Abstract

Background Armed conflict in Nigeria resulted in more than 2 million internally displaced persons (IDPs). IDPs live in poor conditions lacking basic resources with variable provision across different locations. This audit aimed to determine the health-related resources available to IDPs in camp-like settings in Nigeria and whether these met international standards.

Methods Using a cross-sectional study approach, information was collected in 9 camps across 7 states from camp managers, and direct observation in September-October 2016. The Sphere minimum standards in humanitarian crises were used as the audit standards.

Findings Five of 15 assessed standards were met to some extent, including the availability of water and shelter. Sanitation and vaccination were unmet in 5 camps, with severe overcrowding in 5 camps, and inadequate waste disposal in all camps. Health programme implementation was uneven, and especially poor in self-settled and dispersed settlements.

Conclusion Inequality in distribution of humanitarian support was observed across different settings, which could lead to a higher likelihood of water, food and air related diseases and thereby, a poorer quality of life for IDPs. Ensuring standardised health assessments could promote a more even distribution of resources across IDP locations.

Keywords: Internally displaced persons, Nigeria, healthcare, displacement camps, public health

Introduction

As of 2016, about 40.3 million people had been internally displaced due to conflict and violence, and globally there were twice as many Internally Displaced Persons (IDPs) as refugees.[1] IDPs are those who remain within the affected country's borders whereas refugees and asylum seekers, are those who move into other countries.[2] Unlike refugees, IDPs are not directly managed by international organizations but are the responsibility of the affected nation's government.[2] Available services and evidence of health interventions for IDPs are less established compared to refugees.[3] One major consequence of displacement is limited access to amenities such as food, water, shelter and healthcare and the resulting dependence on humanitarian assistance.[4,5]

Vulnerability from displacement is also compounded by settlement locations.[6,7] Most locations where displaced people settle lack the capacity to effectively manage the migratory crisis and this is more problematic among IDPs.[8,9] Location vulnerability impacts the physical, emotional and mental health of those affected.[10–12] In addition, infrastructural damage and insecurity, which are major consequences of conflict, significantly affect healthcare[12–14] thus leading to poorer health outcomes including the spread of infectious diseases, high morbidity and mortality, as well as limited availability of basic health services.[9,14–18] Ensuring targeted provision of standard public health measures can minimize these impacts.[16,19]

Nigeria as a country has experienced armed conflict from the Boko Haram Islamic terrorists since 2011 in 3 North-Eastern states: Borno, Yobe and Adamawa states. Since 2014 there has been mass human displacement affecting about 15 million people and resulting in over 2 million IDPs.[20] The International Organization on Migration (IOM) Displacement Tracking Matrix (DTM) Round VII report in December 2015,[21] showed IDPs had settled in 13 of 37 states in the country, all within the northern region **[Figure 1].**

In Nigeria, the IDPs settled in a range of settings with host communities, families or in camp-like locations.[22] Camp-like settings are categorised as planned, transit, dispersed and self-settled camps.[21] Planned camps are officially authorized by the national authorities. Transit camps are created to serve as temporary shelters for displaced persons before they are moved to more stable locations. Dispersed settlements were residential areas under one camp management but scattered across wide distances. Self-settled locations are where IDPs settle of their own accord without official approval. Generally, most organized humanitarian support are provided for IDPs living in camp-like settlements.[23] Hence, IDPs in self-settlements are a concern as they have no official status, which influences the support they receive and consequently their health status.[24]

Although some research on the health and wellbeing of IDPs from the Boko Haram crisis have been conducted,[24–29] there is limited knowledge on how camps are organised, managed, and the availability of basic resources and access to health services. In addition, little is known about the distribution of resources across different camp types and sites. Such evidence is required to effectively deliver

coordinated and integrated life-saving assistance to IDPs. The objectives of this study, which is part of a doctoral thesis, was to assess camp conditions in IDP camp-like settings in Nigeria; and to evaluate if their management and organisation met international standards, with a specific focus on health impact The study aims to contribute to the growing evidence base on IDP management in Nigeria.

