

Living conditions, mental health status and common illnesses present in an Internally Displaced Persons' Camp in Benue State, Nigeria

***DANIEL DA, *AKWARAS NA, *DANIEL FO, **ATSEHE CF, ***TYOVENDA RK, *ALAPA DO**

**Department of Family Medicine, Federal Medical Centre, Makurdi, Nigeria.*

***Department of Internal Medicine. Benue State University Teaching Hospital. Benue State, Nigeria.*

****Department of Community Medicine. Federal Medical Centre Makurdi, Benue State, Nigeria.*

ABSTRACT

Background: Globally, Internally Displaced Persons (IDPs) may be faced with precarious situations that can be detrimental to their well-being. This study assessed the living conditions, mental health status and common illnesses present in an IDPs Camp in Benue State.

Methods: The study was carried out at Ichwa camp located in North-Bank, Makurdi, Nigeria. One hundred and fifteen consenting adults were consecutively recruited using an interviewer-administered questionnaire and mental status was assessed using the General Health Questionnaire-12 (GHQ-12). The data was analyzed using SPSS version 20. The level of significance was set at $P < 0.05$.

Results: The respondents mean age was 45.12 ± 15.33 years, majority were female (88.7%), married (47.0%), and had informal education (59.1%). Over the preceding three months, 80% had experienced illness, with most seeking treatment at patent medicine stores (69.6%). Common ailments included febrile illness (30.6%), cough (19.9%), hypertension (18.3%), and bites from scorpions, snakes, and dogs (7.7%). Borehole water (98.2%) and pit latrines (90.4%) were predominantly used, with 84.3% sleeping under insecticide-treated nets. Many females used pieces of clothing to manage menstrual flow (72.2%). Mental stress was prevalent, affecting 84.3% of respondents, and was significantly associated with age and duration of stay in the camp.

Conclusion: The findings highlight suboptimal living conditions and widespread mental stress among IDPs, with febrile illness being particularly common. The study recommends advocating for sustainable interventions to improve the well-being of IDPs in the camp.

Correspondence

Ndunno Asheku Akwaras
Department of Family Medicine
Federal Medical Centre
Makurdi, Benue State
Email: ndunnoakwaras@gmail.com

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INTRODUCTION

Internally Displaced Persons (IDPs) face significant humanitarian challenges worldwide. IDPs are individuals forced to flee their homes due to armed conflict, violence, human rights violations, or natural disasters without crossing international borders (UN, 2023). In 2021, 60.9 million internal

displacements were recorded globally, a 60% increase from the previous year (IDMC 2023). Of these, 32.6 million were due to disasters and 28.3 million to conflict and violence. Sub-Saharan Africa reported 16.5 million internal displacements in 2022, a 17% increase from the previous year (IDMC 2023). In Nigeria's northeast geopolitical zone,

2,375,661 IDPs were identified across 483,467 households between August and November, 2022, with 13,578 individuals living in IDP camps in Makurdi, Benue State, in 2023 (IOM Nigeria, 2023; IOM Benue state, 2023).

The health status of people in IDP camps is often precarious due to a combination of factors such as limited water supply, poor sanitation, lack of food and funds, limited access to health care and overcrowding (Faronbi et al, 2019, Ekezie et al, 2021; Cantor et al., 2021). These camps typically have substandard living conditions, including inadequate water supplies and improper waste disposal. This promotes the development of infectious diseases such as waterborne diseases and respiratory infections, while chronic conditions like hypertension and diabetes frequently go untreated (Salami et al., 2020; Cantor et al, 2021; Ekezie et al., 2022).

Psychological distress is also a significant concern for IDPs, as they face stressful living conditions vastly different from their homes. However, there is limited literature on mental health in IDP camps in Benue State, Nigeria. Early identification of those at risk of mental illness is critical and can be facilitated using tools like the General Health Questionnaire (GHQ-12) created by Goldberg in 1972, which has demonstrated good reliability, specificity and sensitivity (Daradkeh et al., 2001; Jackson, 2006; Endsley et al, 2017; Anjara et al, 2020).

