyang, P.V. Akinwale, O.P. Yueh-Lun Lee, Ting-Wu Chuang. Orok, A.B. Ajibaye, O. Chien-Wei Liao, Po-Ching Chen, Chia-Mei Chou, Ying-Chieh Huang, Ursula Barghouth, Chia-Kwung Fan.  
**Title:** Seroprevalence, disease awareness, and risk factors for Toxocara canis infection among primary school children in Makoko, an urban slum community in Nigeria.  
**Journal Title:** Acta Tropica  
**Date of Publication:** 2015  
**Volume ID:** 146  
**Issue ID:**  
**Page(s):** 135-140  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** In this study, we investigated the seroprevalence of Toxocara canis infection in southern Nigeria, which previously was unknown, in addition to evaluating disease awareness and potential risk factors for schoolchildren in an urban slum community. In total, 366 primary schoolchildren were investigated for the presence of anti-Toxocara IgG antibodies. Blood was collected and screened by a Western blot analysis based on the excretory–secretory antigens of larval T. canis (TcES), targeting low molecular weight bands of 24–35 kDa specific for T. canis. Children were considered seropositive if their serum reacted with TcES when diluted to a titer of 1:32. Questionnaires concerning possible risk factors were given to the schoolchildren to acquire data on this infection. The overall seroprevalence of Toxocara infection was 86.1% (315/366). The logistic regression analysis of risk factors showed that children's age (odds ratio (OR) = 2.88, 95% confidence interval (CI) = 1.08–7.66, p = 0.03),

contact with dogs (OR = 0.51, 95% CI = 0.28–0.94,  $p = 0.03$ ), the age of the dog (OR = 0.34, 95% CI = 0.18–0.68,  $p = 0.002$ ), the feeding location of the dog (OR = 0.31, 95% CI = 0.12–0.79,  $p = 0.01$ ), the consumption of raw vegetables (OR = 0.89, 95% CI = 0.54–1.48,  $p = 0.004$ ), and the drinking of unboiled water (OR = 0.48, 95% CI = 0.26–0.90,  $p = 0.02$ ) were risk factors associated with *Toxocara* infection. Although there was a high awareness of dogs being hosts of some parasites in this study, not much was known about *T. canis*. This is the first serological investigation of *T. canis* infection among primary schoolchildren in southern Nigeria. The high seroprevalence recorded is an indication of high transmission with the consequent risk of visceral or ocular larval migrans and neurologic toxocariasis in these children. Our findings suggest the need for prompt interventional measures, particularly health education on personal hygiene.

**Keywords:** Seroprevalence; Disease awareness; Risk factors; *Toxocara canis*; Primary schoolchildren; Nigeria

**Record Number:** 487  
**Author(s):** Audu, R. A. Okoye, R. N. Onwuamah, C.K. Ige, F. A. Musa, A. Z. Odunukwe, N. N. Onwujekwe, D. I. Ezechi, O. C. Idigbe, E.O. Kanki, P. J.  
**Title:** Potential for false-positive HIV test results using rapid HIV testing algorithms.  
**Journal Title:** African Journal of Laboratory Medicine  
**Date of Publication:** 2015  
**Volume ID:** 4  
**Issue ID:** 1  
**Page(s):** 1-8  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Background:** In order to scale up access to HIV counselling and testing in Nigeria, an HIV diagnostic algorithm based on rapid testing was adopted. However, there was the need to further evaluate the testing strategy in order to better assess its performance, because of the potential for false positivity. **Objectives:** The objective of this study was to compare positive HIV test results obtained from the approved rapid testing algorithm with results from western blot tests performed on samples from the same patient. **Methodology:** A retrospective review was conducted of HIV screening and confirmatory results for patients seen between 2007 and 2008. Rapid test and western blot results were extracted and compared for concordance. Discordant results were further reviewed using a combination of HIV-1 RNA viral load and CD4+ cell count test results and clinical presentation from medical records. **Results:** Analysis of 2228 western blot results showed that 98.3% ( $n = 2191$ ) were positive for HIV-1, 0.4% ( $n = 8$ ) were positive for HIV-2 and 0.3% ( $n = 7$ ) were dual infections (positive for both HIV-1 and HIV-2); 0.6% ( $n = 13$ ) were indeterminate and 0.4% ( $n = 9$ ) were negative. Further investigation of the 13 indeterminate results showed nine to be HIV-1 positive and four to be HIV-negative, for a total of 13 negative results. The positive predictive value of the HIV counselling and testing algorithm was 99.4%. **Conclusion:** Using the rapid testing algorithm alone, false positives were detected. Therefore, effective measures such as training and retraining of staff should be prioritised in order to minimise false-positive diagnoses and the associated potential for long-term psychological and financial impact on the patients.

**Keywords:** HIV.

**Record Number:** 488  
**Author(s):** Ohioin, G. A. Bello, B. Herbertson, E. C. Ezechi, O. C.  
**Title:** Use of modern contraceptive implants the: Lagos island maternity Hospital experience.  
**Journal Title:** Tropical Journal of Obstetrics and Gynaecology  
**Date of Publication:** 2015  
**Volume ID:** 32

**Issue ID:** 2  
**Page(s):** 125-31  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Background: Implants are an effective and reversible long term method of fertility regulation, particularly advantageous to women who wish an extended period of contraception protection. The development of contraceptive implants was made possible by the discovery of silicone and its bio-compatibility in the human body. Silastic tubes with sealed ends and filled with steroids provided a sustained release of the steroids in vitro over months; these models were the precursors of today's contraceptive implants. This technology resulted in the development and patent of Norplant' and Norplant-2 by the Population Council. Over the years the popularity and use of Norplant has waned due to difficulties in insertion and removal. Lagos Island Maternity Hospital (LIM H) introduced Jadelle and Implanon- the newer forms of Implants in the year 2007 with the improvement made on these newer forms, we review the use of modern contraceptive Implant in LIMH.**Objectives:** The objectives of this study are to demonstrate the socio-demographic and clinical variables influencing acceptors of modern contraceptive implants; to describe observed side effects associated with the use of contraceptive implants and to ascertain acceptance of contraceptive implants through determination of continuation rate.**Methodology:** This involved a review of clients who were counseled and accepted subdermal contraceptive implants. The contraceptive implants were inserted by sub-dermal insertion of either Jadelle consisting of 2 rods. into the medial boarder of the upper arm or insertion of Implanon single rod in a similar anatomic location Data was extracted using an established family planning proforma. Data obtained included sociodemographic features, past obstetric/gynecological history of the respondents and side effects of the implants. Extraction of data was done over a period of one year.(July 31st 2011 to June 30th 2012)**Results:** A total of 622 clients made use of various methods of contraception during the study period. The proportion of clients who made use of modern Implants is 11.41 % (n= 71). The average age of the respondents is 32years, with a range of 17.49years.The commonest side effect seen is amenorrhea, occurring in 12.7% of respondents (n = 9).Intermenstrual bleeding occurred in 4.2% of respondents (n =3). More of the respondents had insertion of Jadelle (69.0%: n= 49). The other respondents had insertion of Implanon (31%: n= 22). The proportion of clients who had no plan for further child bearing is 29.6% (n= 21). The majority of clients are desirous of further child bearing (70.4%: n=50).First time users constituted 52.1 % of clients (n= 37). Continuation rate was 90.1 % (0.9% discontinuation due to side effects). Some of the clients had used the copper TIUD(19.7%: n= 14).**Conclusion:** Contraceptive Implants have been shown by this study to be an acceptable form of contraception. Majority of the women maintained the use of the contraceptive implants, In women who experienced side effects, amenorrhea is the commonest side effect experienced. The relatively high continuation rate of these implants is a testament of its acceptability. Scaling up its uptake and availability will be useful in reducing the unmet needs for contraception.

