

about this report

The Rule of Law and Empowerment Initiative also known as PARTNERS WEST AFRICA NIGERIA on the 20th of December, 2019 contracted Dr. Kurkat Maigida and her team to carry out a psychosocial assessment in two communities As part of their project on Engaging Children to Counter Violent Extremism (ECCVE-II)



The impact of armed conflict in Nigeria has created a fertile ground in the increase of high prevalence of mental health problems among survivors.

The impact is not limited to adult survivors alone; children also develop a myriad of health issues. Beside the direct impact of traumatic events, the normal interactive patterns between parents/caregivers and the child could also be disrupted.

This may interfere with the normal development of emotional regulation resulting in various difficulties in life such as problems in school, increased, domestic violence and vulnerability to negative manipulation. If left untreated, it may present a huge burden not only on the family, but on the community.

The North East is one of such regions in Nigeria that has experienced the post traumatic symptoms of conflict that has affected both young and old as well as children who have to bear the brunt of these conflict. As a result, PWAN through its intervention undertook a study which is aimed at evaluating the mental health effect on the children as well as the parents/caregivers in light of the 2017/2018 armed attack on Dong and Kikan communities in Adamawa state.

Consecutive sampling method was employed to interview the 117 pupils attending the informal school being run by PWAN. Face-to-face interview was conducted using Sociodemographic questionnaire; Strength and Difficulty Scale (SDQ) and Children's Revised Impact of Event Scale (CRIES-13) to collect data. General Health Questionnaire (GHQ), the Harvard Trauma Questionnaire (HTQ) and Hopkins

Symptoms Checklist (HSCL) were used to assess the psychological well-being and symptoms of trauma on the parents/teachers.

The parents and the teachers rated 22.0 % and 12.0% of the children respectively, to have difficult behaviors on the SDQ. The prevalence of Post Traumatic Stress Disorder among the pupils was 25.8%. The trauma's impact on the children was significant, especially among the older children who have a better understanding of armed attack.

Having experienced trauma about 2 years ago, more than 4 in 10 of all parents had problems with their psychological well-being as measured by GHQ-12. About 1 in 5 of the parents who survived the attack had anxiety/depression, which was expected based on the loss of family members, properties and sources of livelihood as well as post attack hardships.

A third of the teachers who survived the attack were worried and depressed. The results underscore the importance of introducing a school-based mental health program for the pupils and the training of teachers to identify pupils with mental health needs.

This is necessary because children spend a considerable amount of time in school and their teachers play a major role in their development. In the same vein, a community mental health program will go a long way to mitigate the psychological problems of the survivors and help in building their resilience and promoting recovery.





Violent Extremism as defined by United Nations Educational, Scientific and Cultural Organization (UNESCO) is the belief and actions of people who support or use violence to achieve ideological, religious or political goals.

Numan and Demsa Local Government Areas (LGAs) in Adamawa State Nigeria have had a number of unpleasant experiences of violent extremism especially between the months of December 2017 and January 2018.

A numbers of wards were also affected by this violence. A wide range of psychological disorders may be consequent upon exposure to these traumatic events. A traumatic event is defined as when an individual experienced, witnessed or was confronted

with an event or events that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others in which the individual responded with intense fear, helplessness or horror, resulting in fear related hyperarousal, avoidance and intrusive symptoms.

Post-Traumatic Stress Disorder (PTSD) is the most common psychological disorder that results from the effect of exposure to trauma. However, this is not the only psychological sequel of trauma as PTSD can cooccur or lay a foundation for the development of other conditions such as depression, anxiety, sleep disorders, physical illnesses among others.



A traumatic event is defined as when an individual experiences an event or series of events that involved actual or threatened death or serious injury.

In children, the impact of stressful events may imprint an undesirable stamp on their developing personality in ways which may be difficult to measure



INTRODUCTION

In children, the impact of stressful events may imprint an undesirable stamp on their developing personality in ways which may be difficult to measure.

Children have immature coping mechanisms at various stages of life. So they may rely on adults for understanding most external events..

Unfortunately, the loss of family and friends may shatter their world and influence their perception about themselves, others and the universe at large. These reactions could be internalized or externalized makes them susceptible to psychological disorders, loss of trust, neglect of school, among others.'

Children often develop a variety of difficulties which may span across emotional and behavioral problems.'

