

PREVALENCE AND EXTENT OF SUICIDAL BEHAVIOURS AMONG UNDERGRADUATES OF UNIVERSITIES IN NORTH-EAST STATES OF NIGERIA

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Abstract

Suicide is increasingly becoming one of the leading causes of death among youth and adolescents worldwide. In view of this, the present study investigated the prevalence and extent of suicidal behaviours among undergraduates of universities in Northeast States of Nigeria. The study adopted ex-post factor research design. Through multi-stage sampling procedure, a sample of 389 undergraduate students in the Federal Universities in Northeast, Nigeria, was drawn for the study. Anecdotal records and a structured questionnaire titled Prevalence Rate and Suicidal Ideation Questionnaire (PR&SIQ) were used for data collection. To determine the face validity of the instruments, they were given to the experts. Cronbach alpha reliability coefficient of 0.88 was obtained for PR&SIQ. Descriptive statistics (frequency, percentage, mean and standard deviation), t-test and the z-test were used for data analysis. Findings revealed that there is no significant difference in the extent of suicide ideation among undergraduate students in North Eastern States of Nigeria by gender. Also, the difference in the prevalence rate of attempted suicide among undergraduate students in North Eastern States of Nigeria by gender is statistically significant, and the difference in the prevalence rate of completed suicide among undergraduate students in North Eastern States of Nigeria by gender is statistically significant. Based on the findings, it was concluded among other things those undergraduate students in North Eastern States of Nigeria indulge in suicidal ideation to a low extent.

Keywords: Prevalence, Suicide; Suicidal Behaviours; Universities, Undergraduates.

Introduction

Suicide is increasingly becoming one of the leading causes of death among youth and adolescents worldwide. Various perspectives on the concept of suicide have been asserted by some scholars with a high level of communality, who portray it as an individual's deliberate actions that are aimed at killing oneself. According to the World Health Organization [WHO], (2016), suicide is a purposeful act of self-harm, initiated and carried out by the individual in question with full awareness or expectation of its fatal outcome. Suicide, according to Ayodele (2019), is an intentional death, a self-afflicted death in which one makes an intentional, direct, and conscious effort to end one's life. According to this definition, individuals attempt to end their lives, resulting in death. In the context of this study, suicide is defined as a deliberate act of self-harm initiated and carried out by university undergraduates with full knowledge or expectation of its fatal outcome. The prevalence of suicide among individuals in this contemporary society is alarming.

Different reports have been given on the statistics of people who commit suicide. According to WHO (2021), 703, 000 people worldwide commit suicide every year, accounting for more than one in every 100 fatalities (1.3%) in 2019 (WHO, 2021). It

stated that more people even die from suicide than from violence, breast cancer, HIV/AIDS, malaria, or other major causes of death in the world. Recently, there has been more attention paid to Nigeria's rising suicide rate among newly arrived adults. More current data reveals that Nigeria's suicide rate is 9.5 per 100,000 individuals, with an annual death toll of 18,608 people (World Population Review, 2019). According to the Suicide Research and Prevention Initiative (SURPIN), 20% of all suicide cases in Nigeria involve young people between the ages of 13 and 19, but the number of fatalities rises dramatically to over 50% as the victims' ages lean toward 29, the latter stage of emerging adulthood (Muanya et al., 2019; Offiah & Obiorah, 2014). Additionally, according to recent trends, students in this age range in Nigerian tertiary institutions are more likely to commit suicide than other demographic groups in the general population (Mac-Leva et al., 2019; Muanya et al., 2019). Reports about suicides among university undergraduates in Nigeria have become very common and alarming (Ube, 2023).

