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Title

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Permalink

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Journal

Global Public Health, 15(3)

ISSN

1744-1692

Authors

Kaiser, Bonnie N
Ticao, Cynthia
Boglosa, Jeremy
[et al.](#)

Publication Date

2020-03-03

DOI

10.1080/17441692.2019.1665082

Peer reviewed



HHS Public Access

Author manuscript

Glob Public Health. Author manuscript; available in PMC 2021 March 01.

Published in final edited form as:

Glob Public Health. 2020 March ; 15(3): 358–371. doi:10.1080/17441692.2019.1665082.

Mental health and psychosocial support needs among people displaced by Boko Haram in Nigeria

Bonnie N. Kaiser, PhD, MPH*,

University of California San Diego, Duke Global Health Institute

Cynthia Ticao, PhD,

Gede Foundation

Jeremy Boglosa, MM,

Gede Foundation

John Minto, MA, MSc, MBA,

Gede Foundation

Charles Chikwiramadara, MBA,

Catholic Relief Services

Melissa Tucker, MA,

Catholic Relief Services

Brandon A. Kohrt, MD, PhD

George Washington University

Abstract

Since 2013, the Boko Haram insurgency in Nigeria has left almost 2 million people displaced and 10 million in need of life-saving services. While the humanitarian response has focused on provision of food, shelter, and physical health needs, mental health needs remain largely overlooked. This mixed-methods project explored the mental health and psychosocial (MHPS) burden, existing resources and coping mechanisms, and remaining needs among internally displaced persons (IDPs) and host communities in Borno State, Nigeria. Survey findings reveal a high burden of mental health needs: 60% of participants strongly endorsed at least one mental health symptom, and 75% endorsed functional impairment associated with mental health symptoms. Unexpectedly, we found that adult men had the highest rates of symptom burden, suggesting that typical approaches focusing on women and children would miss this vulnerable population. Qualitative findings (free lists, interviews, focus group discussions) reflect MHPS needs that could be addressed through solutions-focused approaches, although tailored interventions would be needed to support stigmatized and vulnerable groups such as drug users and rape victims. Finally, participants emphasized the breakdown of community and political

* *Correspondence to:* Bonnie N. Kaiser, 9500 Gilman Road, #0532, La Jolla, CA 92093, bfullard@gmail.com.

Declaration: The authors report no conflicts of interest

Data availability statement: Data available upon request to corresponding author.

leadership structures, as well as of economic and livelihood activities, suggesting that MHPS interventions should focus on restoring these key resources.

Keywords

Boko Haram; humanitarian emergency; internally displaced persons (IDPs); mental health and psychosocial support; Nigeria

Introduction

In May 2013, the Government of Nigeria declared a State of Emergency in the North-East in response to the ongoing militant Islamic movement of Boko Haram, which shows no signs of abating. Since then, more than 1.8 million individuals have been displaced, with 1.4 million in Borno State alone (IOM, 2017). More than 10 million are in need of life-saving assistance (UN OCHA, 2018). While many have sought safety in Maiduguri (FEWSNET, 2017), others have fled to adjacent communities, living within formal camps, host communities, and/or informal settlements.¹ The protracted conflict has been worsened by the tendency of Armed Opposition Groups (AOGs) to recruit youth from these communities. Community relations have become strained, livelihoods options destroyed, with the needs of children, youth, and elderly particularly dire.

Recently, return movements have been triggered by government-led initiatives, as well as improved security in some areas, inadequate assistance in areas of displacement (particularly camps), and farming seasons. As of November 2017, approximately 1.3 million individuals are thought to have returned to Adamawa, Borno, and Yobe States (UN OCHA, 2018), although many have returned to their Local Government Area (LGA) headquarters and not to their home village. In this context, communities are still transitory and continue to require support for food, shelter, skills, education, and social cohesion interventions. Almost 4 million individuals are food insecure; thousands of water sources have been destroyed; and only 30% of health facilities are functional (UN OCHA, 2018).

It is estimated that depression and post-traumatic stress disorder (PTSD) are experienced by 15-20% of survivors of disasters and humanitarian emergencies (Steel et al., 2009). Acute stress and grief responses are to be expected in the context of humanitarian emergencies, but their effects can be ameliorated through psychosocial interventions. These reactions might become extreme, interfering with daily functioning. Additionally, some individuals might have underlying common mental disorders, such as depression or anxiety, that become triggered in the face of trauma.

This mixed-methods study aimed to identify mental health and psychosocial (MHPS) problems, risk factors, and existing resources among conflict affected communities (internally displaced persons [IDPs], host communities, and returnees), in Borno State, Nigeria. The aims were: (a) to qualitatively explore perceived MHPS problems, existing

¹An informal settlement is defined as a completely closed in compound or semi-closed area on privately owned land where IDPs have been given the permission to stay by the landowner and, in some cases, local religious authorities (imam, etc.).

community supports, and resilience-promoting factors among a sample of community-based IDPs and host communities and (b) to quantitatively assess physical, social, and psychological needs of the target population, including symptoms of depression, posttraumatic stress, and local idioms of distress. This research is the first step towards developing necessary psychosocial services for these conflict-affected communities.

