JOURNAL OF





Health, Metabolism & Nutrition Studies (JHMNS) Vol. 6 No. 3

VALUATION OF KNOWLEDGE AND AWARENESS OF SKIN NEGLECTED TROPICAL DISEASES IN MBAITOLI LGA IMO STATE

OKEHIE, C. C.; OZIMS, S. J.; & EBERENDU, I. F.

Department of Public Health, Imo State University, Owerri.

Abstract

his study was carried out to evaluate of knowledge and awareness of skin neglected tropical diseases in Mbaitoli LGA Imo State. A multistage sampling technique was used to select nine hundred (900) participants from Mbaitoli LGA of Imo State. A semi-structured, self-administered questionnaire was used to elicit information respondent's socio-demographic on characteristics, knowledge, and recognition of skin NTDs. Data analysis were done using independent sample t-test, analysis of variance with p-value set at 0.05. Out of the 900 participants in the studied areas, 756 (72.88) claimed that stepping on charm is the major cause of skin NTD while 968(63.27%) attributed the cause of skin NTD infection to lack of personal hygyiene. 697(45.56%) believes skin NTDs are caused through sexual intercourse, 646(42.22%) believe it is caused contaminated food, 464(30.33%) attributed it to fever, 379(24.77%) claimed it is caused by working in the sun while 354(23.14%) believed it is caused by

Introduction

The continued neglect of skin NTD locally and indeed globally is not an option, as this will be at the expense of public health, particularly when viewed against the backdrop of indices used in determining population health, such as disabilityadjusted life years, which is a summary measure of the burden of disease in a population (Anto et al., 2018). People affected by tropical skin neglected diseases (NTDs) grapple with both physical and emotional reactions that tend compromise their health and well-being (Amazigo, 2021). These emotional reactions (anxiety and depression) are sometimes the result of stigma, discrimination and

BERKELEY RESEARCH & PUBLICATIONS INTERNATIONAL Bayero University, Kano, PMB 3011, Kano State, Nigeria. +234 (0) 802 881 6063, berkeleypublications.com

ISSN 2016 9664 B ISSN 2017

E-ISSN 3026-8664 P-ISSN3027-2238

Journal of Health, Metabolism and Nutrition Studies

Drinking untreated water. This study has helped quantify the information gaps that need to be addressed in order to create demand for integrated skin NTDs services in an endemic setting in Mbaitoli and Nigeria at large.

Keywords: Knowledge, Awareness, Skin Neglected Tropical Diseases, Mbaitoli, Imo State

ocial exclusion, which in turn affect overall functioning in areas such as initiating or keeping livelihoods, bonding with family and limitations to participating in social activities within the community. Individuals and families affected by skin NTDs tend to have worse socio-economic status compared with the general population, especially where the affected person is the major income earner. Community perceptions of causation of skin NTDs may play an important role in access to or utilization of health services. One of the key guiding principles of the WHO African Region Strategic Plan for NTDs is empowerment of people and communities through the involvement of populations affected by or at risk of NTDs in control interventions. Previous studies on skin NTDs had focused on of self-care interventions for integrated morbidity management of skin neglected tropical diseases (Babu and Satyanarayana, 2016). Another study by Bailey et al. (2021) considered barriers and challenges to the integrated management of neglected tropical skin diseases in an endemic in Anambra State. A more recent study by Bangert et al. (2023) explored the prevalence of Buruli Ulcer in Imo State. Available literature shows that there appears to be dearth of information regarding the community knowledge, attitudes and practices (KAP) on the prevalence of skin NTDs in Imo State using patient participatory approach. However, this information is crucial in designing cost-effective community engagement strategies for integrated of skin NTDs and to support elimination efforts for the skin-NTDs in Imo State and Nigeria at large. It is against this backdrop that this study thus seeks to document the spectrum of skin NTD seen in selected parts of Imo State, and some challenges encountered in the effective management of these conditions.

Study area

The study was carried out in selected communities and watds in Mbaitoli LGA Imo State. As the name implies "Mba - itoli" is a local government with nine (9) towns and twelve (12) political wards. The nine (9) towns includes: Afara, Orodo, Ogwa, Ogbaku, Mbieri, Ifakala, Eziamaobiato, Umunoha and Ubomiri.

