

## **Determination of the Relationships between Age, Gender, Occupation, Level of Education, Length of Stay in IDP camp and PTSD among IDPs in Borno state Nigeria**

<sup>1</sup>Adamu Muhammad Sabo  
+2348060275670

[adamusabomuhammad@gmail.com](mailto:adamusabomuhammad@gmail.com)

<sup>2</sup>Prof. Hayat Gomma  
+2348096535406

[h.gommaa@gmail.com](mailto:h.gommaa@gmail.com)

<sup>1</sup>Adamu Alhaji, Ph.D  
+2348065499113

[adamuamin@gmail.com](mailto:adamuamin@gmail.com)

<sup>3</sup>Mohammed Inuwa  
+2348065407190

[miazare90@gmail.com](mailto:miazare90@gmail.com)

<sup>3</sup>Sa'ad Abubakar Idris  
+2347063635490

[asidris4gud@gmail.com](mailto:asidris4gud@gmail.com)

<sup>1</sup>Department of Nursing Science  
Faculty of Allied Health Sciences,  
Federal University of Health Sciences, Azare

<sup>2</sup>Department of Nursing Science  
Faculty of Allied Health Sciences,  
Ahmadu Bello University, Zaria

<sup>3</sup>Department of Primary Education  
School of Early Childhood Care and Primary Education  
<sup>3</sup>School of Postgraduate and Sub-degrees Programme  
Aminu Saleh College of Education, Azare

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## **Abstract**

*The study determined relationships between Socio-demographic and PTSD among IDPs in Borno State, Nigeria. Descriptive cross-sectional design of mixed method was adopted for the study. The population of the study comprised all registered IDPs living in 11 IDPs Camps with total of 27212 IDPs. Multistage sampling procedure was adopted to select a sample of 500 respondents using Kieshie formula. Descriptive statistics of frequency counts and percentage were used to describe the demographic information of the respondents while inferential statistics of t-test and One-way ANOVA, Regression and PPMC were used to test the postulated hypothesis at 0.05 alpha level. Questionnaire and PTSD checklist civilian version (PLC) was used as instrument for data collection for the study. The instrument for data collection adopted was validated by five experts in medical psychology and psychiatric Specialist. Pilot study was conducted to establish the reliability of the instrument. The result of the study revealed that: the male and the female IDPs were difference in the prevalence of PTSD in Borno State, hope level will determine severity of PTSD and majority of IDPs have highest hope level in Borno State, Age, Ethnicity, Marital Status and Gender are significant predictors of PTSD among IDPs in Borno State, this shows that 99.9% of the severity of PTDS is not predicted by hope level. The study conclude that, there is significant prevalence of post-traumatic stress disorder among IDPs in Maiduguri, Borno State. The study recommend among others that measures should be put in place by either government or non-governmental agencies to include mental health intervention in the rehabilitation of victims of insurgency who show one or more symptoms of PTSD.*

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## **Introduction**

In recent years, Borno State had witnessed a series of conflicts such as Boko-Haram, Religious and communal conflicts that resulted many people being shot, burnt or beheaded; So many were physically attacked and get injured; their houses and properties burnt or exposed to the grotesque (for example to mutilated and/or pieces of corpses) as happened during the Bombing on the May 1<sup>st</sup> 2014(mike). This is in addition to disaster such as oil spills, flooding, and catastrophes like air crashes, bomb blasts and horrific road accidents. The physical, human and environmental effects of these conflicts are still very visible and persist with unspeakable consequences; among the effects are psychological disturbances of various types and severity. A review of studies on psychological trauma had concluded that a significant relationship exist between posttraumatic stress disorder (PTSD) and Psychological trauma Omoluabi (2004), defined trauma as a psychological or physical injury that is caused by critical life events. It was Reported by Basoglu *et al.*, (2007) that there was also evidence to suggest that an individual sense of unpredictability and uncontrollability during a traumatic situation increases the risk of Post-traumatic stress disorder (PTSD). Basoglu, *et al.*,(2004) postulated that critical life events in the case of the internally displaced persons (IDPs) can be rape, murder, torture, kidnapping, and imprisonment, others are separation from family members, forced to kill a friend or relative, witnessing the killing of a loved one or a family member among others. Loey *et al.*,(2012) stated that Post-traumatic stress disorder (PTSD) is the most prolonged and the most serious of all reactions to severe stress. Posttraumatic stress disorder (PTSD) is a relatively common and complex psychiatric disorder

experienced by traumatic event survivors. PTSD is characterized by three symptom clusters that include re-experiencing, emotional numbness and avoidance and, and increased emotional arousal (American Psychological Association, 2002) in line with Diagnostic Statistical Manual (DSM-IV). PTSD is the psychiatric disorder that can be resulted from the experience of life-threatening events, such as terrorist attack, violent and abuse, military combat, natural disasters, serious accidents and personal assaults.