Despite the presence of IDPs in Nigeria, there is a lack of data on their living conditions, mental health, and other health challenges, prompting this research in an IDP camp in Benue State.

MATERIALS AND METHODS

Study area

The study was carried out on 12th September 2023 at the Ichwa camp, located along the Joseph Sarwuan Tarka University Road, in the North Bank area of Makurdi, Benue State capital, Nigeria. Benue State is situated in North-central Nigeria, an area also referred to as the Middle-belt of Nigeria. The Ichwa camp is one of the 13 designated Internally Displaced Persons (IDPs) camps set up by the Benue State Government to temporarily accommodate hordes of the people rendered homeless by suspected armed herdsmen terrorists in the state. The camp hosts 2681 registered persons (IOM Benue State, 2023). The study was carried out during a Medical Outreach by the Christian Medical and Dental Association (CMDA) Benue State, Branch, a non-governmental professional body consisting of medical doctors and dentists.

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Sampling technique

One hundred and fifteen (115) consenting adults were recruited consecutively using a structured interviewer administered questionnaire. Those that were very ill were excluded.

Data collection

The questionnaire collected information on socio-demographic characteristics, living conditions (eg source of water, toilet facility, use of insecticide treated net (ITN), number of persons per tent, access to source of employment etc), having been ill within the preceding three months. The structured questionnaire modified from questions obtained from similar studies (Faronbi et al, 2019, Ekezie et al, 2021).

The blood pressure was measured as follows: The blood pressure was taken with Accuson^(R) mercury sphygmomanometer and a 3M Littmann^(R) stethoscope. Blood pressure was measured with the subject seated and relaxed for about 5 minutes, with back support, legs uncrossed and the arm supported at heart level (TRUE Consortium, 2017). The stethoscope was placed gently over the brachial artery at its point of maximal pulsation at the cubital fossa. The cuff which covered two third of the upper arm length was then be inflated rapidly to about 30mmHg above the palpated systolic pressure and deflated at a rate of 2 – 3mmHg per second during which the Korotkoff first and fifth sounds were heard which corresponded to systolic and diastolic blood pressure respectively. The average of two blood pressure measurements taken at an interval of at least 2 minutes was used (TRUE Consortium, 2017). The subjects were classified using the JNC7 report on the prevention, detection, evaluation and treatment of high blood pressure into normal (<120/80mmHg), pre-hypertensive (120 – 139/80-89mmHg) and hypertensive ($\geq$ 140/90mmHg) (TRUE Consortium, 2017).

Information on the mental health status using the General Health Questionnaire – 12 (GHQ-12). The GHQ-12 mental stress screening tool that consists of 12 questions related to various aspects of mental well-being. The GHQ-12 includes the following 12 questions: (1) Have you recently been able to concentrate on whatever you are doing? (2) Have you recently lost much sleep due to some worry? (3) Have you recently felt constantly under strain?

(4) Have you recently felt that you could not overcome your difficulties? (5) Have you recently been feeling unhappy and depressed? (6) Have you recently been losing confidence in yourself? (7) Have you recently been thinking of yourself as a worthless person? (8) Have you recently felt that you are playing a useful role in life? (9) Have you recently felt capable of making decisions about things? (10) Have you recently been able to enjoy your normal day-to-day activities? (11) Have you recently been able to face up to your problems? (12) Have you recently been feeling reasonably happy, all things considered? (Qin et al, 2018)

Each question typically has four likert scale response options. Positively worded items have responses of "better than usual," "same as usual," "less than usual," and "much less than usual," while responses to negatively worded items are "not at all," "no more than usual," "rather more than usual," and "much more than usual." Scoring is along a 4-point ordinal scale (0 to 3) with higher scores suggestive of more distress. Total scores range from 0 to 36 with a score of 0-11 generally considered normal or no significant psychological distress, scores > 15 suggesting evidence of distress, and scores > 20 are considered severe problems with psychological distress (Benoni et al, 2024).

