

Self-esteem, posttraumatic stress disorder and suicidal ideation among victims of sexual violence

Abstract

Over the past years, suicide and suicidal ideation have become a Mental Health concern in Nigeria. With this concerns, the study examined the impact of Self-esteem and Posttraumatic Stress Disorder on suicidal ideation among victims of sexual violence. In line with the study objectives, three research questions and three hypotheses were formulated and tested. Participants for the study consisted of 28(23 Christians and 5 Muslim) victims/survivors of different forms of sexual violence from 3 Non-Governmental Organizations (NGOs) who support victims of sexual violence, drawn through a purposive sampling technique. Participants were within the age range of 11-31 years. Results revealed that self-esteem has no significant main effect on suicidal ideation $F(1, 24) = .439, p = .514$ while PTSD has a significant main effect on suicidal ideation $F(1, 24) = 0.032$. The results also showed that self-esteem and PTSD do not have any significant interaction effects on suicidal ideation $F(1, 24) = 1.56, P = .224$. It was recommended that all victims of sexual violence and other traumatic experience should undergo psychological evaluation to help alleviate the symptoms and distress.

Keywords: self-esteem, posttraumatic stress disorder, suicidal ideation & sexual violence

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Abbreviations: NGOs, non-governmental organizations; PTSD, post traumatic stress disorder; WHO, world health organization; CWEENs, christian women for excellence and empowerment in nigerian society; SGBV, sexual and gender based violence; DSM-5, ANOVA, Analysis of Variance; PSLs, PTSD Symptom Levels Scale; SABCS, Suicidal Affect-Behaviour-Cognition Scale; WTL, wish to live; WTD, wish to die; SI, suicidal ideation

Introduction

Today, we live in a world that is continuously plagued by numerous distressing issues. With the rise of psychological distress, conflict and other distressing issues, Post Traumatic Stress Disorder (PTSD), suicide, sexual violence, suicidal ideation and other issues have become areas of concern in the field of Mental health. In Nigeria, cases of suicide have become increasingly rampant over the last few years with reported cases of suicide in Lagos and other parts of the country. With several factors aligning to play a role in suicide and suicidal attempts, when people take their lives their families are left in pains. One key factor that seems to prepare the way for suicide is suicidal ideation. Suicidal ideation is the thought, intent, plan and imagination of an individual concerning their wish to commit suicide. When looking at suicidal ideation we do not look into suicide attempts or complete suicide but the thought of an individual concerning suicide.

Research has shown that several factors play significant roles in suicidal ideation and this phenomenon cuts across individuals irrespective of age, gender, ethnicity, race, academic performance or even social status. Suicide and suicidal behaviours are both national global phenomena. Suicidal behaviour, ranging from suicidal ideation to suicidal acts such as parasuicide, attempted suicide, and completed suicide, is widely pervasive and has reached critically wide-ranging proportions.^{1,2} According to World Health Organization (WHO) estimates, almost one million people worldwide commit suicide every year, accounting for more deaths than homicide and war combined.

Suicide is one of top 20 leading causes of death worldwide, killing more than 800,000 people each year.³ Suicide accounted for 1.4% of all deaths worldwide, making it the 15th leading cause of death in the same year.⁴ In the year 2000, a suicide was completed every 40 seconds and attempted every 3 seconds worldwide.⁵ Furthermore, according to the WHO estimates based on current worldwide trends, for the year 2020, ~1.53 million people will die from suicide and 10-20 times more people will attempt suicide, representing an average of one death every 20 seconds and one attempt every 1-2 seconds.⁶