Methods

This project followed the MHPS needs assessment component of the *Toolkit for Humanitarian Settings* developed by the World Health Organization/United Nations High Commission for Refugees (WHO, 2012). The research was conducted in four communities in Borno State, selected among those in which the local Ministry of Health assigned Catholic Relief Services (CRS) to operate.² CRS is implementing programs to provide food; water, sanitation and hygiene; and shelter, and to support early recovery through agricultural livelihoods.

All data were collected by Nigerian enumerators from the study region, three males and two females. Enumerators, the field coordinator, and data entry personnel had undergone one week of training in project objectives, qualitative and quantitative research methods, and research ethics. Data collection was completed in September-October 2017.

All study procedures and ethical considerations were approved by the Borno State Ministry of Health (MOH.GEN/1426/VOL. 1/26). Before data collection, adults provided verbal consent to participate. For minors, enumerators elicited parental consent or *loco parentis* consent, as well as verbal assent from the participant. Because it is not always possible to seek informed consent from individual parents and caregivers – particularly for minors without parental guardians – IDP community leaders/chiefs or household heads provided *loco parentis* informed consent on behalf of participants.

Qualitative data collection

Free listing combined with brief interviews were conducted among IDPs and host community members (n=66). Free listing is a structured elicitation technique, in which participants are given a prompt and asked to provide as many answers as they can think of. To ensure diversity of our sample, we aimed for approximately equal numbers of adult males, adult females, teenage girls, and teenage boys. Purposive recruitment was led by community coordinators. Anticipating some heterogeneity by age and gender, we recruited approximately double the standard minimum number of free list participants (Borgatti, 1999).

First, individuals were delivered the prompt ‘What kind of problems do IDPs and host communities have because of the humanitarian situation?’ An enumerator recorded all responses. They then elicited a short description of each problem listed. The enumerator reviewed the list and identified those problems relevant to MHPS, such as problems related to feelings, thoughts, behaviors, and social relationships. The enumerator then asked the

²NGOS are assigned to certain host communities based on need and in order to avoid duplication of effort.

respondent to rank the top three most important MHPS problems. Finally, the enumerator elicited coping strategies associated with each MHPS problem named, including asking whether each strategy helped with the problems.

Additional free listing and brief interviews were conducted among community members who had direct exposure to interpersonal or community violence (n=28). Data collection began with the prompt ‘Could you list the problems you are currently experiencing because of the humanitarian situation?’ When necessary, probes were used to elicit psychological and relational problems. Participants were then interviewed about the resources and coping strategies that they draw upon to deal with MHPS challenges, as well as the extent to which they require additional support.

Key informant interviews (n=20) and focus group discussions (FGDs, n=4) were conducted with community members thought to have in-depth knowledge of the community and its MHPS needs. This included local NGO staff, religious/community leaders, traditional healers, women leaders, businessmen, and farmers. FGDs were stratified by gender and age (adult, teenagers). They explored problems in the community, existing resources and coping strategies, and particular needs of people with mental illness, drug users, and rape victims. Additionally, FGDs were used to assess comprehensibility, acceptability, and relevance of items to be used for the quantitative assessment of MHPS needs (see below).

Quantitative data collection

A short mental health assessment tool was used to estimate prevalence of severe distress symptoms among IDPs and host communities and to identify those in most need of MHPSS services. The 6-item assessment tool is part of the MHPS needs assessment from the *Toolkit for Humanitarian Settings* developed by the World Health Organization/United Nations High Commission for Refugees, which guided overall data collection. Specific topics and phrasing of assessment tool items are adapted from the WHO World Mental Health Survey’s subset of K6 questions (Kessler et al, 2002). The goal is to have a rapid-to-use tool (average 2-3 minutes) to assess relatively severe symptoms of distress that are commonly seen in humanitarian contexts. Prior to the survey, items were translated into Hausa and Kanuri and adjusted using input from FGDs (see above). Because we did not have a sampling frame available to draw a true random sample, households were selected using a random walk protocol (Bennett, Woods, Liyanage, & Smith, 1991). Enumerators began from a center point in the community, walked in opposite directions, and visited every 5th house to complete surveys. Within each household, one adult and one child were recruited, aiming to recruit equal numbers of males and females. Questions were delivered verbally by trained enumerators, who recorded responses. The tool was completed with 124 participants, half children (12-17) and half adults (18+).

Analysis

Scores on the mental health assessment were analyzed descriptively. Scores were analyzed in two ways: first, as dichotomous – any ‘high’ response on an item (responding that one experiences a symptom ‘most of the time’ or ‘all of the time’) – second, as a continuous sum score. For the latter, the Likert scale was converted to scores of 0 (never) to 4 (all the time).

We used Cronbach's alpha to assess internal consistency and t-tests and Pearson's correlation coefficients to assess bivariate associations of demographics with mental health scores.

Free list results were analyzed using AnthroPac, which calculates the frequency and proportion of respondents who named each item.