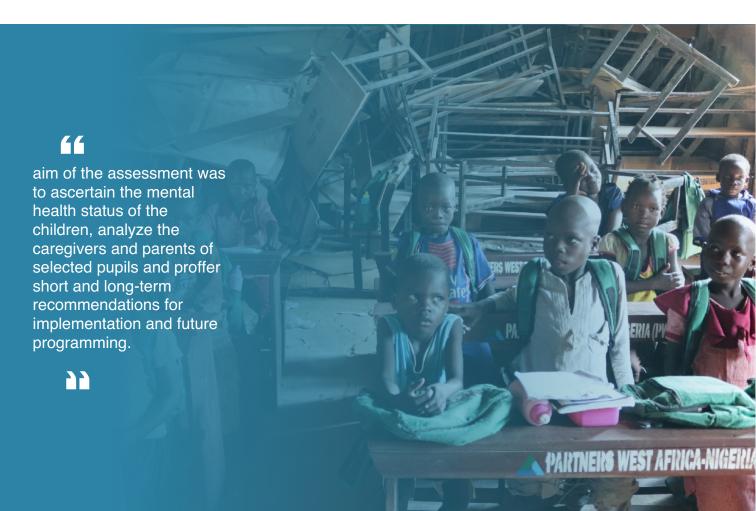
Furthermore, the mental representation of the trauma can result in an unconscious organizing belief determining how children see the world and how they choose to act. This may result in the development of militaristic ideas that may in turn precipitate a cycle of violence in their life time. However, some others adopt a laudable attitude and adjust towards forgiveness and selflessness.

The ability of a human being to survive, recover and persevere against various obstacles and threats, known as resilience, has been observed more in children.' Therefore, the role of schools, family and the community at large is highly significant in promoting resilience among children which will in turn promote recovery.

The aim of the assessment was to ascertain the mental health status of the children, analy, e the caregivers and parents of selected pupils and proffer short and long-term recommendations for implementation and future programming.



A wide range of psychological disorders may be consequent upon exposure to these traumatic events.





The study was conducted in Dong and Kikan wards of Demsa and Numan LGAs of Adamawa state, North Eastern Nigeria. The two wards were purposively selected because of the ongoing PWAN project.

Demsa Local government has an area of 1,825 km with a population of about 238, 400, according to the 2006 census. Dong which is one of the locations for the study is predominantly made up Christians of Bachama ethnic group, who also understand and speak the Hausa language.

Facilities in this community include schools, a market square and a health center among others. On the other hand, Numan LGA has an area of 905km with a population of about 122,300 according to the 2006 census. Kikan which is one of the locations for the study is predominantly made up of Christians of the Bachama ethnicity who also understand and speak Hausa language. The major occupation in both communities is farming (including fishing) and trading.

The population to be assessed was 120 pupils between the ages of. 4-12 years, their caregivers (parents and blood relatives) and the six teachers. Permission was sought and granted through the sponsors of the program (PWAN).

All those who were present and gave oral consent to participate and were interviewed via consecutive sampling however, only 117 pupils were present. One of the missing children was sick, the other was yet to return from the Christmas/New Year break and the last one was removed from the programme.

Short Sociodemographic instrument



This instrument carries the bio-data of the participants- It assesses the age and sex (for both children and adults), marital status, occupation and income among others

The Children's Revised Impact of Event Scale (CRIES-13)



It is a brief friendly assessment tool designed to screen children susceptible to Post-Traumatic Stress Disorder (PTSD). This instrument has good face and constructs validity and has been used to screen large samples at risk. There are two versions the CRIES-8 and CRIES-13.

The latter was used. It includes four items measuring Intrusion, four items measuring avoidance and five items measuring arousal. Items are scored on a non linear scale and responses include; 0(not at all),1(rarely),3(Sometimes) and 5 (often). Scores range from 0-65 with a cut off of above 30 to indicate PTSD symptoms.

Strengths and Difficulties Questionnaire(SDQ)



It is a brief behavioural screening tool for children between the ages of 4-17 years and it exists in various versions including the parent report, teacher's report and self report.

SDQ consists of 25 items,14 describes perceived difficulties,10 indicates perceived strengths and 1 is neutral.

Responses include not true, somewhat

true and certainly true.

Perceived difficulties responses are scored 0-2 while perceived strengths are scored in the reverse. The 25 SDQ items are divided into scales of emotional problems, conduct problems, hyperactivity problems, peer problems and prosocial scale (five items per scale).

A score is calculated for each scale (range 0-10) and a total difficulties score for the four scales (excluding prosocial behaviour).

Additional questions on impact of the difficulties enquires about chronicity, distress, social impairment and burden for others.

It is then further classified as Normal,

General Health Questionnaire (GHQ



It is useful in the assessment of mental/psychological well being as a screening tool to detect those likely to have or be at risk of developing psychiatric disorders. Versions 12, 20, 28 and 60 are available and for this study, version 12 was used.

The responses are from not at all to much more than usual and are scored either using the likert scale (0123) or binary (0011). The binary scoring method was used in this study. A score of 3 and above suggests caseness.

