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Posttraumatic stress disorder symptoms among women and children affected by Boko Haram insurgency in North-east Nigeria

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ABSTRACT

This study is a survey which evaluated posttraumatic stress disorder symptoms and psychological wellbeing of women and children in the context of Boko Haram insurgency in north-east Nigeria. A total of 96 persons (55 women and 41 children) were randomly selected from the population of Chibok community in Chibok Local Government Area of Borno State. Self-report measures consisting of Conflict-Related Trauma Inventory and PTSD Checklist for civilians were administered to the participants. Data was analysed using Chi-square statistics. Results indicated a PTSD prevalence of 70.9% and 41.5% among the women and children, respectively. There was no significant gender difference in PTSD among the children exposed to Boko Haram insurgency. Based on the findings, the researchers recommended setting up of trauma centres by federal/state governments and private individuals across the communities in the northeastern states for people affected by the insurgency to receive care. Psychologists should be employed in all trauma healing centres for effective service delivery, instead of leaving such centres to be run with those who do not have sufficient expertise and training in trauma assessment and interventions

The well-being of citizens is the government's primary responsibility in any country. Hence government of various countries develop strategies and measures towards ensuring the welfare of its people. African countries are currently plagued by myriads of threats that challenges the peaceful wellbeing of her people. A major threat is the widespread terrorism and insurgency. In Nigeria, for instance, an Islamic sect known as *Jama'atu Ahlis Sunna Lidda'a watiwal Jihad* (People Committed to the Propagation of the Prophet's Teachings and Jihad) or commonly called Boko Haram (western education is forbidden) have been terrorizing communities in north east Nigeria since 2009. Osita-Njoku and Chikere (2015) identified causes of Boko Haram insurgency in Nigeria as: poverty, unemployment, absence of good governance and increasing radicalisation of jihadist group in the world. They have strong aversion to western culture/modernity and implement their campaign of terror using suicide bombings, shootings and arson in the early stages of their emergence. They grew to guerrilla warfare and occupation of territories through violence (Adibe, 2012). Their activities spread quickly from Borno state where they started to neighbouring states like Adamawa, Yobe, Bauchi, Gombe as well as countries like Chad, Cameroun and Niger, and their tactics of operation transformed into killings, bombings, displacements, abductions, rapes, forced marriages and forced conversion to Islamic faith.

The attacks by Boko Haram have increasingly targeted civilians, making women and children the most vulnerable. The group raids towns and villages. This has led to the destruction of many homes, schools and religious institutions while health care facilities in these areas have been disrupted. Hundreds of individuals have been abducted, thousands have been killed, and more than a million people have been displaced, leaving many children orphaned and homeless (Amusan & Ejoke, 2017). Women and girls in captivity are used for cooking, cleaning and other duties that may be assigned to them by their captors. Many may also be forced to bear children that will grow to further the course of the insurgency (Osita-Njoku & Chikere, 2015). Boko Haram's rise and insurgency have dramatically changed the lives of thousands of women and girls, often casting them voluntarily or by force into new roles outside the domestic sphere. Some joined to escape their social

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conditions; others were abducted and enslaved. Several years of war have caused gender-specific suffering. While men have disproportionally been killed, women and children are an overwhelming majority among the estimated 1.8 million internally displaced persons (IDPs) in the North East (United Nations High Commission for Refugees, UNHCR, 2018).

According to the study on 30 abducted individuals, 16 witnesses and 12 escaped students of the Chibok School by Human Rights Watch, HRW (2014), kidnapped women and girls were threatened to death if the Christians among them refused to denounce their religious faith. Abducted girls were forced into marriages; others were forced to carry stolen loots from neighbouring villages while some were forced into military participation; forced to kill captured victims; brain washed into being a suicide bomber, sexually molested, and raped. Many of the victims of abduction and their family members reported living in constant fear of re-abduction which torments them resulting in sleeplessness (Human Rights Watch, 2014). Regardless of the motive(s) behind kidnapping/abduction and other terrorist activities, these crimes have devastating, far-reaching effects on the victims, their families and the society at large. The activities of Boko Haram Terrorist (BHT) in Nigeria have therefore become a great concern, particularly in the North-eastern Nigeria where many Nigerians are having the nightmares of their lives as they live in perpetual fear of bombings and kidnappings with many of them suffering from psychological instability (Amusan & Ejoke, 2017). Report on mental health services in emergency settings published by the World Health Organization (WHO) estimated that humanitarian emergencies double the chances of people being affected by mental health disorders.