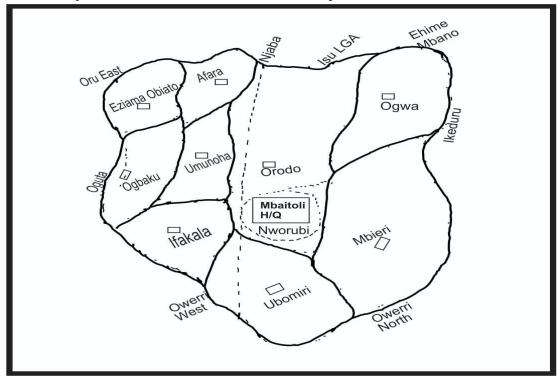
BERKELEY RESEARCH & PUBLICATIONS INTERNATIONAL Bayero University, Kano, PMB 3011, Kano State, Nigeria. +234 (0) 802 881 6063, berkeleypublications.com



Journal of Health, Metabolism and Nutrition Studies

Study Design

This study adopted a mixed-method of design using quantitative and qualitative methods. The main methods to used were descriptive cross-sectional surveys of community members and health workers using semi-structured interviewer-administered questionnaires, and focus group discussions (FGDs) sessions with community members, health care workers and patients with a skin NTD.



Population of the Study

The study population for this work comprised of both male and female from the three (3) geopolitical Zones of the local government, thus, Mbaitoli North, Mbaitoli East and Mbaitoli South. The population of Mbaitoli is recorded to be 237,474, including male and female as well as young and old, National Population Census (2006).

Ethical consideration

Ethical approval for the study was gotten from the Post Graduate Board of the of Department of Public health, Imo State University Owerri ethical committee and Imo State Ministry of Health through the Imo State Primary Healthcare Development Agency Mbaitoli who also helped to identify the targeted



Journal of Health, Metabolism and Nutrition Studies

population. Written/oral Consent was sought and obtained from the subjects as well.

Sample and sampling technique:

The sample for this study consists of respondents drawn from the 3 geopolitical Zones of the LGA. A total of nine hundred (900) respondents were randomly selected without discrimination, three hundred (300) respondents from each of the three (3) geopolitical Zones of the local government areas.

Method of Data Collection:

Because of the number of illiterate persons and peculiarities of their language (dialects), the researcher visited the selected communities and the approved self - developed questionnaire was administered and used for data collection. Nine hundred (900) copies of the questionnaires was administered to the participants from the selected communities by the researcher himself, while asking them questions in line with the contents of the research instrument

Method of Data Analysis:

The data obtained from the respondents via the well-structured (close ended) questionnaire administered was organized and analysed using descriptive Statistics, which includes tables, diagrammatic and pictorial presentation.

RESULTS

Demographic characteristics of the respondents

The demographic and socioeconomic characteristic of the respondents from the study areas is presented in Table 1. Based on the feedback from the respondents, the study comprised 57.8% males and 42.2% females. In terms of age (in years), majority of the respondents (33.4%) were between 40 and 49 (working group) years followed by 30 to 39 years of age (33.2%). The lowest represented age group is the range 70 and above (elderly age group). In addition, majority (53.3%) of the heads of households were married while only 31.2% reported to have never been married (single). However, 3.7% respondents indicated to have lost their spouses while 4.3 % are divorced.

As regards number of years stayed in the community, a large of proportion (33.5%) reported to have spent between 40 to 49 years in their communities



Journal of Health, Metabolism and Nutrition Studies

while 32.0% of household heads had spent between 30 and 39 years. Only 1.33% indicated to have stayed <10 years in their communities.