Interviews and FGDs were audio-recorded, and modified transcripts were developed by writing detailed notes in English while listening to audio recordings in the language of data collection. Transcripts were reviewed to identify themes until saturation. Themes were operationalized into codes, and an inter-coder agreement exercise was completed prior to coding transcripts. Text segments for each code were reviewed and code summaries written.

Results

Mental health consequences

Free lists—Twelve MHPS problems were named by more than 5% of participants (Tables 1-2). Thinking (too much) was the most commonly named problem, named by two-thirds of participants. Participants also described many symptoms that overlap with mental health disorders but also indicate normal stress reactions, including sadness and crying; fear, worry, and anxiety; sleepless nights; and substance abuse. Additionally, anger was named by about one-fifth of the sample, more commonly among males. Finally, several were social or interpersonal, such as encountering problems in the community or family. One of the most common community problems was stigmatization or humiliation brought about by interactions with the host community. Notably, there was a strong degree of overlap between items spontaneously named in free listing and those included in the assessment tool (fear, anger, fatigue, disinterest, hopelessness, and upset).

Quantitative findings—The 6-item mental health assessment had fairly strong internal consistency (Cronbach's alpha=0.68). Sixty percent of participants endorsed a high degree of experience on at least one of the mental health symptoms, and approximately 75% of participants endorsed functional impairment ('being unable to carry out essential activities for daily living because of the feelings of fear, anger, fatigue, disinterest, hopelessness, or upset,' Figure 1).

While total mental health scores did not differ by gender for the overall sample or within teenagers, there was a gender difference within adults, with men having higher (i.e. worse) mental health scores (10.6 vs. 8.7). Mental health score was moderately associated with age within children and among men, such that increasing age was associated with increasing mental health score ($r=0.23$ and 0.25 , respectively). Adults were more likely than teenagers to report a high score on at least one mental health symptom (68% vs 52%, respectively).

Qualitative data somewhat agreed with these findings. When participants were asked who is suffering the most, a common response was that everyone is suffering. When pressed for specific risk groups, some stated that adult men suffer more due to inability to fulfill responsibilities in relation to the family. At the same time, others described that women

suffer the most because of inability to care for their children or loss of children, which does not agree with the quantitative findings. Below, we explore vulnerable groups in more depth.

Qualitative findings—Similar to free list findings, interview and FGD participants described a wide range of psychological and mental health consequences. These include emotional, cognitive, behavioral, or social problems arising from the crisis.

Emotional problems were reported by almost all participants and included feelings of grief, loss, anger, fear, and anxiety after AOGs attacked them. Many witnessed the death of relatives killed by Boko Haram or were separated from their families. For example, a 49-year-old businessman explained:

Any time we remember this problem, our hearts are disturbed (Hausa: *zuciyan mu na sinkewa*, literally ‘sink/are cut’). Remembering how we used to live and today we have turned into pitiful people, our hearts beg to get disturbed (*zuciya yana tashi*, literally ‘hearts get awakened’). When we hear that something has happened, maybe a bomb somewhere or that killed someone somewhere, we get disturbed or restless (*hankali yana tashiwa*, literally ‘attention gets awakened’).

Some participants experienced fear and anxiety that bombs can explode any time in the camp, feelings of persecution from not being able to practice their religion, and shame and embarrassment from not being able to repay loans and lack of privacy. For example, ‘Imagine somebody beating you, pursued you, kills you and take away your wealth, is there any consequence greater than this?’ (*Male community leader, 55-year-old*).

Cognitive problems were described by a good number of participants as thinking too much, unusual thinking, difficulty concentrating, and losing one’s mind/senses as a result of trauma. For example, one FGD participant described that ‘Worry leads to overthinking because of the abduction of their family members’ (*Male FGD participant*). Participants described that they no longer *gist* (gossip/socialize) or talk with friends and prefer to be by themselves and think about their problems. Another participant described problems with ‘restless mind (*rashin kwanciyan hankali*): All the people in the community won’t have peace of mind, especially living in the city’ (*Female farmer, 20-year-old*).

Behavioral problems were described by many participants, including aggression, physical violence, stealing, spousal abuse, sleeplessness, difficulty sleeping, losing one’s appetite, and isolation. For example, ‘We that are presently talking to you are also facing a lot of problems, for example, not having a good night’s sleep, we think a lot, we get angry for no reason sometimes’ (*Adult male FGD participant*).

Participants also described several negative consequences for *social and family relationships*, namely family separation, inability to attend social gatherings (e.g., weddings), strained social relationships (e.g., disrespect of elders, lack of cooperation/understanding among residents), and exploitation (e.g., robbing, blocking distribution of humanitarian goods). This occurred in the context of breakdown of the typical leadership structure and loss of social institutions like schools and local government offices.

Recognizing distress.: Participants were asked to describe how they recognized a distressed child, man, or woman, which included references to their physical appearance, emotional expression, and behavior.

