



Exploring the influence of health management processes on health outcomes among internally displaced persons (IDPs)

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ARTICLE INFO

Keywords:

Conflict
Internally displaced persons
Health management
Displacement camps
Qualitative
Nigeria

ABSTRACT

Background: Despite global action and policy initiatives, internally displaced persons (IDPs) experience poor living conditions and lack healthcare access compared to refugees. This study sought to understand the relationship between health management processes and health outcomes among camp-dwelling IDPs in northern Nigeria.

Method: 73 individuals participated in either a focus group ($n = 49$) or one-to-one interview ($n = 24$), comprising IDPs ($n = 49$), camp managers ($n = 9$), health workers ($n = 7$) and government administrative authorities ($n = 8$). Interviews explored IDP health management processes, partners and perceptions around camp management. Data were analysed using an inductive thematic approach.

Results: Four main themes were identified: opinions about healthcare organisation and management, service availability, interventions and information management, and IDP health outcomes. Though many stakeholders, partnerships, and national and international government agencies were involved in the provision of healthcare services, respondents described efforts as disjointed. Reports suggested that the coordination and management of health services and resources were not tailored to the needs of those living in all camps. And because so many national and international agencies were involved, but under weak coordination, access to services was less than optimal and adequate management of critical public health interventions was lacking. Varied allocation of resources such as funding, medication and medically trained staff were viewed as key factors in the availability and the ability to access what was considered as essential healthcare services.

Conclusion: The health of IDPs in camp-like settings was compromised by uncoordinated management, treatment, and control of communicable and non-communicable diseases. Government authorities need to be aware and consider the complexity of the multiagency involvement in the management and provision of IDP healthcare services. Introducing systems to streamline, monitor and support IDP healthcare management could be cost-effective strategies for achieving optimal health care.

Background

At the peak of the Boko Haram armed conflict crisis in 2015-2016, over 2.2 million people were displaced, most of whom migrated to 13 of 36 states in Nigeria, within the northern region ([International Organization for Migration \(IOM\), 2022](#)). Multiple conflicts in the area, mostly from the Boko Haram insurgency, over a decade resulted in an

unprecedented humanitarian crisis, lack of access to essential resources and high demand for health care, which has lasted over a decade ([International Organization for Migration \(IOM\), 2022](#), [Ekezie et al., 2019](#)). The conflict also threatened the lives of healthcare workers leading to further reductions in human health resources, poor distribution of care, and weak disease surveillance ([Babakura et al., 2021](#)). These healthcare shortages affect the general population in the region, who all experience

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<https://doi.org/10.1016/j.jmh.2022.100124>

Received 26 February 2022; Received in revised form 1 June 2022; Accepted 19 June 2022

Available online 22 June 2022

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the impact of the disrupted, inadequate, inaccessible and uncoordinated services. Particular areas affected include vaccination, infectious disease notification and management, maternal services and universal basic care (Babakura et al., 2021, Nasir et al., 2016, Sato, 2021, Denuue et al., 2016, Anyebe et al., 2019, Solanke, 2018, Ager et al., 2015). As a result, the most vulnerable populations are faced with limited healthcare services that are often unaffordable. Considering the vulnerability of internally displaced persons (IDPs), insights into the IDP health management process, especially from IDPs leading self-settled camps, is vital for effective planning and coordination of assistance.

As of the end of 2021, there were approximately 53.2 million total IDPs by conflict and violence globally, including 3.2 million in Nigeria (6% of the global total) (Internal Displacement Monitoring Center IDMC, 2022). IDPs experience numerous challenges to health and vulnerabilities and are often exposed to new health challenges (Cantor et al., 2021). Compared to refugees who receive appropriate attention from international organisations, IDPs do not because they are considered the responsibility of the affected country's authorities. A recent review outlined the health needs and challenges IDPs face, including the burden of diseases, mortality, access to care, structural concerns and research gaps (Cantor et al., 2021). Several issues identified have significant long-term public health impacts, especially in healthcare systems and protracted displacement. (Quintero and Culler, 2009) Organising health services for IDPs is particularly challenging due to numerous interacting factors, including finance, human resources and government willingness. IDPs, therefore, tend to experience more negative health outcomes relative to refugees (Salama et al., 2001). Accessible IDP health services are often limited to camp settlements approved by government authorities and areas managed by specific international or non-governmental organisations (NGOs); however, this sometimes differs in urban settings and varies across different regions (IOM, NRC, UNHCR, 2015, Cotroneo, 2017). Considering that most IDPs live in unofficial camp-like settings, this puts them at a further disadvantage. Understanding the health management processes from different stakeholder perspectives is essential to better understand healthcare provision across different camp-like locations. This is particularly important since most IDP affected areas are in low and middle-income countries (LMICs), which have poor health systems and policies (Global Protection Cluster, 2019).

Given the global scale of conflict and violence displacement, including poor living conditions and healthcare services for those displaced, this paper aims to provide insight into the essential primary care health management processes in IDP camp-like settlements to strengthen understanding of the factors that contribute to health outcomes observed in internal displacement populations. The research focuses on IDPs resulting from the Boko Haram conflict who resided in camp-like settings in northern Nigeria in 2016. The healthcare service experience of the IDPs was explored to highlight the range of factors that influence the management of healthcare services in IDP camps.

Methods

Study design

This study is based on qualitative data collected as part of a broader mixed-methods study. (Ekezie, 2019) The broader study assessed the essential health services available to IDPs in conflicted affected low-middle income countries and northern Nigeria. This larger study included a systematic review (Ekezie et al., 2020), a camp audit assessment (Ekezie et al., 2019), a quantitative survey with IDPs (Ekezie et al., 2021), and a qualitative component. The qualitative study comprised of semi-structured interviews and focus group discussions with IDPs, camp managers (CMs), health service providers (HSPs) and administrative policymakers (APMs).

Study setting and participants

The term 'camp and camp-like' included all IDP camp-like settlements, including formally authorised, informally self-settled areas and transit centres. According to the December 2015 DTM assessment (IOM, 2015), IDPs from the Boko Haram crisis had settled in 13 states within the northern region. Seven states representing the highest number of IDPs living in camp-like settings in all three northern regions were selected for this research: Borno and Taraba (north-east), Kaduna and Kano (north-west); and FCT, Nasarawa, and Plateau states (north-central).

Study participants

Sampling of IDPs, CM and HSP were carried out at camp-level, while APM sampling was at state-level. Criteria for IDP selection was involvement in IDP camp management, administration, and leadership. CMs were individuals responsible for the daily running and management of camps, including IDP and non-IDP camp managers. HSPs were those who provided primary healthcare services to IDPs and were based within close proximity to the camps. Selected APMs were representatives of the organisation responsible for managing IDPs at the national and state levels (National Emergency Management Agency (NEMA) and the state subsidiary State Emergency Management Agency (SEMA)).