The Harvard Trauma Questionnaire (HTO)



Designed by the Harvard program in Refugee Trauma, Massachusetts for the diagnosis of PTSD. It has 40 questions on a 5 point severity scale of 1-5. Individuals with a total score > 2.5 were considered symptomatic for PTSD

The Hopkins Symptom Check list (HSCL-D)



A screening tool for symptoms of anxiety and depression. Questions are rated on a 4 point likert scale with 1 (not at all) to 4 (extremely). Summed scores are divided with the total score and ≥ 1.75 is considered probable for depression or and anxiety symptoms.

Procedure

The team consisted of three psychiatrists who are fluent in the English and Hausa languages and conversant with the use of the survey instruments.

The pupils were divided into three (3) groups, based on their respective classes I-III (class I comprised of grade 1 and 2, class II comprises of 3 and 4 while class III comprised of grades 5 and 6). The interview was conducted in each class together with the respective teachers as each child came in accompanied by a parent or blood relative to ensure privacy.

Questionnaire administration was via face to face interview to minimize risks of errors and ensure homogeneity of questioning. It was filled in by the researchers.

The SDQ parents and teachers' version was administered to the child's parent/blood relative and the latter to the teachers. The CRIES-13 was administered to children from 8 years and above.

Further interview was conducted for the parents/blood relatives and teachers after the pupils were excused. The GHQ, HTQ and HSCL-D were administered and data collected over a week.

Data Analysis

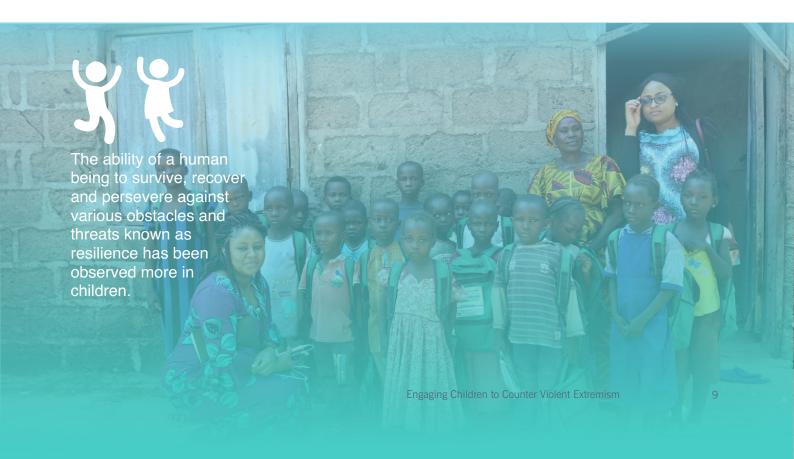
The Statistical Package for Social Sciences version 25 (SPSS-25) Software package was used to analyze the data.

The results were presented in frequency tables, mean, standard deviation and descriptive analysis. Ttest was used to compare mean values of numerical variables and Chi Square test was used to investigate the difference between categorical variables and their associations.

Values of P < 0.05 were considered statistically significant.

Correlation analysis was employed to determine the direction and strength of relationship between two numerical variables that showed linear relationships on scatter plots.

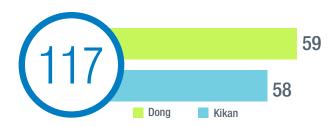
Values of correlation coefficient (r) = +1 were considered as positive linear relationship, while values of (r) = -1 was considered as negative linear relationship and value of 0 considered as no relationship.



Socio-demographic Characteristics of pupils in both locations

A total of 117 pupils were enrolled into the study, with 59 (50.4%) and 58 (49.6) from Dong and Kikan communities respectively. Their ages range between 4 and 14 years inclusive, with mean ages of 9.79±2.35 and 9.74±2.49 for Dong and Kikan respectively.

The mean ages of the two groups did not differ significantly (t = 0.009, p = 0.992). Gender distribution between the two locations was unequal, with more males in both communities (X2 = 3.87, p = 0.049)

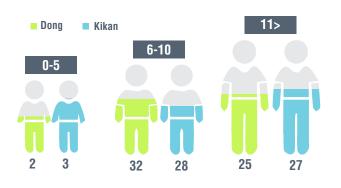


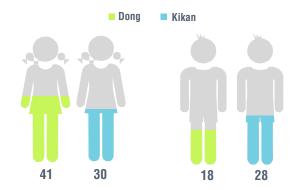
Socio-demographic characteristics of the pupils in both locations

	Location Frequency (%)					
Variable	Dong	Kikan	Total			
Age Group	Age Group					
0-5	2	3	5			
6-10	32	28	60			
11>	25	27	52			

	Location Frequency (%)				
Variable	Dong Kikan Total				
Gender					
Male	41 (57.7)	30 (42.3)	71 (100)		
Female	18 (39.1)	28 (60.9)	46 (100)		

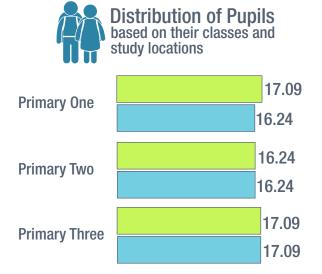
Table 1: Socio-demographic characteristics of the pupils in both locations





Engaging Children to Counter Violent Extremism

The figure below illustrates the distribution of pupils based on the study locations and the classes they belong to. The percentages of the pupils represented in all the classes were almost equal (16.24%/17.09%).