According to Centres for Disease Control and Prevention,⁷ suicidal ideation is the precedent factor of suicide which is the second leading cause of death among (25-34) year olds and the third leading cause of death among (15- to 24) year olds, and accounts for 12.2% of all deaths annually in U.S.A. Such worldwide problem of suicidal ideation has been considered a significant factor leading to death according to many researchers. Nock et al.,⁸ affirm that between 22% and 38% of young adults have suicidal thoughts at some point in their developmental life stages. However, this global psychological distress and its predicting factors have not been thoroughly researched in Nigeria. Hence, the motivation for this study; in order unearth the effects of self-esteem and trauma on suicidal ideation among victims of sexual violence.⁹ Seemingly, there have been increasing concerns over the prevalent rates of suicides globally over the last few years. Suicidal behaviour, ranging from suicidal ideation to suicidal acts such as parasuicide and attempted suicide,⁶ and completed suicide,⁵ is widely pervasive and has reached critically wide-ranging proportions.^{1,2}

Cases of sexual violence are increasingly becoming rampant in Nigeria. Although most of these cases are hardly reported due to fear of stigmatization, the few that are documented are mostly done by NGOs, police or health centres. For instance, Christian Women for Excellence and Empowerment in Nigeria Society (CWEENs) documented 446 cases of Sexual and Gender Based Violence (SGBV) from January 2015 to December 2016 in Plateau state alone. Out of the 446 cases documented, 29 % (129.34) were sexual violence

cases out of which 24% were rape cases, 1% sexual assault, 3% sexual harassment, 1% gang rape, 2% child marriage and 7% child defilement.¹⁰

For example,¹³ reported that self-esteem is a powerful internal protective factor against adolescent suicide behaviours. Violent behaviour, alcohol consumption, and smoking among adolescents are said to be directly related to suicidal ideation, possibly because they perceive such behaviours as a possible solution to stressful events.¹⁴ Self-esteem is one of the major factors associated with suicide.^{15,16} Pinto et al.,¹⁷ report that self-esteem of youths experiencing suicidal thoughts is low compared to other youths, and youths who have low self-esteem are more likely to attempt suicide than other youths. Self-esteem also has a significant effect on suicidal thoughts in adult, including the elderly.¹⁸ Negative view of the self may involve seeing the self as worthless and the future as hopeless. A study was conducted by Bhar et al.,¹⁹ to investigate the self-esteem and suicide ideation in psychiatric outpatients revealed that depression, hopelessness, and low self-esteem are all associated factors to suicidal ideation. The results of the study indicated that low self-esteem was negatively associated with suicidal ideation and considers being a good predictor of suicidal ideation independent of depression and feeling of hopelessness.

The sample consisted of 338 psychiatric out-patients male and female at the Centre for Cognitive Therapy at the University of Pennsylvania USA. The Beck Self-Esteem Scales was used to measure patients' self-esteem, Beck Depression Inventory, Beck Hopelessness Scale were utilized in the study. Similarly, Wanyoike et al.,²⁰ found that there is a close relationship between self-esteem and suicidal ideation. Singh & Pathak²¹ in a study of suicidal ideation among adolescents found that low self-esteem group scored higher on suicidal ideation scale. This finding shows that persons with low self-esteem are much more vulnerable to suicidal indulgence than the persons with higher self-esteem. Al-Shawashereh²² in a study on self-esteem and suicidal ideation among students however, found that students with higher level of self-esteem exhibited more suicidal ideation. Similarly, Manani & Sharma²³ explored the relationship between self-esteem and suicidal ideation and found that there was negative correlation between self-esteem and suicidal ideation among students.

In some studies, depressive symptoms, posttraumatic stress disorder (PTSD), and suicidal ideation;^{24,25} were found among Child Sexual Abuse victims than among the general population. Other studies have also shown that among sexually abused adolescents, not only do depressive and PTSD symptoms predict suicidal ideation,²⁶ but depressed mood also mediates the relationship between sexual abuse and suicidal ideation.²⁷ Depressive mood is a well-known risk factor for suicidal ideation and behaviours, along with PTSD.^{28,29} Similarly, studies have shown that among the general population, PTSD has been linked to suicidal ideation (SI) and past suicide attempts,³⁰ a relationship that appears to be amplified among individuals with comorbid major depressive disorder.^{30,31} PTSD is predictive of a future suicide attempt among individuals reporting Suicidal ideation. 60 Sexually abused adolescent girls are at high risk of suicidal ideation and attempts.³²⁻³⁴ According to WHO victims of sexual assault are six times more likely to suffer from post-traumatic stress disorder and four times more likely to contemplate suicide. An extensive 50 article meta-analysis that examined the association between PTSD and suicide ideation/behaviours found PTSD to be associated with an increased incidence of prior suicide attempts and current suicide ideation even after controlling for other psychiatric