Despite the foregoing, no research has been conducted to evaluate the prevalence rate of suicide in universities in the Northeast. Most households in the Northeast states are large, with a high prevalence rate of unemployment, under-equipped and understaffed schools, increased family poverty, and low parental and school surveillance of the children. As a result, individuals are more likely to experience emotional disturbance, irritation, anxiety, sadness, and hopelessness at a young age. Consequently, undergraduates in universities in the Northeast may be involved in antisocial vices such as substance abuse, robbery, prostitution, and other antisocial crimes in this setting. Suicidal behaviours may be present in the students as a result of the aforementioned personality issues. Again, many Nigerian university students face some excruciating economic difficulties, such as the inability to pay their school fees, purchase essential textbooks for their courses, feed and clothe themselves or cope with academic work, and obtain good medical care while on campus. These unaccomplished needs, among others, may culminate in suicidal behaviours. It is based on this background that the present study examined the prevalence rate and extent of suicidal behaviours among undergraduates in universities in the north-eastern states of Nigeria. Specifically, the study sought to find out:

1. extent of suicidal ideation among undergraduates of universities in Northeastern States, Nigeria.
2. prevalence rate of suicidal attempts among undergraduates of universities in Northeastern States, Nigeria (2012 – 2021).
3. prevalence rate of completed suicide among undergraduates of universities in Northeastern states, Nigeria (2012 – 2021).

Research Questions

The following research questions guided the study:

1. What is the extent of suicidal ideation among undergraduates of universities in Northeastern States, Nigeria?
2. What is the prevalence rate of suicidal attempts among undergraduates of universities in Northeastern States, Nigeria (2012 – 2021)?
3. What is the prevalence rate of completed suicide among undergraduates of universities in Northeastern states, Nigeria (2012 – 2021)?

Hypotheses

The following null hypotheses guided the study and were tested at 0-05 level of significance.

Ho₁: There is no significant difference in the extent of suicidal ideation among undergraduates of universities in Northeastern States, Nigeria by gender.

Ho₂: There is no significant difference in the prevalence rate of suicidal attempts among undergraduates of universities in Northeastern States, Nigeria by gender.

Ho₃: There is no significant difference in the prevalence rate of completed suicide among undergraduates of universities in Northeastern states, Nigeria by gender.

Literature Review

Extant literature shows that the concept of suicidal behaviour has been defined by several authors. According to Alabi, Alabi, Ayinde, and Abdulmalik (2015), suicide behaviour is the act of killing oneself, deliberately initiated and performed by the person concerned in the full knowledge or expectation of its total outcome. Mapayi (2016) also defined suicidal behaviour as a deliberate act intended to end one's life in order to escape unbearable suffering or to help change adverse conditions of living. Suicidal behaviour is the domain of thoughts, images, and ideas about committing suicide or the desire to terminate one's life without the suicidal act (Okoedion & Okolie, 2019). It can occur when a person feels they are no longer able to cope with an overwhelming life situation.

Suicidal behaviour has been categorized into various classifications. For instance, Robert, cited in Samm (2012), put the four categories of suicide as: suicide ideation, suicide attempt, self-destructive acts, and completed suicide. Eze, Chukwuorji, Ettu, Zacchaeus, Lorfa, and Nwonyi (2019) posited that suicide ideation has to do with all overt suicidal behaviours and communications that depict that this one is contemplating dying, like issuing suicide threats and making it a constant expression to those who care to listen. Oginyi, Mbam, Sampson, Chukwudi, and Nwoba (2018) posited that suicide ideation is a serious psychological, social, cultural, and public health problem that is a source of great concern to people all over the world. By suicide attempt, the person involved has taken a step further from issuing threats to actually carrying out the threats, but he actually survives it; peradventure, he took an overdose drug, and before serious damage is done, he has been rescued. Self-destructive acts are behaviours that kill gradually. A good example is the slogan written on every stick of cigarette in Nigeria: 'Smokers are liable to die young' (Federal Ministry of Health, 2020). Completed suicide is a behaviour that results in the death of the victim. Nock et al. (2013) buttressed that among young people, especially university students, suicide is the second leading cause of death besides self-inflicted injuries, making this population an at-risk group. By implication, suicidal behaviours may be common among undergraduates. Mba (2010) showed that there was a very low prevalence of completed suicide. There was a low prevalence of suicidal ideation among the students studied. There was also a low prevalence of indirect self-destructive behaviours among the undergraduates studied.