Study participants were identified using a purposive sampling approach based on individual roles and responsibilities in IDP health support, resource provision and camp management. During the survey conducted for the large study, IDPs who indicated being involved in camp administration and management were requested to participate in the FGDs. Where the numbers identified during the survey were insufficient or IDPs declined participation, the CMs nominated other relevant IDPs, with particular emphasis on nominating some female leaders. The CMs also verified the eligibility of the IDPs identified and selected during the survey. On the other hand, CMs were easily identified as those with the primary responsibility of managing the affairs of a specific camp, and they were either representative of supporting organisations or IDP individuals appointed by the IDP communities. HSPs included in this research were those available on site at the camp or the closest health care facilities to the camps, while the APMs were government contact persons involved in IDP field management.

Eligible participants were notified face-to-face in the camps to seek their interest and availability at least one day in advance, and consent was obtained from each participant before data collection. Ethical approval for the study was received from the Nigerian National Health Research and the University of Nottingham Medical School

Data collection and analysis

The uniqueness of each participant group led to the development of different data collection instruments. Four different interview guides were developed, one per study group, using several tools (IOM, NRC, UNHCR, 2015, Oxfam, 2001, MSF, 1997, WHO, 2011, UNHCR, 2010). Each guide was designed using frameworks relevant to the research focus of each group to ensure relevant information on healthcare service provision in camp settings were collected. The guides covered topics such as health management, resource distribution, disease prevalence, morbidity, mortality and stakeholder involvement. They were also field-tested, and question wordings were modified to ensure clarity for respondents.

Focus group discussions were conducted with IDPs, and one-to-one interviews were completed with CM, HSP and APM stakeholder groups. Data collection was conducted from September to October 2016 in camp premises in either English, Pidgin English, or Hausa by trained bilingual local researchers. Interviews lasted about 31 min on average and ranged between 16 and 70 min. Audio recordings were transcribed verbatim directly to English by local researchers. Afterwards, the first

author (W.E.) verified each transcript for quality, consistency, and accuracy against the audio recordings.

An inductive thematic approach was used to analyse the data using Nvivo 12.0 software. The analysis followed the six-stage process proposed by Braun and Clarke: familiarisation with the data, generating initial codes, searching for themes, reviewing initial themes, defining and naming themes, and producing the report (Braun and Clarke, 2006). The generation of themes followed the step-by-step coding process recommended by Boyatzis for developing data-driven themes (Boyatzis, 1998). Double coding of selected transcripts was conducted by (W.E. and P.S.) to enhance the transparency, validity, consistency, and applicability of identified themes and subthemes. After reaching a consensus on initial codes, this was applied and refined following analysis of the remaining transcripts and until the point of data saturation.

Results

A total of 73 individuals participated in the study: 8 focus groups with 49 IDPs and 24 one-to-one interviews with nine CMs, seven HSPs, and eight APMs (Table 1). The shortest interviews (minimum of 16 min) were with participants who had the least amount of information related to the health management of IDPs. Formal camps were run by either the government or an NGO, while the IDPs managed all self-settled camps. No FGD was conducted in Kaduna state due to new conflict arising in the area during the data collection period leading to early departure of the research team. In lieu, data was collected from two government representatives (one representing the national (NEMA) and state (SEMA) levels, respectively). Also, no HSP was identified in three camps Gaida, Kyauta and Mullum camps.

Qualitative themes

Thematic analysis of the interviews revealed four main themes and eight corresponding subthemes (Table 2). Participants' opinions, perceptions and experiences within IDP health management and the resulting impact on IDP health outcomes were explored. After open coding of the responses from each participant, common themes were slightly different across the groups and camps.

Like here, the government has not recognised it as a standard camp, so we need government intervention to provide security, water supply etc. ... (for now) we just work here according to our knowledge... – FG8,

Table 1
Overview of study participations.

| State | Camps | Camp status (administrative authorities) | Respondent groups (no. of participants) | Total no. of participants |
|----------|----------------------|--|---|---------------------------|
| Borno | Bakassi | Formal (government-run) | FG (11), CM (1), HSP (2), APM (1) | 15 |
| FCT | Kuchingoro Durumi | Self-settled | FG (11), CM (2), HSP (2), APM (1) | 16 |
| Kaduna | Kyauta | Self-settled | CM (1), APM (2) | 3 |
| Kano | Gaida | Self-settled | FG (5), CM (1), APM (1) | 7 |
| Nasarawa | Gurku | Formal (NGO-run) | FG (7), CM (1), HSP (1), APM (1) | 10 |
| Plateau | Stefanos | Formal (NGO-run) | FG (5), CM (1), HSP (1), APM (1) | 8 |
| Taraba | Mullum Gullum | Self-settled | FG (10), CM (2), HSP (1), APM (1) | 14 |

Table 2
Summary of identified themes and subthemes.

| Themes | Subthemes |
|---|--|
| Opinions about organisation and management of healthcare services | Responsibilities Camp health services IDP involvement |
| Healthcare service availability | Healthcare staff Referral service Disease surveillance |
| Healthcare interventions and information management | Intervention prioritisation Information management |
| Predominant IDP health outcomes | |

Gullum camp

Opinions about organisation and management of healthcare services

The participants' accounts provided an overview of how healthcare services were managed and organised in the camps. Coordination of healthcare delivery and resources was viewed as being disjointed. In the opinion of all participant groups, the various agencies responsible for providing certain services and resources were not fully aware of what each other was doing. The Ministry of Health (MoH) was revealed to be responsible for coordinating the health sector support at the national level, including the coordination of international humanitarian agencies, while local government health teams executed field activities. MoH was stated to be responsible for health resource supply, and other organisations acted as support when required. However, when it came to accessing care and transferring care from camp health facilities to local facilities (referral), it was not always possible. Getting timely medical treatment proved difficult because there seemed to be no arrangement to transfer services between agencies.

Responsibilities

The participants gave their opinions about the responsibilities around providing and delivering services. Partnerships were formed at different country administrative levels: national, zonal, state and local levels. The partners involved included government agencies, national and international institutions, faith-based organisations, and private individuals; still, inadequate healthcare management and collaborations were reported. Although IDP health management was generally the responsibility of the health sector committee, which had been set up to manage health issues from the conflict crisis in the country and headed by the MoH, as stated by the APMs, the IDPs and some CMs perceived that these responsibilities were not taken seriously. This observation was expressed in reports that most camps experienced minimal support in relation to what was needed by the IDPs, especially from the national authorities. Overall, the partnership structures and responsibilities were often unclear to the CMs, who admitted that they struggled when advocating for the needs of the IDPs.

...the Nigerian Air Force and Nigerian Navy come here sometimes with their medical team to treat our people...we beg government that "let them help us to attach us with one government hospital so that if we have a patient, we will take it to there". But they didn't agree.... – CM3, Durumi camp

Besides the IDPs, NEMA/SEMA staff reported benefiting from the IDP healthcare management partnerships through access to staff empowerment, training, and skill development provided by international partners. But most APM participants felt that whilst most partners could provide help, most agencies and civil organisations seemed to specialise in one particular aspect of humanitarian aid, health and public health resources and services. For example, vaccines were provided by from the World Health Organisation (WHO) and United Nations Children's Fund (UNICEF); rapid health first aid responses by the Red Cross; provision of skilled health staff and medical specialists such as consultant doctors by MoH; and security by the Nigerian military, police and Civil Defence.