Physical appearance was described by most participants as a primary way to recognize distress. The person wears torn and dirty clothes, looks weak, dull, disorganized, unhealthy, has lost weight, or is malnourished. Similarly, *emotional expression* was described by many participants as a way to recognize a distressed person. The person cries often, looks unhappy, and is frequently angry (*bacin rai/fushi*). Exemplar descriptions included ‘He looks angry, mostly sitting under shade of tree spending all the day without doing anything’ (*Woman leader, 50-year-old*) and ‘They will be sad due to the loss of their loved ones. They will be angry because they don’t eat food for some time. They cry throughout the day because of the pain and sorrow’ (*Male adult FGD participant*).

Behaviors of a distressed person included s/he behaves aggressively or wanders aimlessly around the community, displays unusual behavior, e.g., isolates him/herself from others, steals others’ property, is forgetful, has difficulty concentrating, talks to him/herself, may become aggressive and talkative, overthinks, or lacks discipline. For example, one participant described that distressed individuals ‘don’t relate with people. Always wants to be left alone. Yells at children over small mistakes. Cries unknowingly while *gisting* (gossiping/socializing) with neighbors’ (*Woman leader, 35-year-old*).

Causes of mental health problems.: Participants attributed mental health problems to three factors: (1) displacement, (2) poverty, and (3) supernatural beings.

Displacement was described by almost all respondents as the cause of mental health problems in their communities. Loss of wealth and loved ones were the reasons given for why people think too much, are angry, and are worried. For example, a 55-year-old male community leader explained:

It’s just anger that brought it, and they do too much thinking. Thinking about your lost wealth, thinking about how you used to live peacefully in your own house. Going out every day and coming back with food, people eating to their satisfaction, etc., but today everything has been lost. It is just the thinking that remained in the heart, and the heart was awakened (*zuciya ya tashi*) because of the problems.

Similarly, *poverty* was described by some participants to be the cause of mental illness: people are jobless and do not have money or food. Participants often linked these causes to overthinking or thinking sickness. For example, ‘Even madness/insanity (*tabo*) sometimes is because of poverty [...] Their problem I tell you is food. Even when a mad person (*mahaukaci*) goes naked today and you give him food, he will come back to his senses. Even a mad person needs food’ (*Woman leader, 35-year-old*).

Supernatural causes were described by a few participants as causing mental illness. These include God, spirits, and demons. For example, ‘Those that don’t know [a psychiatrist] will say it’s demons that have entered him. Let’s call the *mallam* (wise old man/religious leader). Let’s offer prayers for him’ (*Businessman, 49-year-old*).

Vulnerable groups

Participants were asked to identify risk groups, or those that face the greatest challenges of displacement as a consequence of the crisis. Most of the participants emphasized that everyone in the community was suffering and had to be pushed to specify risk groups. Almost all participants agreed that women and children suffer more, while many also argued that men are at increased risk.

Children were described by most participants as a risk group because they cannot fend for themselves. For example, ‘We have children who are little. The adults are finding it difficult to cope, let alone the little children. How will they survive?’ (*Woman leader, 35-year-old*). Orphaned by the crisis, some children are homeless and have nowhere to go. Additionally, almost all children were forced to drop out of school.

Women were described by almost all participants to be vulnerable, particularly widows, those who are pregnant or lactating, and the aged: ‘For instance, a woman whose husband was killed, or the woman who is yet to see her husband, or ladies that were captured into captivity by AMG (armed military group). This has turned into severe/beyond suffering (*bakar wahala*, literally ‘black suffering’) for the woma’’ (*Businessman, 49-year-old*).

Men were perceived by some participants to be at risk because they are responsible for their families yet cannot provide as before. For example, ‘The men, even when they go out to look for food, sometimes they don’t get help. There are times that they go to farm, but they can’t really farm. So even the men are suffering [...] So men suffer more in summary, because they are the ones that look for the food and the burden is on them’ (*Female farmer, 35-year-old*).

Another participant described that although others identify IDPs as particularly vulnerable, ‘people from the host communities are suffering a lot. Less privileged people, even if they are not internally displaced people, they are suffering. In this community, I will point to more than fifty houses that are less privileged than displaced people from other local government [areas]’ (*Woman leader, 38-year-old*).

Perception and treatment of people with mental health problems—Participants described the community’s perception and treatment of people with mental health problems in three ways: (1) with compassion (e.g., pity them, sympathize with their situation, treat them with kindness), (2) disdain (e.g., isolate them, dislike being close to them, insult them), or (3) objectively and without judgment (e.g., simply describing how the mentally ill behave).

Humane or compassionate treatment was described by participants as treating the mentally ill with kindness. At least two participants expressed this perception. For example: ‘No matter what someone is passing through, a human being is a human being [...] They need clothing just like any other person; they need education just like any other person, etc.’ (*Male farmer, 35-year-old*).

Stigma and discrimination were described by a few participants, including behaviors such as avoiding laughing at, blaming, or distancing oneself from people with mental illness. For examples, ‘Community members watch them with keen interest, but they don’t like coming close or relating with them. They don’t stigmatize them, because nobody is above their condition, but people don’t like coming close or relating with them’ (*Female religious leader, 73-year-old*).

Many participants’ statements reflected *nonjudgmental descriptions of mental illness*, in which they merely describe behaviors and perceived thought processes. For example, ‘They looked at them as people that think a lot and don’t have faith within themselves [...] They see them as people that worry too much about how little or big their problem might be. And people do see them as people that are suffering, that they might die because of suffering’ (*Woman leader, 35-year-old*).

