Prevalence of psychological trauma symptoms among residence in Jos, Nigeria

Dashit Samson Ishaya^{1*}, Dauda Akwai Saleh², Azi Peace Satzen³^{1,2}Department of Psychology, Plateau State University Bokkos Plateau State
³Department of Psychology University of Jos Plateau State

*corresponding author: samishaya2003 @yahoo.com, +2348036331865

ARTICLE INFORMATION

Article history
Received 26 November 2020
Received revised version 21 February 2021
Accepted 24 February 2021
Published Online ****

ABSTRACT

Psychological trauma and its symptoms have been on increase considering the rise in ethnic, religious, insurgency, kidnapping, farmers and herders' conflict being experiences in Jos Plateau State, Nigeria. Trauma Symptoms Checklist-40 (TSCL-40) was the instrument used, with 297 participants (184 males and 113 females) purposefully selected among populist with mean age of 25.7, while six hypotheses were tested using Chi-square. Findings of the study showed that male participants did not significantly score high on dissociation compared with females. While male participants significantly scored high on anxiety compared with female. Furthermore, male participants significantly scored high on depression compared with female. Also, female participants did not significantly score higher on sexual abuse trauma index compared with male and male significantly scored high on sleep disturbance compared with female. Finally, females did not significantly score high on sexual problems compared with males. There is need for more studies on psychological trauma symptoms in other communities affected by conflict, as well as the establishment of community clinical interventions (community counselling, psychotherapy) which could assist in the management and treatment of such traumatic symptoms.

Keywords: Jos Metropolis. Nigeria, Plateau State, Prevalence, Symptoms, Trauma.

INTRODUCTION Background to the Study

Jos the plateau state capital has had its own share of conflict ranging from ethnic, religious, farmer and headers clash and in recent time kidnapping that has resulted to loss of love ones, goods, properties and in a long run internally displacement of people and the outcome of these negative experiences are traumatic and can lead to psychological trauma. Pearlman and Saakvitne (1995), viewed psychological trauma as that unique experience of an event or

enduring conditions. Furthermore, the individual's ability to integrate his or her emotional experience is overwhelmed, or the individual experiences (subjectively) a threat to life, bodily integrity or sanity.

The causes of psychological trauma symptoms are various, there are some primary signs of trauma that you can look out for. Such as individuals who have endured traumatic events and experiences will often have mood swing, poor concentration, night terrors, edginess, irritability and while disoriented and in a shock state, they may find it difficult to respond to conversation and often appear absent minded, withdrawn even when spoken to (Dashit, Ibrahim & Dabit, 2020). Although, trauma can be caused by an overwhelmingly negative experience and causes a lasting negative impact on the victim's emotional stability.

Trauma symptoms in most case seems virtually unnoticeable to the victim's family, friends and such cases illustrate the immediate need to talk to someone after a traumatic event has occurred, even if they show no initial signs of disturbance because traumatic symptoms can manifest in some days, months or even years after the actual experience. Trauma is often but not always associated with being present at the site of a trauma-induced experience. Rather is also possible to be traumatized after witnessing the negative event from a far.

Tagurum, Chirdan, Obindo, Bello, Afolaranmi, Hassan, and Yilgwan, (2015) had reported, that in Jos Nigeria, two-thirds of victims of ethno-religious conflict reported 36.8% had seen someone getting killed, 16.7% seen someone getting stabbed, 20.6% seen someone shot, 31.4% seen loss of property and 26% had seen people relocate. Symptoms of Posttraumatic Stress Disorder (PTSD) experienced by participants were constant watchfulness and being easily startled (8.1%), denial or avoidance of thoughts of the crisis (67.6%), numbness and detachment from surroundings (52.9%) and nightmares (42.2%).

Also, in a study among medical students in Jos Nigeria, Nwogu, Audu, and Obembe, (2016) reported PTSD prevalence of 23.5%. Previous childhood trauma and personal experiences during the crisis were significantly associated with having PTSD. Therefore, young children are also vulnerable to trauma and there is a need for them to be psychologically examined after experiencing a traumatic event to ensure their emotional well-being is stable and such can only be achieved if studies are done one mental state of mind of people in communities that have experience conflict situations.

Statement of the Problem

In Nigeria, studies in recent times have been focused on peace, conflict resolution, internally displaced person (Dashit et al. 2020; Nwogu et al. 2016). While, the community affected by the negative experience, little or nothing have been done in finding out the psychological state of mind of people from such communities. Although researchers have investigated the prevalence of posttraumatic stress disorder and other mental health disorders. Rather, little have been done on psychological trauma symptoms among populace of a community with a history of conflict in Nigeria. The aforementioned above dearth of literature precipitates the present study to fill this gap.