illnesses.³⁵ These findings are congruent with similar studies that have also found PTSD to be associated with elevated suicide ideation and suicide attempts.³⁶⁻³⁹

Furthermore,²⁶ found that PTSD predicted suicidal ideation among sexually abused adolescent girls, even after controlling for depressive symptoms. Alix et al.,³⁹ found that self-blame and shame were both found to be predictors of PTSD, depressive symptoms and suicidal ideation among sexually abused children and adults. Similarly,⁴⁰ reported that girls and boys exposed to physical or sexual violence had 3.42 and 3.14 times more probability of referring suicidal ideation in the past 30 days. High rates of suicidal behaviour have been consistently reported among PTSD patients exposed to combat trauma, physical/sexual abuse, intimate partner violence, natural disasters or a mixture of different traumatic events⁴¹ traumatic events such as childhood abuse increase a person's suicide risk. PTSD is associated with suicidal ideation and suicide attempts, and presence of the disorder may indicate which individuals with ideation eventually make a suicide plan or actually attempt suicide.⁴² Few studies have reported the relationship between self-esteem, PTSD and suicidal ideation. For instance, some studies show that the evidence base on the psychological dimensions of sexual violence suggests that they too are often long-lasting. Survivors are more likely to exhibit symptoms of depression, anxiety, posttraumatic stress disorder (PTSD), low self-esteem and suicidal thoughts.^{43,44}

Similarly, Kwon et al.,⁴⁵ in a study on effects of traumatic experiences on suicidal ideation among 173 Korean adolescents found that self-esteem decreased the prevalence of suicidal ideation by moderating the effect of depression in adolescents who suffered traumatic experiences. Finally, the review of the relevant literature also shows that in spite of the startling increase in the rate of suicide and sexual violence, there is very limited African/Nigerian research on these psychological distresses. Similarly, there are very few researches on the relationship between self-esteem, trauma and suicidal ideation or behaviour especially among victims of sexual violence. The alarming rates of suicide and sexual violence in Nigeria as well as literature gaps motivated the current study on self-esteem, posttraumatic stress disorder and suicidal ideation among victims of sexual violence in Plateau state. The general objective of the study is to examine the roles of self-esteem and PTSD on suicidal ideation among victims of sexual violence. In addition to the general purpose of the study, the study also explored the following specific objectives:

- i. To examine the role of self-esteem on suicidal ideation among victims of sexual violence
- ii. To examine the effect of posttraumatic stress disorder on suicidal ideation among victims of sexual violence
- iii. To examine the interaction effects of self-esteem and posttraumatic stress disorder on suicidal ideation among victims of sexual violence

Theoretical framework

More recent theories have also sought to explain suicide. Shneidman⁴⁶ explained suicide as a response to overwhelming pain (i.e., psychache), Durkheim⁴⁷ emphasized the role of social isolation, Baumeister⁴⁸ described suicide as an escape from an aversive state of mind, Abramson⁴⁹ highlighted the role of hopelessness. These theories have been tremendously useful in guiding suicide research and

prevention efforts. At the same time, these theories share a particular feature that may be limiting progress in understanding suicide: They fail to differentiate explanations for suicidal thoughts and suicidal behaviour. This distinction is especially important when one considers that most people who develop suicidal ideation never go on to make a suicide attempt.^{8,50}