Data analysis

The data was analyzed using SPSS version 20 (Chicago IL USA). The descriptive statistics generated were presented on frequency tables and bar charts. The association between variables were analyzed using the Pearson Chi-square test. The level of significance was set at $P < 0.05$.

Ethical approval

Ethical approval was gotten from Federal Medical Centre, Makurdi, Health Research Ethics Committee. Written informed consent was obtained from the participants. The study was observed ethical principles as stipulated in the Helsinki Declaration of the 1975 and revised in 1983. No participant of the outreach was victimized for not consenting to answering the questionnaire.

RESULTS

The mean age of the respondents was 45.12 ± 15.33 years. Those aged 21-40 years (40.0%, $n=46$) and 41-60 years (42.7%, $n=49$), made up slightly more than four-fifths of the respondents. Majority were females (88.7%, $n=102$), married (47.0%, $n=54$) and had no formal education (59.1%, $n=68$). Only about one-third (33.9%, $n=39$), were engaged in jobs, out of which the commonest job was farming (71.8%, $n=28$). The highest proportion of those who had

been ill over the preceding months were aged between 41 – 60 years and it was statistically significant ($P=0.030$). There were more females who had been sick and was also statistically significant ($P=0.023$) (Table 1).

Most of the respondents had lived in the camp for ≤ 2 years ($n=65$, 56.5%), had lost relative (s) in the conflict experienced prior to staying in the camp ($n=74$, 64.3%). Four-fifths had been sick over the preceding three months ($n=92$, 80.0%) and mostly resorted to patent medicine store ($n=64$, 69.6%) to get treatment, while hospitals ($n=12$, 13.0%) and alternative medicine ($n=16$, 17.4%). Self-care practices reported included brushing once a day ($n=81$, 70.4%), brushing twice a day ($n=27$, 23.5%), bathing daily ($n=92$, 80%), washing hands after using the toilet ($n=101$, 87.8%) and use of pieces of clothing by females to contain menstrual flow ($n=65$, 72.2%). As regards conditions of living in the camp, overcrowding was reported by ($n=70$, 60.9%), ITN were used by many respondents ($n=97$, 84.3%), pit latrine was mostly used ($n=104$, 90.4%) while 8 (7.0%) practiced open defaecation. Majority practiced open dumping of waste ($n=97$, 84.4%) and the commonest source of water was from borehole ($n=113$, 98.2%). Most of the respondents experienced mental stress ($n=97$, 84.3%) and some were hypertensive ($n=21$, 18.3%). Duration of stay in the camp ($P=0.020$) and sleeping under mosquito net ($P=0.002$) were significantly associated with falling ill in the preceding three months (Table 2).

Febrile illness (30.6%) was the commonest symptom, and dyspepsia ranked second (24.0%) while the least recalled health challenge was diarrhoea (7.7%) and bites from scorpions, snakes and dogs (7.7%) (Table 2).

Age had a statistically significant association with mental stress. Those aged 41 – 60 years had the highest proportion of mental stress while those aged ≥ 60 years and above had the least proportion of mental stress. Males, single individuals, having secondary level of education and not doing any job was observed to have a higher proportion of mental stress but were not statistically significant (Table 3).

The duration of stay in the camp was significantly associated with mental stress status ($P=0.032$). Those who had stayed between 3 and 4 years had a higher proportion of mental stress. Although not statistically significant, history of loss of relative(s), staying in overcrowded tent and having normal blood pressure was observed to show a high proportion of mental stress (Table 4).