A total of 35 (30%) parents in both locations rated their children as having borderline/abnormal emotional difficulties as against 82(70.0%) that were rated normal.

With respect to conduct difficulty subscale, 13(11.1%) of all parent rated their children as having borderline difficulties, the rest 104(89.9%) were normal. Seven (6.0%), and as many as 33(28.2%) of all parents rated their children as having borderline/abnormal difficulties in hyperactivity and peer problem scales

many parents rated their children as having borderline/abnormal difficulties in hyperactivity and peer problem scales

	Frequency (%)			
Variable	Dong	Kikan	Total	
Emotion				
Normal	42 (51.2)	40 (48.8)	82 (100)	
Borderline	10 (55.6)	8 (44.4)	18 (100)	
Abnormal	7 (41.2)	10 (58.8)	17 (100)	

Frequency (%)						
Variable	Dong Kikan Total					
Conduct						
Normal	54(51.9)	50(48.9)	104(100)			
Borderline	5(38.5)	8(61.5)	13(100)			
Abnormal	0	0	0			

	Frequency (%)				
Variable	Dong Kikan Total				
Hyperactivity					
Normal	55 (50.0)	55 (0.0)	110 (100)		
Borderline	2 (50.0)	2 (50.0)	4 (100)		
Abnormal	2 (66.7)	1 (33.3)	3 (100)		

	Frequency (%)				
Variable	Dong Kikan Total				
Peer problem					
Normal	48 (57.1)	36 (42.9)	84(100)		
Borderline	3 (25.0)	9 (75.0)	12(100)		
Abnormal	8 (38.1)	13 (61.9)	21(100)		

Frequency (%)					
Variable	Dong	Total			
Difficulties Sc	Difficulties Score				
Normal	53(51.5)	50(48.5)	103(100)		
Borderline	3(30.0)	7(70.0)	10(100)		
Abnormal	3(75.0)	1(25.0)	4(100)		

Frequency (%)						
Variable	Dong Kikan Total					
Strength(prosocial)Score						
Normal	59(50.4)	58(49.9)	117(100)			
Borderline	0	0	0			
Abnormal	0	0	0			

Table 2: Distribution of various subscales of Strength and Difficulties in both locations, based on parents' SDQ rating scale



Distribution of Pupils based on difficulties in areas of life as rated by parents

Variable	Dong	Kikan	Total	
Overall difficulties				
NO	53	50	103	
Minor difficulties	4	6	10	
Definite difficulties	2	2	4	
Severe difficulties	0	0	0	
Total(N=117)	59	58	107	

Variable	Dong	Kikan	Total	
Duration of difficulties				
Less than a month	0	0	1	
1-5months	0	2	2	
6-12months	1	3	4	
Over a year	5	2	7	

Variable	Dong	Kikan	Total	
Upset or distress to child				
Not at all	1	1	2	
Only a little	2	4	6	
Quite a lot	2	3	5	
A great deal	1	0	1	

Variable	Dong	Kikan	Total	
Difficulties in home life				
Not at all	0	0	1	
Only a little	0	2	2	
Quite a lot	1	3	4	
A great deal	5	2	7	

Variable	Dong	Kikan	Total			
Difficulties in friendships						
Not at all	4	3	7			
Only a little	2	4	6			
Quite a lot	0	1	1			
A great deal	0	0	0			

Variable	Dong	Kikan	Total
Difficulties in learning			
Not at all	2	8	10
Only a little	2	0	2
Quite a lot	2	0	2
A great deal	0	0	0

Variable	Dong	Kikan	Total			
Difficulties in leisure acti	Difficulties in leisure activities					
Not at all	5	3	8			
Only a little	1	2	3			
Quite a lot	0	3	3			
A great deal	0	0	0			

Variable	Dong	Kikan	Total		
Burden of difficulties on the family					
Not at all	2	5	7		
Only a little	2	2	4		
Quite a lot	2	1	3		
A great deal	0	0	0		

Table 3: Distribution of the overall difficulties in 1 area of life as rated by parents

A total of 84 (71.8%) children were rated normal on SDQ emotional difficulty subscale by their teachers.