**Keywords:** Contraceptive implants, Maternity, Hospital experience.

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**Record Number:** 489  
**Author(s):** Ujah, I .A. Ezechi, O. C. Ohihoin, A.G.  
**Title:** Status discordance: associated factors among HIV positive pregnant women in Lagos, Southwest Nigeria  
**Journal Title:** African journal of reproductive health  
**Date of Publication:** 2015  
**Volume ID:** 19  
**Issue ID:** 2  
**Page(s):** 107-15  
**Address/Availability:**  
**Location/URL:**

**Abstract:** The HIV negative partner in a HIV serodiscordant relationship is at high risk of becoming HIV infected. The annual risk of HIV infection for a partner of a person with HIV is about 10%, with higher annual transmission rates of 20-25% per year reported in Rwanda and Zambia. Although there is considerable variation across countries, recent studies in southern and east Africa countries with mature epidemics reported that up to two-thirds of infected persons in stable relationship are discordant. HIV serodiscordance is thus a recognized priority for HIV prevention intervention. In Nigeria only few studies have studied the burden of serodiscordance, making planning difficult. In this study HIV serodiscordance rate and associated factors among pregnant women were assessed in a large PMTCT clinic in Lagos Nigeria over a 9 years period. Information on HIV status disclosure, partners HIV status (confirmed by HIV test results), sociodemographic characteristics and reproductive information were obtained from the women after enrollment and entered into the case file. In the study, relevant information was managed with SPSS for windows version 19.0. The variables independently associated with HIV status discordance were determined in both univariate and multivariate analysis. P values and Odd ratio with their confidence intervals were calculated. Out of the 4435 women enrolled during the study period, 3712 (83.7%) had disclosed their status to their partner. Partner's HIV status among the women with confirmed HIV status was negative in 2065 (66.8%) women, thus a discordant rate of 66.8%. HIV status disclosure rate was 83.7%; with significantly higher disclosure rate in concordant couple (83.3%) compared to 76.8% among women in serodiscordant relationship ( $p = 0.00$ ; OR: 1.5; 95% CI: 1.25-1.82). Discordant HIV status in a female positive relationship was found to be associated with history of at least two termination of pregnancy (OR: 3.05; 95% CI: 2.91-3.89) and five or more total life time sexual partnership (OR: 2.3; 95% CI: 1.27-3.21). The perception that men are the index cases is not supported by evidence from this study. We recommend the tracking of both men and women as index cases in other to reduce HIV transmission within stable relationship. Social marketing aimed at reducing concurrency should focus on both male and females, if we must reduce new HIV infection within stable relationships.

**Keywords:** HIV/AIDS, HIV status, Discordance, Pregnant, Nigeria.

**Record Number:** 490

**Author(s):** Gbaja-Biamila, T. A. David, A. N. Herbertson, E. C. Ohwodo, H. Ezeobi, P. Ohihoin, A.G. Ezechi, O. C.

**Title:** Long term adverse drug reaction to Efavirenz in a HIV infected adolescent.

**Journal Title:** Archives of Medical and Biomedical Research

**Date of Publication:** 2015

**Volume ID:** 2

**Issue ID:** 4

**Page(s):** 142-5

**Address/Availability:**

**Location/URL:**

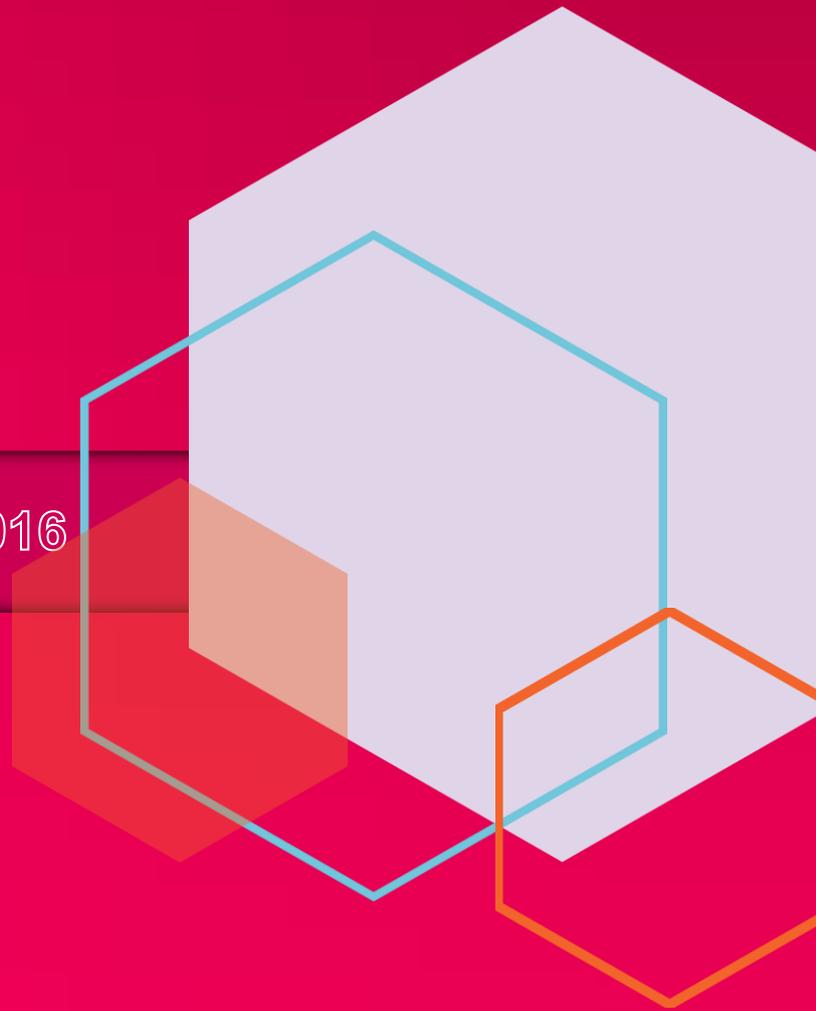
**Abstract:** Efavirenz is one of the medications used in combined antiretroviral therapy (ART) for the management of HIV infection in adolescents. Various central nervous system adverse reactions have been reported in patients commencing antiretroviral therapy with a regimen containing Efavirenz. These reactions tend to be acute, commonly occurring in the first six months of therapy. Adverse reactions following long term use of Efavirenz for ART is rare among adults and rarer still among children and adolescents. There is only one published case of serious adverse reaction to Efavirenz in an adolescent after long-term use. The case of a male HIV Positive Nigerian patient aged 13 years. He presented with five-day history of Difficulty sleeping, abnormal dreams, inability to concentrate, restlessness, irrational behavior and long-term memory loss. There was no previous history of psychiatric illness and no suggestive social or family history. Patient was on Efavirenz containing regimen about 6.5 years till presentation with adverse reaction mainly affecting behavior, thought processes and memory. After discontinuing Efavirenz and replacing with

Nevirapine in his combined ART regimen, all neuropsychiatric manifestations ceased .He regained his memory, no longer had bad dreams or demonstrated any irrational behavior or attitude. Physicians who are involved in the care of HIV infected patients need to be aware of the possibility of adverse Drug reactions occurring in patients who have been on antiretroviral drugs for years. This possibility should not be excluded from possible differential diagnosis.

**Keywords:** Adolescent; Efavirenz; HIV Infection; Reactions; Adverse drug; Psychomotor Agitation; Long term.

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2016



- Record Number:** 491  
**Author(s):** Ezechi, L. O. Musa, Z. A. Ootobo, V.O. Idigbe, I. E.  
**Title:** Trends and risk factors for obesity among HIV positive Nigerians on antiretroviral therapy.  
**Journal Title:** Ceylon Medical Journal  
**Date of Publication:** 2016  
**Volume ID:** 61  
**Issue ID:** 2  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Introduction: The increased access to antiretroviral therapy has changed the once deadly infection to a chronic medical condition, resulting in a dramatic change in causes of morbidity and mortality among HIV infected individuals. Obesity and its cardiovascular sequelae are increasingly reported in the literature. However, data on the burden, trends and risk factors for obesity are sparse in countries worst hit by the epidemic. Objectives: To investigate the trend and risk factors for obesity among a cohort of HIV infected adults on antiretroviral therapy. Methods: We analysed prospectively collected data in an ongoing longitudinal observational study conducted at the HIV treatment centre, Nigerian Institute of Medical Research, Lagos, Nigeria. Patients who started treatment between June 2004 and December 2009, and completed a five year follow up were included in the analysis. Multivariate analysis was used to determine the risk factors for obesity among the cohort. Results: A total of 12 585 adults were enrolled in the treatment programme during the study period. Of which, 8819 (70.1%) met the inclusion criteria. At the start of treatment, 27.0% were either overweight (19.6%) or obese (7.4%) compared to 62.2% that were either overweight (35.7%) or obese (26.5%) at the end of 5 years. The observed differences were statistically significant ( $p < 0.01$ ). Female gender (aOR: 2.2; 95% CI: 1.81-2.67), low baseline BMI less than 20 (aOR: 1.9; 95% CI: 1.3-2.2) and baseline CD4 count less than 350/µl (aOR: 2.51; 95% CI: 2.13 – 3.09) were associated with the development of obesity at multivariate analysis. Type of antiretroviral drug, age, marital status, viral load and haemoglobin level were not associated with obesity after controlling for confounding variables. Conclusions: Obesity is common among HIV infected Nigerians on antiretroviral therapy and is associated with female gender, low baseline BMI, and CD4 count less than 350/µl. Programmes targeted at prevention of obesity and its sequelae should be integrated into routine HIV care with emphasis on those with the identified risk factors.
- Keywords:** HIV positive, Antiretroviral therapy.