Table 1: Demographic Characteristics of the Respondents (N = 600)

Characteristics	Component	Frequency	-	
Sex	Male	520	57.8	
	Female	380	42.2	
	Total	900	100	
Age (years)	20-29	170	18.9	
	30-39	299	33.2	
	40-49	301	33.4	
	50-59	101	11.2	
	60-69	20	2.2	
	70 and above	9	1.1	
	Total	900	100	
Marital status	Single	281	31.2	
	Married	480	53.3	
	Divorced	33	3.7	
	Widowed	39	4.3	
	Separated	67	7.5	
	Total	900	100	
Years stayed in the community (years)	Less than 10 years	12	1.33	
	19-0ct	39	4.33	
	20-29	150	16.7	
	30-39	288	32	
	40-49	301	33.5	
	50-59	101	11.2	
	60-69	9	1	
	Total	900	100	

BERKELEY RESEARCH & PUBLICATIONS INTERNATIONAL Bayero University, Kano, PMB 3011, Kano State, Nigeria. +234 (0) 802 881 6063, berkeleypublications.com



Journal of Health, Metabolism and Nutrition Studies

Distribution of respondents by educational status

The education status distribution of the respondents is presented in Figure 1. The results show a majority of the community members who participated in the study has one form of formal education or the other. About a 7% of the respondents were uneducated with just 21.1% having been to a higher institution. Majority (53.5%) of the respondents have either Primary (First School Leaving Certificate (FSLC) or Secondary education (Senior Secondary Certificate Examination (SSCE). The Table also reveals that 20.3% of the heads of participants had attended one tertiary institution or the other, thereby obtaining either NCE/OND/B.Sc or their equivalent and only three 5% of the respondents indicated to have a Master's degree.

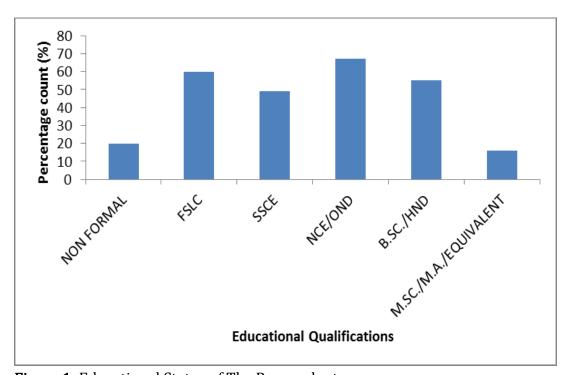


Figure 1: Educational Status of The Respondents

Distribution of the participants source of information concerning skin NTDs

Distribution of the participant's source of information concerning skin NTDs is presented in Figure 2. The participants first learnt about these skin NTDs mainly from radio jingles (89.0%), followed by family/ friends (77.8%) as shown in figure 4.2. the least source of information according to the participants were the church (40.1%) and internet (29.8%) respectively.

BERKELEY RESEARCH & PUBLICATIONS INTERNATIONAL Bayero University, Kano, PMB 3011, Kano State, Nigeria. +234 (0) 802 881 6063, berkeleypublications.com



Journal of Health, Metabolism and Nutrition Studies

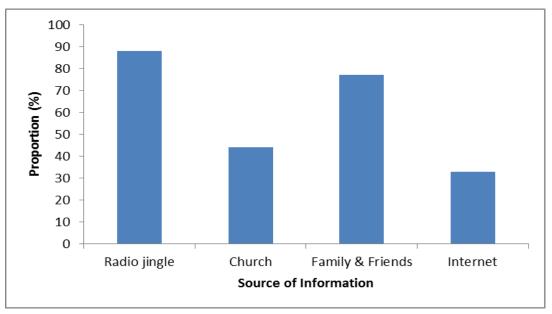


Figure 2: source of information on Skin NTDs in the study areas

Table 2 shows the number of subjects that responded positively to the best of their knowledge on the causes of skin NTD infection. Out of the 900 participants in the studied areas, 756 (72.88) claimed that stepping on charm is the major cause of skin NTD while 968(63.27%) attributed the cause of skin NTD infection to lack of personal hygyiene. 697(45.56%) believes skin NTDs are caused through sexual intercourse, 646(42.22%) believe it is caused by contaminated food, 464(30.33%) attributed it to fever, 379(24.77%) claimed it is caused by working in the sun while 354(23.14%) believed it is caused by Drinking untreated water.

