

**AN ASSESSMENT OF DEMOGRAPHIC VARIABLES ON POST-
TRAUMATIC STRESS DISORDER (PSTD) AMONG FLOOD VICTIMS
IN MAKURDI METROPOLIS.**

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Abstract

This study examined the Post-Traumatic Stress Disorder among flood victims in Makurdi metropolis. The study adopted ex post facto research design. A total of 205 participants randomly selected from five areas mostly affected by flood were selected for the study. They comprised of 113 (55.12%) male and 92 (44.88%) females. Their age ranged between 17 and 50 years and their mean age is 33.5. An instrument, Post Traumatic Stress Disorder Checklist (PCL-C) developed by National Center for PTSD, was used to collect data. Two hypotheses were generated and tested using t-test and multiple regression analysis. Results showed no significant difference between male and female on PSTD following flood disaster and that demographic variable independently and jointly predicted PSTD among flood victims. Based on the findings, it was recommended that government should step up policies that would require the services of Clinical Psychologists and conducting psycho-education for the victims. Measures should be put in place in relocating those who lost all their properties to flood disaster.

Keywords: *Assessment, Post-traumatic, flood, Makurdi metropolis.*

INTRODUCTION

The flood disaster experienced by residents of Makurdi metropolis in September, 2012 still lingering as people still counting their losses and the flash back episode. Flood has been recorded to be one of the major natural disaster which is capable of destroying property, safety, and amenities of human properties (Awopetu, Chia, & Labe, 2013). It is known to trigger physical, emotional and psycho-social, and more importantly post traumatic stress disorder (American Psychiatric Association, 1994). Exposure to this traumatic event is common as we live in a world of uncertainty. Studies have shown that more than two third of the general population are likely to be exposed to trauma in their life span and flood is one of the most common and severe forms of such natural disasters which can result to direct economic and property loses, physical injury, death and psychological injuries (Kaysen, Morris, & Resick, 2005).

The flood disaster of 2012 that had fallen over most of the States in Nigeria particularly Benue State rendered most of the people homeless and properties worth millions were destroyed. The residents of Makurdi metropolis were not left out, areas around river banks, Gyado Villa and parts of Benue State University and many other residents were over flooded, lasting for about two months is an example of natural disaster. This disaster left hundreds of residents homeless and destroyed many infrastructures both physical and agricultural. A majority of affected victims no doubt experienced mental stress, depression, anxiety and especially, flood phobia when it is about raining. Such disaster equally left indelible, unforgettable, and most terrifying and horrifying impacts on the minds of the victims which eventually results in post-traumatic stress disorder (PTSD).

Post-Traumatic Stress Disorder is one of the commonest disorders among victims of various disasters ranging from road accident, violent crimes, hurricane, earthquake, to flood (Ahmad, Bukhari, & Munir, 2011). It is one of the psychological health problems that victims of natural disaster such as flood faced (Awopetu et al, 2013). PTSD is also a very severe and complex disorder precipitated by exposure to psychologically distressing situations (Sana & Khattah, 2014).

According to Diagnostic Statistical Manual IV Text Revision (APA, 2000), Post traumatic stress disorder is a disorder that lasts more than one month and develops as a result of response to stressful events. It is also caused by a situation or circumstances in which a person experienced, witnessed, or was confronted with

an event that involved actual or threatened death. It is characterized by intrusive memories of the traumatic events, emotional withdrawal, and heightened autonomic arousal (Sue, Sue, & Sue, 2006).

The study becomes necessary because of the pool of flood events that occurred in most of the states in Nigeria, which Benue State was also affected. The natural disaster which resulted in both direct economic and property losses; and physical injuries left many residents hopeless and helpless. People woke up to find their residence overtaken by water, places of workshop, security, offices, farm lands etc all engulfed by water. This saw many people injured, while heap of damaged goods littered in the compounds. Many days of fierce flooding in the down followed during which people remained fearful and stayed indoors, for weeks. The markets, school, banks, transport parts etc remained closed. People experienced acute food and water shortage.