Trauma exposure is common throughout the world, unequally distributed, and differential across trauma types with respect to PTSD risk. The fact that only a small minority of people in the population develops post-traumatic stress disorder (PTSD) (Atwoli, Stein, Koenen, & McLaughlin, 2015) even though the vast majority are exposed to traumas at some time in their life. According to NEMA (2017), increased terrorist attack, violent crime and abuse, military combat, natural disasters, serious accidents, and personal assaults, clash between herders and farmers, activities of bandits, Boko-Haram in Nigeria have necessitated the establishment of internally displaced camps because so many people lost their properties, loved ones, children lost their parents, jobs, homes, and farmland, many girls and women were raped (NEMA, 2014). The victims were rendered homeless, sent out from their communities, significant number of parents lost their jobs, farms and many children could not attend schools, they could not eat three square meals per day, yet going street by street bare footed and in tattered clothes begging in many state and they cannot afford good health care services.

These problems encountered by the internally displaced persons predisposed them to psychological consequences such as PTSD. Some studies pinpointed that the internally displaced persons who were injured or maimed, had witnessed a burial, injury or death and had suffered severe property loss, were more prone to suffer from psychological problems that showed greater anxiety and a greater number of PTSD symptoms existed in children who had experienced severe exposure to trauma, (Zhang *et al.*, 2012). Moreover, the type of parental loss was related to the severity of PTSD, adolescents who had lost their mothers had the highest chances of PTSD (Liu, *et al.*, 2013). It was discovered that residents in the camps are not limited to adults alone, both adolescents and young adults are found in the camps. Although previous studies conducted on PTSD among internally displaced persons in Nigeria to the researcher knowledge, only a few have explored the prevalence and socio-demographic correlate of PTSD and coping mechanism used by IDPs living in camps. So the present study is aimed to bridge this gap in knowledge.

1. Determine the pattern of PTSD among IDPs in Borno state
2. Determine the relationships between Socio-demographic and PTSD among IDPs in Borno State, Nigeria.

### **Materials and Methods**

Descriptive cross-sectional design of mixed method was used for the study. The population of the study comprised twenty seven thousand two hundred and twelve (27212) registered IDPs lived in camps within Maiduguri Metropolitan Council (MMC) and two sample size determinations for quantitative and qualitative were determined. Multistage sampling technique was used to select the sample of 500 participants for the study.

**Table 1: Proportionate distribution of IDPs according to the Camps**

<b>LGA</b>	<b>Camps</b>	<b>Sampling frame</b>	<b>Household Size</b>	<b>Quantitative</b>
Maiduguri	Dalori	2200	400	45
	Bakasi	5000	850	97
	T- village	2662	450	49
	Gubio	1126	280	26
	NYSC	2800	520	51
	M-yarbadari	300	600	24
	Custom House	2087	390	43
	Farm centre	2120	400	39
	G-Kachallari	1808	380	38
	Bakolis	3059	620	56
	Madinatu	1350	280	32
<b>Total</b>	<b>11</b>	<b>N=27212</b>	<b>5170</b>	<b>n= 500</b>

Questionnaire and PTSD checklist civilian version (PLC) was used as instrument for data collection for the study. The Questionnaire consist of eight (8) variables includes; age, gender, ethnicity, Education, occupation, income, Religion and length of stay in camp. PTSD checklist civilian version (PLC): The PCL-Cis 17-items self-report rating scales to assess the Prevalence of PTSD (Weathers et al., 1994). The items are scored on a five point scale (1 = not at all, 2 = a little bit, 3 = moderately traumatized, 4 = quite a bit, 5 = extremely traumatized). The items are divided into three sub-scales that correspond with the three symptom clusters of PTSD described in the DSM-IV (American Psychiatric Association, 2016). The total score ranges from 17 to 85, and score of 3 represent the decision basis for each item. A total score of 50 and above represent the diagnosis of PTSD, with higher scores indicating higher PTSD Prevalence. The instrument was validated in the study of role resilience and locus of control in University of Nigeria (2017). Similarly, it was also validated in assessment of post-Traumatic stress and its pre-traumatic factors among Liberian refugees in department of psychology, faculty of social sciences, Ekiti State University, Nigeria (2013).

The collected were using Statistical Package for Social Sciences (SPSS V. 26.).

### **Results**

The researcher made used of five hundred (500) questionnaires. Out of 500 questionnaires administered, all were retrieved back completely filled by the respondents. The response rate was 100%.