The different participant groups then explained that whilst a wide range of national and international organisations was involved in managing IDP health services, there were times when this resulted in the duplication in activities, actions and resources and gaps in other areas.

...capacity partners involved specialise in their different and individual fields.... each sector there is a lead in whatever humanitarian assistance they can do. Like UNHCR is the lead in shelter, let's say WASH (Water, Sanitation, & Hygiene) programme that is house and environment sanitation. So IOM is also on shelter but UNHCR has been in charge. So we notify them that we have new arrivals, so they now start making plans to provide shelter, sometimes we provide shelters too. – **APM1, Bakassi camp**

Camp health services

Participants reported that healthcare facilities nearest to camps were health posts or primary healthcare centres (PHC), and the facilities offered basic primary care such as first aid, oral rehydration therapy, dressing wounds, drug prescriptions, and treating minor ailments such as mild fever. The facilities were often described as non-operational, lacking essential medical resources and staff, or permanently closed. Complex situations such as birthing a child and cases needing operational procedures were reported to be referred to hospitals (secondary level care) by PHC staff. Hospitals were described as much farther away from the camps, requiring access to appropriate means of transportation or extremely long walks. Many participants, especially the IDPs and CMs, expressed that the distance and finance needed for transportation often discouraged IDPs from seeking healthcare, leading to complications including death.

If you have your money you can go the healthcare... for our women to give birth is a problem for us...even last week we lost one of our women here... she wanted to give birth here because there is nothing we can do... and if we don't have money we can't go to the hospital... because if you don't have money, they will not take care of us. She died. – **CM3, Durumi camp**

Regarding the financial implications, a few participants, especially the APMs, indicated that managing camp authorities, the government, or NGOs sometimes covered the IDP health costs at secondary healthcare centres. However, the CMs highlighted that there were limitations on what these organisations were willing to pay for or cover. For instance, mental health services were considered capital intensive, so these organisations often did not cover them. In informal self-settled camps, IDPs with no external organisation management support revealed that they mostly paid personally out-of-pocket (OOP) for incurred health service charges. Many IDPs were also reported to resort to traditional medicines, even after consulting with medical staff, if they could not afford or access formal health services. The main driver for this decision was identified to be the medical expenses required for referral.

We go to the health centre... But no money. So instead of going for at least full treatment, they rather go to a chemist to get drugs of 50 naira because they don't have money. – **FG8, Gullum camp**

Medications were stated to be either donated by organisations or directly purchased over the counter at local pharmacies. Participants reported that generally, donated drugs were deposited at the health facilities accessed by IDPs. However, in self-settled camps with no access to health facilities, drugs were given to IDP leaders to manage, and this often included pain relief medications and antibiotics. The IDP leaders explained they used their discretion to determine what drugs to give to those who make requests, but they often run out of supplies.

...sometimes, the NGO used to process some drugs, and some organisations they used to help us with some drugs, but as for now, we don't have any drugs now. The clinic is even closed, it's empty. The drugs that have been brought by the NGO have already finished. – **FG5, Gurku camp**

Vaccinations provided to IDPs in camps were reported to be administered by PHC staff who visited the camps. However, the IDPs revealed that vaccines provided were mainly given to women and

children; and overall observation showed that the services were not offered in all camps. For instance, IDPs in Kyauta camp, Kaduna state, reported no vaccinations had been provided on the camp. The lack of mass vaccination was assumed to be associated with the fact the camp was not considered a formal site. Due to a lack of accessible health services, IDPs were reported to often rely on herbal remedies to prevent and treat diseases. The IDPs and CMs were also of the opinion that vaccination awareness and communication in the camps was poor. They expressed that IDPs were not knowledgeable about vaccine schedules, and those vaccinated were often unaware of vaccines received, including mothers being unaware of vaccines given to their children.

She will not know which one (vaccine) was given to the child... but they used to give TT (tetanus toxoid vaccine) and then...pentavalent – **FG5, Gurku camp**

IDP involvement

HSPs explained how IDPs were involved and contributed to healthcare management; this varied by camp and depended on the type of camp and how it was run. In many camps, IDPs reported they had formed internal health committees or leadership teams for themselves. It was explained that these groups acted as advocates and took an active role in determining how healthcare was delivered. Some activities they carried out included conducting gender-focused consultations with the wider IDPs population in the camps to ensure that gender-sensitive issues were discussed and taken into account. For external roles, the IDP committee leaders were said to have contributed to developing and planning health interventions, such as mass vaccination campaigns. Several participants, including the HSPs and APMs, felt IDP involvement in health management helped facilitate, mobilise, and improve uptake of health intervention activities.

(IDPs) are involved, because now if we want to do something, we will call the community leaders, the chairmen of various local governments. They come here, then we will discuss about decision making, they will go and tell it to the people. – **HSP2, Bakassi camp**

Healthcare service availability

Participants in all locations believed resources required to manage IDP health, for example, skilled health staff and affordable treatment, were limited. This observation was presumed from several factors, including experience with healthcare resource and staff shortage, cost-intensive referral process, and weak disease surveillance. Although most participants were not very knowledgeable about the details of services provided, it was highlighted that the identified factors influenced the health outcomes of IDPs.

Healthcare staff

Participants reported that camps managed by a specific organisation had more HSPs available either at the health facilities or through frequent health staff visits to the camps, still IDPs reported that on most days, there were no HSPs. It was revealed that, on average, some facilities had staff present 1 to 3 times a week. The alleged reason for poor staff availability was stated to be the lack of funding needed for running the services and staff salaries. As a result, it was reported that HSPs generally avoided roles in facilities around IDP settlements, and those who worked in those locations sometimes visited only in times of emergencies.

Sometimes we come 3 times in a week, sometimes once in a week. You know that government they are not bringing money. So I have to try and come sometimes once, sometimes 3 times, sometimes 2 times. But if they have emergency, sometimes they will call, I will come. And when we finish, I will go back. – **HSP5, Gurku camp**

Many participants elaborated that due to a shortage of experienced HSPs, such as medical doctors, nurses and midwives, most PHCs accessible to IDPs were managed by community health workers (CHWs) who lacked in-depth medical skills and training. CHWs were described

as local community members trained for about two years to provide basic healthcare such as first aid, immunisation, active case finding, and referrals. For serious cases, these CHWs were stated to often rely on visiting health practitioners, especially staff from non-governmental institutions such as UNICEF. Participants also shared that some IDPs living in the camps who had previously been exposed to healthcare settings before being displaced often acted as healthcare contacts before the IDPs went to healthcare centres or were seen by an HSP.

...he's a retired staff with the General Hospital in their own local government there in Gwoza. So, he was an attendant, a ward attendant. So he has little experience of giving them first aid. So in case he has difficulties he calls me, even if it's not the days I come here, because I come Tuesdays and Thursdays. – **HSP6, Stefanos camp**

Referral services

HSPs reported that the health conditions referred to secondary level healthcare (hospitals) were often cases requiring specialised attention beyond the capacity of the primary care staff. These included blood transfusion, surgery, mental health problems, complicated pregnancies, recurring and long-term illnesses such as diabetes. Some participants stated that childbirths were handled at the PHCs; however, the IDPs specified that traditional birth attendants (TBAs) were often the first to be called when women were in labour. The TBAs were described as untrained female local health service providers. Some participants felt that one major consequence of using TBAs was that deliveries sent to PHCs and hospital referrals were often then complications TBAs could not manage, and this posed a significant health risk. Due to the shortage of staff and equipment at the PHCs, HSPs explained they often advised participants to go directly to secondary level facilities for care. But some IDPs lamented that a few referral hospitals also lacked skilled health staff.