Methodology

Study Design

A cross sectional study design using an audit survey approach was conducted between September and October 2016 in 7 states in Nigeria. Nine camp-like locations where IDPs displaced by the Boko Haram crisis resided, were visited. The questionnaire and standards for the audit were developed and adapted from the Sphere Handbook.[30] The handbook is the most commonly used guideline for assessing attainment of international minimum standards during humanitarian aid responses. Fifteen of the Sphere Minimum Standards under 3 sectors, Water, Sanitation and Hygiene (WASH), Shelter and Health were considered for inclusion in this study **[Table 1].**

Audit Assessment Variables

The audit survey questionnaire comprised 4 main sections with closed questions. These sections were the camp details (location, established date, availability of shelter, water and sanitation); population demography, health resources (health staff and medical commodities) and intervention programs received (poverty, WASH, protection and health). Key indicators from the Sphere handbook were used as the benchmark.[30] However, most of the indicators had no specific outcome measure but used signals which showed when standards were attained. In line with the indicators, a 3-point grading system was developed for this study: “Met”, “Partially Met” or “Unmet”. Standards were considered “met” if it had been implemented in all 9 camps; “partially met” if implemented in 6 or more camps, and “unmet” if attained in 5 or less camps. Some indicators were related to more than one standard therefore assessments of each standard took into consideration all findings associated to that standard. In this study, distances identified to be “Very Close” were less than 200m, “Not too far” less than 500m and “Very far” were over 500m from the households.

Setting

The 9 camps across the 7 states were selected based on population size and security clearance. All camps audited were established between 2012 and 2015 and spread across rural and urban locations. **[Figure 1]** The camps selected for inclusion in this audit were sites in 7 of the 13 states where IDPs displaced by armed conflict had settled as listed in the DTM December 2015 report.[21] State selection was based on zonal spread: Borno and Taraba (North-East), Kaduna and Kano (North-Central) and Nasarawa, Plateau and FCT (North-Central).

Data Collection

Individuals responsible for the daily running and management of each camp were identified and asked to complete the audit questionnaire. In most locations these were camp leaders, who were IDPs themselves. Bakasi and Stefanos Foundation camps had external camp administration personnel (representatives of organizations) who managed general camp affairs and visited the camps daily. In these camps, information was obtained directly from the external camp administrators. Questionnaires were completed by trained field investigators who personally administered the survey to the camp managers on the camp premises. For each question, responses from the camp leaders and direct observations of all relevant information were directly recorded on the audit survey forms. Data collected were verified for accuracy in the field by the field team leaders and checked for consistency by the lead researcher.

Ethical Clearance

Ethical clearance was received from the Nigerian National Health Research Ethics Committee *(Ref: NHREC/01/01/2007-08/06/2016)* and the University of Nottingham Medical School Research Ethics Committee *(Ref: OVSb12072016)***.** Permits to access the camps was given by the Nigerian National Emergency Maintenance Agency (NEMA). Written signed consents were received from all participants.

Result

Location Characteristics

Of the 9 camps visited, there were 4 camp types established between 2012 and 2015 with diverse household sizes and available resources **[Table 2]**. Household numbers varied from 47 to 1739 IDP shelters. Camp managers in the FCT and Kano state were unsure of the number of households but provided estimates. Kyuata camp reported 4,000 shelters but these included houses of non-IDP local residents living within the IDPs dispersed settlement area. The average household size, which represented the number of people living under the same sheltered structure, ranged from 6 to 21. Pit latrines, which are acceptable excreta disposal facilities, were available in 8 camps. However, use of outdoor open spaces for defecation, which is not recommended, was still common.

Audit Findings

Table 3 outlines the available resources identified on each camp and how they scored against each standard under the WASH, shelter and health headings. Findings across all camps showed 5 of 15 standards assessed were met to some extent, including availability of water and shelter. Sanitation, vaccination, planning, and community involvement standards were unmet in over half of the sites.