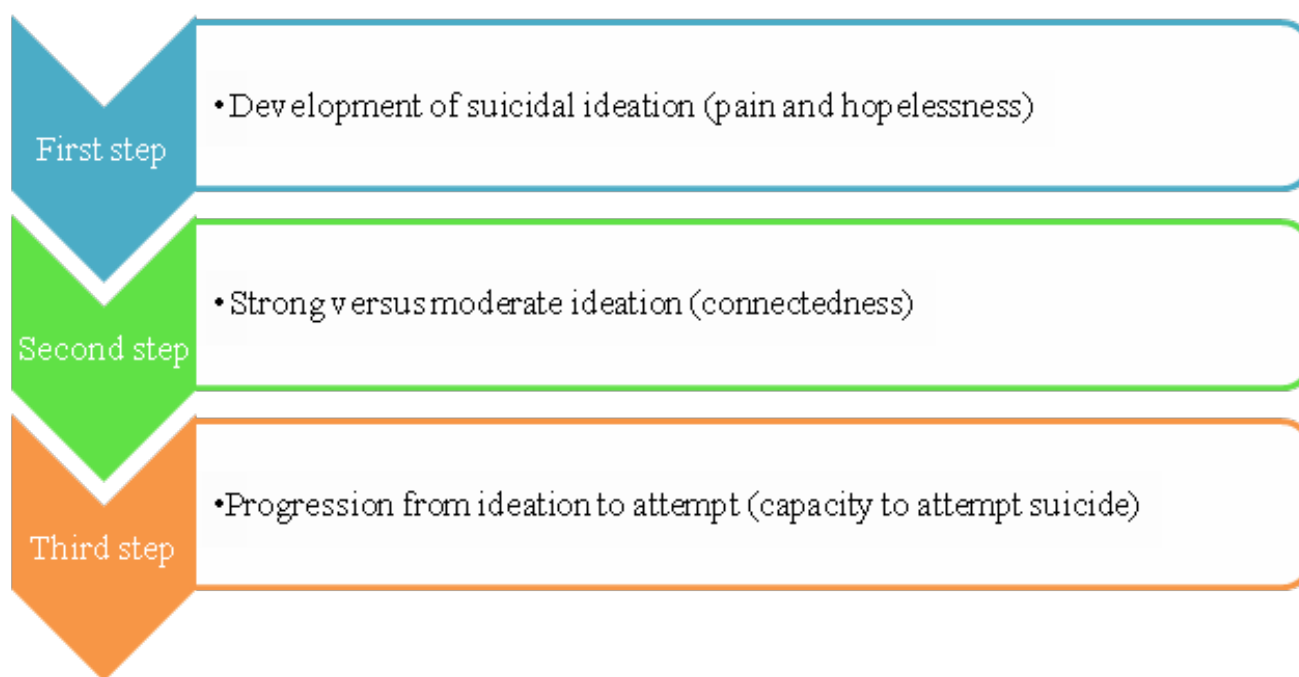
The study will however, adopt the framework of the Klonsky et al.,⁵⁰ Three-Step Theory (3ST). The theory is built on the foundation of Thomas Joiner's⁵¹ Interpersonal Theory of suicide which posits that completed suicide can only be obtained through the simultaneous presence of a desire to die and the ability to die. The three-step theory offers separate explanations for:

- i. The development of suicidal ideation and
- ii. The progression from suicidal ideation to attempts.

The theory is relatively parsimonious in that suicide ideation and attempts are explained in terms of just four factors: pain, hopelessness, connectedness, and suicide capacity. According to this theory, there are three (3) steps to suicide which include; development of suicidal ideation, strong versus moderate ideation and progression from ideation to attempts. The theory first explains that pain which could be emotional and psychological such as burdensomeness and low belongingness, social isolation, negative self-perception and myriad other aversive thoughts, emotions, sensations, and

experiences in combination with hopelessness can lead to a decreased desire to live. The theorists believe that it is the combination of pain and hopelessness that is required to bring about the development of suicidal ideation. Secondly, the theory considers the next step toward potentially lethal suicidal behaviour (strong versus moderate ideation) to involve connectedness. According to the theorists, connectedness refers to one's attachment to a job, project, role, interest, or any sense of perceived purpose or meaning that keeps one interested in living. This means that the interaction between pain, hopelessness and connectedness can lead to strong or moderate ideation. The last step according to this theory is when an individual has developed a desire to end his or her life, the next question is whether the person will act on that desire and make an attempt or not (progression from ideation to attempts) this, however, is determined by one's acquired capacity to attempt suicide.