**Table 2: Distribution of the sample according to socio-demographic variable n =500**

Variables		Frequency (F)	Percentage (%)
Age	Greater than 40 years	150	10.2
	20-39years	170	26.0
	10-19yeas	180	30.2
Gender	Female	303	60.6
	Male	197	39.4
Ethnicity	Hausa	8	1.6
	Kanuri	296	59.2
	Shuwa	136	27.2
	Kenembu	60	12.0
Educational Qualification	None	128	25.6
	Religious	43	8.6
	Tertiary	22	4.4
	O Level	186	37.2
	Primary	121	24.2
Income	None	164	32.8
	40,000	18	3.6
	30,000	54	10.8
	20,000	153	30.6
	10,000	98	19.6
	5,000	13	2.6
Religion	Christianity	77	15.4
	Islam	423	84.6

Occupation	Dependent	105	21.0
	Civil Servant	26	5.2
	Farming	252	50.4
	Trading	117	23.4
Length of Stay in the Camps	1-2years	52	10.4
	3-4years	143	28.6
	4-5years	120	24.0
	6years and above	185	37.0

Presented the socio-demographic information of the respondents, It shows that 168(30.6%) at the age of 10-19, 150(10.2%), at the age of 40 and above. It also shows that 303(60.6%) are females, 197(39.4%) are males. 296(59.2%) are Kanuri, 8(1.6%) are Hausas. It further revealed that 186(37.7) possess O'level, 22(4.4%) attended tertiary institutions. 271(54.2%) were dependents, 79 were civil servants. It also shows that 164(32.8%) has no income 18(4.7%) has income of 40,000 monthly, 432(84.6%) are Muslims, 77(15.4%) are Christians. On the reasons for displacement 474(94.8%) was due to activities of insurgents while 12(2.4%) was due communal clashes. It also reveals that 252(50.4%) were farmers, 26(5.2%) were civil servants, It finally shows that 185(37%) of the respondents spent 6years and above in the camps while 52(10.4%) of the respondents spent 1-2years in the camps.

**Table 3: Distribution of IDPs according to Severity and Presence PTSD n =500**

Variable	F	%
Presence		
No PTSD	63	12.8
Yes	437	87.4
Levels PTSD n= 437		
Mild PTSD < 17	44	10.0
Moderate 17 to 50	133	30.5
Severe >50	260	59.5

The table above, show that 260(59.5%) have severity symptom of PTSD such as flash back, nightmares about situation found themselves and feeling hopeless etc, while 133(30.5%) had moderate symptoms of PTSD and 44(10%) had mild symptoms of PTSD.



\*P < 0.05

**Figure: The relationship between socio-demographic and Severity of PTSD**

The figure above shows the relationship between socio-demographic and Severity of PTSD among IDPs in Borno State. The Reason for displacement (P<0.000) are the only one (1) variable indicated relationship with severity of PTSD.

### Discussion

From the result of the socio-demographic information of the respondents, It shows that 168(30.6%) at the age of 10-19, 150(10.2%), at the age of 40 and above. It also shows that 303(60.6%) are females, 197(39.4%) are males. 296(59.2%) are Kanuri, 8(1.6%) are Hausas. It further revealed that 186(37.7) possess O'level, 22(4.4%) attended tertiary institutions. 271(54.2%) were dependents, 79 were civil servants. It also shows that 164(32.8%) has no income 18(4.7%) has income of 40,000 monthly, 432(84.6%) are Muslims, 77(15.4%) are Christians. On the reasons for displacement 474(94.8%) was due to activities of insurgents while 12(2.4%) was due communal clashes. It also reveals that 252(50.4%) were farmers, 26(5.2%) were civil servants, It finally shows that 185(37%) of the respondents spent 6 years and above in the camps while 52(10.4%) of the respondents spent 1-2 years in the camps.

The finding of the study one revealed that there was significant severity of post-traumatic stress disorder (PTSD) presence among internally displaced persons (IDPs) in Borno State. The study has significant influence on individual response to situations with 59.5% as compared by Richa *et al.* (2020) who reported that 100% prevalence of trauma exposure and 48.7% of current PTSD among IDPs, 70% PTSD rate of Yazidi participants, which is significantly higher (p < 0.01)