A research carried out in the region of Diffa, Niger Republic, showed that half of the persons displaced by insurgency and war suffer from mental health problems. Among them, 32% were suffering from Post-Traumatic Stress Disorder (PTSD), 25% from depression and 7% from psychosis; rates which are like other conflict settings (Coperazione Internazionale, COOPI, 2017). Due to stressors caused by the ongoing insurgency in North Eastern Nigeria, many civilians have been treated for psychological complications including PTSD. Many are losing their zest for life while going through traumatic experiences with the danger of more patients standing risks of being diagnosed with various mental disorders including PTSD (Omeiza, Onyencho, & Wakil, 2014). A startling increase in PTSD among individuals living in the area exposed to the insurgency was reported by the Federal Neuropsychiatric hospital in Maiduguri. This is not surprising as several related studies that assessed the psychological impacts of the Boko Haram insurgency yielded similar results (Mishara & Gbaden, 2014; Omeiza & Wakil, 2014; Amusan & Ejoke, 2017; Haruna et al., 2017).

Many victims of Boko Haram insurgency have been reported to witness the torture or death of a family member (Mgbenkemdi & Eze, 2017). Although any death of a love one can be emotionally devastating, unexpected deaths provoke especially strong responses, as there is less time to prepare for and adapt to the death (Applebaum & Burns, 1991). In a study carried out by researchers among persons displaced by the Boko Haram insurgency in Maiduguri, more than half (59.5%) of the respondents reported losing a family member to the violence (Habu et al., 2017). The odds of having PTSD were 3.5 times higher among the respondents with depression and 3.7 times higher among those who had witnessed the death of a family member (Sheik et al., 2014). War- related traumatic events that have been associated with PTSD among victims of insurgency and ethno religious conflicts include being injured, destruction of personal property, home burned down, being personally attacked and being evacuated from their town (Khamis, 1993; Roberts et al., 2008; Sheik et al., 2014; Mgbenkemdi & Eze, 2017)

Several theories have been mentioned as useful in explaining the relationship between exposure to violence and PTSD among victims. For the purpose of this research, cognitive conceptualization of PTSD and emotional processing theory have been used to exposure to trauma impacts PTSD among victims of violence. The cognitive conceptualization of PTSD acknowledges the presence of overly active danger schemas (Beck, Emery, & Greenberger, 1985; Ehlers & Clark, 2000; Hembree & Foa, 2004). A person with PTSD is likely to have recurrent false alarms brought on by an exaggerated sense of danger. This can happen even if the trauma happened long ago. Researchers have advanced several explanations of why some individuals experience this persistent, exaggerated sense of threat. One explanation is the process of avoidance and "seeking safety" (Dunmore et al., 1999; Najavits, Weiss, Shaw, & Muentz, 1998). Evidence suggests that the way individuals

emotionally and cognitively process a traumatic experience contributes to the development and maintenance of PTSD (Clark & Ehlers, 2004; Ehlers & Clark, 2000; Foa & Kozak, 1986; Smucker, 1997). Persistent PTSD occurs when an individual processes a traumatic event in a manner that leads the person to recall the event with the same sense of seriousness and danger felt at the time of the original trauma (Clark & Ehlers, 2004; Ehlers & Clark, 2000). It is the individual's interpretation and appraisal of the trauma and the ensuing memory that contribute to persistent PTSD.

Emotional-processing theory (Foa & Kozak, 1986; Foa & Riggs, 1993; Rachman, 1980) provides an integrated framework to analyse and explain the onset and maintenance of PTSD. This theoretical approach combines insight from learning, cognitive, and behavioural theories of PTSD and builds on the idea that it is not unusual for emotional experiences to continue to affect one's behaviours long after the event originally associated with the emotion has passed. This emotional re-experiencing can engender a pattern of avoidance of the trauma memory and sustain the presence of PTSD (Foa et al., 1989; Foa & Jaycox, 1999). Foa and Kozak suggest that emotions are represented by information structures in memory. In the case of fear, the associated memory includes information specific to the feared stimulus, overt responses (i.e., verbal, physiological, and behavioural) to the stimulus, and the meaning that the individual has attached to that stimulus. The overall function of this information structure is to help the individual escape or avoid the perceived threat or danger (Foa & Kozak, 1986). Therefore, it is the meaning attached to the memory, usually in the form of a feeling of dangerousness or some catastrophic outcome (e.g., "I will die"; "I will lose control"; "I will faint") that prevents the individual from confronting the traumatic memory and effectively processing the information, emotionally and cognitively, underlying the memory. Thus, the individual reacts to the memory with the same cognitive, affective, and behavioural responses associated with the original trauma. In effect, the individual fear structure is virtually stuck in a moment in time that has now passed but that has not been processed or digested in an effective and healthy manner.