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- Record Number:** 492  
**Author(s):** Aseffa A, Chukwu JN, Vahedi M, Aguwa EN, Bedru A, Mebrahtu T, Ezechi OC, Yimer G, Yamuah LK, Medhin G, Connolly C.  
**Title:** Efficacy and Safety of 'Fixed Dose' versus 'Loose' Drug Regimens for Treatment of Pulmonary Tuberculosis in Two High TB-Burden African Countries: A Randomized Controlled Trial.  
**Journal Title:** PLoS One  
**Date of Publication:** 2016  
**Volume ID:** 11  
**Issue ID:** 6  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** BACKGROUND: There are limited data on the performance of the use of fixed-dose combination (FDC) TB drugs when used under programmatic settings in high TB-endemic countries. We evaluated the efficacy and safety of FDC versus loose formulation (LF) TB treatment regimens for treatment of pulmonary TB (PTB) in the context of actual medical

practice in prevailing conditions within programmatic settings in five sites in two high TB-burden African countries. **METHODS:** A two-arm, single-blind, randomized clinical trial comparing FDCs with separate LFs involving 1000 adults newly diagnosed with culture positive PTB was conducted at five sites in two African countries between 2007 and 2011. Participants were randomized to receive daily treatment with anti-TB drugs given as either FDC or separate LFs for 24 weeks (intensive phase- 8 weeks of isoniazid, rifampicin, ethambutol and pyrazinamide; continuation phase- 16 weeks of rifampicin and isoniazid). Primary outcome measures were microbiological cure and safety at the end of six months' treatment; pre-specified non-inferiority margin for difference in cure rate was 4%. The primary efficacy analysis was based on the modified intent to treat (mITT) cohort comprising all randomized patients with a positive baseline culture result for TB and who received at least one dose of study treatment. Patients missing end of treatment culture results were considered failures. Further analyses were done in which mITT patients without an end of treatment (EOT) culture were excluded in a complete case analysis (mITTcc) and a per protocol cohort analysis defined as mITTcc patients who received at least 95% of their intended doses and had an EOT culture result. **RESULTS:** In the mITT analysis, the cure rate in the FDC group was 86.7% (398/459) and in the LF group 85.2% (396/465) (difference 1.5% (90% confidence interval (CI) (-2.2%- 5.3%)). Per Protocol analysis showed similar results: FDC 98.9% (359/363) versus LF 96.9% (345/356), (difference 2.0% (90% CI: 0.1%- 3.8%)). The two arms showed no significant differences in terms of safety, early culture conversion and patient adherence to treatment. **INTERPRETATION:** The comparison of the two drug regimens satisfied the pre-specified non-inferiority criterion. Our results support the WHO recommendations for the use of FDC in the context of actual medical practice within health services in high TB-endemic countries.

**Keywords:** Pulmonary Tuberculosis, Randomized Controlled Trial.

**Record Number:** 493  
**Author(s):** Ezechi, O. C. Petterson, K.O. Gbajabiamila, T. A, Idigbe, I.E. Gab-Okafor, C. V. Okolo, C.A. Ujah, I.A. O. Ostergren, P. O.  
**Title:** Evaluation of Direct Visual Inspection of the Cervix in Detecting Cytology Diagnosed Squamous Intraepithelial Lesion in Women of known HIV Status. A Randomized Trial (CANHIV Study).  
**Journal Title:** African Journal of Reproductive Health  
**Date of Publication:** 2016  
**Volume ID:** 20  
**Issue ID:** 4  
**Page(s):** 77-88  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

A two-arm, open label, randomized study, evaluated the test characteristics of visual inspection of cervix with Acetic acid (VIA) and Lugol's Iodine (VILI) in detecting cytology diagnosed squamous intraepithelial lesion (SIL) in 1160 women of known HIV status in southwestern Nigerian. Using SIL as reference standard and the HIV status masked, VIA and VILI had similar test characteristics except for the positive predictive value in which VIA value of 91.5% was significantly higher than 77.7% for VILI (p=0.01). Among HIV positive women, VILI performed poorly across all the 4 test characteristics compared to VIA. Among severely immuno-compromised HIV positive participants VILI performance was consistently below 80% across all test characteristics (sensitivity-70.0%; specificity-66.9%; positive predictive value-46.7%; negative predictive value (NPV) -50.0%) compared to VIA (Sensitivity-71.3%; specificity-88.2%; positive predictive value-83.3%; negative predictive value-88.2). Our study shows that VILI is insufficiently sensitive and specific in the presence of HIV infection especially in those with severe immunosuppression. Based on VIA's acceptable sensitivity and NPV in all situations, it is recommended for cervical cancer screening in HIV positive women and in settings of high HIV burden.

**Keywords:** Cervical cancer, HIV, Squamous intraepithelial lesion, Visual inspection with Acetic

**Record Number:** 494  
**Author(s):** Ezechi, O .C.Wapmuk, A. E,Ohihoin, A.G. Ujah, I .A.  
**Title:** Semen quality of male partners of infertile couples living with HIV infection.  
**Journal Title:** International Journal of Reproduction, Contraception, Obstetrics and Gynecology  
**Date of Publication:** 2016  
**Volume ID:** 5  
**Issue ID:** 5  
**Page(s):** 1423-7  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **Background:** Infertility among HIV positive couples are increasingly been reported in various gynaecology clinic. Unfortunately research into aetiology of infertility is out tune with this emerging trend. This study was conducted to determine the semen quality among infertile HIV positive couples.**Methods:** A retrospective analysis of information obtained during routine care of infertile HIV positive couple at a large HIV treatment in Lagos Nigeria. **Results:** Over thirty percent (31.7%) of the male partners of HIV positive couple in study had abnormal semen quality. Secondary infertility was the commonest (79.2%). The quality of semen of the HIV negative men in the study was significantly better compared to that of HIV positive men (p

**Keywords:** Men, Infertility, Semen, Spermatozoa, HIV, Couple

**Record Number:** 495  
**Author(s):** Ezechi, O.C. Adesola Musa, Z. David, A.N. Wapmuk, A. E. Gbajabiamila, T.A. Idigbe, I, E. Ezeobi, P. M. Ohihoin, A.G. Ujah, I.A.  
**Title:** Trends and patterns of sexual assaults in Lagos south-western Nigeria.  
**Journal Title:** The Pan African Medical Journal  
**Date of Publication:** 2016  
**Volume ID:** 24  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **Introduction:** Sexual assault is a severely traumatic experience that disproportionately affects women and girls. Yet there is limited information on the subject in our environment. This study was conducted to determine the trend and pattern of sexual assault among Nigerians. **Methods:** A retrospective study of sexual assault victims managed at a large clinic in south west Nigeria. Victims were identified from the programme data base and case files retrieved from medical records department. Relevant information was extracted and managed with SPSS for windows version 19. **Results:** Steady increase in the proportion of reported cases of sexual violence over the years ( $P<0.0001$ ) was observed. Sexual assaults were recorded among the males (6.1%), although female victims were in the majority (93.9%). Sexual assault was found to be higher in person's <20 years and the unmarried. Most sexual assault occurred during the day time. Assailants were mostly persons known to the victim (52.0%) and the assault occurred mostly in the assailants' house or office (48.5%). Sexual assault through vaginal route only (87.2%) was the most common route of sexual assault. Threat of violence (31.1%) and physical force (29.6%) was the common methods for overcoming the victims. Follow up was completed by 75.0% of the victims. **Conclusion:** Sexual assault is common in our environment, with increasing prevalence and change in pattern. Young persons aged less than 20 years constitutes the majority of victims and assailants were mostly persons known to them. The current public education on the evils of sexual violence should be intensified.