...minor ones we use to attend it here (PHC). If it is so complex we take to that hospital, even in that hospital, they don't have medical personnel, the consultants sometimes will refer us if it is serious to FMC (Federal Medical Centre) – **FG5, Gurku camp**

Participants stated that services provided at the hospitals usually required payments for services, e.g. laboratory tests. This financial implication was stressed to be an extra burden for the IDPs, especially those in informal camps, who lacked both financial resources and organisational support. To avoid incurring additional expenses, some participants revealed IDPs often delayed following up their conditions at referral hospitals, and these delays contributed to further complications, including death. A few participants in formal camps reported that partnership structures were established between primary and secondary IDP facilities in those camps. They explained that partnership facilitated better referral pathways, including access to a broader range of health services and adequate transportation options like ambulances or cars. On the contrary, participants in the informal self-settled camps stated transportation options to referral centres depended on the purpose and patient. For instance, children were often carried on the back of an adult who then walked to the hospitals, while adults could either walk or use hired motorcycle riders.

(Transportation) depends. If it is a small child, it is on the back we carry it. If it is an adult, we find okada ("means motorcycle") that will go, we go find all these okada people... we put the person for okada, sit down with them and carry them to the PHC... if the PHC is not too far. – **HSP5, Gurku camp**

Disease surveillance

Many participants felt the management approach for disease outbreaks was vague. They elaborated that it ranged from specific guidance available in a few camps to no monitoring actions in most camps. They also emphasised that infectious disease management plans for tracking outbreaks were absent in most locations. HSPs in some camps reported using daily case counting, e.g. diarrhoea patients, to determine the likelihood of an outbreak. In settlements with accessible PHCs, IDP

accounts were also considered a monitoring tool. For instance, one HSP recounted how IDP leaders proactively reported suspected cases to the nearest health facility.

Last year, the Camp Chairman was very cautious and very vigilant. So, he called me on suspicion of measles so, when I came, I saw him, I saw the child, I said no it's not measles. But we have a surveillance officer that does come from the local government. – **HSP3, Durumi camp**

Although the HSPs stated one of their roles was to monitor reported disease incidences, their inconsistent working patterns, often a few times a week, was expressed by a few participants to have contributed to delayed observation of outbreaks. For example, delayed measles identification among children led to an outbreak in Stefanos camp. The HSPs stated when suspected disease outbreaks were identified; they alerted surveillance officers from the local authorities who sometimes visited the camps for monitoring. They further explained that the discovery of outbreaks often triggered mass vaccination campaigns in the affected camps. Participants also emphasised that external supporting organisations, such as WHO and UNICEF, were immediately notified by the local surveillance team or HSPs working in direct partnership with those organisations. Although, one CM stated that the international organisations handling active case finding, case management or outbreak management did not visit all camps.

No (outbreak) plan. All this is supposed to be done by World Health Organisation, who are not coming here... they are responsible for this. – **CM9, Gullum camp**

Healthcare interventions and information management

APM participants reported that the national authorities, NEMA and SEMA, were actively involved in soliciting resources for IDPs, and they played a connecting role between supporting organisations and IDPs. Some listed interventions provided on camps included vaccination, health education and supply of food and non-food items such as mattresses, mosquito nets, and kitchen utensils. The prioritisation of the interventions was described as unevenly distributed, and the management of health service and outcome information was weak due to poor awareness of their importance.

Intervention prioritisation

Some participants indicated that the administration and uptake of health services were often influenced by age, gender, type of illness, urgency and cost. Participants in camps with support from international partners, such as WHO and UNICEF, reported that frequent vaccination activities were conducted in those locations. However, participants from all camps expressed that vaccinations were not provided in all camps and vaccines were often administered only to women and children.

Only a few HSPs revealed that they knew the essential vaccine requirements, including the national Expanded Program on Immunisation (EPI) list or what had previously been administered in the camps. However, most of the HSPs who lacked vaccine awareness were those situated in facilities not offering vaccinations. The HSPs also highlighted that untrained IDP HSPs (e.g. TBAs) supported visiting vaccination teams, but they were not involved in administering the vaccines. Participants in all camps felt vaccination administration timelines were inconsistent. One reason for the inconsistency, as described by an HSP, was that since vaccine protection lasted a long time, vaccination emphasis was not crucial, so vaccine administration reduced as the influx of IDPs into camps declined.

Yes, we conducted the test last year and gave those that are free from it the vaccines. But this year, we did not do it. We are yet to do it. Anyway, since we don't have newcomers coming in because the vaccine lasts for about ten years, there may not be need for that. – **HSP6, Stefanos camp**

Many participants reported that health promotion and education were often conducted directly in the camps. Topics they listed to be covered included raising awareness and the management of diarrhoea,

malaria, HIV, immunisation, hygiene, reproductive health, and breast-feeding. Some HSPs expressed that they occasionally experienced challenges getting IDPs to accept specific health promotion interventions. For example, one HSP had difficulties getting IDPs to collect free condoms during reproductive health promotion sessions. This refusal was attributed to the cultural values of the IDPs that did not actively encourage birth control.

They are rural people. We have condoms here, but they are not interested. So we issue it to people that need them outside IDP camps. So they get women pregnant and give birth without problem. We have some women with ten, eleven children... Their mindset right from home is the problem. – **HSP6, Stefanos camp**

Information management

Most HSPs reported not keeping records of clinical attendance, services provided, or health outcomes. “Not having time” was commonly cited as a reason for poor record-keeping since the HSPs were reportedly more focused on administering treatments. HSPs in some facilities recounted that they previously documented information on patient medical history, but this was stopped due to the stress of juggling between high patient influx and record-keeping processes, which they felt was time-consuming. However, despite the reported high volume of IDP patients, a few HSPs also reported there were days when no patients visited the facilities.

Ah, yes. We had them (medical records) before. These are the exercise books. But along the line, we stopped using the exercise books because if they come many, for you to check for the name and do the treatment is very hectic. So we just neglected them, but we have some of them there. – **HSP6, Stefanos camp**

Gaps in HSP knowledge, skills and training were also revealed to have contributed to poor record-keeping and monitoring. For instance, one HSP felt it was unnecessary to keep records since no one monitored facility activities; hence, they did not see the importance of documenting mortality and referral information.

Mortality records? No! We don't have. How can we write that one now? Unless we can begin to do that, but now, we don't... We do not keep consumption records... Why do we want to keep referral information? We do not need to keep those things nobody asks us, so we don't have to keep it. – **HSP5, Gurku camp**

The HSPs reported that disease outbreak case reports were not kept at the PHCs but were retained by local surveillance authorities. They further explained that the associated outbreak information, including vaccination records, was also taken by whichever organisation or group had administered the vaccine or provided the service. The participants also added that referral records were not retained at the primary facilities except in formal camps with referral logfiles at the PHCs. But for referral visits, some HSPs reported they sometimes accompanied referred IDPs to hospitals, and proper case documentation was prepared there.