Table 2: Respondents' knowledge on causes of skin NTDs

Causes	Afara/ Eziama	Ogwa,	Orodo	Ifakal a	Umun oha	Ubom iri	Ezinih itte Mbier i	Amaik e Mbier i	Umuag wu /Umun woha Mbieri	Total (%) (n = 900)
Workin g in the sun	46(33. 33)	31(21 .09)	38(30 .16)	34(23 .45)	41(24 .55)	42(14 .85)	37(17 .62)	40(30 .77)	46(23. 47)	355(3 9.4)
Sexual interco urse	90(65. 22)	62(42	86(68 .25)	80(55 .17)	61(36 .53)	76(44 .97)	84(40 .00)	62(47 .69)	44(22. 45)	601(6 6.8)

BERKELEY RESEARCH & PUBLICATIONS INTERNATIONAL
Bayero University, Kano, PMB 3011, Kano State, Nigeria. +234 (0) 802 881 6063,
berkeleypublications.com



Journal of Health, Metabolism and Nutrition Studies

Steppin	107(77	115(7	101(8	121(8	127(7	118(6	131(6	98(75	108(5	756(7
g on	.54)	8.23)	0.96)	3.45)	6.05)	9.82)	2.23)	.38)	510)	2.88)
charm										
Lack of	89(64.	71(48	84(66	102(7	78(46	114(6	126(6	128(9	86(33.	878(9
person	49)	.30)	.67)	0.34)	.71)	7.46)	0.00)	2.31)	69)	7.55)
al										
hygiene										
Fever	56(40.	41(27	51(40	54(37	42(25	50(29	55(26	47(36	32(18.	428(4
	58)	.89)	.48)	.24)	.15)	.59)	.19)	.15)	37)	7.55)
Contam	80(57.	78(53	77(61	81(55	56(33	59(34	73(34	56(43	52(26.	612(6
inated	97)	.74)	.11)	.86)	.33)	.91)	.76)	.08)	53)	8.00)
food										
Drinkin	38(27.	32(21	36(28	40(27	32(19	34(20	38(18	31(23	44(22.	325(3
g	54)	.77)	.57)	.59)	.16)	.12)	.10)	.46)	45)	6.11)
untreat										
ed										
water										

Discussion

Skin NTDs remains a major public health problem in developing countries especially the Sub-Saharan African countries. Poor health facilities, health infrastructure, and health coverage are the major front-runner factors that made transmission of the disease is on-going and protracted elimination. The study investigated skin NTDs in selected parts of Mbaitoli in Imo state in nine hundred (900) inhabitants of the studied communities. It was established that more females participated in the study than males. Majority of the participants 301 (33.4%) in this study were between the age range of 40-49. Brieger et al. (2019) also reported similar age bracket in their study on prevalence of NTDs and associated clinical manifestations in selected hypoendemic communities in Oyo State.

The study investigated Knowledge, attitude and practice of respondents on skin NTDs and transmission in the study communities. From the analysis of data, it was discovered that 85.0% of the participants had adequate knowledge of skin NTDs and its transmission in the study communities. This is greater than the finding from the study conducted by Duamor et al. (2020) in South West Cameroon. This study also disagrees with the opinion of Emukah et al. (2023) carried out in Imo and Abia states of south-eastern Nigeria. The lower perception of preventability of skin NTDs and its transmission might be due to the sociodemographic differences and poor access to health education information in the



Journal of Health, Metabolism and Nutrition Studies

studied communities. This underscores the importance of health education as a means of skin NTDs control.

The findings revealed that the community had poor attitude towards skin diseases similar to a study carried out in Yaounde, Cameroon which reported poor attitude among the general actioners while 60% of the study participants had poor attitude towards Atopic dermatitis(CDC, 2016). The findings are contrary to a study carried out in Pesantren Darul Fwata which reported 80% good attitude towards scabies among the Santri (CDC, 2016). On the other hand, the findings were similar to a study in North central Nigeria where majority (58.8%) of the study participants had no specific preferences on the type of clothing; though the study revealed that skin diseases had influence on and interference on the choice of clothing among the community members (Fleming et al., 2020).