**Keywords:** Sexual assault, sexual violence, rape, women, Nigeria.

**Record Number:** 496  
**Author(s):** Odunukwe, N. N. Okwuzu, J. O. Okwuraiwe, A. P. Gbajabiamila, T.A. Musa, Z. A. Ezeobi, P. M. Somefun, E.O. Kalejaiye, O. O. Onwujekwe, D. I. Salu, O. B. Onwuamah, C. K. Audu, R. A. Ezechi, O.C.  
**Title:** Selenium as adjunct to HAART in the management of HIV/Hepatitis B Virus coinfection: A Randomized open label study.  
**Journal Title:** African Journal of Clinical and Experimental Microbiology.  
**Date of Publication:** 2016  
**Volume ID:** 17  
**Issue ID:** 3  
**Page(s):** 197-204  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Objective:** Management of viral hepatitis in patients with HIV disease is quite challenging and complex. With effective HIV treatment, people with HIV/HBV co-infection are living longer. HBV epidemiologic surveys showed an inverse association between selenium (Se) level and regional cancer incidence, as well as viral infection. This study assessed effect of selenium as adjunct to HAART in management of HIV/HBV co-infection. **Methods:** A randomized open label study with participants allocated into three treatment groups: – HAART-only, Se-only and HAART-plus-Se. HIV viral load, HBV viral load, CD4 cell count, and alanine aminotransaminase (ALT), were analyzed at baseline and 18th month, analyzed using SPSS 5 v11. Ethical approval was obtained from Institute’s Ethical Review Board. **Results:** Sample size was 149 HIV/HBV patients. Rate of HBV clearance was higher among those on HAART-plus-Se at 18th month when compared with rate of clearance among those on HAART-only (p=0.046). CD4 count increment among HAARTplus- Se group compared with HAART-only group was higher (p=0.133), though not statistically significant. On comparison of baseline and 18th month ALT, there was significant decline for HAART-plus-Se (p=0.002) compared with HAART-only group. **Conclusion:** Selenium seems to have protective effect on liver cells; may be beneficial as adjunct to HAART in HIV/HBV management.  
**Keywords:** HIV/HBV co-infection, Selenium adjunct, HAART

**Record Number:** 497  
**Author(s):** Ezechi, L. Brai, B. Osifeso, G. Mbah, P. Ezechi O.  
**Title:** Nutritional Knowledge, Attitude and Practices of Women Living with HIV/AIDS in Lagos Southwest, Nigeria  
**Journal Title:** Malaysian Journal of Nutrition  
**Date of Publication:** 2016  
**Volume ID:** 22  
**Issue ID:** 1  
**Page(s):** 1-15  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Introduction:** Behaviour change and the use of antiretroviral drugs have been the main focus of most human immunodeficiency virus (HIV) prevention and control programs, with minimal focus given to the role of nutrition. Additionally, women are affected the most and have the responsibility to care for other family members. **Methods:** The study used a cross-sectional study design to determine the nutritional knowledge, attitude, and practices of women living with I IN/acquired immune deficiency syndrome (AIDS). A pre-tested structured questionnaire was used to obtain information from women selected through systematic random sampling at a large I ITV treatment Centre in Lagos, Nigeria. **Results:** The majority of the respondents in this study were less than 40 years (70%), married (67.2%), and had at least a secondary education (83.0%). The majority (59.7%) of the women earned less

than USD 200 per month. Although knowledge of nutrition and attitude was poor, nutritional practices were good. Older women who were married and had at least a secondary education were found to have better knowledge of nutrition than their younger peers who were single and less educated. Education was also found to positively influence nutritional practice as having at least a secondary education was found to be significantly associated with good nutrition. Conclusion: This study showed that I fly positive mothers had poor knowledge and attitude to nutrition but relatively good nutritional practices. Nutrition education should be integrated into routine counselling at I HIV treatment centres, aimed at improving the knowledge and attitude to nutrition among HIV positive women.

**Keywords:** Awareness, HIV, knowledge, nutrition practice, women

**Record Number:** 498

**Author(s):** Enwuru, C. A. Iwalokun, B. Enwuru V. N, Ezechi, O. Oluwadun, A.

**Title:** The effect of presence of facultative bacteria species on semen and sperm quality of men seeking fertility care.

**Journal Title:** African Journal of Urology

**Date of Publication:** 2016

**Volume ID:** 22

**Issue ID:** 3

**Page(s):** 213-222

**Address/Availability:**

**Location/URL:**

**Abstract:** Introduction: Infections of male urogenital tracts may contribute to male infertility. However, the effects of bacterial presence on sperm quality and fertility are controversial. Objectives: We investigated the occurrence of non-specific bacteria and quality/quantity of semen of infertile and fertile control groups in Nigeria. Subjects and methods: We investigated 162 infertile and 54 fertile men. Spermogram, culture, bacterial isolation and characterization were conducted. Results: We report 114/162(70.4%) occurrence of bacteria species, 49.4% of such were Gram positive and 21% Gram negative: Staphylococcus aureus (29.6%) and Escherichia coli (10.5%) had the highest occurrence for each group respectively. On semen quality/quantity, we report 14.2% azoospermia, 52.5% oligozoospermia and 33.3% of normozoospermia. The mean sperm concentrations were  $10 \times 7/\text{ml}$  and  $41 \times 10^6/\text{ml}$  for oligo and normozoospermia respectively. Majority (52%) of azoospermic group had no bacterial growth. S. aureus was the most implicated among the bacterial positive group. Within the oligozoospermic category, 28% had no bacterial growth, 28% had S. aureus and 11.8% E. coli. The normozoospermic patients had 18.5% no bacteria contamination, 33.3% had S. aureus, 13% had E. coli. From the analysis, the normozoospermic group with bacterial contamination had lower sperm concentrations compared with those without contamination. It was apparent that factors other than bacterial contamination may contribute more to oligozoospermia (compare: "no bacteria" group mean sperm concentration  $8.97 \times 10^6/\text{ml}$ , Gram positive bacteria contaminated group  $17.74 \times 10^6/\text{ml}$  and Gram negative bacteria contaminated group  $13.66 \times 10^6/\text{ml}$ ). The mean progressive motility ratios were lower (15.6 [a] + 18.3 [b]) = 33.9% against WHO standard (a + b = >50%) and control RPM (a) = 55.3%. Generally, the semen quality (vol., rapid progressive motility, sperm concentration and immotility) were significantly lower than the fertile group, P = 0.0005, <0.0001, <0.0001 and 0.0335, respectively. Conclusions: Although bacterial presence in semen reduced mean sperm concentration and viability, thereby contributed to oligozoospermia and by extension the chances of siring a child, however, factors other than bacterial presence may contribute more. Improved interpretative approaches of semen analyses are highlighted.