In most studies carried out on PTSD following crisis periods, females are significantly more susceptible to serious psychiatric morbidity than males (Tolin & Foa, 2006; Roberts et al., 2008; King'ori, Peter &Oboka, 2014; Saleh, James & Shedrach, 2016). An explanation for the observed sex differences in PTSD is that male participants are more likely than female participants to exhibit posttraumatic symptoms other than PTSD. Gibbs (1989) posits that following a crisis, male posttraumatic reactions are different from, but not necessarily less disturbing than those of female, males are less likely to report internalizing disorders (e.g., anxiety or depression), but are more likely to report externalizing disorders (e.g., conduct disorders or substance use disorders).

Mishara and Gbaden (2014) investigated the prevalence of mental disorders among the youths as an aftermath of the internal insurgency attacks in Maiduguri, Nigeria. They maintained that age may impact on the course of the disorders, with elderly subjects found to show a significant decrease in post-traumatic symptoms that may be due to lower psychological stress and successful coping in previous disaster experiences. Children as well as adolescents because of their developmental status are more emotionally vulnerable to the devastating effects of a crisis. A research by Groome and Soureti (2004) supported this same idea as well. The purpose of this study is to examine the prevalence of PTSD among women and children affected by Boko Haram insurgency in Borno state, Nigeria. The study also seeks to examine gender differences in self-reported PTSD symptoms among children affected by the insurgency.

Method

Participants and procedure

The sample for this study was 96 women and children drawn from residents of Chibok Local Government. Chibok is a Local Government Area in Borno State. According to National Bureau of Statistics (2006), Chibok has an area of 1,350km^2 and had a population of 66,333 in 2016 with a projected population of 93,900 for 2016. Out of the 66,333 population, 13,766 are children aged between 8 – 18 while 32,381 are women. This brings the total figure to 46,147 for Chibok women and children (National Bureau of Statistics, 2006). This was the research's population of study. The researchers employed non-probabilistic purposive sampling method to select participants for the study. This is a sampling technique that is based on the characteristics of the population and objective of the study. The sampling focuses on selecting samples that shares common characteristics or sets of characteristics which in this study are women and children who were directly affected by Boko Haram insurgency in Borno state, northeast Nigeria. The characteristics of the sample for this study is presented in the results section.

Instruments

The instrument used for the collection of data for the current study is a self-administered questionnaire consisting of three sections. The first section (Section A) had four items about socio demographic data of the respondents. Section B was the was the PTSD Checklist for civilians (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993). The PCL is a 17-item scale measuring each of the DSM-IV symptoms of PTSD. It also includes assessment of exposure to trauma. Respondents rate each of the items on a five-point scale (1 = not at all to 5 = extremely) based on how much they were bothered by each symptom of PTSD in the past month. The PCL is scored by adding up all items from each of the 17 items. Total severity scores range from 17-85. A total score of 17-29 shows little to no severity, a score of 30–44 indicates moderate to moderately high severity of PTSD symptoms while a total score of 45-85 indicates high severity of PTSD symptoms. In a study comparing seven self-report measures of PTSD (Adkins,Weathers, McDevitt-Murphy and Daniels, 2008) the PCL had the highest convergent validity, good discriminant validity and a high diagnostic utility in measurement. The PCL has high internal consistency and test-retest reliability. Previous study in Nigeria by Ifeagwazi and Chukwuorji (2015) reported an α of .85 and split half-reliability (Spearman-Brown) of .92 for the PCL, while Onyedire, Ekoh, Chukwuorji and Ifeagwazi (2017) obtained α coefficient of .82

Design/statistics

The research design adopted in this study was cross-sectional desing. The quantitative data obtained from questionnaires were also analyzed using descriptive statistics such as frequency and percentages to establish the prevalence of PTSD symptoms among women and children. All analyses were done using the SPSS.

Results

Table 1: Demographic characteristic of the participants (*N* = 96)

Variable	Frequency	Percentage
Age		
8-18 years	41	42.7
19-35 years	33	34.4
Above 35 years	22	22.9
Gender		
Male	13	13.5
Female	83	86.5

Table 1 showed the demographic characteristics of the participants. Participants aged 8-18 years were 41(42.7%); 19-35 years were 33(34.4%), while participants above the age of 35 years were 22 in number (22.9%). By gender, 13(13.5%) were male and 83(86.5%) were female.

Table 2 shows the results of crosstab computed to determine the prevalence of PTSD among women and children exposed to Boko Haram insurgency. The table showed that 70.9% (n = 39) of the women exposed to the insurgency reported high symptoms of PTSD while 29.1% (n = 16) had low symptoms of PTSD. Among the children, 41.5% (n = 17) reported high symptoms of PTSD while 58.5% (n = 24) had low symptoms of PTSD. Overall, the prevalence of PTSD among women and children exposed to Boko Haram insurgency was statistically significant ($\chi^2_{(1)} = 5.123, p < .05$).