Eriegba, Isukwem, Ojo and Williams (2014), observed a number of epidemiological survey studies which have shown that post-traumatic stress disorder (PTSD) is twice as common in women as in men. In addition, there are gender differences in the type of trauma exposure, presentation of illness, and comorbidities. Some of these differences are clearly societal and non-biologically based but, it is also clear that the biologic systems altered in PTSD may modulate or be modulated by sex hormones (Yehuda & Le Deoux, 2007). There are a number of reasons why PTSD may be more common in women than in men. Different types of trauma carry different risks for the development of PTSD. For example, rape in both men and women, carries one of the highest risks for producing PTSD that approximately 0.7% of men in the United States reported being raped as compared with 9.2% of women who develop post-traumatic stress disorder (Spitzberg, 1999).

There are also differences between men and women in the presentation of PTSD. Women are more likely to have symptoms of numbing and avoidance and men are more likely to have the associated features of irritability and impulsiveness. Men are more likely to have comorbid substance use disorders and women are more likely to have comorbid mood and anxiety disorders, although many disorders comorbid with PTSD are commonly seen in both men and women (Goldney, 2000). This devastating experience made mental workers weary of the affected people developing PTSD.

On the basis of studies on PTSD as related to demographics such as age and

marital status, Kessler, Sonnega, Bromet, Hughes, & Nelson (1995), observed that levels of symptom severity would vary by age (being highest among our 45-54 year olds) and marital status (being highest for previously married and lowest for never married individuals). In the same way, the social economic status of flood victims could be associated with problems that contributed to the levels of stress suffered either with personal relationships or employment as reported by Awopetu, Awopetu & Awopetu, (2013). According to them the socio-economic impacts of floods experienced by victims could predispose them o high level of PTSD's symptoms manifestation.

The objective of this study is to assess the demographic variables and traumatic stress disorder among flood victims in Makurdi metropolis, with a view of highlighting its wide range of mental and physical consequences and systematically assess the evidence of PTSD following the flood; specifically the study tries to examining the following objectives:

- i. To assess the influence of PTSD among flood victim,
- ii. To find out the relationship between PTSD and gender of flood victims,
- iii. To ascertain whether demographic variables will jointly and individually influence PTSD upon flood disaster.

Research Hypotheses

- i. There will be a significant difference between male and female on PTSD following flood disaster.
- ii. Demographic variables will jointly and individually influence PTSD among flood victims.

METHOD

Design

The study adopted ex-post facto design. This is because the researcher did not manipulate any of the independent variables.

Participants

The study consisted of a total two hundred and five (205), 113 (51.1%) male, 92 (44.9%) female. Among the participants 75(36.6%) were students, 75 (36.6%) civil servants, 36(17.6%) were farmers. Marital status indicated that 109 (53.2%) were married while 96 (23.9%) were either single or divorced. On the location of the participants, 76 (37.1%) were from Wurukum, 49 (23.9%) from Gyado villa,

30(14.6%) from Wadata, 16 (7.8%) from Logo 1 and 34 (16.6%) from North Bank all from Makurdi metropolis.

Sampling Method.

The study employed purposive simple random technique to draw participants from various locations that were much affected by the flood. Simple random sampling technique was chosen because it allows all member of the population equal chance of being selected.

Instrument

The only instrument for this study was questionnaire containing 17 items. It is a Post Traumatic Stress Disorder (PCL-S) Civilian Version. It was developed by Australian Centre for Posttraumatic Mental Health. According to Weathers et al, (1993), the instrument has excellent test-retest reliability and internal consistency is very high for each of the items. For this study, the Cronbach alpha of 0.76 was reported.

Procedure

A copy of the questionnaire was given to each participant in their various homes after informed consent was sought and granted accordingly. The questionnaires were distributed through research assistants and were later collected by them after they finished responding to them.