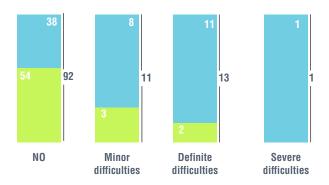
Thirty-three (28.2%), 18 (15.4%) and 26 (22.2%) children in both location were rated by their teachers as having borderline/abnormal difficulties in emotional, conduct and hyperactivity subscales respectively.

So also were 26 (22.2%) and 35 (30.0%) with borderline/abnormal peer problem and overall difficulties scores respectively.

Frequency (%)					
Variable	Dong	Total			
Emotional					
Normal	46	38	84		
Borderline	4	9	13		
Abnormal	9	11	20		

Frequency (%)					
Variable	Dong	Kikan	Total		
Conduct					
Normal	51	48	99		
Borderline	1	5	6		
Abnormal	7	5	12		





difficulties caused distress in

21of the 25 children



60% of the 25 children had their difficulties interfering with peer relationship and classroom learning

	Location			
Variable	Dong	Kikan	Total	
Duration of difficulties				
Less than a month	0	4	4	
1-5months	0	7	7	
6-12months	5	5	10	
Over a year	0	3	3	

	Location			
Variable	Dong	Kikan	Total	
Upset or distress to child				
Not at all	0	4	4	
Only a little	4	7	11	
Quite a lot	1	9	10	
A great deal	0	0	0	

	Location			
Variable	Dong	Kikan	Total	
Interference with classroom learning				
Not at all	0	6	6	
Only a little	2	7	9	
Quite a lot	3	7	10	
A great deal	0	0	0	

	Location			
Variable	Dong	Kikan	Total	
Overall activities				
Not at all	1	9	10	
Only a little	0	2	2	
Quite a lot	4	4	8	
A great deal	0	5	5	

Table 3: Distribution of the overall difficulties in 1 area of life as rated by parents

	Location		
Variable	Dong	Kikan	Total
Hyperactivity			
Normal	52	49	101
Borderline	5	4	9
Abnormal	2	5	7

	Location				
Variable	Dong Kikan Total				
Difficulty Scor	Difficulty Score				
Normal	46	36	82		
Borderline	6	13	19		
Abnormal	7	9	16		

	Location			
Variable	Dong	Kikan	Total	
Peer problem				
Normal	47	44	91	
Borderline	9	7	16	
Abnormal	3	7	10	

	Location			
Variable	Dong	Kikan	Total	
Strength(Prosocial) Score				
Normal	59	58	117	
Borderline	0	0	0	
Abnormal	0	0	0	

Distribution of various domains of Strength and Difficulties in both locations, based on Teachers' rating

Out of the 117 pupils enrolled into the study, 91 (78.6%) had no overall difficulties in one or more areas of life while 25(21.4%) had it, lasting for about a month.

Out of the 25 with overall difficulties, 21(84.0%) were rated by their teachers as having one or more difficulties in some areas of their lives, lasting for at least one month.

The difficulties caused distress in 21(71.4%) of the 25 children. Similarly, 19(76.0%) and 15(60.0%) of the 25 children had their difficulties interfering with peer relationship and classroom learning, while 15(60.0%) had difficulties that interfered with their overall activities.

Out of the 25 with overall difficulties, 21(84.0%) were rated by their teachers as having one or more difficulties in some areas of their lives, lasting for about a month



A total of 117 parents were interviewed comprising 59(5.4%) and 58 (49.6%) from Dong and Kikan respectively.

Their mean ages were 37.49 ± 9.25 years and 43.62 ± 19.92 years respectively (t=2.679, p=0.009).

There were more female 63(53.8%) than male (46.2) parents, majority of who were from Dong, 35(55.6%).

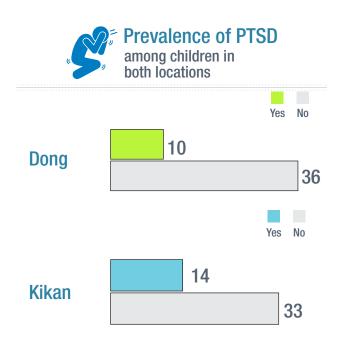
More than 90% had at most secondary level of education. Only 8(6.8%) had tertiary level of education.

Similarly, a total of 34(29.1%) had their individual monthly income above N35,000.00 as against 77(70.9%) who had their monthly income below N35, 000.00.