Table 1: Sociodemographic characteristics of the respondents and their association with having been ill in the preceding three months

Variables	Total (%)	Been sick over the past 3 months. n=115		Test statistic	p-value
		Yes n(%)	No n(%)		
Age (mean age=45.12 ± 15.33 years)				Chi-square test	0.030*
≤ 20	5(4.3)	3 (60.0)	2 (40.0)	1.337	
21 – 40	46(40.0)	37 (80.4)	9 (19.6)		
41 – 60	49(42.7)	40 (81.6)	9 (18.4)		
≥ 60	15(13.0)	12 (80.0)	3 (20.0)		
Gender				Fishers exact	0.023*
Male	13(11.3)	12 (92.3)	1 (7.7)	1.388	
Female	102(88.7)	80 (78.4)	22 (21.6)		
Marital status				Chi-square test	0.694
Single	16(13.9)	14 (87.5)	2 (12.5)	0.729	
Married	54(47.0)	42 (77.8)	12 (22.2)		
Widow/widower	45(39.1)	36 (80.0)	9 (20.0)		
Ethnicity				Fisher's exact	0.680
Tiv	112(97.4)	89 (79.5)	23 (20.5)	0.770	
Idoma	1(0.9)	1 (100.0)	0 (0.0)		
Others	2(1.7)	2 (100.0)	0 (0.0)		
Religion				Fisher's exact	0.105
Christianity	112(97.4)	90 (80.4)	22 (19.6)	4.509	
Islam	1(0.9)	0 (0.0)	1 (100.0)		
Others	2(1.7)	2 (100.0)	0 (0.0)		
Level of education				Fisher's exact	0.796
Informal	68(59.1)	56 (82.4)	12 (17.6)	1.022	
Primary	16(13.9)	13 (81.3)	3 (18.8)		
Secondary	28(24.4)	21 (75.0)	7 (25.0)		
Tertiary	3(2.6)	2 (66.7)	1 (33.3)		
Doing any job while in the camp				Chi-square test	0.694
Yes	39(33.9)	32(82.1)	7(17.9)	0.155	
No	76(66.1)	60(78.9)	16(21.1)		
Type of job done		-	-	-	-
Farming	28(71.8)				
Brewing local beer	1(2.6)				
Carpentry	1(2.6)				
Plaiting	1(2.6)				
Tailor	2(5.1)				
Teaching	2(5.1)				
Trading	4(10.2)				

*Statistically significant

Table 2: Association between relevant history, living conditions and having been ill in the preceding three months