Referral record.... We don't have.... Usually, if we have any case, we do take them by ourselves there without any referral letter, except if they go out to outside Clinics, that's when they get referral letters. But if it is here, I will take them myself to the hospital. – **HSP6, Stefanos camp**

Predominant IDP health outcomes

Participants stated the IDPs experienced some common health challenges, and this included cough, diarrhoea, fever, headaches, malaria, measles, pneumonia, tuberculosis, typhoid, and skin problems. Mortality rates were considered low by most participants compared to disease incidence. Most diseases identified were attributed to the poor living and environmental conditions within camps, such as the lack of sanitation facilities and the presence of stagnant water close to household shelters which encouraged the breeding of disease-causing vectors, e.g. mosquitoes. Overall, the majority of participants felt the lack of resources needed to manage IDP health outcomes contributed to high

morbidity rates.

...There is malaria everywhere, also pneumonia. Cold enter children's body a lot. Now cough everywhere because of dust...purging (diarrhoea) is common because they don't have 'better water' or 'better food' and children come plenty (for diarrhoea). – **HSP3, Durumi camp**

IDPs were also of the opinion that insufficient food supply affected their overall health status and contributed to the observed deaths, and conditions such as trauma, stress and poor nutrition were associated with high blood pressure and stomach ulcers. These issues were described to be further complicated by limited and delayed access to healthcare and the lack of HSPs to diagnose certain diseases. Further, the absence of proper diagnosis implied the true causes of deaths were often unverified.

People die because there is no one to take care of them very well, and we tried our best, and it's not working, and those people die... sometimes they don't bring (the cases) on time... mostly children... when it gets too much they bring them and then they cannot make it. – **HSP4, Kuchingoro camp**

The health and wellbeing of all IDPs in the camps were affected, but the groups all participants considered most vulnerable were women and children. The reasons for this included the assumption that women and children were more prone to falling ill, their inability to source for food, and the tendency of children to interact with and become exposed to more people.

Females (are most vulnerable) because it is hard for them to go somewhere to go find something to eat... children too, because when their parents die, they can't help themselves – **FG2, Kuchingoro camp**

Discussion

This qualitative study explored the perceptions about health management within camps among IDPs and stakeholders in northern Nigeria. The short discussion duration reflected a low IDP health management awareness level among some participants. Most resources were not provided by the government but by international and local NGOs, and this humanitarian support was unevenly distributed across the camps and IDPs, with informal camps at a disadvantage. The majority of camps lacked sufficient medical resources and access to skilled health staff; for example, no doctors were stationed in all the camps visited. With PHCs in poor conditions and often managed by low-skilled health workers, IDPs had to visit secondary care facilities (hospitals), often based on referrals, and they experienced several challenges, including the need for transportation and payment for services. Formal camps had better referral systems through government aid, which was not available at informal camps. Personal cost implications caused IDPs to seek alternative medical options or delay further follow-up, and this sometimes resulted in complications and death. Although the predominant health conditions were infectious diseases, surveillance systems and outbreak management were weak or non-existent in some areas; regular information management was also poor. Overall, a lack of adequate healthcare management and resources contributed to delayed access to healthcare and weak health monitoring, which might be associated with likely underestimation of morbidity and mortality rates.

Similar findings on better availability of services in the formal camps in this study were demonstrated in another qualitative study where IDPs expressed a desire to relocate to government recognised IDP camps that had more access to healthcare (Chi et al., 2015). Within our research, personal cost and distance to health facilities influenced healthcare-seeking behaviour and access. This corroborates with previous studies that reported barriers to accessing healthcare services and intervention uptake, including lack of health worker support, transportation, inflated costs, insecurity, funding, and cultural factors (Ekezie et al., 2020, Mendelsohn et al., 2012, Onyango et al., 2013, Mills et al., 2006, Ojeleke et al., 2022). Our findings on the poor supply of health resources in IDP camps are consistent with other research in the country, which reported scarcity of essential drugs and unavailability

emergency services, laboratory investigative and diagnostic services were also unavailable (Usar and Akosu, 2020, Joshua et al., 2021, Ojonugwa, 2021). These observations across the country further elaborate upon the audit conducted in the study camps, which revealed the IDP camps lacked the minimum health care package guarantee to all PHCs in the country; and also, they did not meet the international Sphere minimum standards recommended for humanitarian aid responses (Ekezie et al., 2019, The Sphere Project, 2018).

As reported in our study, poor record-keeping at the PHCs has several implications, including limiting the opportunity for healthcare follow-up and continuity of care. The lack of experienced HSPs and absence of health management protocols showed to have contributed to poor IDP health outcomes, e.g. mortality due to delayed access to care. Similar weakness in the healthcare monitoring process and their impact on IDPs have also been reported in previous studies (Onyango et al., 2013, Bruckner and Checchi, 2011, Spiegel et al., 2002, Siddique et al., 1995). Although non-communicable and long-term health conditions like hypertension and diabetes were not reported among the common IDP health conditions, previous studies have also shown they often receive less attention, as evidenced in our study by the lack of support for managing mental health by supporting organisations. (Cantor et al., 2021, Kehlenbrink et al., 2019, Burns et al., 2018, Roberts et al., 2012) It is therefore likely these conditions may have been missed by participants in our study who reported some cases were often undiagnosed due to a lack of skilled health workers, appropriate diagnostic resources and poor record-keeping.

Implications from healthcare gaps in IDP camps also include derailment of the health system goals, universal health care coverage targets, such as reducing maternal and child mortality, and broader global sustainable development goals. Since most of the IDP health conditions were environmentally related, health interventions need to be holistic and encompass both indirect health dimensions like provision of accommodation and sanitation to reduce infectious diseases. (Oluwasanmi et al., 2018) Also, by adopting standard health guidelines and measures for complex emergencies, like the Sphere minimum standards (The Sphere Project, 2018), PHCs could be empowered to deliver preventive, promotional and curative services (Odusanya, 2016). This would tackle most healthcare delivery barriers, especially those related to diagnosis, case management and referral of emergency cases, especially for pregnant women (Chi et al., 2015).