**Keywords:** Facultative; Bacteria; Infertility; Semen.

**Record Number:** 499  
**Author(s):** Ezechi, O. C. Musa, Z. A. Onwujekwe, D. I. Ezeobi, P.M. Gbajabiamila, T. A. Gab-Okafor, C.V. Odunukwe, N.N. Idigbe, E.I. Ujah, I. A.O.  
**Title:** Gender perspective of the demographic and biological profiles of southwestern Nigerians living with HIV infection at presentation (2004 – 2015).  
**Journal Title:** International Journal of Advanced Research  
**Date of Publication:** 2016  
**Volume ID:** 4  
**Issue ID:** 7  
**Page(s):** 2097-2105  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Background: Nigeria ranks second in total burden of HIV/AIDS globally and it is estimated that women constitute over half of the population of persons living with HIV/AIDS. Despite the high burden, the epidemiology of HIV in Nigeria, especially in women is not well understood. In this study the gender dimensions of the patients presenting at a large HIV treatment centre is reported. Methods: Retrospective data analysis of clinical and laboratory information generated during routine patient care. Patients data were captured with case record forms designed for the programme by clinicians and uploaded into the programme data base by data entry clerks. Study specific data were extracted from the data base, exported and analysed with SPSS for windows version 19.0. Results: A total of 23,734 adult HIV positive patients were seen over the 11 year study period. Yearly enrolment increased steadily from 625 in 2004 to a peak of 2327, with the proportion of women increasing over the years from 60.2% in 2004 to 68.6% in 2015. Trading was the most common occupational group (23.0%), although artisans were in the majority (25.3%) among the female enrollees. Majority were married (64.0%), acquired HIV infection through the heterosexual route (79.4%) and presented at late disease stage (55.3%). More males presented late, and with comorbidities compared to the females ( $p < 0.05$ ). The mean CD4 cell count was  $269.3 \pm 173.7$ , with a higher mean baseline in females ( $290.8 \pm 182.1$ ) compared to ( $228.6 \pm 153.1$ ) in the male ( $p=0.001$ ). Conclusion: Majority of patients were females, traders and infected through heterosexual sex. Over 80% presented at CD 4 count  $< 500$  cell/mm<sup>3</sup>, with females presenting at a higher CD 4 count. Prevention programme should target females, traders and artisans, in addition to continue what is currently ongoing to control the epidemic.  
**Keywords:** HIV, female gender, demographic, biological, late presentation

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**Record Number:** 500  
**Author(s):** Adeneye, A. Kolawole, S. Oyedeji, K. S. Niemogha, M. Nwaokorie, F.O. Bamidele, T.A. Ochoga, M. Akinsinde, K.A. Brai, B. I. Oladele, D. Omonigbehin, E.A. Bamidele, M. Fesobi, T.W. Musa, A. Z. Smith, S. I. Ujah, I. A.  
**Title:** Risk Factors Associated with Cholera Outbreak in Bauchi and Gombe States in North East Nigeria.  
**Journal Title:** J Public Health and Epidemiology  
**Date of Publication:** 2016  
**Volume ID:** 8  
**Issue ID:** 11  
**Page(s):** 286-296  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**  
**Keywords:**

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**Record Number:** 501  
**Author(s):** Smith S. Smith, S.  
**Title:** Media coverage of the Ebola virus disease in four widely circulated Nigerian newspapers: lessons from Nigeria.  
**Journal Title:** Health Promotion Perspectives  
**Date of Publication:** 2016  
**Volume ID:** 6  
**Issue ID:** 2  
**Page(s):** 92-95  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Background:** The importance of the media in the coverage of Ebola virus disease (EVD) in Nigeria and its implications (negative or positive) amongst the populace cannot be overemphasized. This study was conducted to assess the role of media in the Ebola reportage and its implication in creating awareness and stopping the spread amongst the populace. **Methods:** The nature and extent of media coverage about Ebola in four major national newspapers were examined. The four major national newspapers were The Sun, The Vanguard, The Nation and The Punch newspapers. The period of study ranged from 20 July (when the index case came to Nigeria) to 20 October 2014. Analysis of the newspaper article was according to content. **Results:** A total of 1625 articles were published between July 2014 to October 2014 and these were divided into news (1127; 69.4%), features (267; 16.4%), opinion (76; 4.7%), editorials (149; 9.2%) and interviews (6; 0.4%). The most common topic was Ebola cases in Nigeria (17.5%) followed by discrimination due to Ebola (10.8%) and least of all the use of salt and or Kola for the cure of Ebola (5.2%). **Conclusion:** Although the World Health Organization (WHO) declared Nigeria Ebola free on the 20th October 2014, continual reportage of the Ebola disease for effective awareness, prevention and control of the virus is recommended.  
**Keywords:** Ebola, Epidemic, Nigerian newspapers, Media.

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**Record Number:** 502  
**Author(s):** Anejo-OkopiAje, J. Audu, O. Adaiche, A.R. Okojokwu, O. J. Ali, M. Adekwu, A. Lar, P., Smith, I. S.  
**Title:** Prevalence of Helicobacter pylori infection among HIV-1 infected patients using Stool Antigen Tests in Jos, North-Central, Nigeria.  
**Journal Title:** Govareh J21 (1): 57 – 62.  
**Date of Publication:** 2016  
**Volume ID:** 21  
**Issue ID:** 1  
**Page(s):** 57-62  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Background** Helicobacter pylori (H. pylori) infection is common among humans and plays a major role in the etiology of peptic ulcer disease with significant morbidity in patients with HIV-1 on antiretroviral therapy. There are conflicting prevalence patterns of H. pylori in HIV-1 infected patients using various methods of detection. The noninvasive technique used for detection of H. pylori infection is inexpensive and convenient with no complications. **Materials and Methods:** We aimed to determine the prevalence of H. pylori infection among patients infected with HIV-1 on antiretroviral therapy using H. pylori stool antigen. 139 patients infected with HIV-1 were recruited, stool samples were collected and the H. pylori stool antigen (HpSA) test was used to detect H. pylori antigen. **Results:** 46.8% of the respondents were positive for H. pylori and 53.2% were negative, 18 (13%) were men and 47 (33.8%) were women. HpSA is a relatively simple, inexpensive, and time-saving non-

invasive test for the detection of *H. pylori* infections in patients infected with HIV-1  
**Conclusion:** We also observed that the prevalence of *H. pylori* was low in these patients compared with the general population. However, more studies using *H. pylori* stool antigen test are needed in these patients in the North- Central, Nigeria to further evaluate the infection rate.

**Keywords:** Prevalence, *Helicobacter pylori*, stool antigen, enzyme immunoassay, HIV-1 infected

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**Record Number:** 503

**Author(s):** Oluyemi A, Ebere, A. Stella, S. Olufemi, F.

**Title:** Influence of *Helicobacter pylori* infection on the Prevalence and Patterns of Upper Gastrointestinal Symptoms in Nigerians with Diabetes Mellitus.

**Journal Title:** Nig J of ClinPract.

**Date of Publication:** 2016

**Volume ID:**

**Issue ID:**

**Page(s):**

**Address/Availability:**

**Location/URL:**

**Abstract:** **Background:** Infection with *Helicobacter pylori* infection is widespread in our environment. However, whether this fact has any bearing on the prevalence and pattern of symptoms referable to the upper gastrointestinal (GI) system in our population of diabetes mellitus (DM) patients has not been much studied. **Aim:** We embarked on this study to evaluate if *H. pylori* infection played any significant role in the prevalence and patterns of upper GI symptoms in type 2 DM patients in Lagos, Nigeria. **Materials and Methods:** A case-control design was employed. One hundred consecutive, consenting, and ambulant type 2 DM patients were recruited from the Lagos University Teaching Hospital and 100 age- and sex matched nondiabetic controls were drawn from medical outpatient clinics of the same hospital. All subjects were investigated for a marker of active infection with *H. pylori* via stool antigen testing, had anthropometric measurements taken, and completed a structured questionnaire administered to elicit for the presence of various upper GI symptoms over the preceding 3 months prior to the time of the study. The controls were further tested for DM. For analysis, the symptoms were divided into dyspepsia, gastroesophageal reflux (GER), and others. **Results:** *H. pylori* infection status was neither significantly associated with dyspepsia in either cases or controls ( $\chi^2 [1] = 2.198, P = 0.138$ ) nor significantly associated with the symptomatic suggestion of GER in either cases or controls ( $\chi^2 [1] = 3.742, P = 0.053$ ). Moreover, the same held for the other upper GI symptoms in cases or controls ( $\chi^2 [1] = 0.157, P = 0.203$ ). *H. pylori* infection was detected in 18% of DM patients and 13% of controls, but there was no statistical significance in this difference ( $\chi^2 [1] = 0.954, P = 0.329$ ). **Conclusion:** Infection with *H. pylori* does not appear, from the results of this study, to influence the prevalence and patterns of upper GI symptoms in patients with DM in Nigeria.