Achievement of Minimum Standards

The proportion of standards met were mostly shelter-related and was followed by those WASH-related as illustrated in **Table 3**. Inadequate provision of waste disposal facilities for solid waste excreta and drainage was observed in all 9 camps and severe overcrowding in 5 camps. Most of the

IDP leaders responsible for managing camp affairs had no recollection of any needs assessments ever having been conducted. The findings showed health-related standards attainment was the lowest and this was of major concern. It was observed that only 3 of 4 camps with health services facilities had basic medical amenities like weighing scales, beds, stethoscopes and essential drugs. In addition, 2 camps which reported having healthcare on-site, referred to services provided by traditional birth attendants. Overall, health program implementation was uneven with formally recognized camps having more access to health services, in contrast to dispersed settlements who reported having no direct access to health staff.

Findings Distribution by Location

Attainment by camp locations shown in **Table 4** showed 2 camps were planned, in contrast to 5 camps which were either self-settled or dispersed camp types. Camps nearer to the crisis locations were more planned whereas those further away were mostly self-settled. Also, the camps further away from the crisis state had less access to resources. The camp in the main crisis location, Borno state, had the highest number of standards met when compared to camps in Kaduna and the FCT which were the most distant locations. Review of each camp by sectors showed attainments were mostly “Partially met” or “Unmet” in over 70% of camps, as reflective in the overall minimum standards findings **[Table 3].**

Discussion

Main Finding of this study

Our study represents the first audit to assess IDP conditions and access to resources by settlement types. The results showed significant disparities between IDP living standards in Nigeria and the Sphere minimum standards. None of the 15 standards reviewed was fully “met” (achieved in all 9 camps), 5 standards were “partially met” and the other 10 standards were “unmet”. Furthermore, there was an observed difference in resource availability by camp types and locations. This implies a gap exists in the availability of health-related services provided to IDPs across the country, and this could compromise their health and well-being.

What is already known on this topic

A study by Tunçalp et al in 2013, focused on health facilities for displaced populations and access to services, showed that levels of conflict and displacement were associated with the availability of critical services, such that areas with high concentrations of IDPs had less service availability.[13] The review by Porter and Haslam showed that IDPs living in institutional and temporary accommodations, like transit camps, experienced restricted opportunities and had worse health outcomes.[31] Conversely, the study by Kiboneka et al (2009), focusing on HIV treatment for IDPs, did not find worse outcomes for IDPs resident in camps compared to those in urban dwellings. However, the study did not investigate the variance between different camp types.[32] The geographical spread of shelters, as observed in this study, is a significant factor to be considered for the protection of IDPs. In addition, the dispersed layout in settlements like Gaida camp has a significant impact on security,

cultural activities and use of resources.[33]. Consequently, the camp type, location, size, residential spread and the management are factors that influence living conditions of IDPs and subsequently health related outcomes.

Limited access to basic resources such as clean water and adequate sanitation, especially in camps not formally recognized, are generally associated with poor health and wellbeing.[34,35] This increases health risks and susceptibility of the IDPs to various health and wellbeing challenges.[11] Poor disposal of waste observed in all the camps increases the risk of surface water, groundwater and environmental pollution.[36] Despite availability of toilets, some IDPs preferred defecating in open fields. Since all the camps sourced water directly from the ground, through boreholes and wells, such practices could lead to both water and food contamination. In addition, inadequately disposed solid waste provided breeding sites for disease vectors like flies, cockroaches and rats, further increasing the risk of infectious diseases associated with poor management of water disposal and sanitation like increase in malaria. Nigeria is a malaria endemic location,[37] and several IOM Nigeria DTM reports highlight need to place the control of control as high priority.

