

## **The Prevalence of Depression among the Youths as an Aftermath of the Internal Insurgency Attacks in Maiduguri, Nigeria**

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**Abstract:** *In recent years the issues of crisis and its consequences as perpetrated by insurgents have constituted major growing health problems in developing African countries. The city of Maiduguri, in the North eastern part of Nigeria, has suffered persistent insurgency attacks that have claimed thousands of lives. This empirical study investigates the prevalence of depression and its correlates among students of the University of Maiduguri. The survey was conducted about six months following the declaration of 'state of emergency' imposed on the three North eastern states of Adamawa, Borno and Yobe in May 2013. The students who remained in the city during and after the crisis were used. Data was collected by way of administering questionnaires to the respondents. About 70% of the subjects showed some degree of evidence of depression. Females and those who lost first degree relatives were more likely to suffer from post-traumatic stress disorders (PTSD), being a precursor of depression. So it's the conclusion of this research that these high risk individuals would need special attention and particular support.*

**Key Words:** *Attacks, Crisis, Depression, Insurgency, Students, PTSD*

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### **I. Introduction**

Crisis and its consequences constitute a major public health problem. As a natural disaster, it strikes quickly and without warning and is uncontrollable, affecting a large population and leaving injury, death and subsequent destruction. It is not uncommon therefore, to associate loss of loved ones and livelihood to the numerous factors known to be likely to put survivors at the risk of experiencing psychological issues like stress/distress of different shades such as post-traumatic stress disorders (PTSD), acute stress disorders (ASD) and depression.

Depression is a common mental disorder that presents with depressed mood, loss of interest or low pleasure, decreased energy, feeling of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. Depression is a significant contributor to the global burden of disease and affects people in all communities across the world. Basoglu, Salaoglu, and Livanou (2003) conducted a large scale survey about the 1999 earth quake in Marmara, Turkey (Vehid, Balyanak & Eksi, 2006). Gillespie, Duffy, Hackmann and Clark (2002) carried out a similar survey on the survivors of the 1998 Omagh bombing in Northern Ireland and found out that 91 survivors met the criteria for PTSD. The World Health Survey conducted in 17 countries discovered that on average, about 1 in 20 people reported having an episode of depression in the previous year.

Research in developing countries suggests that maternal depression may be a risk factor for poor growth in young children (Rahman, Patel, Marsella & Kirkwood, 2008). The burden of depression is 50% higher for females than for males (WHO, 2008). Fear during disasters is a strong predictor of PTSD symptoms in children and sometimes even in adults (Basaoglu, et al, 2003). Groome and Soureti (2004) had a similar result when they reported prevalence of disaster-related symptoms among males as was earlier reported by La Greca, Silverman and Wasserstein (1998). Research with the youth generally supports this assertion.

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. Research efforts compiled by Groome and Soureti (2004) share this same idea as well. Aside from the fact that there is a high rate of severe to mild PTSD in any given crisis, exposed children and adolescents, and a substantial proportion of them are compatible with the criteria for depression.

In the month of May, 2013, a state of emergency was declared on Borno alongside Adamawa and Yobe states all located in the North-Eastern region of Nigeria. At least 10,000 people must have been killed by the insurgents during the crisis and about 300,000 injured. Also more than 100,000 people almost became homeless. This was made known by the Director/spokesman for the Centre for Humanitarian Psychology. In spite of the fact that 6.6% does not constitute a large scale of crisis, the situation in Maiduguri was peculiar because it occurred in a city densely populated and with a congested environment. This research investigated the

prevalence of depression and its correlates among students of the University of Maiduguri located in the capital of Borno State.

## II. Material and Methods

The study was a cross-sectional survey conducted among the students of the University of Maiduguri who remained in the city four months after the crisis. Data was collected by a self administered questionnaire consisting of batteries of questions in three parts after obtaining informed consent: (1) Demographic data including age, educational level, the person's relationship to victims and the number of relatives lost in the crisis; (2) Structured depression questionnaire according to The Diagnostic Statistical Manual Revised (DSM IV-TR); (3) The Davidson trauma scale (DTS), a 17 item scale to determine the severity of PTSD symptoms. Each item was rated on 5-points frequency (0 = not all distressing, to 4 = extremely distressing). The DTS yields a frequency score (ranging from 0 – 136). A cut off of  $\geq 44$  was considered; (4) The Beck Depression Inventory (BDI), a 21 item self report instrument which is used to access the severity of depression (minimal; mild, moderate). Each item was rated from 0 – 3 with the maximum possible scale being 63. Evidence of the reliability and validity of DTS and BDI were previously established. Using multivariate logistics regression, the association between socio-demographic variables and PTSD were analyzed. The Hosmer-Leme show test was used to access model fit. Statistical analysis was performed using SPSS V.14.

## III. Result and Discussion

Four hundred and sixty-six (466) students completed the questionnaire. Out of this, 60.7% were male. See (Table 1). The mean ( $\pm$ SD) age of the participants were 15.9 ( $\pm$ 1). According to DSM IV-TR criteria, 311 students (66.7%) met the criteria for PTSD. As shown in Table 2, the prevalence of depression among high school students was 70.4% (n=327). The frequency of subjects answering yes and the mean score for DTS item is shown in Table 3.

The final results of the multivariate logistic regressions are shown in Table 4. The highest odds of PTSD was associated with females (OR: 2.9, 95% Ci 1.9-4.5) which was also indicative of depression. Those confronted with dead bodies were more likely to express PTSD (OR: 1.9, 95%. CI: 1.2-3.2).