Variables	Total (%)	been sick over the past 3 months. n=115		Test statistic	P-value
		Yes n(%)	No n(%)		
Duration of stay in the camp (mean = 2.50 ± 0.96 years)				Chi-square test	0.020*
≤ 2 years	65(56.5)	55 (84.6)	10 (15.4)		
3 – 4 years	47(40.9)	35 (74.5)	12 (25.5)		
≥ 4 years	3(2.6)	2 (66.7)	1 (33.3)		
Had lost relative(s) in the preceding conflict				Chi-square test	0.381
Yes	74(64.3)	61 (82.4)	13 (17.6)		
No	41(35.7)	31 (75.6)	10 (24.4)		
Have you been sick over the past 3 months?		-	-	-	-
Yes	92(80.0)				
No	18(20.0)				
If yes to above, where did you seek healthcare?		-	-	-	-
Patent medicine store	64(69.6)				
Hospital	12(13.0)				
Alternative medicine*	16(17.4)				
Do you sleep under ITN?				Fisher's exact	0.002*
Yes	97(84.3)	83 (85.6)	14 (14.4)	12.004	
No	18(15.7)	9 (50.0)	9 (50.0)		
Source of water				Chi-square test	0.596
Borehole	113(98.2)	88(79.3)	23(20.7)	1.036	
Well water	3(2.6)	3(100.0)	0(0.0)		
Others#	1(0.8)	1(100.0)	0(0.0)		
If female, what do you use to contain menstrual flow (n=90)		-	-	-	-
Sanitary pad	23(25.6)				
Tissue paper	2(2.2)				
Piece of clothing	65(72.2)				
Frequency of brushing teeth				Chi-square test	0.102
Does not brush	4(3.5)	4 (100.0)	0 (0.0)	6.204	
Once	81(70.4)	60 (74.1)	21 (25.9)		
Twice	27(23.5)	25 (92.6)	2 (7.4)		
Thrice	3(2.6)	3 (100.0)	0 (0.0)		
If you brush, what do you use?		-	-	-	-
Toothpaste	88(76.5)				
Chewing stick	23(20.0)				
Does not brush	4(3.5)				
Frequency of bathing				Fisher's exact	0.616
Daily	92(80.0)	91(79.8)	23(20.2)	0.252	
Three times per week	23(20.0)	1(100.0)	0(0.0)		
Type of toilet used				Chi-square test	0.572
Pit latrine	104(90.4)	82(78.8)	22(21.2)	1.1118	
Open defecation	8(7.0)	7(87.5)	1(12.5)		
Other	3(2.6)	3(100.0)	0(0.0)		
Hand washing after toilet use				Fisher's exact	0.295
Yes	101(87.8)	79(78.2)	22(21.8)	1.647	
No	14(12.2)	13(92.9)	1(7.1)		
Overcrowding index				Chi-square test	0.633
Overcrowding	70(60.9)	57 (81.4)	13 (18.6)	0.228	
No overcrowding	45(39.1)	35 (77.8)	10 (22.2)		
Waste disposal method				Chi-square test	0.264
Approved site/facility	3(2.6)	2(66.7)	1(33.3)	3.974	
Open dumping	97(84.4)	80(82.5)	17(17.5)		
Burning	13(11.3)	8(61.5)	5(35.8)		
Others	2(1.7)	2(100.0)	0(0.0)		
Mental status				Fisher's exact	0.521
No mental stress	18(15.7)	16(88.9)	2(11.1)	1.054	
Stressed	97(84.3)	76(78.4)	21(21.6)		
Blood pressure status				Fisher's exact	0.238
Normal	94(81.7)	73(77.7)	21(22.3)	1.762	
hypertensive	21(18.3)	19(90.5)	2(9.5)		

*Statistically significant, #- water vendors, packaged water, - implies not applicable