Overcrowding is a known issue in these situations. Studies have shown overcrowding is associated with of high risks of water, food and air related diseases; especially malaria, diarrhoea and respiratory infections.[5,16,38] The audit showed that camps had household sizes ranging from 10 to 21, and the camps mostly overcrowded were categorised as self-settled or dispersed. Considering all the camps audited had been established for at least 1 to 4 years, such living conditions could have long-term health implications such as tuberculosis**.**[35]

Previous studies identified an association between health knowledge and health protection. Camps with no health education had poorer living environments and unsafe hygiene practices during handling of food and water.[34,39,40] An IDP situation assessment in Nigeria linked poor WASH practices to the following morbidity figures: diarrhoea (39.6%), skin infections (10.4%), eye infections (0.9%), with diarrhoeal diseases incidence at 19% among children under-5 and malaria consultations at 47% for all age groups.[39] The hygiene-related standard unmet in most camps could be linked to the lack of appropriate facilities especially in the camps with no WASH resources or health education interventions. Building health knowledge, attitude and practice capacities among displaced populations is a key contributor to health protection and should not be neglected.[41] This was shown in the study by Bile et al where promotion of health education activities, as part of a primary health care intervention package in camps for displaced mothers, increased their knowledge on vital health issues like prevention and control of diarrhoea, infant feeding, reproductive health, personal hygiene and immunization.[42]

Although over 50% of the health sector standards were either “met” or “partially met”, the key factors required for delivering effective services, such as the availability of health staff and medical supplies, were lacking. Evidence have shown gaps in the presence of skilled health staff has been linked to

delays in recognition of disease outbreaks.[43] Such delayed awareness has further been associated with excess mortality in IDP populations compared to refugees or non-displaced residents.[9] Overall disparities displayed a fundamental weakness in healthcare management and monitoring of IDPs living in camps. External humanitatrian support is critical in providing sufficient skilled human resources required to effectively manage health issues in emergenies. This relates to evidence from other studies that showed the presence of external support from non-governmental organizations (NGOs) and United Nations organizations were associated with a greater likelihood of health service provision.[13,44] Humanitarian support, especially when done in collaborations between organizations,[45] could increase overall aid effectiveness and reach more IDP locations.

Most of the recent IDP initiatives tend to be focused on the North-East region, the main conflict region.[46] IDPs in other regions like the FCT were at a disadvantage because they were practically overlooked.[24] The Borno state camp, which is formal, received the most supportive interventions (e.g. resource provision and medical aid) and NGO involvements. Rapid assessments from January 2016 were mainly focused on Borno state. This could be because it was the main conflict point and more people were affected.[47] Other factors that have caused high levels of unmet needs in similar settings included low levels of assistance and insecurity.[17,43] Consequently, effective deployment of conventional prevention interventions is a major challenge in conflict and post-conflict situations. Furthermore, providing humanitarian assistance was indicated to be easier if the IDPs were not scattered across a region.[5,48]

What this study adds

Evidence on humanitarian interventions for this population has been weak.[3] This study contributes by highlighting the disparity and inequality in access to basic resources required by IDPs in Nigeria, with emphasis to settlement types. A major strength of the study is the contribution to evidence on health-related interventions among IDP populations, which could be used in planning, management and development of interventions in any humanitarian response situations.

Limitations of this study

This audit was based on a cross-sectional study of self-reports, within the context of ongoing population movement and an evolving post-conflict situation, and represents only one point in time. Due to active violence in some states several IDP settlements were inaccessible. However, the 9 camps visited represented approximately 8000 IDPs. The results need to be interpreted within the study context and audit period, and care would be required when generalizing the findings to other settings. The audit questions, although simplified, were not always answered fully as some IDP leaders found a few questions difficult, and gave responses based on personal experiences which may not represent the experiences of the IDP camp residents It is acknowledged that the audit questionnaire requires further adaptation to make it more culturally acceptable. Direct observation of resources was not possible in some locations due to insecurity and time constraints, so it was not possible to corroborate all answers given with what was provided in the camps.

Conclusion

Our findings show the poor living conditions and uneven distribution of resources for IDPs in Nigeria. The settlement location also had an influence on access to services. Overall, the limited access to health-related resources increased the risks of water, food and air related diseases especially malaria, diarrhoea and respiratory infections. This information can be used at an operational level by practitioners and policy makers to design the environmental, infrastructure, and monitoring interventions to effectively manage IDP situations and ensure camps are meeting international humanitarian and health standards. Further research is required to show the association between resource availability and specific health outcomes.

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