According to the theorists acquired capability refers to an individual's habituation to pain, fear, and death through exposure to life experiences such as physical abuse, non-suicidal self-injury, the suicide of a family member or friend, combat training, or any other experience that subjects someone to painful and provocative events. The study will adopt this theoretical framework to explore self-esteem, trauma and suicidal ideations of victims of painful experiences such as sexual violence. The theoretical framework of this study can be explained with a simple diagram as seen below:



Three-Step Theory of Suicide

In line with the study objectives, the following hypotheses were drawn:

- i. There is the main effect of self-esteem on suicidal ideation among victims of sexual violence
- ii. There is the main effect of posttraumatic stress disorder on suicidal ideation among victims of sexual violence

- iii. There are the interaction effects of self-esteem and posttraumatic stress disorder on suicidal ideation among victims of sexual violence.

Material and methods

Population

The population of the study consisted of 35 female victims

of sexual violence in Jos, Plateau state drawn from three (3) Civil Society Organisation (CSOs) Christian Women for Excellence and Empowerment in Nigeria Society (CWEENS), Women and Girl Child Rescue and Development Initiative and Simji Girl Child Development Initiative that work with victims/survivors of Sexual Violence. A total of 35 questionnaires were issued out to the participants using a purposive sampling technique with particular focus on victims of sexual violence as operationally defined above. However, only 28 questionnaires were completed correctly while 7 were discarded for incomplete responses. The final sample consisted of 28 respondents out of which 24 (85.71%) were Christians, 5 (14.29%) were Muslims. 13 (46.43%) of the respondents reported to have been victims of rape, 3 (10.71%) were victims of attempted rape, 7(25%) were victims of intimate partner violence while 5 (17.86%) reported to have suffered other unspecified forms of sexual violence. Majority of the participants 12 out of the 28 (42.9%) fall within the age range of above 31 years and above.

Design

The research design for the study is a factorial design. A 2x2 factorial design was used. There are two independent variables, self-esteem and posttraumatic stress disorder and one dependent variable; suicidal ideation. Self-esteem has two levels, low and high. Likewise, trauma has two levels, mild and severe. The Analysis of Variance (ANOVA) statistic was used for the data analysis.

Instruments

The Rosenberg Self-Esteem Scale (Rosenberg, 1965)

This scale consists of self-worth statements ranging from low self-esteem to high self-esteem. The scale is a ten item Likert type. Items are four-point scale ranging from strongly agree to strongly disagree. Strongly agree has three points, agree two points, disagree one point, and strongly disagree no points. Scoring: The scale consists of five positive items and five negatives items. Negative items (2, 5, 6, 8, and 9) are reversed scored. Scores on the scale range from 10-40 with a mean of 1-4. High scores on the scale mean a higher level of self-esteem and vice versa. For this research, an average score of 1-2.9 is low self-esteem while an average score of 3.0-4.0 is high self-esteem. This scale is well known measure of self-esteem all over the world. Rosenberg⁵² reported internal consistency reliability (Cronbach alpha) ranging from 0.85 to 0.88 for the participating students.