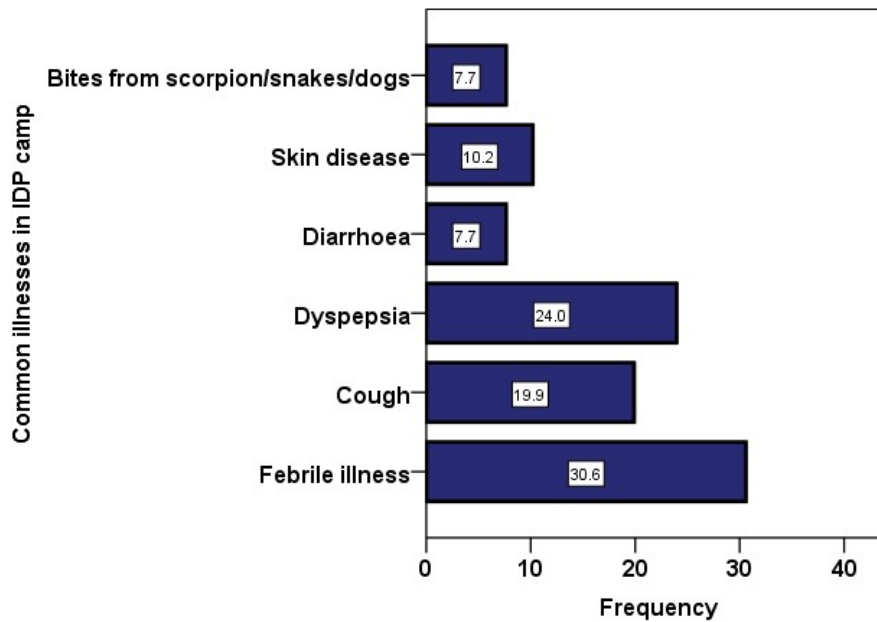


Figure 1 showing the common health conditions reported by respondents

Table 3: Sociodemographic characteristics and association with mental stress

Variables	Mental status, Total n=115		Test statistic	P-value
	Not stressed n(%)	Stressed n(%)		
Age (mean age=45.12 ± 15.33)			Fisher's exact 8.771	0.032*
≤ 20	3 (60.0)	2 (40.0)		
21 – 40	7 (15.2)	39 (84.8)		
41 – 60	5 (10.2)	44 (89.8)		
≥ 60	3 (20.0)	3 (20.0)		
Gender			Fisher's exact 0.703	0.689
Male	1(7.7)	12 (92.3)		
Female	17(16.7)	85 (83.3)	Chi-square test 1.734	0.420
Marital status				
Single	2(12.5)	14 (87.5)		
Married	11 (20.4)	43 (79.6)		
Widow/widower	5 (11.1)	40 (88.9)	Fisher's exact 0.572	0.751
Ethnicity				
Tiv	18 (16.1)	94(83.9)		
Idoma	0 (0.0)	0 (0.0)		
Others	0 (0.0)	0 (0.0)	Fisher's exact 0.572	0.751
Religion				
Christianity	18 (16.1)	94 (83.9)		
Islam	0 (0.0)	1 (100.0)		
Others	0 (0.0)	2(100.0)	Fisher's exact 0.885	0.829
Level of education				
Informal	11 (16.2)	57 (83.8)		
Primary	2 (12.5)	14 (87.5)		
Secondary	4 (14.3)	24 (85.7)		
Tertiary	1 (33.3)	2 (66.7)	Chi-square test 0.236	0.627
Doing any job while in the camp				
Yes	7 (17.9)	32 (82.1)		
No	11(14.5)	16(85.5)		

Table 4: Association between relevant history, living conditions and mental status.

Variables	Mental status		Test statistic	P-value
	Not stressed n(%)	Stressed n(%)		
Duration of stay in the camp			Chi-square test 6.888	0.032*
≤ 2 years	11 (16.9)	54 (83.1)		
3 – 4 years	5 (10.6)	42 (89.4)		
≥ 4 years	2 (66.7)	1 (33.3)		
Had lost relative(s) in the preceding conflict			Chi-square 3.685	0.065
Yes				
No	8 (10.8)	66 (89.2)		
	10 (24.4)	31 (75.6)		
Have you been sick over the past 3 months?			Fisher's exact 1.054	0.521
Yes				
No	16(17.4)	76(82.6)		
	2(8.7)	21(91.3)		
Do you sleep under ITN?			Fisher's exact 0.017	0.566
Yes	15 (15.5)	82 (84.5)		
No	3 (16.7)	15 (83.3)		
Frequency of bathing			Fisher's exact 0.187	0.843
Daily	18 (15.8)	96 (84.2)		
Three times per week	0 (0.0)	1 (100.0)		
Frequency of brushing teeth			Chi-square test 2.599	0.458
Does not brush	0 (0.0)	4(100.0)		
Once	11 (13.6)	70 (86.4)		
Twice	6 (22.2)	21 (77.8)		
Thrice	1 (33.3)	2 (66.7)		
Overcrowding index			Chi-square test 1.059	0.304
Overcrowding	9 (12.9)	61 (87.1)		
No overcrowding	9 (20.0)	36 (80.0)		
Blood pressure status			Fisher's exact 0.224	0.636
Normal	14 (14.9)	80 (85.1)		
Abnormal	4(19.0)	17(81.0)		

*Statistically significant

DISCUSSION

This study found that the mean age of the respondents was 45.12 ± 15.33 years. This is higher than 34.47 ± 11.14 years obtained at Dalori Camp, Maiduguri, North-east Nigeria (Faronbi et al., 2019). The most prevalent age groups which summed up to four-fifths of the participants were those aged 21- 40 years (40.0%) and 41-60 years (42.7%). In another IDP camp, the most prevalent age group was 21-30 years (Faronbi et al., 2019). These age groups are the active and working age of most societies but are incapacitated while living in such situation. For those within middle age who are prone to many non-communicable diseases having to live in such circumstances, this can be inimical to their health. There were more females (88.7%) in this study and is similar to findings in another cross-sectional study, (Faronbi et al., 2019) whereas in a study conducted in 9 IDP camps in Northern Nigeria using multistage sampling technique, the male to female ratio was nearly equal (Ekezie et al., 2022).