Frequency (%)					
Location Statistcs					
Variable	Dong (n=59)	Kikan (n=58)	Total(n=117)	X ²	Р
Age group					
>34	24 (61.5)	15 (38.5)	39 (100)	9.715	0.046
35-44	23 (56.1)	18 (43.9)	41 (100)		
45-54	8 (36.4)	14 (63.3)	22 (100)		
55-64	4 (40.0)	6 (60.0)	10 (100)		
65>	0 (0.0)	5 (100)	5 (100)		
Gender					
Male	24 (444)	30 (25.6)	54 (100)	1.436	0.231
Female	35 (55.6)	28 (44.4)	63 (100)		
Education					
No formal	6 (40.0)	9 (60.0)	15 (100)	1.713	0.634
Primary	18 (46.2)	21 (53.8)	39 (100)		
Secondary	31(56.4)	24(43.6)	55(100)		
Tertiary	4(50.00)	4(50.00)	8(100)		
Individual					
Income(Naira)					
≤ 20,000.00	33 (53.2)	29 (46.8)	62 (100)	0.796	0.850
21,000-35,000.00	9 (42.9)	12 (51.1)	21 (100)		
36,000-50,000.00	8 (47.1)	9 (52.9)	17 (100)		
>50,000.00	9 (52.9)	8 (47.1)	17 (100)		

The prevalence of PTSD was 25.8% among all respondents. 22% in Dong and 29.8% in Kikan.

There was no statistically significant difference in prevalence of PTSD among children between the two locations.



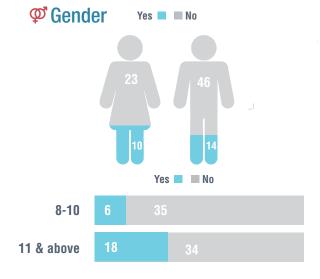
Within the age group distribution, 18(19.4%) of the children aged 11 years and above compared to 6(6.5%) of those below 10 years had PTSD.

The difference was statistically significant, with the older children being more likely to experience PTSD (X2=4.780, p=0.029)





	Location				
Variable	Dong Kikan				
Yes		10	14		
No		36	33		
Total		46	47		



There were more female than male parents, majority of whom were from Dong.

Table 6 below shows that the SDQ total mean scores for the children as rated by their parents and teachers in both communities did not differ significantly

Location		Standard Deviation
Dong	16.02	4.53
Kikan	16.10	4.55

Table 6: Comparison of SDQ total mean scores between parents and teachers

Table 7 below shows the mean scores of impact of events for children 8years and above was 22.72±11.52 and 17.52±11.52 in Dong and Kikan respectively.

The difference in mean scores of the children between the two localities was statistically significantly (t=<2.217, p=0.029)

Location	Mean score	Standard Deviation
Dong	17.52	11.52
Kikan	22.72	11.10

Table 7: Comparisons of the impact of event mean total score based on the two locations

More than half; 46 (52.7) and 47(50.4%) of the 93 children in both locations (Dong + Kikan) had more intrusive and arousal symptoms as against less than half, 42(45.2%) who reported avoidance, symptoms of PTSD.

Majority of those with more intrusion and avoidance symptoms were from Kikan.

More than half of the 93 children in both locations had more intrusive and arousal symptoms





	Location				
Variable	Dong Kikan Total				
Intrusion					
Less		26	18	44	
More		20	29	49	

	Location			
Variable	Dong Kikan Total			
Avoidance				
Less	29	22	51	
More	17	25	42	

	Location				
Variable	Dong Kikan Total				
Arousal					
Less	17	29	46		
More	28	19	47		

Table 8: Impact of event score for children 8years and above

Sociodemographic characteristics of parents in both Locations

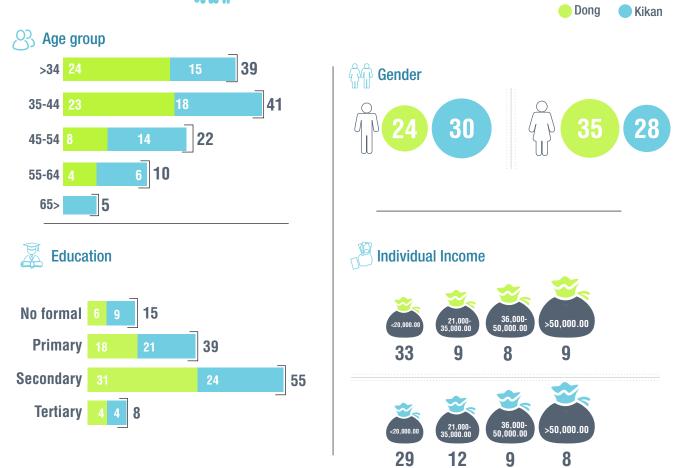




Figure 2 shows the distribution of parents in both locations based on their occupations:

They were largely farmers and traders except 7(5.98%) who were engaged in other occupations.

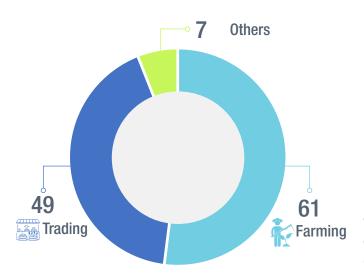
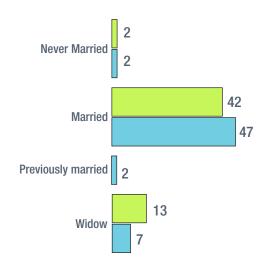


Figure 3 shows that, a high proportion of parents who participated in the study were married, however, the number of widows in Dong (13) was almost twice that of Kikan.