Objective of the Study

The objective of the study was to carry out an assessment on the prevalence of psychological trauma symptoms (dissociation, anxiety, sexual abuse, sleep disturbance and sexual problems) in Jos metropolis Plateau State, Nigeria.

Literature Review

Psychological trauma has developed into a very common concept in the scientific community, in mental health care, as well as in popular language and mass media (Kleber, 2019). People living in sub-Saharan Africa Sub-Sahara Africa are disproportionately exposed to trauma and may be at increased risk for posttraumatic stress disorder (PTSD). However, a dearth of population-level representative data is a barrier to assessing PTSD (Lauren, Anne, Sreeja, Charlotte, Soraya, Boniface, Bonginkosi, & Karestan 2020).

Buswell, Haime, Lloyd-Evans, et al (2021) viewed PTSD as most prevalent amongst those who have previous trauma histories, who experienced intense emotional reactions and dissociation during the trauma, and who lacked social support. There is a substantial study that have found pre-trauma factors such as low cognitive ability, previous exposure to trauma (Andrews, Brewin, Rose, & Kirk, 2000) predict more severe post-traumatic stress response to trauma. Peri-traumatic factors such as the degree of life threat or physical injury experienced during a trauma can bring about symptoms of psychological trauma which further increase the probability of developing severe mental health challenge and consequently, traumatic experience involving bereavement, assault, or violence are signals for manifestation of psychological trauma symptoms that might likely lead to post traumatic stress disorder. While, experience of dissociation (Murray, Ehlers, & Mayou, 2002), mental confusion (Dunmore, Clarke, & Ehlers, 1999), or mental defeat (Ehlers, Maercker, & Boos, 2000) at the time of a trauma are also associated with poorer prognosis. In a similar vein, post trauma factors such as a perceived lack of social support (Ullmann & Filipas, 2001; Zoellner, Foa, & Bartholomew, 1999), unrealistically negative appraisals of self, or the world (Dunmore, Clark, & Ehlers, 2001), or excessive feelings of anger, guilt or shame (Andrews et al., 2000) decrease the likelihood of spontaneous recovery.

Hypotheses

The following hypotheses were tested in the study:

- Male will score significantly high on the dissociation sub-scale of psychological trauma than their female counterpart.
- 2. Male will score significantly high on the Anxiety sub-scale of psychological trauma than their female counterpart.
- 3. Male will score significantly high on the depression sub-scale of psychological trauma than their female counterpart.
- 4. Male will score significantly high on the sexual trauma sub-scale of psychological trauma than their female counterpart.
- 5. Male will score significantly high on the sleep disturbance sub-scale of psychological trauma than their female counterpart.
- 6. Male will score significantly high on the sexual problems sub-scale of psychological trauma than their female counterpart.

METHOD

Participants

The study had a total of 279 participants with mean age of 25.7 years and a standard deviation of 9.2 years. Using purposeful method participants were selected among populace of Jos metropolis in Plateau State, Nigeria. Male participants were majority with 184(62%) and female113(38%), while majority 199 (78.7%) had never been married and 54 (21.3%) were married. With regards to religious affiliation, 217 76.7%) were affiliated with Christianity,66 (23.3%) and their educational attainment revealed that majority 164 (62.4%) of the participants

had secondary school education, post-secondary education 81 (30%) and 18(6.8) primary education.

Instruments

The questionnaire had two sections: Section 'A' assessed the socio-demographic characteristics of participants (Age, gender, marital status, educational qualification, and occupation); while section 'B' assessed psychological trauma symptoms using psychological trauma symptom checklist – 40 (TSC-40) developed by Briere and Runtz (1989), the TSC-40 is a 40-item self-report measure of symptomatic distress in adults arising from childhood or adult traumatic experiences. It measures aspects of posttraumatic stress as well as other symptoms found in some traumatized individuals. Respondents are asked to rate how often they have experienced each symptom in the last two months using a 4-point frequency rating scale ranging from 0 ("never") to 3 ("often"). The TSC-40 has six subscales: Anxiety, Depression, Dissociation, Sexual Abuse Trauma Index, Sexual Problems, Sleep disturbances and yields a range of scores 0-120 with higher score representing severity of trauma. According to the authors, this measure is intended exclusively for research purposes. The Sexual Problems subscale displays reasonable reliability (alpha = .73); (b) the Sleep Disturbance subscale (alpha = .77); (c) the reliability for the SATI is alpha = .62; and (d) the total TSC40 score is highly reliable (alpha= .90). The score for each subscale is the sum of the relevant items, listed below: Dissociation: 7, 14, 16, 25, 31, 38; Anxiety: 1, 4, 10, 16, 21, 27, 32, 34, 3,9; Depression: 2, 3, 9, 15, 19, 20, 26, 33, 37; Sexual Abuse Trauma Index 5, 7, 13, 21, 25, 29, 31; Sleep Disturbance 2, 8, 13, 19, 22, 28; and Sexual Problems 5, 9, 11, 17, 23, 29, 35, 40.