**Keywords:** *Helicobacter pylori*, infection, Upper Gastrointestinal, Symptoms, Nigerians, Diabetes Mellitus

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**Record Number:** 504

**Author(s):** Königer, V. Holsten, L. Harrison, U. Busch, B. Loell, E. Zhao, Q. Bonsor, D.A. Roth, A. Kengmo-Tchoupa, A. Smith, S.I. Mueller, S. Sundberg, E.J. Zimmermann, W. Fischer, W. Hauck, C.R. Haas, R.

**Title:** *Helicobacter pylori* exploits human CEACAMs via HopQ for adherence and translocation of cagA.

**Journal Title:** Nat Microbiol

**Date of Publication:** 2016

**Volume ID:**

**Issue ID:**

**Page(s):****Address/Availability:****Location/URL:****Abstract:**

*Helicobacter pylori* (Hp) strains that carry the cag type IV secretion system (cag-T4SS) to inject the cytotoxin-associated antigen A (CagA) into host cells are associated with peptic ulcer disease and gastric adenocarcinoma. CagA translocation by Hp is mediated by  $\beta$ 1 integrin interaction of the cag-T4SS. However, other cellular receptors or bacterial outer membrane adhesins essential for this process are unknown. Here, we identify the HopQ protein as a genuine Hp adhesin, exploiting defined members of the carcinoembryonic antigen-related cell adhesion molecule family (CEACAMs) as host cell receptors. HopQ binds the amino-terminal IgV-like domain of human CEACAM1, CEACAM3, CEACAM5 or CEACAM6 proteins, thereby enabling translocation of the major pathogenicity factor CagA into host cells. The HopQ–CEACAM interaction is characterized by a remarkably high affinity ( $K_D$  from 23 to 268 nM), which is independent of CEACAM glycosylation, identifying CEACAMs as bona fide protein receptors for Hp. Our data suggest that the HopQ–CEACAM interaction contributes to gastric colonization or Hp-induced pathologies, although the precise role and functional consequences of this interaction in vivo remain to be determined.

**Keywords:****Helicobacter pylori, human CEACAMs, HopQ, cagA.****Record Number:****505****Author(s):**Jolaiya, T.F. **Smith, S. I.** Coker, A.O**Title:**

Knowledge and Assessment of Parents on Diarrhoea and its Management in Lagos, Nigeria.

**Journal Title:**

International Journal of Health Sciences and Research

**Date of Publication:**

2016

**Volume ID:**

6

**Issue ID:****Page(s):**

138-143

**Address/Availability:****Location/URL:****Abstract:**

**Aim:** The study was aimed at assessing the knowledge of parents of child bearing age on diarrhoea and its management in Lagos, Nigeria. **Methods:** In 2011, 250 parents of child bearing age were included in a cross-sectional descriptive study using semi-structured questionnaires. **Results:** 200 of 250 respondents completed the questionnaire from which majority 108 (54%) were in the 30-40 years age range. Of these 200, 172 (86%) were females while 28 (14%) were males. Majority of the respondents 112 (57.1%) had tertiary education with self employed respondents in the majority, 105 (52.5%) in terms of profession. When asked about their understanding of diarrhoea 89.5% of the respondents strongly had an understanding of what diarrhoea was as ailment with 75.5% of the respondents having an understanding of the first aid treatment for children suffering from diarrhoea. A total of 70% of the respondents knew that giving of antibiotics was not the first treatment for diarrhoea with the belief that oral rehydration salt should be given first. Majority (91%) of the respondents did not accept the claim that behavioral patterns and attitudes predispose children to diarrhoeal infections. Majority 170 (85%) of the respondents supported the claim that avoidance of micro organisms infected in food or water can prevent children from diarrhoea. A total of 93.5% of the respondents felt eating improperly cooked food and not well preserved food can cause diarrhoea in children while nine (4.5%) did not support the claim with four (2%) being indifferent.

**Keywords:****Diarrhoea, Management, Microorganisms, Treatment, Children, Electrolyte.****Record Number:****506****Author(s):**Abimbola, R.E. Olusimbo, O.A. Barbara, E.M. Ben, D. T. **Stella, S.I****Title:**

Phenotypic and genotypic characterization of Cronobacter isolated from powdered infant

formula retailed in Nigeria.

**Journal Title:** J Food Research  
**Date of Publication:** 2016  
**Volume ID:** 5  
**Issue ID:**  
**Page(s):** 65-78  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Cronobacter is a genus with emerging pathogens that has been associated with life threatening diseases in neonates, infants and immunocompromised adults. Three Cronobacter species were isolated from powdered infant formula retailed in Nigeria. Different methods of phenotypic and genotypic characterization were carried out. All the isolates were identified biochemically by Microscan identification analysis as *Enterobacter sakazakii* (98.87%). The Vitek MALDI-TOF system identified the isolates as *Cronobacter sakazakii*. 16S rRNA sequencing identified the isolates as *C. sakazakii*. In contrast the use of species-specific PCR assays targeting *rpoB*, and *cgcA*, helped to identify two of the three strains as *C. sakazakii* and the last strain was identified as *C. malonaticus*. Multi locus sequence typing (MLST) analysis was used to identify each strain's sequence type and the results identified three new sequence types: 303, 304 and 296. *C. sakazakii* BAA 894 served as a positive control for all the experiments. Biochemical methods and commercial identification systems are not sensitive enough to identify *Cronobacter* strains to the species level. Molecular methods are needed to confirm the species identity of strains.

**Keywords:** **Cronobacter; genotyping; phenotyping; powdered infant formula milk.**

**Record Number:** 507  
**Author(s):** Smith, S. Braun, S. Akintimehin, F. Fesobi, T. Bamidele, M. Coker, A. Monecke, S. Ehricht, R.  
**Title:** Serogenotyping and antimicrobial susceptibility testing of *Salmonella* spp. isolated from retail meat samples in Lagos, Nigeria.  
**Journal Title:** Molecular and Cellular Probes  
**Date of Publication:** 2016  
**Volume ID:**  
**Issue ID:**  
**Page(s):**  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** Microarray-based serogenotyping, antimicrobial susceptibility tests and the detection of relevant resistance genes were performed on isolates of *Salmonella* spp. from retail meat samples obtained in Lagos, Nigeria. Out of 151 meat samples, 33 *Salmonella* isolates were obtained. Nine different *Salmonella* serovars (*S. Amoutive*, *S. Bargny*, *S. Drac*, *S. Ealing*, *S. Urbana*, *S. Hadar*, *S. Nyborg*, *S. Anatum* and *S. Havana*) were identified by microarray-based serogenotyping and confirmed afterwards using classical serotyping. Antibiotic susceptibility tests with 17 antibiotics showed that almost all isolates were fully susceptible to this panel. The results of this study indicated a high prevalence of *Salmonella* in retail meat, the presence of some previously rather rarely described Serovars in retail meat samples from Lagos, and a need to monitor for *Salmonella* and their antibiotic resistance determinants. The microarray-based system used herein proved to be perfectly suited as epidemiological tool to replace classical serotyping.

**Keywords:** **Africa; DNA-based microarray; Genotyping; Retail meat; Salmonella; Serogenotyping; Serotyping**

**Record Number:** 508  
**Author(s):** Smith, S.I. Seriki, A. Ajayi, A.  
**Title:** Typhoidal and non-Typhoidal *Salmonella* infections in Africa.  
**Journal Title:** Journal of Clinical and Microbiology and Infectious Diseases

**Date of Publication:** 2016  
**Volume ID:** 35  
**Issue ID:** 12  
**Page(s):** 1913-1922  
**Address/Availability:**  
**Location/URL:**

**Abstract:** Salmonella infections in humans can range from self-limiting gastroenteritis typically associated with non-typhoidal Salmonella (NTS) to typhoidal fever, which can be life-threatening. Salmonellosis causes considerable morbidity and mortality in both humans and animals, and has a significant socioeconomic impact worldwide. In Africa, it is difficult to evaluate the situation of salmonellosis due to the non-availability of facilities capable of performing the tests essential for the diagnosis of typhoidal and non-typhoidal Salmonella infections. This article reviews important work in the literature, including the epidemiology, disease burden, pathogenesis, genomics, diagnosis, treatment, emergence and tracking of multidrug-resistant (MDR) Salmonella infections and intercontinental transmission of Salmonella to Africa. Searches of PubMed and Google Scholar were completed and the retrieved list of relevant publications were further screened. The literature revealed that the most common form of the disease in Africa is gastroenteritis, with bacterial multiplication in intestinal submucosa and diarrhoea caused by the inflammatory response and, perhaps, also by toxins. In addition to the high burden of Salmonella infection in Africa, MDR Salmonella species is on the rise in the continent, which might pose difficulties in the treatment of the disease.