Although this study was conducted before the COVID-19 pandemic, COVID-19 added a layer of complexity and threatened to deepen the IDP crisis in the country, especially in the northeast region. Gaps identified in this current study, particularly the shortage of sanitation and hygiene resources and disease surveillance, were still significant issues when managing the crisis in IDP settings during the pandemic (Tijjani and Ma, 2020). Most IDPs reported being aware of the pandemic, but the national measures implemented to manage the pandemic, such as social distancing and infection control, were difficult to perform; and despite the restrictions, lockdown and further disruption to accessing services, adequate considerations were not provided to support or manage the IDPs (Omosekejimi et al., 2021, IOM, 2021, Niyi-Gafar and Adalokun, 2022, UNHCR, 2021). COVID-19 situation reports showed the government had implemented awareness campaigns in IDP settlements (IOM, 2022a, IOM, 2022b), but this varied across different states and IDP settings, for instance, in the northeast, IDPs outside the main conflict state – Borno state – and those in host communities were less reached by awareness campaigns (IOM, 2021). In addition, there were no specific COVID-19 mitigation measures set up to prevent the spread of COVID-19 in some localities, and the majority of health centres were not prepared to handle COVID-19 cases (IOM, 2021). For COVID-19 vaccination, although a high proportion of IDPs were aware of COVID-19 vaccines, most did not get this information from either government officials, medical personnel, NGOs or INGOs but from community members and family; and the majority of IDPs felt they lacked sufficient information on COVID-19 and the vaccines to be able to make informed decisions

(IOM, 2022a, IOM, 2022b). Overall, awareness and mitigation measures were better in the northcentral and northwest regions compared to the northeast (IOM, 2022a, IOM, 2022b). Other consequences of the pandemic and the government response measures included disruptions to food distribution, WASH resources, general healthcare, education, protection and livelihood generation for IDPs in both camp-like settings and host communities, which contributed to increased negative coping strategies such as the sale of assets and child labour (IOM, 2021, UNHCR, 2021). These negative coping actions likely exacerbated other similar negative actions identified among the population in this study, particularly the action of begging for food and deprioritising accessing health services due to financial challenges (Ekezie, 2022). These observations also support our findings in this research which highlight disparities in service availability by location and that despite multiagency involvement in IDP management, interventions did not sufficiently reach all IDPs. Information on how the pandemic affected specific IDP management processes, such as disease surveillance and medical record-keeping, is lacking; hence more research would be needed to assess these areas towards strengthening infectious disease management in IDP settings.

Strong coordination that combines interventions and health system strengthening is essential for improving IDP health management (Bile et al., 2011, Olu et al., 2015). Involvement of various stakeholders in IDP healthcare, especially international organisations, offers several benefits (Bile et al., 2011, Olu et al., 2015, Tyndall et al., 2020, Low et al., 2014). For example, the health cluster partnerships approach in Uganda, also overseen by the MoH, improved the humanitarian response and health coordination (Olu et al., 2015). However, the objectives of external organisations often tend to prioritise emergency humanitarian relief over long-term health system strengthening (Kimbrough et al., 2012). IDP health management and partnership collaborations may need further refinement, and this would require predictable funding and political commitment (Roberts et al., 2022). Nonetheless, regardless of the level of support provided, both comprehensive and partial external support has been associated with a greater likelihood of improved health service provision in displacement settings (Ekezie et al., 2020, Olu et al., 2015).

Strengths and Limitations

This study presents a comprehensive qualitative account of IDP health management and the impacts on IDP health outcomes. The main strength of the study is the novel insights gained from different participant perspectives, which provide a rounded account of IDP health management when put together. Limited HSP representation restricted in-depth exploration of several healthcare services; hence the results may not adequately reflect all healthcare services. Short interaction time with some participants implied that information from some camps was much lower than in other areas. Also, due to time and security constraints, a reduced number of interviews and FGDs were conducted; nevertheless, data saturation was reached on the topics explored. Furthermore, the IDPs' experience with the pressure and frustration with conflict situations may have influenced their responses.

Study implications

Strong humanitarian coordination, which is equitable and reaches all IDP locations and focuses on health system strengthening, is essential for improving IDP health management. Tackling the health problems of IDPs and increased health staffing capacity will require high-level political commitments, willingness and effort. To improve the health workforce in displacement settings, IDPs could be trained and empowered as health workers, this could include training on general disease prevention and protective behaviours, disease symptom identification, basic first aid and health information record keeping. In addition, specific interventions and training for all health workers in IDP settings are also crucial. Health care planning and delivery should also include both

medical and non-medical components that include preventive, promotional, and curative services.

Conclusion

There is a wide gap in the IDP health management sector that has several impacts on the health and wellbeing of IDPs. Findings from this research have broader relevance beyond the single country studied, as all human displacements inevitably contribute to similar health and social burdens. Government authorities need to acknowledge the existence of all IDPs and include all IDP settlement locations in administrative and management processes. In addition, regardless of camp status, more basic resources and healthcare services need to be provided. Achieving optimal healthcare for IDPs requires more than just understanding the pattern and burden of disease; but also involves awareness of healthcare management approaches and the need to consider the complexity of the multiagency involvement in IDP management. Hence, policymakers, public health officials and affected populations would benefit from understanding the effect of management on the health and wellbeing of all those affected by displacement crises, as presented. This study provides significant insights which could support the recommendation of the United Nations High Commissioner for Refugees (UNHCR) High-Level Panel on Internal Displacement on the need to “Strengthen the quality of protection and assistance to IDPs and host communities” by providing information on areas to consider when coordinating humanitarian health responses, particularly in IDP protracted conditions. In addition, the findings also support the broader effort being made to increase the accountability of IDPs and promote the responsibilities of national authorities in IDP management. Information from the study could be used to inform the establishment of efficient health policies. Also, organisations that support IDPs could use the information when developing and implementing preventive and curative measures needed to protect the health and well-being of IDPs. Finally, delivery of standard primary health care in IDP settlements and empowerment of IDPs as local health workers could be cost-effective strategies for achieving optimal health care in humanitarian situations.

Funding

None.

Declaration of Competing Interest

None.

Acknowledgement

This study is part of the PhD thesis of the first author. The authors would like to thank all academic supervisors, data collectors and study participants who contributed to the research.