Those that were married constituted 47.0% and is very close to that obtained in another study (Faronbi et al., 2019). More than half had no formal

education (59.1%) and is higher than 37.1% of those with informal education obtained from Dalori camp in Maiduguri, Nigeria, but lower than 93.8% of little or no formal education observed in a study carried out in nine IDP camps in Nigeria (Ekezie et al, 2021). This lack of basic education can affect ease of passing health education information to many IDP camp residents and also affect their ability to reintegrate into the society or get gainful employment. Only about one-third (33.9%), were engaged in jobs, out of which the commonest job was farming (71.8%). This is reflection of the common occupation of rural inhabitants in North-central Nigeria.

More than half of the respondents had lived in the camp for ≤ 2 years (56.5%) with a mean of 2.50 ± 0.96 years. There was statistically significant association between duration of stay at the camp and ill health. This is in conformity with finding from another study (Ekezie et al, 2021). Staying longer in the camp with minimal resources, sanitation and water may contribute to this finding.

This study observed that majority (80%) of the camp inhabitants had been sick over the preceding

three months prior to the study. The highest proportion of those who had been ill over the preceding months were aged between 41 – 60 years and it was statistically significant. This may be because those in this age group are more active and are more prone to non-communicable diseases. In another study, ill health was reported among those aged 18-69 years and less than 5 years and was statistically significant. In this study those younger than 18 years were excluded from responding to the questionnaire though they all participated in the medical care services provided. Further study to include all ages in the IDP camp therefore necessary. There was a statistically significant relationship with being female and reporting ill which mirrors findings by Ekezie and colleagues (Ekezie et al, 2021).

A lot of the respondents resorted to seeking treatment at patent medicine stores (69.6%) and few obtained healthcare at hospitals (13.0%) and the use of alternative medicine was attested to by 17.4%. Non availability of medical care and inability to afford medical care have remained a recurrent challenge to residents of IDPs camps.

Self-care practices prevalence for brushing of tooth (70.4%), brushing twice a day (23.5%), bathing daily (80.0%), and regular hand washing (87.8%) reported in this study is not satisfactory. Regular hand washing of 84.6% was reported from another IDP camp (Faronbi et al., 2019). Such deficient self-care practices may be traceable to insufficient water supply, lack of funds to obtain tooth brushes and tooth paste and poor knowledge of dental hygiene. Policy makers and health educators can mitigate these by improving the supply of water, providing dental care products and giving health education on self-care practices. Ekezie and colleagues reported that initiatives such as water purification can be vital in limiting communicable diseases and reducing diarrhoea incidence by over 90% in IDP camp (Ekezie et al., 2020).

Menstrual health and hygiene of IDP camp inhabitants is not usually focused on but rather there is more interest on sexually transmitted infections and unintended pregnancies (Cantor et al., 2021). This lack of attention on menstruation management and some repressive socio-cultural belief and stigma about menstruation compounds the challenges of handling this aspect of women's health (UN, 2020). In this study, over two-third of the females used pieces of clothing to contain menstrual flow (72.2%). This is an aspect of women's health that needs an overhaul in terms advocacy and provision of hygienic menstruation management materials, provision of clean toilet

facilities with adequate privacy and adequate water supply.