**Keywords:** Typhoidal, Non-Typhoidal Salmonella, Africa

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**Record Number:** 509  
**Author(s):** Anejo-Okopi, A.J. Isa, E.S., Audu, O. Fagbamila, I.O. Okojokwu, O.J. Iornenge, C.J. Augustine, B.B. Pam, L. Ali, M. Zumbes, H.J. Mohammed, M. Lar, P. **Smith, S.I.**  
**Title:** Isolation and Polymerase Chain Reaction detection of Virulence *invA* gene in Salmonellaspp from Poultry farms in Jos, Nigeria.  
**Journal Title:** J Med Tropics 18 (2): 98 - 102  
**Date of Publication:** 2016  
**Volume ID:** 18  
**Issue ID:** 2  
**Page(s):** 98-102  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **Background:**Salmonella serovars are one of the most common food-borne pathogens, and poultry consumption is responsible for the majority of routes of infection worldwide. There is a paucity of documented data regarding the prevalence of virulence determinant genes in Salmonella serovars in Nigeria. The aim of the study was to isolate Salmonella spp. in selected poultry farms in Jos Metropolis, Plateau State, Nigeria. **Methodology:** A total of eighty samples were conveniently collected from 18 commercial poultry. The samples were from poultry droppings, egg shells, workers' hands, and feeds. The samples were examined for the presence of Salmonella by standard microbiological techniques. The isolates were phenotypically confirmed using biochemical characterization and virulence gene determined by polymerase chain reaction (PCR). **Results:** The overall isolation percentage of Salmonella species was 28.75% (23/80). DNA extraction was carried out on the isolated 23 Salmonella isolates and 11 successfully quantified. Of the 11 isolates, ten (91.0%) successfully amplified using the *invA* gene-specific primers by PCR method. The result indicates the presence of Salmonella in poultry farms, and this posed a major concern for public health. **Conclusion:** The result showed that the use of PCR amplification of virulence genes in suspected Salmonella spp. from poultry farms proved to be efficient and could serve as an alternative rapid tool for the detection of Salmonella spp. Further large studies with the use of more virulence genes are needed to understand the Salmonella epidemiology in poultry farms that serves as a major protein source of the nation.

**Keywords:** InvA virulence gene, poultry farms, Salmonella

**Record Number:** 510  
**Author(s):** Smith, S.I.Nwaokorie, F.O.Adagbada, A.O.Yisau, J.I. David, N. A. Adebayo, M.A.N. Adesida, S.A. Bamidele, M. Adeneye, A. Fowora, M.A. Musa, Z.A.Adedeji, M.A.Omonigbehin, E.A. Iroha, E. Adedoyin, O.T. Eneh, A. Ibeziako, N. Jiya, N. Oguche, S. Bello, M. Olowu, A.O. Ujah, I.A.O.  
**Title:** Survey and mapping of the leading causes of childhood mortality in Nigerian tertiary hospitals.  
**Journal Title:** Ind J Child Health  
**Date of Publication:** 2016  
**Volume ID:** 3  
**Issue ID:** 4  
**Page(s):** 281-285  
**Address/Availability:**  
**Location/URL:**

**Abstract:** **Background:** Despite the modest gains made under the millennium development goals, indices of child health for Nigeria remain poor. Improvement on these indices requires mitigating the causes of childhood mortality. **Objective:** We undertook this study to determine the leading cause(s) of childhood mortality in Nigeria from 2005 to 2009. **Methods:** Using stratified random sampling techniques, data on demographics and cause(s) of death of under-five children, who had died between 2005 and 2009, were collected from the patients' records of seven teaching hospitals. Data were analyzed using IBM SPSS version 20.0. **Results:** The leading causes of childhood mortality from this survey were neonatal sepsis (30.1%), asphyxia (27.2%), preterm complications (25.8%), and acute respiratory illness (15.3%). Analysis of causes of death by geopolitical zones did not indicate any definite pattern, although the North-Central and South-West had the highest deaths due to respiratory tract infections. The highest death records from human immunodeficiency virus/acquired immune deficiency syndrome came from North-East. In addition, Lagos in South-West was the most likely to have recorded death due to malaria ( $p < 0.05$ ). Preterm complications and neonatal sepsis accounted for the majority of the causes of death in low birth weight babies, whereas neonatal sepsis and asphyxia accounted for the majority of the causes of death in the appropriate birth weight group. **Conclusions:** This study supports the results of previous ones that childhood mortality was due to illnesses that were preventable and treatable. Knowledge of the causes and pattern of childhood mortality is essential to enable the health authorities to scale up appropriate interventions to reduce the burden. This will help the country to meet the target of reducing under-five mortality by two-thirds, few years after 2015.

**Keywords:** Childhood mortality, Geopolitical zones, Mapping, Preventable illnesses, Survey, Tertiary hospitals.

**Record Number:** 511  
**Author(s):** Obaseki, D.E. Forae, G.D. Iyawe, D.U.Akinwale, O. Obahiagbon, I.  
**Title:** A First Reportable Case of Fatal Granulomatous Amoebic Encephalitis in an Immunocompetent Nigerian Confirmed by Molecular Studies-Polymerase Chain Reaction (PCR).  
**Journal Title:** International Journal of Medicine and Public Health  
**Date of Publication:** 2016  
**Volume ID:** 6  
**Issue ID:** 3  
**Page(s):** 148-150  
**Address/Availability:**  
**Location/URL:**  
**Abstract:** **Aims:** To demonstrate the DNA sequences of Acanthamoeba castellanii strain using

molecular genomic DNA extraction and polymerase chain reactions. **Materials and Methods: Genomic DNA extraction:** Four 5 µm thick sequential sections were cut from the formalin-fixed paraffin embedded tissue sample. The micro-sections were placed in a micro-centrifuge tube. Sections were de-paraffinized using 300 µl of mineral oil and incubated at 90°C for 20 minutes to dissolve the wax. The tissue was digested with 50 µg/ml proteinase K at 48°C and incubated overnight. Genomic DNA (gDNA) was extracted from the solution by adding an equal volume of chloroform/isoamyl alcohol (24:1) to the tube. The gDNA was determined using Nanodrop ND-1000 Spectrophotometer. **Polymerase chain reaction (PCR) assay:** PCR assay was carried out on the extracted gDNA to amplify a target sequence of 161bp using Bioneer AccuPower® PCR PreMix in a reaction volume of 20 µl containing 1U of Top DNA polymerase, 250 µM dNTPs, 10 mM Tris-Hcl (pH 9.0), 30 nM Kcl, 1.5 mM MgCl<sub>2</sub>, 25 pmol each of the two primers—forward—Aca16Sf1010 (5'-TTATATTGACTTGTACAGGTGCT-3') and reverse—Aca16Sr1180 (5'-CATAATGATTGACTTCTTCTCCT-3') and the template DNA. **Results: PCR analysis/sequence analysis and alignment:** The amplification of the 16S small subunit ribosomal RNA gene produced an expected band, which is 161bp in size. A nucleotide BLAST search was carried out at NCBI to ascertain what the sequence was. The forward and reverse sequences showed great similarity with the same sequence as given by *Acanthamoeba castellanii* strain sequence ID: gb|AF479520.1| 16S small subunit ribosomal RNA gene. **Conclusion:** The high index of suspicion for *Acanthamoeba* species in this index case presenting histologically as granulomatous amoebic encephalitis was confirmed by molecular polymerase chain reaction as *Acanthamoeba castellanii*.