Procedure

Participants that participated in this study were purposefully drawn from different communities within Jos metropolis (Jos North, Jos South and Jos East local government areas of Plateau

state Nigeria); these communities include, Jenta Adamu, Dadin Kowa, Bukuru, Fobor, Bauchi road, Gada Biyu, Rafield, Farin Gada, Rantya, and Angwan Rukuba. Only participants that consent to participate were administered questionnaires, those that participated in the study were met in various locations, some in their homes, front of their homes, business areas (shops), and play ground. Valid questionnaires were scored and analysed.

Design

The study design is a descriptive survey. This is appropriate as the descriptive research is an appropriate choice when the research aim is to identify characteristics, frequencies, trends, correlations and, and categories of a parameter or variable within a population.

Method of Data Analysis

The analysis of the data was based on the hypothesis formulated for the study. The chi-square statistical tool was used test for proportions of psychological trauma symptoms. The chi-square is appropriate as it tests for frequency counts, and as such tests for differences in proportion among parameters. The 0.05 alpha level was used as the study significance level.

RESULTS Rate of Trauma Symptoms

Table 1: Rate of Trauma Symptoms

	Observed	Percent	Chi-Square	P –value
	N	%	(χ^2)	
Dissociation				
Normal	131	44.1	4.125	0.042*
Dissociation	166	55.9		
Anxiety				
Normal	116	39.1	14.226	0.0005*
Anxiety	181	60.9		
Depression				
Normal	116	39.1	14.226	0.0005*
Depression	181	60.9		
Sexual Abuse Trauma				
Normal	138	46.5	1.485	0.223
Sexual Abuse Trauma	159	53.5		
Sleep Disturbance				
Normal	119	40.1	11.721	0.001*
Sleep Disturbance	178	59.9		
Sexual problems				
Normal	162	54.5	2.455	0.117
Sexual problems	135	45.5		

^{*}Significant

Table 1 above shows the rate of trauma symptoms among participants. The result revealed that there was a significant rate of dissociation among participants (χ^2 = 4.125, df = 295, p = 0.042) with 55.9% of the participants having dissociation; anxiety (χ^2 = 14.226, df = 295, p = 0.0005), with 60.9% of the participants with anxiety; depression (χ^2 = 14.226, df = 295, p = 0.0005), with 60.9% with depression; and sleep disturbance (χ^2 = 11.721, df = 295, p = 0.001), with 59.9% of the participants with sleep disturbance. However, there was no significant rate of sexual abuse trauma (p>.05), and sexual problems (p>.05).

Hypotheses Testing

Six hypotheses were tested with the Chi-Square statistical tool at the 0.05 significance level, and the results are presented below:

Hypothesis 1:

Table 2: Chi-square Table for Gender and Dissociation

Gender	Disso	Dissociation		Chi-square	p-value
	Normal	Dissociation		(χ^2)	
Male	85	99	184		
Female	46	67	113	0.855	0.355
Total	131	166	297		

Table 2 above shows the Chi-square results which reveals that more male participants did not significantly have dissociation compared with female, $\chi^2 = 0.855$, df = 295, p = 0.355 (p>.05). The hypothesis is not supported.

Hypothesis 2:

Table 3: Chi-square Table for Gender and Anxiety

Gender	Anx	Anxiety		Chi-square	p-value
	Normal	Anxiety		(χ^2)	
	0.4	100	101		
Male	81	103	184		
Female	35	78	113	5.008	0.025
Total	116	181	297		

Results of hypothesis two in table 3 above indicated that more male participants significantly have anxiety compared with female, $\chi^2 = 5.008$, df = 295, p = 0.025 (p<.05). The hypothesis is supported. This implies that higher proportion of male have anxiety.