A total of 49 (41.9%) of all parents had a total GHQ 12 score of \geq 3 (caseness), majority of whom were from Kikan, 32(65.3%). The difference was statistically significant (X2 = 8.349, p=0.004).

A total of 26 (22.2%) parents had probable anxiety symptoms score of \geq 1.75, majority of whom were from Kikan, with a difference that was statistically significant(X2 = 7.388, p=0.007).

A total of 14 (12.0%) and 21 (17.9%) parents scored ≥ 1.75 for DSM IV Depression and Anxiety plus depression respectively.



Most parents were largely farmers and traders except 7 who were engaged in other occupations.

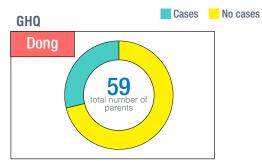


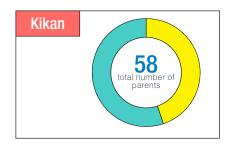
a high proportion of parents who participated in the study were married



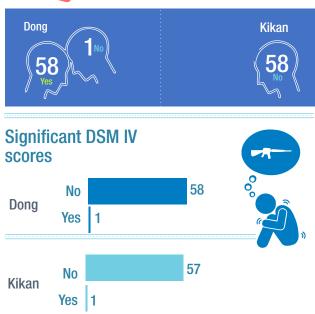
DISCUSSION













Discussion:

The tragedy of traumatic events experienced by children and adults across the globe has been recognized to affect mental well-being and behavior.

Our research was aimed at finding the behavioral changes post attack and the difficulties inherent in school learning and living within the communities.

The research also underscored the need to assess the psychological well-being of their caregivers.

There were 120 children that were enrolled in the schools for the two communities but only 117 children's behavior were rated by the parents and teachers using the Strength and Difficulty questionnaire because one child was ill during the period of assessment, another had not returned from the holidays and the last had been withdrawn from the program.

The impact of the traumatic events on the children was also rated by the (CRIES-13).



Socio-demographics of children

The mean ages of the pupils were 9.79±2.35 and 9.74±2.49 with no significant differences. However, there was a difference in the gender distribution in the two schools with more boys being enrolled than girls.

This finding is consistent with the general school enrollment trend in Northern Nigeria and especially in the North Eastern part of the country which has only about 47.7% of the girl child being enrolled into the primary schools.

Parents' rating on Strength and Difficulty Scale

On the various subscales of the Strength and Difficulty Questionnaire (SDQ), as rated by individual parents, only fourteen (12%) parents rated their children to have borderline/abnormal difficulties in all the subscales of the SDQ, i.e. emotional, conduct, hyperactivity and peer problem subscales.

This means that the children have emotional behavioral problems, conduct and hyperactivity problems likewise peer relationship problems that create difficulties and distress to the child and the community.

However, these difficulties are neutralized by the high normal finding on the prosocial subscale of the SDQ which measures the strength inherent in each individual child. The strength scale is a positive finding that will mitigate the effect of trauma on the child and his learning ability and also on the development of mental health problems either at present or later in life.

Taking individual subscales of the total difficulty scale of the SDQ, we found that on the emotional subscale, the parents rated 35 (30%) of the children to have borderline/abnormal emotions, while for conduct, hyperactivity and peer relational problems, the parents rated 13 (11%), 7 (6%), 33 (28%) of the children to have difficulties, respectively.

The above findings are consistent with a study on the impact of natural disaster versus a spate of communal riots in Gurajat, India, which showed only 7.6% of children affected by the earthquake fell into the

abnormal score on the total difficulty scale of the SDQ.

However, studies by Thabet et al, found 42.7% of Palestinian children who were exposed to shelling had abnormal scores on the total difficulty scale of the SDQ.

The disproportionate finding between our study and Thabet et al could be due to the difference in duration of exposure to trauma and the time of carrying out the research. While their study was carried out about a month after the traumatic events, our study was carried out two years after the incidence.

Previous research showed that there is an inverse relationship between the time of exposure to trauma and the development of abnormal behavior. Quite often than not, the fact that time heals

Teachers' rating of strength and difficulty scale

The teachers in both communities rated 31 (26.5%) pupils to have borderline/abnormal difficulties in school.

This difficulty comprises the emotional problems, difficulty in conducting themselves well in school, the exhibition of hyperactivity and having problems with peers.