The study further revealed that the knowledge of the cause and mode of transmission of skin NTDs varied significantly among the respondents in the communities. 38.24% of the participants in this study knew that the mode of transmission of the disease is caused by blackfly biting, with at least one misconception or the other. For instance, stepping on charm (72.88%) and lack of personal hygiene (63.27%) were recorded as the major perceived cause of skin NTDs in the study communities. Other respondents had different perceptions on the cause of transmission of the disease. About 45.56% of the participants claimed that skin NTDs could be transmitted sexually. This is higher than 66% reported by Bailey et al. (2021) but lower than 42.8% documented by Brieger et al. (2019) in their study on perception and attitude of people toward skin NTDs (River Blindness) in South Western Nigeria. This implies that sex is another persistent predictor to consider during interventions. Transmission of skin NTDs through witchcraft (58.43 %) as observed in this study is not peculiar to the studied communities as opined by previous researchers (Anto et al., 2018; Hotez et al., 2021;). Poor knowledge about the skin NTDs is a common factor in African rural inhabitant's predisposing them to infection". This current study is consistent, with studies done in North Ethiopia Quara focus and Southwestern Bebeka focus (Anto et al., 2018).

Conclusion

In conclusion, this study has helped quantify the information gaps that need to be addressed in order to create demand for integrated skin NTDs services in an





Journal of Health, Metabolism and Nutrition Studies

endemic setting in Mbaitoli and Nigeria at large. Individual, structural and socioeconomic challenges to access and delivery of services to management of skin NTDs in the communities were identified.

References

- Anto, F, Asoala V, Anyorigiya T, Oduro A, Adjuik M, Akweongo P, Aborigo R, Bimi L, Amankwa J, and Hodgson A. (2018). Simultaneous administration of praziquantel, ivermectin and albendazole, in a community in rural northern Ghana endemic for schistosomiasis, onchocerciasis and lymphatic filariasis. *Trop Med Int Health*.16:1112–1119.
- Amazigo, U. (2021). The African Programme for Onchocerciasis Control (APOC). *Ann Trop Med Parasitol*. 1:19–22.
- Babu, B.V, and Satyanarayana, K. (2016). Factors responsible for coverage and compliance in mass drug administration during the programme to eliminate lymphatic filariasis in the East Godavari District, South India. *Trop Doct.* 33:79–82.
- Bailey, F, Eaton J, Jidda M, van Brakel WH, Addiss DG, Molyneux DH. (2021). Neglected tropical diseases and mental health: progress, partnerships, and integration. *Trends Parasitol.* 35:23–31
- Bangert, M, Molyneux DH, Lindsay SW, Fitzpatrick C, Engels D. (2023). The cross-cutting contribution of the end of neglected tropical diseases to the sustainable development goals. *Infect Dis Poverty*. 6:73.
- Brieger, W.R, Otusanya SA, Oke GA, Oshiname FO, Adeniyi JD. (2019) Factors associated with coverage in community-directed treatment with ivermectin for onchocerciasis control in Oyo State, Nigeria. *Trop Med Int Health*. 7:11–18.
- Center for Disease Prevention and Control. (2016). Neglected Tropical Diseases. Archived from the original on 4 December 201 Retrieved 30 October 2016.
- Duamor, C.T., Datchoua-Poutcheu FR, Chounna Ndongmo WP, Yoah AT, Njukang E, Kah E, Maingeh MS, Kengne-Ouaffo JA, Tayong DB, Enyong PA, Wanji S. (2020). Programmatic factors associated with the limited impact of Community-Directed Treatment with Ivermectin to control Onchocerciasis in three drainage basins of South West Cameroon. *PLoS Negl Trop Dis.* 390-498.
- Emukah ,E.C, Enyinnaya U, Olaniran NS, Akpan EA, Hopkins DR, Miri ES, Amazigo U, Okoronkwo C, Stanley A, Rakers L, (2023). Factors affecting the attrition of community-directed distributors of ivermectin, in an onchocerciasis-control programme in the Imo and Abia states of south-eastern Nigeria. Ann Trop Med Parasitol. 2008;102:45–51.
- Federal Ministry of Health. Nigeria Master Plan for Neglected Tropical Disease (NTDs) 2013-2017. Abuja: Federal Ministry of Health. 2013; 142.
- Fleming FM, Matovu F, Hansen KS, Webster JP. (2020). A mixed methods approach to evaluating community drug distributor performance in the control of neglected tropical diseases. *Parasit Vectors*. 016-1606-2

Journal of Health, Metabolism and Nutrition Studies

Hotez PJ. "NTDs V20. (2021) "blue marble health"-neglected tropical disease control and elimination in a shifting health policy landscape". PLoS Neglected Tropical Diseases. 2013; 7(11): e2570