Hypothesis 3:

Table 4: Chi-square Table for Gender and Depression

Gender	Dep	Depression		Chi-square	p-value
	Normal	Depression		(χ^2)	
Male	82	102	184		
Female	34	79	113	6.164	0.013
Total	116	181	297		

The result in table 4 above revealed that more male participants significantly have depression compared with female, $\chi^2 = 6.164$, df = 295, p = 0.013 (p<.05). The hypothesis is supported. This implies that higher proportion of male participants have depression.

Hypothesis 4:

Table 5: Chi-square Table for Gender and Sexual Abuse Trauma Index (SATI)

Gender	Sexual abuse t	Sexual abuse trauma index		Chi-square	p-value
	Normal	SATI		(χ^2)	
Male	87	97	184		
Female	51	62	113	0.130	0.718
Total	138	159	297		

The result of table 5 above for hypothesis four revealed that more female participants did not significantly have sexual abuse trauma compared with male, $\chi^2 = 0.130$, df = 295, p = 0.718 (p>.05). The hypothesis is not supported.

Hypothesis 5:

Table 6: Chi-square Table for Gender and Sleep Disturbance

Table 0. Cli-square Table 101 Genuer and Sleep Disturbance						
Gender	Sleep d	Sleep disturbance		Chi-square	p-value	
		Sleep		(χ^2)		
	Normal	disturbance				
Male	82	102	184			
Female	37	76	113	4.074	0.044	
Total	119	178	297			

The result of table 6 for hypothesis five indicated that more male significantly has sleep disturbance compared with female, $\chi^2 = 4.074$, df = 295, p = 0.044 (p<.05). The hypothesis is supported. This implies that higher proportion of male have sleep disturbance.

Hypothesis 6:

Table 7: Chi-square Table for Gender and Sexual Problems

Gender	Sexual problems		Total	Chi-square	p-value
	Normal	Sexual problems		(χ^2)	
Male	104	80	184		
Female	58	55	113	0.762	0.383
Total	162	135	297		

The result of table 7 for hypothesis six indicated that more female did not significantly have sexual problems compared with male, $\chi^2 = 0.762$, df = 295, p = 0.383 (p>.05). The hypothesis is not supported.

DISCUSSION

Findings from this study aimed at assessing the prevalence of trauma symptoms among residents of Jos Metropolis Plateau State Nigeria, showed that 55.9% of the participants that participated in this study had dissociation symptom and it is in support of the findings of Ozdemir, Celik and Oznur 2015; also, Dashit, Ibrahim and Dabit (2020) revealed that individuals exposed to conflict situations had higher dissociation levels than those not exposed to conflict situations. While, Gulsum, O'zdemir, Celik, Uzunand and Ozsahin (2009) in their study had established that exposure to higher levels of stressful events and traumatic experience more frequently tend to increased levels of dissociation. Also, Dashit et. al. (2020) in a recent study among teachers in a conflict area in Borno state, Nigeria the study revealed that there was a significant rate of dissociation among the teachers with 61.7% of the teachers having dissociation symptoms. Despite the high prevalence of those with dissociation symptom in this study, males did not significantly have dissociation compared to females and those not support findings of Christiansen and Elklit, (2008) who in their study discovered that dissociation was a better predictor for PTSD in women than in men.

However, result of the second hypothesis revealed that 60.9% of the study population had anxiety symptoms. Which supports the findings of Studies indicating elevated levels of anxiety among teachers that had stressful experiences (Aslrasouli &Vahid, 2014; Dashit et. al. 2020) and they also tend to have relatively high burnout levels and lower resilience levels. While the findings of these present study reveal more males significantly have anxiety compared to females which is contrary to the findings of Punamaki et. al. (2005) who reported that exposure to lifetime trauma was associated with anxiety among women only. Although, Christiansen and Elklit, (2008) discovered that anxiety predicted PTSD in men.

Similarly, findings of hypothesis three had 60.9% of the participants having depression symptom. While male participants significantly were more depressed compared to female, which is contrary to Christiansen and Elklit, (2008) opination that depression predict PTSD in women and Tang and Freyd (2012) findings in which they discovered women reported higher rates of depression and re-experiencing symptoms of PTSD.

Hypothesis four findings revealed that sexual trauma index was 53.5% with female participants not significantly having sexual abuse trauma compared to males, this finding is in contrast to the findings of Herman (1992) who reported, that immediate distress among women victimized in adulthood may include shock, fear, anxiety, confusion and social withdrawal.