There were contrasting notions of where to seek care for mental illness. For example, some suggested a psychiatrist, while others described a range of community resources, including traditional healers, helping rebuild homes, sensitizing community members, and scholars. While a range of supports were described (see Resources, below), few of these were specific to mental illness.

Perception and treatment of drug users—Participants’ descriptions of perceptions and treatment of drug abusers varied widely. Perceptions cover the behavioral (e.g., violence), physical (e.g., hygiene), and interpersonal (e.g., poor reputation) aspects of addiction. Frequent drug abusers are seen as incomplete, disrespectful, useless, and irresponsible persons who bring harm to themselves and the community, yet, they are still human beings and need help.

Most participants who were asked about drug abuse referred to its *behavioral aspects*. For example, many participants described drug users as ‘always causing trouble’ or breaking the law. Participants described that they lack discipline and can become aggressive. Many participants agreed on the negative effects that drug abuse has on the family, particularly wives. For example, a farmer explained that a frequent drug user ‘abuses people even it is his mother; [he] beats her because he is out of his senses’ (*Female, 20-year-old*). *Physical aspects* included the way drug users look (e.g., dirty) and the effects of drugs on their body. For example, one participant said: ‘Illegal drugs lead to addiction, heart problem, liver problem, spoils your hands, it makes you smell’ (*Male teenage FGD participant*). Participants also described resulting medical issues (e.g., liver problems, weight loss).

Treatment of drug abusers was described as strongly negative, including being avoided or despised by others. Emphasis was placed on ruining whole families’ reputation. One participant explained that ‘Community members spite, hate, and despise them. They begin to label their homes: “Do you see that boy? He is from so-and-so family; who will even feed him?” Everywhere he passes, people rain insults on him. Not only do they insult him, they insult his father, his mother and family’ (*Female religious leader, 73-year-old*). Others emphasized that they are still human and should be supported to overcome their substance abuse.

Participants described *strategies* they employed to reduce the negative effects of drug abuse problems. Strategies included spiritual/moral, material, financial, and medical support, e.g., praying, offering advice (to parents), seeking a healer's help (psychiatrist, traditional healer, or wise man (*mallam*), providing money or food, taking him to the authorities (security), promoting literacy among adults, raising awareness about drug abuse, active law enforcement, eradicating poverty, or providing jobs. Some explained that nothing is being done, with one participant stating, 'Even people that used to do something about it before have stopped because everybody does not have time for another person' (*Female religious leader, 73-year-old*).

Some participants described a shift in legal handling of drug problems. Formerly, police arrested drug abusers. Now, it is the Civilian Joint Task Force, composed of young male volunteers, who are not formally trained to help people with drug abuse problems. One participant described:

Before in our communities, police would come and arrest [drug abusers] and beat them. People that used to take before used to hide, until this issue of civilian army came in that they no longer hide. If your elders are taking [drugs], there is nothing you can say [...] Before, if police came to the community, they will just take the person and go with him, but now they are the Civilian JTF. So the whole issue concerning substance abuse have spoilt; it is now more complicated. (*Male community leader, 55-year-old*)

Perception and treatment of rape victims—Almost all participants described that rape victims are stigmatized, discriminated against, and disrespected. In contrast, one female FGD participant said that rape victims are treated with compassion, while one FGD participant did not believe rape happens in his community.

Stigma and discrimination were described by most participants as including blaming the victim, keeping the crime secret, and sending the victim away. Other participants described that people insult rape victims, some doubt the victim's truthfulness, and that men will not want to marry them. For example, 'In this community, a teenager was raped by a bricklayer. The father of the victim took care of her medical bills, but the community people still point at the victim as if she was the rapist. They stigmatized the victim more than the rapist. Some people would start saying that is with her consent' (*Woman leader, 38-year-old*). In contrast, one participant said, 'People don't maltreat them but rather show sympathy and accept the fact that God has willed it to happen' (*Female adult FGD participant*).

Participants described rape victims as having to deal with any of three *consequences*: (1) physical/medical consequences (e.g., bleeding, pelvic girdle injuries, unwanted pregnancy, infections/HIV), (2) psychological issues (e.g., thinking too much, anger), and (3) social issues (e.g., stigma and discrimination). For example:

If someone raped me, if I have the means of killing the man, I will kill him because of anger (*bakin ciki*), and it will lead to mental disorder or blood pressure, and it brings a lot of problems. Armed Opposition Groups raped many women; some of the women feel like committing suicide because of the rape by AOG. Even if you

are alive, whenever you think of the pains, you feel sad (*fushi*) that you will never forget in your life. (*Woman leader, 38-year-old*)

Participants reported a number of *strategies* to respond to rape, such as community members seeking help from others—a hospital, an NGO, a traditional healer, a community leader, or a religious leader – or reporting it to a radio station or the police. One person described, ‘People in the community will announce in the mosque and joints/gathering what happened, and they will contribute money and help the victim to go to the hospital, and after treatment, people will be very conscious and monitoring the house of the victim, or they will relocate the victim to another house with people’ (*Male teenage FGD participant*). In two FGDs, a suggested solution was having the rapist marry the woman.