The prevalence of PTSD was 66.7% which is remarkable in comparison for bodies elsewhere. It was comparable to studies done after large disasters such as the tsunami. The difference between these numbers may be due to the different methodologies between surveys and the difference between the nature and severity of the disaster. The severity of trauma in this study may be to some extent due to the time of crisis, when most people were asleep. Concentration difficulties and upsetting by reminders were the two most frequently reported symptoms (Table 3), which was compatible with the findings of Yang et al., (2003).

About 70% of subjects showed some degree of depression (Table 2). A similar study carried out on students in 1999 in Marmara, Turkey revealed that 71.5% of the students' scores for depression were below the average based on Beck Davidson's Inventory (BDI). It is worthy of note despite several international and national efforts to control psychiatric morbidity in the post crisis period, such a high burden of depression in city communities warrant a revision of the psychiatric and psychological techniques and interventions.

Logistic regression analysis revealed that age and income were not associated with PTSD (Table 4). Females were up to three times more likely to suffer from PTSD than males which are consistent with several other studies. In most studies carried out on PTSD following crisis periods, females were significantly more susceptible to serious psychiatric morbidity than males. It was the most significant associated factor for PTSD. The next most important associated factors were confronting with dead bodies and loss of first degree relative(s) carrying odds ratio of 1.9 (Table 4).

**Table 1: Frequency distribution of study participation according to selected characteristics (n=466)**

Characteristics	No.	(%)
<b>Sex Male</b>	283	60.7
<b>Female</b>	183	39.7
<b>High School Grade</b>		
9	162	34.9
10	88	19.0
11	150	32.2
12	66	14.1
<b>Death at least one first degree relative</b>		
No	364	78.1
Yes	102	21.9
<b>Confronting with dead bodies</b>		
No	110	23.6
Yes	356	76.4
<b>Living status</b>		

With parents	411	88.2
With relatives	51	10.2
Lonely	4	10.9
General family income		
Low	218	46.8
Medium	168	36.1
High	80	18.7

**Table 2: Frequency of depression with respect to score on the Beck Depression Inventory by Severity**

Severity of depression	%	No
Normal	29.6	139
Mild depression	20	93
Consultation need and psychiatrist	11.4	53
Moderate depression	20.7	96
Severe depression	11.6	54
Very severe depression	6.7	31
Total	100	466

**Table 3: Percentage of students answering yes and mean severity score for post-traumatic stress events in the previous 7 days**

Statement	Percentage of students answering Yes	Mean severity
Have you had painful imagination in relation to painful events?	83.2	4.2
Have you had painful dreams of events?	83.2	4.0
Have you had feeling the event is repeating?	71.8	3.7
Have you had serious problems in confronting with reminders?	91.8	4.2
When you remember the events, have you had reactions like sweating, palpitation and shortness of breath?	39.1	1.7
Have you been avoiding any thoughts about the events?	72.7	3.5
Have you been avoiding anything or participation in situations that make you remember the events?	64.1	3.1
Have you realized that you are not able to remember important parts of events?	50.9	2.2
Have you had many problems in relation to pleasurable things?	64.1	3.2
Have you had feelings of strangeness or disruption in interpersonal relationships?	61.4	2.9
Have you been unable to love people?	70.5	3.5
Have you had feelings of shortness of the future?	27.3	3.7
Have you had trouble in getting/continuing sleep?	69.5	3.4
Have you been aroused, or suddenly had to become angry?	68.2	3.3
Have you had trouble in concentration?	93.2	4.3
Have you had feelings as if you are on the edge of a precipice and easily become petrified?	52.5	2.4
Have you had severe restlessness?	62.7	3.6

**Table 4: Logistic regression analysis to access the association between selected characteristics and PTSD occurrence**

Characteristics	Adjusted OR	95% confidence Intervals	P
Age	1.03	0.07-1.23	0.72
Sex Male	1	-	
Female	2.92	1.9-4.5	0.001
Loss of first degree relative(s)	61	15	
No	1	-	
Yes	1.9	1.1-3.3	0.02
Confronting with dead bodies			
No	1		
Yes	1.9	1.2-3.6	0.008
Living status			
With parents	1	-	
Others	1.2	0.6-2.3	0.79
Income			
Low	1		
Mild	0.8	0.5-1.2	0.27
High	1.1	0.6-2.0	0.72

#### IV. Conclusion

Crisis has become the order of the day in African countries and depression remains an ineradicable problem. Depression would continue to be one of the leading problems of African nations unless African Heads

of States give it the priority attention it deserves. For example, a country like Nigeria has been bedeviled by crisis for quite a long period such that Refugee camps have virtually become residents for the common human person and peace has become a scarce commodity.

Depression and its associated conditions have quietly and slowly been robbing African nations of human and material resources as a result of which personnel and economic development have suffered huge set-backs. The African continent however, needs to place depression on its priority list and at the same time mobilize collaborative efforts to tackle the common enemy (crisis). By so doing, depression and its associated conditions like PTSD, Acute Stress Disorders and numerous communicable diseases could either be reduced or totally eradicated. There is no other time better than now for Africa to wake-up from its slumber. As the wise saying goes, "A stitch in time saves nine." Frantic effort is what the continent needs to save itself from losing what it has been known for (greatness) ever since it came into existence.

The current global financial crisis has added to the societal burden that we face across the globe and has resulted in an increased number of people developing depressions. Depression, especially in its self-destructive clinical expression is one of the major psychological conditions that are linked with economic crisis. Screening for depression and suicidal tendencies during period of economic crises as a routine psychiatric preventive strategy is recommended. Public education and awareness campaigns on mental health should be launched in all nooks and crannies. Mental health policy, programmes and legislation are necessary for significant and sustained action. These should be based on current knowledge and human rights considerations. Highlighting the above and advocating for the establishment of cost-effective active labour market, rehabilitation and family support programmes are also recommended.

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