Result for hypothesis five, 59.9% of the study population had sleep disturbance supporting. Koffel and Khawaja (2016) sleep disturbances are common in adults with PTSD. While these findings had more males significantly having sleep disturbance compared to females, and it supports the findings of Kobayashi et al (2012) on PTSD, reported that reduced deep sleep is found only in men. Considering that more males are at the front line in terms of conflicts may explain why more males significantly have sleep disturbance compared to females.

Finally, hypothesis six had 45.5% of the study participants had sexual problem symptoms. While more female did not significantly have sexual problems compared with male, and in contrast to Yuan et. al., (2006) reported that women survivors of childhood and adulthood sexual violence experience severe and chronic psychological symptoms.

CONCLUSION

The study had carried out an assessment of the prevalence of psychological trauma symptoms in Jos metropolis of Plateau state Nigeria, and found significant prevalence rate on dissociation, anxiety, depression, sleep deprivation, sexual trauma index and further findings across gender had supported the hypothesis postulated and some did not support postulated hypothesis. Psychological trauma during and after conflict has a negative impact on the mental state of mind of the populist and could also be highly associated with lack of individual and group exposure to stress management skills, training and psychological therapy.

Implications of the Study

The implication of these study on psychological trauma symptoms indicates most individuals might not be aware of the changes in their behaviors, the way they view life and their mental state of mind but rather see it as a normal way of life and in a long run might result to serious mental health challenges. Gender also is not really a major determining factor in the development of psychological trauma symptoms rather it all depends on how we respond to and interpret negative experiences.

Psychological trauma symptoms does not only occur as a result of exposure to war, accident, sexual assault or the loss of a loved one rather it could also occur as a result of failure in academics, relationships, marriage as well as physical and verbal abuse, early childhood experiences, working in places that could leave scary memories such as hospitals.

Limitation of Findings

The study participants size was relatively small making the findings of these research difficult for generalizations. There was also unequal representation of participant across gender, religious affiliation and while the use of self-report questionnaires might have created a source of bias among participants who may exaggerate or misunderstand a question due to lack of adequate knowledge and respond inaccurately by responding to questions in ways that they feel are socially desirable.

Recommendations

The following recommendations are made in the study:

- 1. There should be an increase in the sample size of populist.
- 2. Future research should have an equal representation across gender and religious affiliation.
- 3. Future studies should compare populist from conflict community with those who had experienced similar conflict situation.
- 4. Future studies should also consider examining the resilience of populist and their differing levels of resilience, burnout, and psychological trauma symptoms.
- 5. The government and Non-governmental organizations should consider conducting studies, training and workshops to improve coping strategies and resilience of populist.
- 6. There is need for more psychological trauma symptoms studies to be conducted amongst front liners (military, para military, medical health workers and community volunteers) of a previous and present conflicting area so as to ascertain their mental state of mind.
- 7. Finally, individual and group should be expose to stress management skills, training and psychological therapy.

REFERENCES

- Andrews, B., Brewin, C. R., Rose, S., & Kirk, M. (2000). Predicting PTSD symptoms in victims of violent crime: the role of shame, anger, and childhood abuse. *Journal of Abnormal Psychology*, 109, 69 73.
- Aslrasoulia, M., & Vahidb, M.S.P. (2014). An investigation of teaching anxiety among novice and experienced iranianefl teachers across gender. *Procedia Social and Behavioral Sciences*, 98, 304 313
- Briere, J.N., & Runtz, M.G. (1989). The trauma symptom checklist (TSC-33): Early data on a new scale, *Journal of Interpersonal Violence*,4,151-163.
- Buswell, G., Haime, Z., Lloyd-Evans, B. et al. (2021). A systematic review of PTSD to the experience of psychosis: prevalence and associated factors. *BMC Psychiatry* **21**, 9 (2021). https://doi.org/10.1186/s12888-020-02999-x
- Christiansen, D. M., & Hansen, M. (2015). Accounting for sex differences in PTSD: A multivariable mediation model. *European Journal of Psychotraumatology*, 6, 26068. Doi:10.3402/ejpt.v6.26068
- Christiansen, D. M., & Elklit, A. (2008). Risk factors predict post-traumatic stress disorder differently in men and women. *Annals of General Psychiatry*, 7, Article 24. https://doi.org/10.1186/1744-859X-7-24
- Dashit, S.I., Ibrahim, J.T., & Dabit, J. (2020). Assessment of Psychological Trauma Symptoms among teachers in a conflict area. The case of Biu local government area of Borno state. *KIU Journal of Humanities*, 5 (2), 157-162.
- Dunmore, E., Clark, D. M., & Ehlers, A. (2001). A prospective investigation of the role of cognitive factors in persistent posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy*, 39, 1063 1084.
- Dunmore, E., Clark, D. M., & Ehlers, A. (1999). Cognitive factors involved in the onset and maintenance of PTSD. Behaviour Research and Therapy, 37, 809-829.
- Ehlers, A., Maercker, A., & Boos, A. (2000). Posttraumatic stress disorder following political imprisonment: the role of mental defeat, alienation, and perceived permanent change. *Journal of Abnormal Psychology*, 109, 45 55.
- Gulsum, M., Ozdemir, B., Celik, C., Uzun, O., & Ozsahin, A. (2009). Dissociative experiences among soldiers who exposed combat trauma. *Anatolian Journal of Psychiatry*, 10:34–39
- Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, 5, 377–391.
- Herman, J. L. (1992). Trauma and recovery: New York: Basic Books.