Again, legal venues were described as contentious. One participant explained, ‘If a lady is raped and her parents report the case to the police station, the person who committed the crime ends up bribing the policemen, and the case is closed. Instead of them fighting for the raped person’s rights, they just close the case and that’s final’ (*Female teenage FGD participant*).

Resources, coping, and rebuilding

Participants described a wide range of support that helped them manage. *Sources of support* included other community members, community leaders, NGOs, the government, and self-help. Other community members were described as the most common source of support; almost all of the participants relied on each other for help: ‘In our community, it is a standard that whoever is stronger will assist the next person to him that is not strong enough or is suffering [...] You will know that he is in difficulty, and the person, without asking, will assist’ (*Woman leader, 35-year-old*). In contrast, there were many participants who reported that no one supports them or they do not know where to seek help. This was particularly common among women. Some participants explained this as caused by lack of solidarity: ‘No one has time for one another. No one cares how people feel, how they survive, and to the extent that no one even comes closer to you. Everyone just focuses on his/her business’ (*Male adult FGD participant*).

Leaders and NGOs were regarded as trustworthy sources of support. NGOs were described as having helped almost all participants with food, shelter, and training on livelihood projects. Community and religious leaders (*bulamas* and *mallams*) were regarded as sources of support by most participants, despite descriptions of breakdowns in trust and social institutions. Participants described formal structures and leadership as either being helpful, or as presently lacking and needing to be replaced to facilitate rebuilding. For example: ‘For rebuilding, we need these traditional rulers to go back to their respective villages and wards. If these people I mentioned cannot go back to their palace, how can the rest of the community go?’ (*Male religious leader, 55-year-old*). Participants emphasized needs such as security, food, income-generating activities, and infrastructure as important for recovery. Additionally, participants stressed the need for cooperation and mutual support to enable rebuilding. For example, ‘Most of us don’t know each other, but we live together as one and peacefully. I believe this is a form of rebuilding. Someone that you don’t know at all, yet you

hold him as a brother. You do your activities together as if you have known each other for a long time' (*Male farmer, 35-year-old*).

In contrast, the government was often seen as unreliable. Although almost all participants saw it as the obvious source of supports such as rebuilding, security, and medical assistance, some participants described the government as impotent and inefficient, not having seen to their needs since the displacement began: 'Nothing is being done concerning this problem [...] The president said some time back that he released food worth tons. But we are yet to see it. If you investigate, not even a single person in this community benefited from that' (*Businessman, 49-year-old*).

Participants described relying on their own initiative rather than external supports, such as paid labor or begging in the streets. Women described more strategies than men, such as petty trade or seeking assistance from NGOs. Additionally, one participant described that prior to the crisis, women were not allowed to work or seek income outside of their homes. However, they now do so because men cannot find work easily. Some participants described coping with distress by staying calm and relaxed. For example, 'We just have to relax our minds and stay. Whatever is good, we help ourselves and do it. There is no need for anger; if you enjoy your mind, that means the thing has passed. So we plead with ourselves to stay calm and wait and even make our lives better' (*Male community leader, 55-year-old*).

When free list participants were asked what people do to cope with the MHPHS problems they named, 14 strategies were named by at least 5% of participants (Table 3). Over half named praying; the next most common response was 'nothing.' Interpersonal strategies were also named, including *gisting* (gossiping/socializing), advice, support, storytelling, and comforting. Additionally, faith in God, medication, work, and storytelling were always described as helpful. Almost all strategies were considered helpful at least half the time.

Discussion

Our findings point to mental health needs as significant among IDPs and others living in Northeast Nigeria. Participants readily described emotional, cognitive, and behavioral problems that resulted from the Boko Haram insurgency, and we found high levels of endorsement of mental health symptoms on the survey. Thinking (too much) was the most commonly named problem in free listing, which aligns with literature from other settings that has found thinking too much to be a common idiom of distress globally (Kaiser et al., 2015). Other descriptions of MHPHS problems overlapped with symptoms of common mental disorders, suggesting that experiences of depression and anxiety are locally salient. Anger also arose commonly in both free listing and qualitative data. This aligns with a systematic review of qualitative research on depression, which found anger to be a commonly named symptom of depression cross-culturally (Haroz et al., 2015). At the same time, anger does not feature in the Diagnostic and Statistical Manual or International Classification of Disease conceptualizations of depression, highlighting the need for attention to local context and experiences in mental health assessments. Additionally, most descriptions of mental distress did not appear to suggest strong stigma regarding mental illness, with the exception of *tabo* (madness).

These findings suggest that there is clear space for community-based detection of mental health problems, which are readily recognized and discussed. In Nepal, Jordans and colleagues (2015) developed a community-informant detection tool, which is a pictorial resource with accompanying training focused on the use of vignettes and well understood, non-stigmatizing language to train community members in identification and referral for common mental disorders. We recommend developing similar tools for the Nigerian context. For children, tools have been adapted and validated for use by lay community members to detect depression, PTSD, and behavior disorders (Kaiser et al., 2017, 2019). In all efforts at identifying individuals at risk or experiencing mental illness, enrolling them in programs, and communicating with beneficiaries, we advocate drawing upon the non-stigmatizing language used by participants in this study, such as thinking too much.

