

Community Knowledge and Perception of Buruli Ulcer in Ogun State, Nigeria

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Introduction

- Buruli ulcer (BU), a disease caused by infection with *Mycobacterium ulcerans* (WHO, 2001).
- Occurs in at least 27 countries in Africa, Asia, South America, and the western Pacific. Most reports from West and Central Africa.
- Reported in States of Nigeria e.g. Adamawa, Benue, Cross River, Akwa Ibom, Enugu, Ogun and Oyo.
- A neglected but treatable tropical diseases (WHO, 2001).
- Leads to extensive destruction of skin and soft tissue (large ulcers) usually on the legs and or arms. All ages and sexes are affected.
- Late treatment often cause long-term functional disability.
- Early diagnosis and treatment prevents such disabilities (WHO, 2001; de Souza *et al*, 2012).
- Frequently occurs near water bodies – slow flowing rivers, ponds, swamps and lakes; cases have also occurred following flooding (WHO, 2001; Chukwuekezie *et al*, 2007).
- Insufficient knowledge of BU undermines efforts to determine the exact prevalence and burden of the disease (WHO, 2004).



Methods

Ethical considerations

- Ethical approval, consent, voluntary participation, confidentiality

Study design: Descriptive cross-sectional study

Study locations: Yew North and Yewa South LGAs, Ogun State (November 2014)

Study population

- Community members, community and opinion leaders, public and private health care providers, and State and Local Government TB, Leprosy and Buruli Ulcer Control Officers

Sampling

- State and LGAs - Purposive and simple random sampling
- Communities (Purposive, stratified and systematic sampling)

Data collection

- Community survey – Questionnaire, indepth interviews and focus group discussions
- Laboratory examination

Data analysis: Quantitative and qualitative data analysed using SPSS version 20 (univariate and bivariate analyses) and Textbase Beta software respectively

Results

Socio-demographic characteristics of respondents

- Two hundred and thirty-six respondents interviewed
- Yewa North 76.7% vs. Yewa South 23.3%
- Sex – male 115 (48.7%); female 121 (51.3%))
- Age range – 19-87 years; mean age – 33.1 years
- Literacy level – 75.4% had minimum of primary education
- Most (88.9%) were married
- Most respondents were artisans (36.1%) and traders (33.3%)
- Income/month (range) – ₦1,000 - ₦80,000
Mean - ₦15,866.85