This finding is at variance with parental rating of children difficulties as shown above in the parents rating on the strength and difficulty scale. However, the difference in parents and teachers mean score was not statistically significant.

This suggests that either of the two raters could be relied on in future rating.

Difficulty comprises the emotional problems, difficulty in conducting themselves well in school, the exhibition of hyperactivity and having problems with peers.



Children's Strength (prosocial) as rated by both parents and teachers

Despite the parents' and teachers' report of the difficulties in the children/pupils, the children had 'normal strength' as shown in the pro-social scale of the SDQ.

This is an indication that there is resilience in these children and it is a positive factor that could be exploited to help in mitigating mental health problems/abnormal behavior.



Impact of the attack

Natural and man-made disasters that are overwhelming, impact meaningfully on the mental health of survivors, with Posttraumatic Stress Disorder (PTSD) symptoms being the most common.

In the light of the above, we found that more than half of the 93 children that are 8 years and above had more symptoms of posttraumatic stress disorder (intrusion, avoidance and arousal).

Based on these symptoms, about 26% met the criteria for PTSD, with majority of them from Kikan community. Perhaps, the multiple attacks on Kikan which was more recent contributed to the higher number of children with PTSD symptoms.

Our findings differ from that of Sheik et al, where they found 4.1% prevalence of PTSD among Internally Displaced Children (IDCs) as a result of post election conflicts.

The disparity in our study and theirs may be due to the differences in methodology and instruments used. Also, the confinement of people within the camp tends to give the children some sense of security which is protective against the development of mental disorders.

In addition to this, social support from government and non-governmental agencies also promotes more well-being unlike in our study area where, there has been a continuum of constant threats with recurrent attacks and a big dive in farming activities affecting them economically too.

Kikan

Kikan community has more parents with both anxiety and depressive symptoms.

Socio-demographics of parents

The parents' demographics showed that majority of them were farmers and farming is the main source of family income, followed by trading in fishes and other occupations.

The average monthly income of parents range from less than \$\frac{1}{2}0,000.00\$ to above \$\frac{1}{2}50,000.00\$. Naira. More than 95% of the parents are within the productive age group and majority were from Dong community. The level of education was generally low in the two communities, with only 8 (7%) of the parents having tertiary level of education.

There were more married parents. A possible reason for the high proportion of married parents could be as a result of remarrying done to help deal with the loss of loved ones, replace companionship and balance the care of children.

On the mental well-being of the parents, about 42% were screened to have problems warranting further evaluation. Further evaluation showed a significant number had high anxiety scores, thereby, corroborating the earlier findings on the general health questionnaire (GHQ-12) which screens for caseness and non-caseness.

The high scores on the GHQ-12 and anxiety/ depression scores on the Hopkins symptoms checklist are consistent with other studies conducted in Nigeria that showed high GHQ and anxiety scores among internally displaced adults who had experienced attacks and violence.

Kikan community has more parents with both anxiety and depressive symptoms. The plausible reason for the high number of parents with the above symptoms in Kikan could be explained by the recurrent threats and attacks.

the multiple attacks on Kikan which was more recent contributed to the higher number of children with PTSD symptoms.

DISCUSSION

Conclusion

The study revealed that traumatic events experienced by the two communities had significant effects on the behavior of the children and the psychological wellbeing of the caregivers.

This has endured for over 2-3 years after the event. If psychological interventions are not carried out within these communities they may continue to live with

these conditions and disabilities which may gradually worsen, evolve into more severe psychological disorders and result in impairment in different areas of living and functioning.



Recommendations

Short term measures:

01

Children and caregivers who were found to have symptoms of psychological disorders will benefit from further clinical assessments to diagnose the possible disorders after which the appropriate management will be given.

02

Formulating an advocacy program for peace and conflict resolution with emphasis on forgiveness so that there can be a future generation of peace makers to break the cycle of violence

03

Build a safe environment where the people can have a sense of safety by promoting neighbourhood/ community watch.

04

Creation of age-groups related social support network among inhabitants of the communities whereby various age group can interact with peers on issues of common interest.

05

Construction of social play grounds/groups within the communities to help children play-reenact their fears and worries from within which helps to diffuse the tension and help with relaxing.

Long term measures:

Incorporate school-based mental health programs into the school curriculum which will include artistic displays, play therapy (this helps with the expression of hidden worries), teaching students how to develop and improve in their social skills in relating with peers and teachers. The school program will also involve training teachers on basic skills that help to identify strength and difficulties of a child and how to work on each child's positive factor in reshaping the child's behavior.

Establishment of community-based mental health programs by scaling down knowledge of mental health to the primary health managers within the community for early identification of people with mental health needs and referral to appropriate quarters.

Skill acquisition and vocational training to enable members of the communities to become independent and productive.

Establishment of trauma healing centers for the communities that will cater for their psychological needs.

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