A second major finding is that men appear to be more vulnerable than is often assumed in humanitarian settings, as reflected in both qualitative and quantitative data. Adult men tended to have higher scores on the mental health assessment than females or children. This is unexpected based on research in other settings (Roberts & Browne, 2011; Whiteford et al., 2013), and it has important implications for humanitarian response. First, it is often assumed that there is one or few primary risk groups in humanitarian contexts, such as women and children. Some have critiqued this focus, demonstrating that mental health consequences and needs can cut across gender, caste/class, age, and other categories (Kane et al., 2018). Indeed, if we were to focus on women and children in this setting, those most at-risk for poor mental health outcomes (adult men) would be overlooked. Additionally, in our qualitative research, most participants began by reporting that everyone is affected. Only after probing did participants name specific vulnerable groups, which included varied and sometimes contradictory responses. Some of these qualitative data point to men being vulnerable due to inability to protect and provide for their family.

A related finding is that much of the discussion around consequences and needs centered on the breakdown of community and political leadership structures, as well as of economic and livelihood activities. There are two major take-aways from these findings. First, interventions should include efforts to re-establish trusted leadership structures and to avoid displacing those systems that exist (Lahiri, Van Ommeren, & Roberts, 2017; Wessells & Bretherton, 2000). For example, traditional leaders could be involved in activities and decision-making, with programs linked to traditional leadership structures. This would have the dual benefit of providing the structures that community-member seek – such as providing recourse to informal justice system – at the same time as it leverages roles for men in the community, to reestablish means for men to fill roles of protection and support.

Second, addressing economic and livelihood needs is critical, for example, identifying means of replacing agricultural and income-generating activities while it remains unsafe for individuals to access their farmland. Such efforts to replace lost livelihoods are likely to address some of the specific forms of distress highlighted as making men vulnerable, as well as to have positive indirect effects on whole families. Additionally, there is a need to address logistical and targeting barriers that participants named, such as families without NGO-provided identification cards being unable to access food aid or Christians being excluded from aid.

Our findings also point to several promising avenues for psychological interventions. For example, solutions-oriented therapy would likely be effective to aid participants in addressing the range of economic, social, and livelihood needs. A counseling program like Problem Management Plus (PM+) would promote concrete, action-oriented solutions at the same time as it addresses cognitive and emotional needs suggested in our qualitative data (Rahman et al., 2016). Framing such interventions as targeting thinking too much would also help to make it comprehensible and non-stigmatizing for participants (Kaiser et al., 2015). An added benefit of this approach is that it is relatively short and low-skill to deliver, suggesting that it would be appropriate for efforts focused on task-shifting of basic mental healthcare to non-specialist providers like community volunteers.

Finally, these programs would need to recognize that unlike for mental health problems broadly, drug abuse appeared to be strongly stigmatized, with effects extending to the whole family. This might be due to the particularly strong stigma regarding substance use in Muslim populations. Stigma can be a strong barrier to accessing treatment and other services. The fact that drug abuse is described as strongly criminalized yet now largely the jurisdiction of an informal justice system suggests that this group is unlikely to access aid as easily as others or to be linked to necessary forms of psychotherapeutic and medical care. Efforts to intervene in terms of drug abuse must therefore include ways to address the strong and widespread stigma regarding drug use in order to access this vulnerable population.

Limitations

Despite its strengths, there are limitations to mixed-methods research. For example, some qualitative findings may not lend themselves to quantitative confirmation, and the point at which qualitative and quantitative findings are merged may influence interpretation (O’Cathain, Murphy, & Nicholl, 2008). In this study, the survey was conducted immediately after qualitative data collection was completed. If these phases had been more distinct, there would have potentially been time to incorporate assessment items that arose from qualitative data collection specifically in this setting (e.g., thinking too much). Additionally, the mental health survey was a short assessment of common distress symptoms. With more time available, complete mental health assessment tools could have provided more insight into specific disorders experienced, as well as a process of local validation. This would have also allowed us to ensure that the tool – and cut-off scores – were valid among all sub-groups (e.g., adults, children). The survey would have benefited from a sampling frame to draw a true random sample. This study was conducted in collaboration with an NGO, which might have encouraged participants to emphasize the importance of NGO support in the humanitarian response.

Conclusion

In the wake of humanitarian crises, it is crucial to understand their potentially far-reaching psychological impacts. This study is the first that we are aware of to detail mental health and psychosocial consequences of the Boko Haram insurgency in Nigeria. This research is crucial to informing ongoing and planned interventions in order to ensure that they are prioritized, targeted, and communicated about in appropriate and non-stigmatizing ways.