Knowledge of BU cases among respondents in the communities

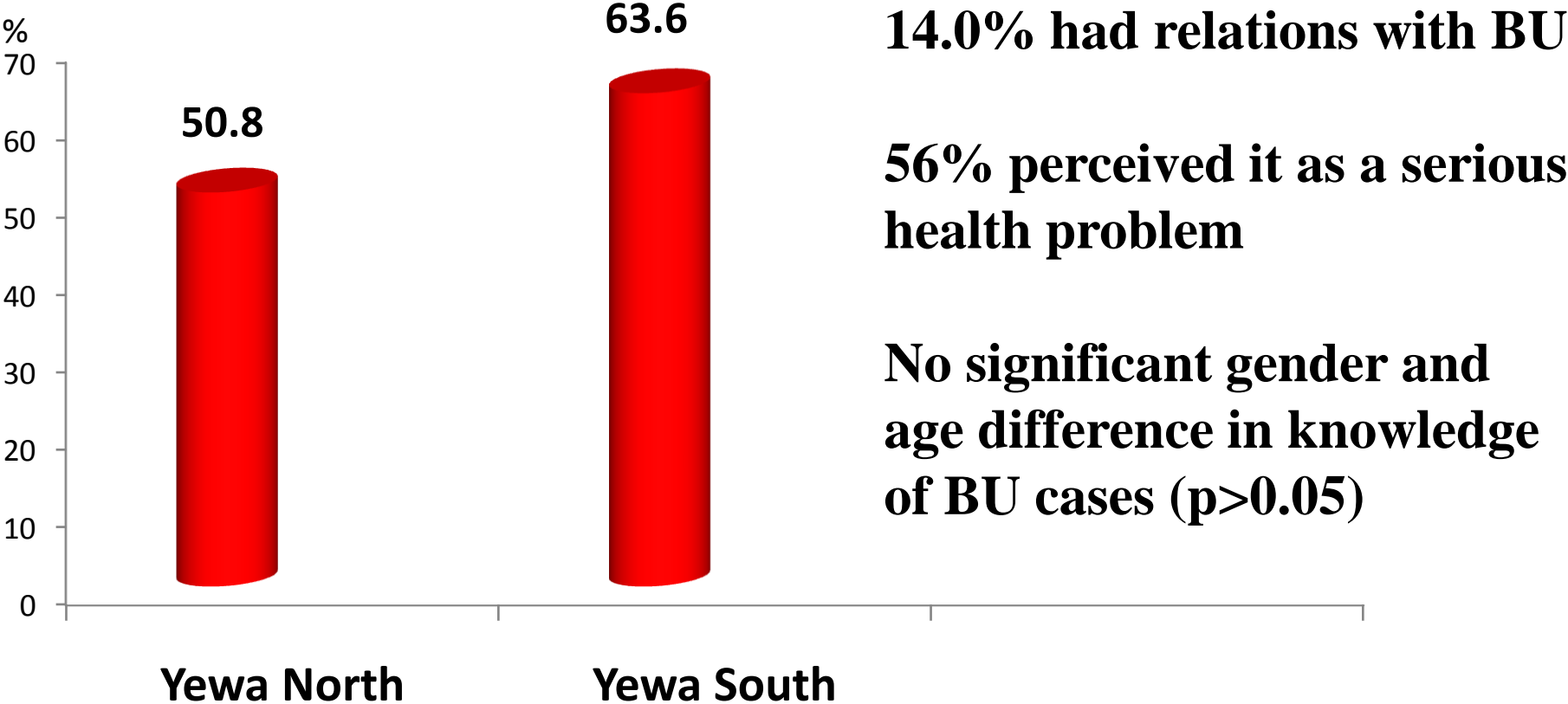


Figure 1 Knowledge of BU cases among respondents in the communities by LGA

Table 1 Respondents' perceived cause of BU by LGA

Perceived cause	Yewa North n=181(%)	Yewa South n=55(%)	Total n=236(%)
Witchcraft/ <i>Olobutu</i>	17 (9.4)	6 (10.9)	23 (9.7)
Bacteria	5 (2.8)	5 (9.1)	10 (4.2)
Water contact	3 (1.7)	4 (7.3)	7 (3.0)
Poor hygiene	4 (2.2)	3 (5.5)	7 (3.0)
Wandering in the bush	0 (0.0)	1 (1.8)	1 (0.4)
Other	14 (7.7)	5 (9.1)	19 (8.1)
Don't know	138 (76.2)	31 (56.4)	169 (71.6)

Photographs of seen BU Cases



2a



2b



2c

Figures 2a A 7-year child affected in the trunk, 2b Leg of a 30-year old woman and 2c Leg of a 26-year old woman

Table 2 Preferred treatment options for BU in the communities according to LGA

Preferred treatment options	Yewa North n=181 (%)	Yewa South n=55 (%)	Total n=236(%)
Traditional medicine	114 (63.0)	22 (40.0)	136 (57.6)
Hospital	76 (42.0)	6 (10.0)	82 (34.7)
Faith homes	30 (16.6)	4 (7.3)	34 (14.4)
Chemist shop	15 (8.3)	4 (7.3)	19 (8.1)
Both herbs & orthodox	6 (3.3)	8 (14.5)	14 (5.9)

Discussion

- Pervasive knowledge of BU and seriousness of its health implications in the communities exist, with traces of denial and misconception of cause of BU.
- ❖ **Denial** is attributable to **social stigma attached to BU**.
- **Insufficient knowledge of BU** among the people and **proximity of people most affected by BU living in remote rural areas** with little contact with the health system **increase likelihood of significant under-reporting**.
- Recourse by most people to traditional treatment is attributable to:
 - ❖ Socio-cultural beliefs and practices that strongly influence people's health-seeking behaviours.
 - ❖ High cost of surgical treatment and long hospital stay (in Republic of Benin), fear of surgery and concerns about possible amputations.

Conclusions

- To curb morbidity from BU in the communities, there is need to strengthen early detection and presentation for prompt and effective treatment through public health education emphasising the identification of signs/symptoms of BU and common modifiable risk factors.
- Study highlights the importance of taking cognisance of the need to develop strategies of expanding access to adequate, affordable and quality treatment for people affected by BU in the studied LGAs.
- Health facilities in the LGAs need to be equipped with adequately trained manpower and equipment for diagnosis and treatment of BU particularly at the primary health care level.