Table 2: Crosstab Chi-square results of prevalence of PTSD among women and children exposed to Boko Haram insurgency

		PTSD Symptom		
		Little	**High**	**Total**
Women	Count	16	39	55
	% within PTSD	29.1%	70.9%	100.0%
Children	Count	24	17	41
	% within PTSD	58.5%	41.5%	100.0%
Total	Count	40	56	96
	% within PTSD	41.7%	58.3%	100.0%

Table 3: Crosstab showing the relationship between gender and PTSD among children exposed to Boko Haram insurgency

		PTSD Symptom		
		Little	**High**	**Total**
Male	Count	6	7	13
	% within PTSD	46.2%	53.8%	100.0%
Female	Count	9	19	28
	% within PTSD	32.1%	67.9%	100.0%
Total	Count	15	26	41
	% within PTSD	36.6%	63.4%	100.0%

$\chi^2_{(1)} = 0.751, p > 0.05$

Table 3 showed the results of Chi-square computed to determine the relationship between gender and PTSD among children exposed to Boko Haram insurgency in North east Nigeria. It was found that female children exposed to the insurgency had 67.9% rate in symptoms of PTSD while male children had 53.8% rate. However, PTSD symptoms rate among female and male children exposed to the Boko Haram insurgency was not statistically significant ($\chi^2_{(1)} = .75, p > .05$).

Discussion

There are two aims of the present study. The first first aim was to examine the prevalence of PTSD among women and children exposed to Boko Haram insurgency in North east Nigera. It was found 70.9% of the women and 41.5% of the children had high PTSD symptoms. This finding is consistent with previous research carried out by Gbaden and Mishara (2013), which high PTSD prevalence among students of University of Maiduguri. Gbaden and Mishara reported a 66.7% prevalence of PTSD among the students. The result of the study has confirmed that not only do victims of the Boko Haram insurgency suffer physical and economic loss, they also suffer significant psychological effects. Beyond meeting the material needs of victims, there is a need for concerned authorities to pay attention to the psychological needs of victims, especially those who are resident in communities that are close to the activities of the insurgents. About affected children, therapeutic programmes intended to meet their psychosocial needs should be developed ahead of time and timely by trained clinical psychologists.

The second research aim was to examine gender differences in prevalence of PTSD among children exposed to the Boko Haram insurgency. Result showed that female children exposed to the Boko Haram insurgency did not report significantly higher symptoms of PTSD than male children, although there were more female children who had high symptoms compared to male children. The finding did not support reports from similar studies by researchers (e.g., King'ori, Peter, & Oboka, 2014; Saleh, James & Shedrach, 2016) who found significant gender difference in PTSD following trauma exposure. It has been observed that male participants were less likely than female participants to exhibit posttraumatic symptoms other than PTSD, that is, after a traumatic event male were more likely to report externalizing disorders such as conduct disorders or substance abuse disorders whereas women report internalizing disorders such as PTSD symptoms (Gibbs, 1989).

When interpreting and applying the results presented in this study it is important to note several limitations of the study. The study was carried out among women and children only, and the results may therefore not be applicable for generalization to the general population. The study made use of self-reporting questionnaires. It is therefore possible that there may be bias in responses. For example, it is possible that some of the participants gave socially desirable responses and may not want to express private details of traumatic experiences of the past even though they were told by the researcher that their responses would be confidential. The researcher encountered language barrier during questionnaire administration. Majority of the local people did not have proper understanding of English language and thus needed verbal interpretation of the items in the questionnaire and this may have influenced the results. Translating the questionnaire into Hausa language could have minimized this challenge and improved responses. Future studies should note these limitations in order to improve the current knowledge in this regard. For further study on PTSD in relation to Boko Haram Insurgency and or

ethnic/religious violence, future studies should draw sample from all demography of civilians as this was centered on women and children. Future studies should also examine PTSD among health workers and other emergency responders exposed to violence such as the military, police and other security agents in order to have better results.

In conclusion, this study investigated Boko Haram insurgency and posttraumatic stress among women and children in Chibok Comminity, Chibok Local Government Area, Borno State. The following conclusions are drawn from the study based on the findings of the hypotheses. The study found that there was a high prevalence of PTSD among women and children exposed to Boko Haram insurgency. The study also found that female children exposed to the Boko Haram insurgency did not report significantly high symptoms of PTSD than male children. Trauma healing centres should be set up by both Federal/ State governments and private individuals across the communities in the states for people traumatized by the insurgency to be cared for. There is also the need for the implementation of screening programmes and psychological interventions in vulnerable populations like Chibok and other communities that have suffered high impact of Boko Haram insurgency.

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