Data analysis

RESULTS

Table 1: Percentage Distribution of Respondent's Demographic Variables

Variables	Frequency (N)	Percentage (%)
Sex		
Female	92	44.9
Male	113	55.1
Total	205	100
Religion		
Christianity	114	60.3
Islam	44	23.3
Others	31	16.4
Total	205	100
Marital status		
Married	96	46.8
Single	109	53.2
Total	205	100
Occupation		
Students	94	45.9
Civil servants	75	36.6
Farmer	36	17.6
Total	205	100

Table 1 above further illustrates the frequency and percentage distribution of the respondents.

Hypothesis1: There will be a significant difference between male and female on PTSD following flood disaster.

Table 2 shows independent t-test between male and female on PTSD

Variables	Sex	N	\bar{x}	SD	df	t	p
PSTD	Male	113	5.01	1.52	203	2.69	>0.05
	Female	92	4.40	1.77			

From the table above, the result indicates that there is no significant difference between male and female on PTSD following flood disaster.

Hypothesis 2: Demographic variables will jointly and independently influence PTSD among flood victims

Table 3: Multiple regression analysis showing the influence of demographic variables on PTSD among flood victims.

Variables	R	R ²	F	β	t	sig.	p
Constant	.808	.652	68.624		2.089	.038	>0.05
Sex				.287	5.195	.000	<0.001
Religion				.180	3.532	.001	<0.001
Marital Status				-.043	-.694	.488	>0.05
Occupation				.955	12.528	.000	<0.001
Location				-.229	-3.427	.001	<0.001

Result shows that demographic variables jointly predicted PTSD among flood victims, Adjusted R²=.652; F (203) = 68.62, P< .001. Independently, marital status did not predict PTSD among flood victims and location although significant; its negative value shows it is a weak predictor of PTSD among flood victims. Sex, religion and occupation independently predict PTSD among flood victims. The hypothesis is therefore confirmed.

DISCUSSION

The study aimed at assessing demographic variables on PTSD among flood victims in Makurdi metropolis. A survey was conducted and the hypotheses raised were tested and the findings are discussed. Results from the study, using independent t-test revealed that there was no significant difference between male and female as both exhibited closely related levels of PTSD and the mean score did not vary significantly. This finding contradict that of Aizhong et al. (2006), whose study to ascertain determinant of PTSD among flood victims in Huna, China, show that there was a difference between male and female as related to PTSD, with female victims showing higher scores. Also, contrary to Yehuda et al. (2005), who noted that PSTD is twice as common in women as in men following disaster events. By the findings of this study, gender differences did not come to play. What was observed was that one sex does not show higher disposition to PTSD than the other among victims of flood in Makurdi metropolis, therefore, the same regard should be given to both sex as suffering the same extent of PTSD.

The findings further revealed that demographic variables jointly and to a great

extent independently predicted PTSD among flood victims in Makurdi metropolis. However, marital status was found not to be a predictive factor of PTSD independently, as it showed an insignificant result. This simply implies that whether you are married or not, you are bound to be affected by flood disaster which could as well predispose such individual to PTSD. The variable of location was found to be significant, however, due to its negative value, it showed to be a weak predictor of PTSD. The other variables independently were predictors of PTSD among the victims, with occupation showing the highest percentage, followed by sex and then religion. According to this result, marital status does not serve as a predictive factor; location is a weak predictor, while the others are strong predictors of PTSD among flood victims in Makurdi metropolis. This finding equally established that, young, less educated, ethnic minority victims were expected to report greater PTSD symptom severity, given some evidence of more PTSD symptoms associated with vulnerable socio-demographic groups.

CONCLUSION AND RECOMMENDATION

Based on the findings of this study, it was concluded that demographic variables have implication in the development of PTSD among flood victims. Either male or female victim did not really show significant difference in the degree of the manifestation of the symptoms. Meanwhile, female victims may likely be at greater risk of developing post-traumatic stress disorder than male because of a heightened fear response to flood disaster. Other demographic variables associated with this such as religion, occupation, marital status and location can serve as a predictor in case of flood disaster. Prevention is said to be better than cure, victims of PTSD should be placed on psychological treatment upon noticing the signs and symptoms of this psychological disorder. Effort should be made by relevant authorities in identifying and categorizing victims of flood disaster based on their demographic characteristics while trying to provide relief materials or treatment approaches to them.

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