**Keywords:** *Acanthamoeba castellanii*, Amoebic Encephalitis, Granuloma, Molecular analysis, Nucleotide sequencing, Polymerase chain reaction

**Record Number:** 512  
**Author(s):** Osue H. O. Abenga J. N. Lawani F. A. G. Falope O. David K. M. Ezebuoro O. G. C. **Akinwale O. P.** and Edeghere H. I.  
**Title:** Status of Anaemia, Semen and Ejaculate Characteristics in Experimental Trypanosomiasis Infections in Yankassa Rams After Berenil, Novidium and Samorin Treatment.  
**Journal Title:** Journal of Agriculture and Veterinary Science 9(6): 60-68.  
**Date of Publication:** 2016  
**Volume ID:** 9  
**Issue ID:** 6  
**Page(s):** 60-68  
**Address/Availability:**  
**Location/URL:**  
**Abstract:**

Forty eight out of 52 matured Yankassa rams were shared into 3 groups A, B and C of 16 animals each and remaining 4 rams served as uninfected and untreated control (group D). The groups A-C were infected with about 1x10<sup>6</sup> of *Trypanosoma brucei brucei*, *T. congolense* and *T. vivax*, respectively. The experimental groups A-C were subdivided into Berenil, Novidium and Samorin treatment subgroups (a-c). *T. congolense* had sub-acute course of infection than the others, hence, there was no late treatment. Anaemia measured as red blood cell (RBC) counts was more severe in *T. vivax* followed by *T. congolense* and *T. brucei brucei*. After treatment, Samorin had increased percentage RBC counts and body weight gain. In groups A-C, pre-treatment semen volume decreased over post-infection values. Early and late sperm concentration reduced by 35.7% and 24.8% in *T. brucei*, cessation of sperm release in *T. congolense* with 19.3% and 67.3% in *T. vivax*. Testicular circumference increased by 11.6% and 19.7% for early and late (Berenil), 26% and 19.6% for Novidium and 12.4% and 32.2% for Samorin. Novidium group had 46.3% and 40.0% decrease in semen volume, 100% reduction in sperm concentration and sperm motility. The testicular circumference increased by 26% and 19.6%. In Samorin group, semen volume decreased by 69.6 and 11.1%, sperm concentrations were lowered by 35.7% and 24.8% for *T. brucei*; aspermia in *T. congolense* with 19.3% and 67.3% for *T. vivax*, and reduction in sperm motility by 100%. Treatment with

Berenil had remarkably improved the sperm concentration compared to slight increase in Novidium-early and also on testicular circumference. All infected animals showed varied degrees of gross sperm abnormalities. Nevertheless, none of the drugs could fully regenerate hematological parameters, semen and ejaculate abnormalities to pre-infection levels before death.

**Keywords:** Anaemia, Ejaculate characteristics, Rams, Semen, Trypanosoma species, Trypanocides.

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**Record Number:** 513

**Author(s):** Hassan, O. Amoo, A. O. J. Akinwale, O.P.Adeleke, M. A.Gyang, P.V.

**Title:** Molecular Characterization and Detection of Infection in Vector Snails of Urinary Schistosomiasis around Erinle and Eko Ende Dams in South West Nigeria.

**Journal Title:** British Microbiology Research Journal

**Date of Publication:** 2016

**Volume ID:** 14

**Issue ID:** 1

**Page(s):** 1-10

**Address/Availability:**

**Location/URL:**

**Abstract:** **Aims:** The prevalence of the schistosome cercariae in snail intermediate hosts has been known as one of the valuable predictors of the level of schistosomiasis transmission in different localities. This study was undertaken to determine molecular characterization and detection of infection in vectors snails of urinary schistosomiasis around Erinle and Eko-Ende Dams, South western Nigeria. **Study Design:** Epidemiological survey. **Place and Duration of Study:** Medical Microbiology and Parasitology Department, Obafemi Awolowo College of Health Science, Olabisi Onabanjo University, Sagamu, Ogun State, Nigeria between January 2010 and November 2012. **Methodology:** The snails collected from communities around Erinle and Eko-Ende dams were identified using standard morphological keys. The infectivity of the *Bulinus* species by Schistosome was determined through cercaria shedding and Polymerase Chain Reaction (PCR) of amplification of Dra 1 gene repeats of *S. haematobium* while snail characterization was done using PCR-RFLP. **Results:** Of the 277 snails screened, 78 (28.28%) were positive for cercaria shedding while 108 (38.98%) were positive for PCR screening. There was significant difference in the infectivity status determined by cercaria shedding and the PCR technique ( $p=0.05$ ). All the snails characterized by PCR-RFLP were *Bulinus*. truncatus showing the species is involved in the transmission of urinary schistosomiasis in the study area. The relatively high prevalence of schistosome infection in snail intermediate hosts around the two dams suggests active transmission of urinary schistosomiasis and underscores the need for integrated control in tackling the menace of the disease at the study area.

**Keywords:** *Bulinus*; *Schistosoma haematobium*; cercaria shedding; PCR; Nigeria.

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**Record Number:** 514

**Author(s):** Ezechi, O.C Onwujekwe, D.I. Adu, R. A.

**Title:** Planning pregnancy in HIV positive couples: exploring the available options.

**Journal Title:** Medipharm Medical Journal

**Date of Publication:** 2016

**Volume ID:** 3

**Issue ID:** 1

**Page(s):** 3-5

**Address/Availability:**

**Location/URL:**

**Abstract:**

**Keywords:** HIV.

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- Record Number:** 515
- Author(s):** Adewale, B. Adeneye, A. K Ezeugwu, S. M. C. Afocha, E. E. Musa, A. Z. Enwuru, C. A. Yisau, J. I. Raheem, T. Y. Sulyman, M. A. Adeiga, A. A. Olayemi, O. M. Mafe, M. A. Ujah, I. A. O.
- Title:** A Preliminary Study on Enrolees Perception and Experiences of National Health Insurance Scheme in Lagos State, Nigeria
- Journal Title:** International Journal of TROPICAL DISEASE & Health.
- Date of Publication:** 2016
- Volume ID:** 18
- Issue ID:** 3
- Page(s):** 1-14
- Address/Availability:**
- Location/URL:**
- Abstract:** **Aim:** To assess enrolees' perception and experiences on the National Health Insurance Scheme, launched in Nigeria, in 2005 and made mandatory for all Federal civil servants. **Study Design:** This descriptive cross-sectional study conducted between August and September 2013 focused on civil servant enrolees of three tertiary health institutions in Lagos, South-West Nigeria. **Methodology:** Three tertiary health institutions were purposively selected. Systematic sampling was employed in selecting 150 enrolees. Quantitative data were collected from each consenting selected enrolee using semi-structured questionnaire which probed into demographic characteristics, knowledge, expectations, services accessed, experiences, perceptions and, suggestions for improvement. **Results:** A total of 143 enrolees (males 43.7%; females 56.3%) completed the questionnaire. Majority (97.2%) had knowledge of the scheme: easy access to affordable healthcare (40.7%), subsidized health care services (22.2%) and pooling of resources (11.1%). Subsidized treatment, quality healthcare provision and free treatment were the most mentioned expectations. Treatment and general care were the most accessed services (55.7%). One in every five enrolees (22.9%) never accessed the services and, 18% had no knowledge of complaints channels. More than half (59.8%) were dissatisfied with services accessed for reasons ranging from drug unavailability (27.8%) to poor quality of service (12.6%) and out-of-pocket payment on drugs and tests (11.4%). Majority (57%) however claimed reduction in out-of-pocket expenses. Major suggestions proffered by enrolees (53.1%) for improving the scheme covered regular monitoring, continuous availability of genuine drugs, sensitisation, prompt response to enrolees' complaints and continuous review of the policy. **Conclusions:** Regular monitoring of the scheme's operations is expected to contribute greatly to improvement of the scheme which should minimise out-of-pocket health expenses. Continuous enlightenment is desirable with emphasis on ensuring enrolees' satisfaction for sustainability to secure the universal health coverage target in the country.
- Keywords:** Health insurance; perception; civil servants; Nigeria.

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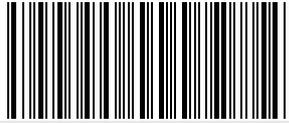
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