Overcrowding was reported by 60.9% and insecticide treated nets (ITNs) were used by 84.3% of the respondents. In another study, overcrowding and non-use of ITN was found to be 45.8% and 66.6% (Faronbi et al., 2019). Overcrowding can encourage respiratory tract infections and dermatological conditions. Vector borne diseases such as malaria and yellow fever can be prevented by ITNs (NCDC, 2017). In the present study, sleeping under ITN was significantly associated with falling ill in the preceding three months. Insecticide treated net use observed in this study is deficient and further studies should be done to find out the reason for this in that particular camp. Some reasons for non-use of ITN in literature are due to non-provision of ITN, sleeping on mats, inconvenient space because overcrowding, lack of water to wash them and selling them in order to procure food (Brooks et al, 2017).

Boreholes accounted for 98.2% of all water sources. This was a notably commendable facility serving the water needs of the camp residents, although this study did not quantify how many litres of water per day was accessible per person. The majority of people (90.4%) utilized pit latrines, whereas 7.0% practiced open defecation. Practice of open dumping of waste was also observed (84.4%). Open dumping of waste Unsafe disposal of human excrement and unwholesome sanitation practice such as open dumping seen in this camp is known to initiate and perpetuate infections such as diarrhoeal diseases, typhoid, poliomyelitis, helminthiasis, schistosomiasis and trachoma (WHO, 2024). Symptoms and events leading to ill health recalled by the respondents within preceding three months prior to the study included, febrile illness (30.6%), dyspepsia (24.0%), cough (19.9%), skin diseases (10.2%), diarrhoea (7.7%) and bites from scorpions, snakes and dogs (7.7%). Such common ailments have been reported in another study (Faronbi et al., 2019). Hypertension was found in 18.3% of the participants and is one of the non-communicable diseases that have been reported in another study (Cantor et al., 2021).

Most of the respondents experienced mental stress (84.3%). Age had a statistically significant association with mental stress. Those aged 41 – 60 years had the highest proportion of mental stress while those aged ≥ 60 years and above had the least proportion of mental stress. The duration of stay in the camp was significantly associated with mental stress status. Males, single individuals,

having secondary level of education, having stayed between 3 and 4 years and not doing any job were observed to have a higher proportion of mental stress but were not statistically significant. Lack of education and marital status (separated) were predictive of stress while being aged 18-29 years was a protective factor compared to those ≥ 50 years in a study at IDP camps at Maiduguri, Nigeria (Salihu et al., 2022). Previous studies indicate that IDPs are more likely than the non-displaced population to have mental health conditions (IDMC, 2021).

CONCLUSION

The conditions within the IDP camp reveal significant gaps in essential living standards. Residents face inadequate facilities and materials necessary for self-care, poor sanitation practices, and persistent overcrowding, all of which contribute to a heightened burden of mental stress. The lack of basic formal education and dependence on patent medicine stores for healthcare further compounds their vulnerability. These findings underscore the need for urgent, well-coordinated, and sustainable measures to improve living conditions, enhance access to quality healthcare, and provide robust mental health support. Only through collective commitment can the health, dignity, and overall well-being of displaced populations be safeguarded.

RECOMMENDATION

Improving the welfare of IDP camp residents calls for a multidimensional and sustained approach. There is a clear need for substantial investment in upgrading camp infrastructure so that residents have access to adequate facilities and materials required for daily self-care. Strengthening sanitation systems through better waste management, reliable access to clean water, and ongoing hygiene education is also essential to reduce the risk of infections and disease outbreaks. Healthcare delivery must be improved by establishing accessible primary healthcare services staffed by trained personnel, which would lessen dependence on patent medicine stores and promote timely, appropriate treatment of illnesses. In addition, targeted mental health support, such as counselling, psychosocial services, and community awareness initiatives, remains crucial for addressing widespread stress and enhancing the resilience of camp residents. Through these coordinated efforts, policymakers, non-governmental organisations, and healthcare providers can foster a safer, healthier, and more

dignified environment for internally displaced persons.

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Conflict of interest

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