References

- WHO, 2011. *Interagency Emergency Health Kit 2011, 4th ed.* France: World Health Organisation.
- International Organization for Migration (IOM). Displacement Tracking Matrix - Nigeria. <https://displacement.iom.int/nigeria>. (Accessed February 20 2022).
- Ekezie, W., Myles, P., Murray, R.L., Bains, M., Timmons, S., Pritchard, C., 2021. Self-reported diseases and their associated risk factors among camp-dwelling conflict-affected internally displaced populations in Nigeria. *J. Public Health* 43 (2), e171–e179. <https://doi.org/10.1093/pubmed/fdaa114>.
- Ekezie, W., Timmons, S., Myles, P., Siebert, P., Bains, M., Pritchard, C., 2019. An audit of healthcare provision in internally displaced population camps in Nigeria. *J. Public Health* 41 (3), 583–592. <https://doi.org/10.1093/pubmed/fty141>.
- Babakura, B., Nomhwange, T., Jean Baptiste, A.E., et al., 2021. The challenges of insecurity on implementing vaccination campaign and its effect on measles elimination and control efforts: a case study of 2017/18 measles campaign in Borno state, Nigeria. *Vaccine* 39 (3), C66–C75. <https://doi.org/10.1016/j.vaccine.2021.01.024>. Suppl.
- MSF, 1997. *Refugee Health: An Approach to Emergency Situations.* Médecins Sans Frontières: Macmillan.
- Nasir, U.N., Bandyopadhyay, A.S., Montagnani, F., et al., 2016. Polio elimination in Nigeria: a review. *Hum. Vaccin. Immunother.* 12 (3), 658–663. <https://doi.org/10.1080/21645515.2015.1088617>.
- Sato, R., 2021. Differential effect of conflicts on vaccination: Boko Haram insurgency vs. other conflicts in Nigeria. *Med. Confl. Surviv.* 37 (4), 275–292. <https://doi.org/10.1080/13623699.2021.1970524>.
- Denué, B.A., W. G., Wuduri, Z.W., M. S., Aliyu, S., Ngoshe, I.Y., 2016. Impact of insurgency on tuberculosis treatment uptake among tb patients in a tertiary health institution in maiduguri, Northeastern Nigeria. *Niger. Med. Practitioner* 70, 11–16.
- Anyebe, E.E., Olisah, V.O., Garba, S.N., et al., 2019. Current Status of Mental Health Services at the Primary Healthcare Level in Northern Nigeria. *Adm Policy Ment Health* 46, 620–628. <https://doi.org/10.1007/s10488-019-00950-1>.
- Solanke, B.L., 2018. Factors associated with use of maternal healthcare services during the Boko Haram insurgency in North-East Nigeria. *Med. Confl. Surviv.* 34 (3), 158–184. <https://doi.org/10.1080/13623699.2018.1511358>.
- Ager, A.K., Lembani, M., Mohammed, A., et al., 2015. Health service resilience in Yobe state, Nigeria in the context of the Boko Haram insurgency: a systems dynamics analysis using group model building. *Confl. Health* 9, 30. <https://doi.org/10.1186/s13031-015-0056-3>.
- Cantor, D., Swartz, J., Roberts, B., et al., 2021. Understanding the health needs of internally displaced persons: a scoping review. *J. Migr. Health* 4, 100071. <https://doi.org/10.1016/j.jmh.2021.100071>.
- Quintero, L.A., Culler, T.A., 2009. IDP health in Colombia: needs and challenges. *Forced Migr. Rev.* 70–71. https://www.fmreview.org/sites/fmr/files/FMRdownloads/en/p_rotracted/quintero-culler.pdf (Accessed February 24 2022).
- Salama, P., Spiegel, P., Brennan, R., 2001. No less vulnerable: the internally displaced in humanitarian emergencies. *Lancet* 357 (9266), 1430–1431. [https://doi.org/10.1016/S0140-6736\(00\)04570-0](https://doi.org/10.1016/S0140-6736(00)04570-0).
- Cotroneo, A., 2017. Specificities and challenges of responding to internal displacement in urban settings. *Int. Rev. Red Cross* 99 (904), 283–318. <https://doi.org/10.1017/S1816383118000164>.
- IOM, 2021. Nigeria – COVID-19 situational analysis 6: North East. June 2021. International Organization for Migration. <https://dtm.iom.int/reports/nigeria-%E2%80%946-covid-19-situational-analysis-6-north-east-june-2021> (Accessed May 12, 2022).
- Internal Displacement Monitoring Center (IDMC). Global report on internal displacement 2022. Geneva: Internal Displacement Monitoring Centre. 2022. <https://www.internal-displacement.org/global-report/grid2022/#at-a-glance> (Accessed May 31, 2022).
- Global Protection Cluster. Global database on IDP laws and policies. <http://www.globalprotectioncluster.org/global-database-on-idp-laws-and-policies/> (Accessed February 24, 2019).
- UNHCR, 2021. Assessing the socioeconomic impact of COVID-19 on forcibly displaced populations. thematic brief no. 2: the case of Nigeria. June 2021. United Nations High Commissioner for Refugees. <https://www.unhcr.org/60d1daca4.pdf> (Accessed May 31 2022).
- Ekezie W.C., 2019. An investigation of the essential health services available to internally displaced populations (IDPs) in Northern Nigeria. PhD thesis, University of Nottingham, United Kingdom. <http://eprints.nottingham.ac.uk/59337/> (Accessed February 20, 2019).
- Ekezie, W., Adaji, E.E., Murray, R.L., 2020. Essential healthcare services provided to conflict-affected internally displaced populations in low and middle-income countries : A systematic review. *Health Promotion Perspectives* 10, 24–37.
- UNHCR, 2010. Health information system (HIS): Reference manual. United Nations High Commissioner for Refugees. <https://www.unhcr.org/uk/protection/health/4a3114006/health-information-system-reference-manual.html> (Accessed February 20 2022).
- International Organization for Migration (IOM), 2015. Nigeria — Displacement Report 7 (1 November — 31 December 2015). <https://displacement.iom.int/reports/nigeria-%E2%80%947-1-november-%E2%80%9431-december-2015?close=true>. (Accessed February 20 2022).
- Oxfam, 2001. *Guidelines for public health promotion in emergencies; 2001.* Oxfam: Oxfam.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual. Res. Psychol.* 3, 77–101. <https://doi.org/10.1191/1478088706qp0630a>.
- Boyatzis, R.E., 1998. *Transforming Qualitative Information : Thematic Analysis and Code Development.* Sage Publications.
- Chi, P.C., Bulage, P., Urdal, H., Sundby, J., 2015. Perceptions of the effects of armed conflict on maternal and reproductive health services and outcomes in Burundi and Northern Uganda: a qualitative study. *BMC Int. Health Hum. Rights* 15, 7. <https://doi.org/10.1186/s12914-015-0045-z>.
- Mendelsohn, J.B., Schilperoord, M., Spiegel, P., Ross, D.A., 2012. Adherence to antiretroviral therapy and treatment outcomes among conflict-affected and forcibly displaced populations: a systematic review. *Confl. Health* 6 (1), 9. <https://doi.org/10.1186/1752-1505-6-9>.
- Onyango, M.A., Hixson, B.L., McNally, S., 2013. Minimum Initial Service Package (MISP) for reproductive health during emergencies: time for a new paradigm? *Glob. Public Health* 8 (3), 342–356. <https://doi.org/10.1080/17441692.2013.765024>.
- Mills, E.J., Nachega, J.B., Bangsberg, D.R., et al., 2006. Adherence to HAART: a systematic review of developed and developing nation patient-reported barriers and facilitators. *PLoS Med.* 3 (11), e438. <https://doi.org/10.1371/journal.pmed.0030438>.
- Ojeleke, O., Groot, W., Pavlova, M., 2022. Care delivery among refugees and internally displaced persons affected by complex emergencies: a systematic review of the