DSM 5 PTSD Symptom Levels Scale (PSLS)

Posttraumatic stress disorder symptoms were evaluated by a questionnaire compiled by Gil et al.,⁵³ corresponding fully with the DSM 5 (American Psychiatric Association 2013) criteria for PTSD. The questionnaire adheres to the construct and expert validity of the DSM-5 diagnosis of PTSD. It is a 20-item self-report questionnaire aimed at assessing levels of PTSD symptoms over the period after the traumatic event. Each item corresponds to one of the 20 DSM-5 diagnostic criteria for PTSD. The severity of each item is rated on a four-point Likert type scale ranging from 0= not at all to 3= severely. A score of 0.0 is no trauma, 1.0-10.0 is mild trauma, 11.0-20.0 is moderate trauma 21.0-30.0 is severe trauma. For the purpose of this study however, trauma will be divided into two levels with a score of 1.0-20.0 representing mild PTSD and 21.0-30.0 representing severe PTSD. The scale is divided into four clusters: intrusion (items 1-5), avoidance (items 6-7), negative alterations (items 8-14), and

alterations in arousal (items 15-20). The scale showed high Cronbach alpha internal consistency for both the general scale and for its subscales. Validity and reliability of the DSM-5 PTSD Symptom Levels Scale (PSLS) Construct validity: The PSLS was developed in adherence to the diagnostic criteria presented in the DSM-5. Each question corresponds to the 20 items developed by experts; thus, construct validity is maintained.

- Content validity: Twenty psychiatrists from three mental health hospitals were asked to rate the extent to which the questionnaire matched the DSM-5 PTSD diagnostic criteria on a Likert scale ranging from 1=very low match to 5 = very high match. The mean score of their rating was 4.7 (SD = 0.8), indicating a high content validity.
- Internal validity: Pearson product correlation coefficients, conducted to identify correlations between the total PSLS score and its 20 items, ranged from ($r = 0.91$; $P < 0.001$) for item 1 to ($r = 0.63$; $P < 0.001$) for item 10. In addition, Pearson product correlation coefficients showed intrusion and strong correlation between the four clusters and the PSLS total score ($r = 0.86$; $P < 0.001$), avoidance ($r = 0.73$; $P < 0.001$), negative alterations ($r = 0.87$; $P < 0.001$), and arousal ($r = 0.91$; $P < 0.001$).
- External validation: In order to examine external validity, the correlation between the PSLS and a well-established well-being questionnaire; 92 an opposite external indicator) were tested. The high negative association between these two tools indicates a high external validity of the PSLS.
- Criterion validity: Twenty of the respondents were recruited randomly immediately after completing the Internet-based questionnaire, and agreed to be examined by a psychiatrist. Only three received a formal diagnosis of ASD, but their scores on the PSLS were indeed relatively high ($M = 0.53$, $SD = 0.54$) compared to the total mean score of the entire sample ($M = 1.1$, $SD = 0.3$). Clearly, no formal statistical analysis is suitable.
- Reliability: The scale showed high Cronbach alpha internal consistency for both the general scale and for its subscales. The Cronbach alpha internal consistency for the intrusion subscale was 0.87, for the avoidance subscale 0.84, for the negative alterations' subscale 0.86, and for the alterations in arousal subscale 0.85. The Cronbach alpha internal consistency for the general scale was 0.94. In addition, Pearson product correlation coefficients, conducted to identify correlations between the total PSL score and its subscales, showed intrusion ($r = 0.86$; $P < 0.001$), avoidance ($r = 0.73$; $P < 0.001$), negative alterations ($r = 0.87$; $P < 0.001$), and arousal ($r = 0.91$; $P < 0.001$)

Suicidal Affect-Behaviour-Cognition Scale (SABCS)⁵⁴

The Suicidal Affect-Behaviour-Cognition Scale (SABCS) is a six-item scale built on premise of the ABC theory for the assessment of suicidal ideation. The scale is suitable for research and for clinical purposes. It includes items on death-related affect, wish to live (WTL) and wish to die (WTD); suicidal behaviours; suicidal cognition, Debate and Ideation; and Prediction of future suicide attempts, a self-assessment item which may have underlying cognitive and affective attributes. Items are totalled, with higher scores indicating greater suicidality and vice-versa. The scale has demonstrated good split-half reliability of up to .90-.94 in two different studies.