Based on our findings, we suggest several potential avenues for MHPSS intervention: (1) focus on low-skill MHPSS interventions that can be delivered by lay community members, (2) account for the surprising finding that adult men experienced a higher degree of mental health symptoms, (3) support restoration of traditional leadership structures and livelihoods as important components of the rebuilding process, and (4) address stigma surrounding drug abuse and rape.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgements:

We are grateful to our research assistants and all those who participated in this study. Support for this paper was provided by Catholic Relief Services with funds from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through U.S. Agency for International Development (USAID) Cooperative Agreement No. AID-620-A-13-00003 and technical support from Gede Foundation. The views expressed in this publication do not necessarily reflect those of CRS or USAID. Dr. Kaiser was supported by the National Institute of Mental Health of the National Institutes of Health (F32MH113288). Dr. Kohrt and Dr. Kaiser are supported by the US NIMH (K01MH104310, R21MH111280).

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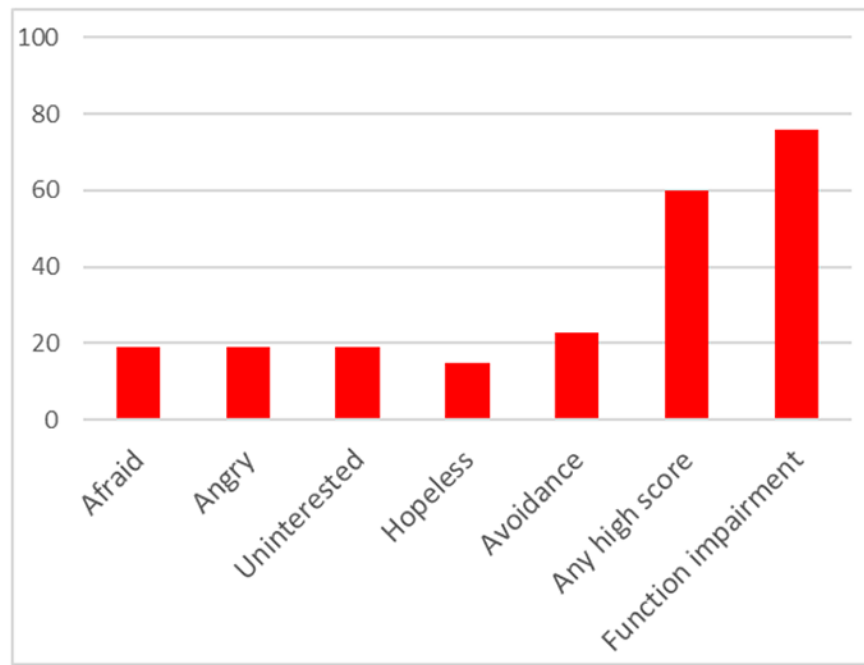


Figure 1: Frequency of high scores* on mental health assessment
*Response of ‘most’ or ‘all of the time’ to any item

Participant Characteristics

Table 1:

Characteristic	Free lists with IDPs and host community (n=66)		Key informant interviews (n=20)		Focus group discussions (n=4)		Mental health assessment (n=124)	
	n(%)	Mean (range)	n(%)	Mean (range)	n(%) ^d	Mean (range)	n(%)	Mean (range)
Gender								
Female	32 (48%)		11 (55%)		2 (50%)		61 (49%)	
Male	34 (52%)		9 (45%)		2 (50%)		63 (51%)	
Age				43 (20-73)				
Teenager(<18)	31(50%)	14 (12-17)			2 (50%)	16 (15-17)	62 (50%)	14 (12-17)
Adult (18)	35 (50%)	42 (18-80)			2 (50%)	43 (18-80)	62 (50%)	42 (18-80)
Marital status								
Single	33 (50%)		0		28 (64%)		62 (50%)	
Married	29 (44%)		18 (90%)		15 (34%)		56 (45%)	
Other	4 (6%)		2 (10%)		1 (2%)		6 (5%)	
Education								
None	47 (71%)		11 (55%)		30 (68%)		101 (81%)	
Primary	15 (23%)		2 (10%)		10 (23%)		20 (16%)	
Secondary/Tertiary	4 (7%)		7 (35%)		4 (9%)		3 (2%)	
Mental health high score^b							74 (60%)	1.2 (0-5)

^a Because focus group discussions (FGDs) were stratified by age and gender, we report number of FGDs in these categories. Other variables are reported at the level of the individual (n=44).

^b Response of 'most' or 'all of the time' to any item

Table 2:

Most common MHPSS problems named by IDPs and host communities through free listing (n=66)

Mental health/psychosocial problem	%
Thinking (too much)	68
Sadness	39
Fearful	38
Worry	24
Anger	20
Sleepless nights	12
Stigmatization/community problems	11
Crying	8
Family problems	6
Family separation/loss	6
Anxiety	6
Substance use	6

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Table 3:

Coping strategies named in free listing (n=66)

Coping strategy	% of respondents	% reporting helpful
Praying	52	92
Nothing	32	3
<i>Gisting</i>	21	81
Patience	17	92
Faith in God	17	100
Advice	17	92
Support	14	91
Medication	11	100
Crying	8	60
Sleep	8	86
Work	8	100
Help	6	60
Storytelling	6	100
Comforting	6	40

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