compared to 44% of Muslim participants and 32% of Christian participants. The finding further reported that PTSD symptom scores was ( $p < 0.001$ ) obtained among Yazidis (43.1; 19.7), compared to Muslims (31.3; 20.1) and Christians (29.3; 17.8). The finding was correlated with the finding of the study of Farhood, Fares and Hamady (2018) who reported that religion in experienced traumas was statistically significant. However, the finding was contradicted by the finding of Sekoni, Mall and Christofides, (2021) who reported that there is no association with PTSD and IDPs from a household in the poorest category was not associated with the occurrence of PTSD even though the association was not strong. However, no other socio-demographic characteristics were associated with PTSD. The study further reported that women without a history of child sexual abuse were less likely to report PTSD symptoms and this was statistically significant. Similarly, Farhood, Fares, & Hamady, (2018) reported that females were twice as likely as males to score above PTSD threshold (24.3 vs. 10.4%,  $p < 0.001$ ). Total scores on all trauma types were similar across genders. Females scored higher on all symptom clusters ( $p < 0.001$ ). Social support, social life events, witnessed traumas, and domestic violence significantly were associated with PTSD in both genders. Social support, social life events, witnessed traumas and domestic violence were significantly associated with PTSD in both genders. Study finding of Baral and Bhagawati (2019) revealed that PTSD was prevalent among 24.10% of adult survivors with highest intrusion symptoms ( $3.24 \pm 0.71$ ). The study further reported that it was significantly associated female gender, illiterates and those who were injured during earthquake are at more risk for PTSD (Baral and Bhagawati, 2019).

The result of the study two revealed that there was no significant relationship between age, gender, former occupation, and current occupation, length of stay in IDPs' camp, and only reason for displacement with having PTSD among IDPs in Borno State. The finding was supported by finding of the study of Paula, Gonzauz, Ismail, and Ana (2017) who reported that clinical and socio demographic variables are correlated with the perception of social support and coping strategies in patients with cancer. The study further reported that the importance of taking into account the socio demographic and clinical variables in their relationship with social support and coping strategies for designing psychological intervention programs in cancer patients is discussed. However, the finding was further supported by the finding of Sofia *et al.* (2016) who reported that age and marital status did not affect significantly the choice of coping strategies Highest used coping strategy was active coping ( $2.92 \pm 0.51$ ). Survivors not having PTSD scored more on active coping ( $p < 0.0001$ ) and self distraction coping ( $p = 0.006$ ) while those with PTSD mostly used passive coping ( $p < 0.0001$ ), religious coping ( $p < 0.0001$ ) and substance use coping ( $p < 0.0001$ ) (Baral & Bhagawati, 2019). The study further revealed that there was difference in religious coping score according to age ( $p < 0.0001$ ), sex ( $p = 0.033$ ) and educational status ( $p < 0.0001$ ) of the adult survivors. Religious coping was found to be significantly high in elderly adults and illiterate survivors compared to their counterparts. Significant difference in passive coping was found according to sex ( $p < 0.0001$ ) and educational status ( $p < 0.0001$ ) of the survivors. Passive coping was higher in females and among the illiterates. Conversely, active coping was significantly higher among the younger adults ( $p = 0.022$ ), males ( $p < 0.0001$ ) and the literate ( $p < 0.0001$ ). Moreover, self distraction coping score was significantly higher among young adults ( $p < 0.0001$ ), males ( $p = 0.033$ ) and literates ( $p < 0.0001$ ). Significant difference was observed between substance use



coping with age ( $p < 0.0001$ ) and educational status ( $p < 0.0001$ ) of respondents. It was higher among elderly adults and those survivors who were illiterate. The finding was further contradicted by the finding of the study of Hajj (2021) who reported that female sex, economic hardship, lower educational level, being unemployed, number of witnessed/experienced traumatic events, and presence of comorbid psychological disorders were associated with higher PTSD rates and adoption of coping strategy.

### **Conclusion**

Based on the finding of the study the following conclusions were drawn:

- i. There is significant prevalence of post-traumatic stress disorder among IDPs in Maiduguri, Borno State.
- ii. Among the eleven socio-demographic characteristics, only reason for displacement indicates significant relationship.

### **Recommendation**

Based on the finding of the study the following recommendations were made:

- i. Measures should be put in place by either government or non-governmental agencies to produce psychiatric nurses, doctors, psychologists and therapists in order to produce them with services needed and rehabilitation services.
- ii. Emphasis to recruit more Psychiatric nurses, Doctors, therapists and psychologists to help in identifying the need to cope and guide the internally displaced persons to use appropriate good coping strategy.
- iii. Psychological counseling should be given to all the victims' insurgency but more emphasis on females on how to cope with the traumatized experiences they went through by community volunteer group, government and non-governmental organizations.
- iv. People of Borno State should be empowered on how to cope with traumatic experience even before they experience traumatize event by either the government or non-governmental agencies so as to prepare them well for eventualities.
- v. Special care and support in relation to provision of foods, shelter and social services and basic social amenities should be given to victims of insurgency so that it will improve their hope that everything would bring back normality and engage them, so as to reduce the development of PTSD among victims of insurgency.
- vi. The government should make provision for security, employment, conducive studying atmosphere and social amenities so as to curtail terror groups in recruiting the citizens to leads the displacement of the communities.
- vii. Government and non-governmental organization should provide the internally displaced person with health care facility, health personnel and provision of essential drugs within the camps.

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