- literature. *J. Public Health Theory Pract.* 30, 747–762. <https://doi.org/10.1007/s10389-020-01343-7>.
- Usar, I.J., Akosu, J.I., 2020. Assessment of health care provisioning and utilisation at an internally displaced persons' camp in Nigeria: time for integrating essential primary health care in delivery strategies. *IOSR J. Dent. Med. Sci.* 19, 26–31. <https://doi.org/10.9790/0853-1907122631>.
- IOM, NRC, UNHCR. *Camp Management Toolkit*. Edition June, 2015. Publishers: International Organization for Migration (IOM), Norwegian Refugee Council (NRC) and UN Refugee Agency (UNHCR). ISBN Print: 978-82-7411-241-4. Digital: 978-82-7411-242-1.
- Joshua, S., Idowu, S.S., Olanrewaju, F.O., 2021. Between the devil and the deep blue sea: Insurgency and humanitarian conditions in IDP camps in Nigeria. *Int. J. Cyber Warfare Terrorism* 11, 1–19. <https://doi.org/10.4018/IJCWT.2021010101>.
- The Sphere Project, 2018. *The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response*, 4th ed. The Sphere Project, Geneva, Switzerland.
- Bruckner, C., Checchi, F., 2011. Detection of infectious disease outbreaks in twenty-two fragile states, 2000–2010: a systematic review. *Confl. Health* 5, 13. <https://doi.org/10.1186/1752-1505-5-13>.
- Spiegel, P., Sheik, M., Gotway-Crawford, C., Salama, P., 2002. Health programmes and policies associated with decreased mortality in displaced people in postemergency phase camps: a retrospective study. *Lancet* 360, 1927–1934. [https://doi.org/10.1016/S0140-6736\(02\)11915-5](https://doi.org/10.1016/S0140-6736(02)11915-5).
- Siddique, A.K., Salam, A., Islam, M.S., et al., 1995. Why treatment centres failed to prevent cholera deaths among Rwandan refugees in Goma, Zaire. *Lancet* 345, 359–361. [https://doi.org/10.1016/S0140-6736\(95\)90344-5](https://doi.org/10.1016/S0140-6736(95)90344-5).
- Kehlenbrink, S., Smith, J., Ansbro, É., et al., 2019. The burden of diabetes and use of diabetes care in humanitarian crises in low-income and middle-income countries. *Lancet Diabetes Endocrinol.* 7 (8), 638–647. [https://doi.org/10.1016/S2213-8587\(19\)30082-8](https://doi.org/10.1016/S2213-8587(19)30082-8).
- Burns, R., Wickramage, K., Musah, A., Siriwardhana, C., Checchi, F., 2018. Health status of returning refugees, internally displaced persons, and the host community in a post-conflict district in northern Sri Lanka: a cross-sectional survey. *Confl. Health* 12, 41. <https://doi.org/10.1186/s13031-018-0176-7>.
- Roberts, B., Ekezie, W., Jobanputra, K., et al., 2022. Analysis of health overseas development aid for internally displaced persons in low- and middle-income countries. *J Migr Health* 5, 100090. <https://doi.org/10.1016/j.jmh.2022.100090>.
- Roberts, B., Patel, P., McKee, M., 2012. Noncommunicable diseases and post-conflict countries. *Bull. World Health Organ.* 90 (1), 2. <https://doi.org/10.2471/BLT.11.098863>, 2A.
- Oluwasanmi, O.I., Eme, O.I., Aloh, R., 2018. Rehabilitation of IDPs in North East Nigeria: challenges and prospects. *Socialscintia* 2 (3), 33–48. Available from: <https://journals.aphriapub.com/index.php/SS/article/view/166>.
- Oduşanya, O., 2016. The health of internally displaced persons. *Niger. Postgraduate Med. J.* 23, 159–160. Available from: <https://www.npmj.org/text.asp?2016/23/4/159/196241>.
- Chi, P.C., Bulage, P., Urdal, H., Sundby, J., 2015. Barriers in the delivery of emergency obstetric and neonatal care in post-conflict Africa: qualitative case studies of Burundi and Northern Uganda. *PLoS One* 10 (9), e0139120. <https://doi.org/10.1371/journal.pone.0139120>.
- Tijjani, S.J., Ma, L., 2020. Is Nigeria prepared and ready to respond to the COVID-19 pandemic in its conflict-affected northeastern states? *Int. J. Equity Health* 19 (1), 77. <https://doi.org/10.1186/s12939-020-01192-6>. Published 2020 May 27.
- Omosekejimi, A.F., Dada, G.A., Ebhonu, S.I., 2021. COVID 19 information seeking behaviour of internally displaced persons (IDPs) in the federal capital territory, Abuja, Nigeria. *Library Philosophy and Practice (e-journal)* 5150. <https://digitalcommons.unl.edu/libphilprac/5150>.
- IOM, 2022b. COVID-19 situational analysis 6: north-central and north-west. March 2022b. International Organization for Migration. <https://dtm.iom.int/reports/nigeria-%E2%80%94-covid-19-situational-analysis-6-north-central-and-north-west-march-2022> (Accessed May 31 2022).
- IOM, 2022a. COVID-19 Situation Report 9 - North-East Nigeria. February 2022 International Organization for Migration. <https://dtm.iom.int/reports/nigeria-%E2%80%94-covid-19-situational-analysis-9-north-east-february-2022> (Accessed May 31 2022).
- Niyi-Gafar, O.L., Adelakun, O.S., 2022. The impact of viral diseases on the rights of vulnerable population: Covid-19 and the Nigerian internally displaced child. *Soc. Sci. Humanit Open.* 6 (1), 100268. <https://doi.org/10.1016/j.ssaho.2022.100268>.
- Ekezie, W., 2022. Resilience actions of internally displaced persons (idps) living in camp-like settings: a Northern Nigeria case study. *J. Migr. Health* 6, 100115. <https://doi.org/10.1016/j.jmh.2022.100115>.
- Bile, K.M., Hafeez, A., Kazi, G.N., Southall, D., 2011. Protecting the right to health of internally displaced mothers and children: the imperative of inter-cluster coordination for translating best practices into effective participatory action. *East Mediterr. Health J.* 17 (12), 981–989. <https://doi.org/10.26719/2011.17.12.981>.
- Ojonugwa F., A., 2021. The challenges of internally displaced persons and the way forward: the Nigerian experience. *Univ. Cape Coast Law J.* 1, 17–36. <https://doi.org/10.47963/ucclj.v1i1.221>.
- Olu, O., Usman, A., Woldetsadik, S., Chamlā, D., Walker, O., 2015. Lessons learnt from coordinating emergency health response during humanitarian crises: a case study of implementation of the health cluster in northern Uganda. *Confl. Health* 9, 1. <https://doi.org/10.1186/1752-1505-9-1>.
- Tyndall, J.A., Ndiaye, K., Weli, C., et al., 2020. The relationship between armed conflict and reproductive, maternal, newborn and child health and nutrition status and services in northeastern Nigeria: a mixed-methods case study [published correction appears in *Confl. Health*. 2021 Mar 1;15(1):11] *Confl. Health* 14 (1), 75. <https://doi.org/10.1186/s13031-020-00318-5>. Published 2020 Nov 13.
- Low, S., Tun, K.T., Mhote, N.P., et al., 2014. Human resources for health: task shifting to promote basic health service delivery among internally displaced people in ethnic health program service areas in eastern Burma/Myanmar. *Glob. Health Act.* 7, 24937. <https://doi.org/10.3402/gha.v7.24937>. Published 2014 Sep 29.
- Kimbrough, W., Saliba, V., Dahab, M., Haskew, C., Checchi, F., 2012. The burden of tuberculosis in crisis-affected populations: a systematic review. *Lancet Infect. Dis* 12 (12), 950–965. [https://doi.org/10.1016/S1473-3099\(12\)70225-6](https://doi.org/10.1016/S1473-3099(12)70225-6).