Procedure

The data was collected over a period of 6 weeks. The researchers met with the managements of the Non-Governmental Organizations to explain to them the objectives of the study and to seek consent for some of their beneficiaries (victims of sexual violence) to participate in the study. The researchers employed a double-blind approach where questionnaires were administered to the participants through female research assistants who are staff of the organizations. The choice of the use of this approach is necessitated by the need to avoid discomfort of the participants considering the sensitive nature of issues of sexual violence. The research assistants were asked to seek the individual consent of each of the participants and also assure them that the information they will give would be kept confidential and used only for the purpose of research.

Results

Descriptive statistics

Table 1 below shows that 17 of the participants have low self-esteem while 11 have high self-esteem with mean of 18.94 and 14.09 and standard deviations of 5.92 and 3.14 respectively

Table 1 Mean and Std. Dev. table for self esteem and suicidal ideation

Self Esteem	N	Mean	Std. Dev.
Low	17	18.94	5.92
High	11	14.09	3.14

Table 2 below shows that 12 of the participants have mild PTSD while 16 have severe PTSD with mean of 14.33 and 19.81 and a standard deviation of 2.57 and 5.52 respectively

Table 2 Mean and Std. Dev. For PTSD and suicidal ideation

PTSD	N	Mean	Std. Dev.
Mild	12	14.33	2.57
Severe	16	19.81	5.52

Table 3 below shows that participants with low self-esteem and mild PTSD had a mean of 12.33 and a standard deviation of 2.31 while those with low self-esteem and severe PTSD had a mean of 20.36 and a standard deviation of 5.49 respectively. Those with high self-esteem and mild PTSD had a mean of 3.67 and a standard deviation of 2.69 while those with high self-esteem and severe PTSD had a mean of 16.00 and a standard deviation of 5.66

Table 3 Mean and STD Dev. for main and interaction effects of self-esteem and PTSD on suicidal ideation

S.E	PTSD	Mean	Std. Dev.
Low	Mild	12.33	2.31
	Severe	20.36	5.49
High	Mild	3.67	2.69
	Severe	16	5.66

Test of hypotheses

Hypothesis 1

Result shows that Individuals with low self-esteem will have high suicidal ideation compared to those with high self-esteem; however,

the differences in means in (Table 1) were not statistically significant. Means: 18.94 (SD 5.92), 14.09 (SD 3.14), $F(1,24) = .439, p = .514$. The hypothesis is therefore not supported (Table 4). It was first hypothesized that there is a main effect of self-esteem on suicidal ideation among victims of sexual violence

Table 4 2-way ANOVA for main effect of self-esteem on suicidal ideation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	325.083 ^a	3	108.361	5.287	0.006
Intercept	3827.657	1	3827.657	186.76	0
S.E.	9.001	1	9.001	0.439	0.514
Error	491.881	24	20.495		
Total	8943	28			
Corrected Total	816.964	27			

a. R Squared = .398 (Adjusted R Squared = .323)

Hypothesis 2

It was hypothesized that there is a main effect of posttraumatic stress disorder on suicidal ideation among victims of sexual abuse. Result from Table 2 above and Table 5 below show that those with severe PTSD had high suicidal ideation than those with mild PTSD. Means: 14.33 (SD 2.57) 19.81 (SD 5.52), $F(1, 24) = 0.032$. The hypothesis is therefore accepted.

Table 5 2-WAY ANOVA for PTSD on Suicidal Ideation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	325.083 ^a	3	108.361	5.287	0.006
Intercept	3827.657	1	3827.657	186.760	0.000
PTSD	105.594	1	105.594	5.152	0.032
Error	491.881	24	20.495		
Total	8943.000	28			
Corrected Total	816.964	27			

a. R Squared = .398 (Adjusted R Squared = .323)

Hypothesis 3

It was hypothesized that there will be an interaction effect of self-esteem and posttraumatic stress disorder on suicidal ideation among victims of sexual violence. Result from Table 6 below shows that there was no significant interaction effect of self-esteem and PTSD on suicidal ideation. $F(1, 24) = 1.56, P = .224$. The hypothesis is therefore not supported.