- Kleber R. J. (2019). Trauma and Public Mental Health: A Focused Review. *Frontiers in psychiatry*, 10, 451. https://doi.org/10.3389/fpsyt.2019.00451.
- Kobayashi, I., Cowdin, N., & Mellman, T.A. (2012), One's sex, sleep, and posttraumatic stress disorder. *Biology Sex Differences* 3, 29. https://doi.org/10.1186/2042-6410-3-29
- Koffel., E, Khawaja. I., & Germain., A. (2016) Sleep Disturbances in Posttraumatic Stress Disorder: Updated Review and Implications for Treatment. *Psychiatry Annual*, 46 (3), 73-176. doi: 10.3928/00485713-20160125-01.
- Lauren.C, Anne., S, Sreeja S. K. Charlotte. H, Soraya S, Boniface H, Bonginkosi C, Karestan C. (2020). National and regional prevalence of posttraumatic stress disorder in sub-Saharan Africa: A systematic review and meta-analysis. *PLOS Medicine* 17(7): e1003312. https://doi.org/10.1371/journal.pmed.1003312
- Murray, J., Ehlers, A., & Mayou, R. (2002). Dissociation and posttraumatic stress disorder: two prospective studies of motor vehicle accident survivors. *British Journal of Psychiatry*, 180, 363 368.
- Nwogu, C.N., Audu, M.D., & Obembe, A. (2016). Prevalence and correlates of posttraumatic stress disorder among medical students in the University of Jos, Nigeria. *Nigeria Journal of Clinical Practice*, 19 (5), 595-599.
- Ozdemir, B., Celik, C., & Oznur, T. (2015). Assessment of dissociation among combat exposed soldiers with and without posttraumatic stress disorder. *European journal of psychotraumatology*, 6, 26657.https://doi.org/10.3402/ejpt.v6.26657
- Pearlman, L.A., & Saakvitne, K.W. (1995). Trauma and the Therapist. New York: Norton.
- Punamaki, R.L., Komproe, I.H., Qouta, S., Elmasri, M., & de Jong, J.T.V.M. (2005). The role of peritraumatic dissociation and gender in the association between trauma and mental health in a Palestinian community sample. *American Journal of Psychiatry*, 162(3), 545-551
- Tagurum, Y.O., Chirdan, O.O., Obindo, T., Bello, D.A., Afolaranmi, T.O., Hassan, Z.I., & Yilgwan, C. (2015). Prevalence of violence and symptoms of post-traumatic stress disorder among victims of ethno-religious conflict in Jos, Nigeria. *Journal of Psychiatry*, 18(1),14-138.
- Tang, S.S.S., & Jenifer, J.J. (2012). Betrayal trauma and gender differences in posttraumatic stress. *Psychological Trauma Theory, Research, Practice and Policy*, 4(5), 469-478
- Ullman, S. E., & Filipas, H. H. (2001). Predictors of PTSD symptom severity and social reactions in sexual assault victims. *Journal of Traumatic Stress*, 14, 369 389
- Yuan, N.P., Koss, M.P., & Stone, M. (2006). The psychological consequences of sexual trauma. Hrrisburg, PA: VAWnet, a project of the National Resource Centre on Domestic Violence. Retrieved October, 27, 2020, from http://www.vawnet.org.

Zoellner, L. A., Foa, E. B., & Bartholomew, D. B. (1999). Interpersonal friction and PTSD in female victims of sexual and nonsexual assault. *Journal of Traumatic Stress*, 12, 689 – 700.