Table 6 2-WAY ANOVA for self-esteem and PTSD on Suicidal Ideation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	325.083 ^a	3	108.361	5.287	0.006
Intercept	3827.657	1	3827.657	186.760	0.000
S.E.*PTSD	31.876	1	31.876	1.555	0.224
Error	491.881	24	20.495		
Total	8943.000	28			
Corrected Total	816.964	27			

a. R Squared = .398 (Adjusted R Squared = .323)

Discussion of findings

Hypothesis one which states that there is the main effect of self-esteem on suicidal ideation among victims of sexual violence was not statistically significant. The finding shows that one's level of self-esteem (high or low) does not have any effect on suicidal ideation. This finding is consistent with previous research findings that reported significant negative relationship between self-esteem and suicidal ideation.²³ The finding however, did not corroborate other findings that reported there is a close relationship between self-esteem and suicidal ideation.^{20,21} Similarly, Al-Shawashereh²² in a study on self-esteem and suicidal ideation among students however, found that students with higher level of self-esteem exhibited more suicidal ideation. Secondly, hypothesis two which states that there is the main effect of posttraumatic stress disorder on suicidal ideation was statistically significant. The findings show that people with severe PTSD have higher levels of suicidal ideation than those with mild PTSD. This finding is consistent with previous research findings that found that PTSD predicted suicidal ideation among sexually abused adolescent girls, even after controlling for depressive symptoms. Sexually abused adolescent girls are at high risk of suicidal ideation and attempts.^{26,34,39}

Finally, the third hypothesis which states that there is the interaction effect of self-esteem and PTSD on suicidal ideation among victims of sexual violence was not statistically significant. This shows that self-esteem and PTSD do not interact to influence suicidal ideation. This finding is consistent with some previous findings who reported that victims of sexual violence exhibit a wide range of symptoms including depression, anxiety, posttraumatic stress disorder (PTSD), low self-esteem and suicidal thoughts.^{43,44} These previous findings show that a several factors interact together without showing which factor influences another. The finding however did not corroborate other previous findings that reported that positive psychological characteristics, such as self-esteem decreased the prevalence of suicidal ideation by moderating the effect of depression in adolescents who suffered traumatic experiences.⁴⁵

Limitations of the study

This study like every other research also had some limitations however; these did not pose any serious threat to the overall outcome of the study. First it was difficult to access the participants because of the sensitive nature of issues of sexual abuse. Similarly, some of the participants who were contacted to participate in the study declined saying they will not be objective in their responses if they did. Some of the questionnaires were discarded because of incomplete responses.

Finally, the constraint of time and finances hindered the researcher from drawing participants from other states of the country.

Recommendations

Considering the limitations mentioned above, and because research is an on-going process, there are areas that this research has unearthed as needing further research. First, future researches should consider liaison with more organizations that work with victims of sexual violence in order to access more victims. Secondly, a different approach such as qualitative method should be used in generating data from the victims in order to avoid incomplete responses and to have a deeper understanding of the unique experiences of the victims which may not have been assessed using quantitative approach. Similarly, other factors such as depression, anxiety, religion, age, self-compassion and form of sexual violence experienced which may all affect suicidal ideation should be considered in further studies. Finally, all victims of sexual violence and other traumatic experience should undergo psychological evaluation to help alleviate the symptoms and distress

Conclusion

In conclusion, this research findings show that suicidal ideation is common among victims of sexual violence and sexual violence is on the increase in the society. Suicidal ideation is one of the leading causes of suicide and several factors have been found to influence it. These factors include PTSD as found in this study; this means that individuals and organizations offering mental health and psychosocial support to victims of traumatic experiences such as sexual violence must take note of this in order to help them cope with their trauma rather consider suicide.

Acknowledgments

None.

Conflicts of interest

Authors declare that there is no conflict of interest.

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