Studies have been carried out to uncover factors responsible for suicidal behaviour. Nyorere, James, and Udom (2020) conducted a study on personal-psycho characteristics and attitudes towards suicidal behaviours among university students in

south-eastern Nigeria. These researchers found a very positive and significant relationship between self-esteem, depression, and attitudes toward suicidal behaviour among university students. Family structure and peer group have also been shown to have a significant relationship with suicidal behaviours (Again, Alonge & Abdul-Kaheem, 2020). Chen, Bai, and Zhai (2021) conducted a correlation study between family background and suicidal ideation in university students in China and revealed that family background impacts suicidal ideation among Chinese university students, especially those from poor families. In a similar vein, Olabimpe, Erhabor, and Babatola (2020) showed that all dimensions of social support were significantly correlated with suicidal ideation.

Suicidal behaviours have been investigated by different researchers. Bong-Hee, Jae-Heon, Hyun-Ah, Young-Gyu, Yang-Im, Won, Gyeong, and Kyoungwoo (2017) carried out a study on the mediating role of parental support on the relationship between life stress and suicidal ideation among middle school students in Seoul, South Korea. Findings indicate a significant influence of parental support on suicidal ideation. This may be the reason why Arun, Garg, and Chavan (2015) posited that students with an academic and unsupportive environment at home perceived life as a burden and had higher rates of suicidal ideation. Parental loss is another factor that has been shown to influence suicidal ideation (Adam, Lothrenz, & Harper, 2020). Concerning suicidal attempts, Kosik, Fan, Mandell, Su, Nguyen, Chen, and Buka (2017) showed that students who perform poorly academically had a higher risk for suicidal attempts. Buka's finding corresponds with Essien's (2015) revelation that academic stress significantly predicts suicidal behaviours. In a similar vein, Olayinka (2018) revealed that academic interest significantly predicts suicidal ideation. This shows that undergraduates' academic work could influence their suicidal behaviours. While personal-psycho characteristics, family structure, peer group, parental support, parental loss, and students' academic performance, among others, may be responsible for suicidal behaviours, little is known about the prevalence and extent of suicidal behaviours among undergraduates. This becomes the main thrust of the present study.

Methodology

The study adopted an ex-post factor research design. This type of design deals with independent variables that cannot be manipulated by the researcher (Nworgu, 2015). In essence, the design takes care of research intentions that involve testing possible antecedents of events that have happened and cannot, therefore, be manipulated. Accordingly, the prevalence rate and extent of suicidal behaviours among university undergraduates cannot be manipulated. In addition, the research design was adopted in this work based on the fact that other researchers like Mba (2010) and Mapayi (2016) who conducted similar studies also employed the same design.

Participants

The study was carried out on undergraduates of universities in Northeast, Nigeria. The population of the study comprised 13, 544 undergraduate students in the Federal Universities in Northeast, Nigeria. The sample size for this study was 389 undergraduate students in the Federal Universities in Northeast, Nigeria. The sample size was determined using Taro Yamane Formula for calculating sample size from a

finite population. A multi-stage sampling procedure was adopted in sampling for the study.

Instrumentation

For the prevalence studies, data was generated from anecdotal records from the counseling and medical units of universities in north-east Nigeria, which included recorded entries on suicide and attempted suicide. A structured questionnaire titled Prevalence Rate and Suicidal Ideation Questionnaire (PR&SIQ) was used as an instrument for data collection. The instrument has two sections, 1 and 2. Section 1 of the instrument consists of demographic information of the respondents such as gender, while section 2 consists of 14 items measuring suicidal ideation of undergraduates. The respondents were requested to tick using a 4-point rating scale of Very High Extent (VHE) = 4, High Extent (HE) = 3, Low Extent (LE) = 2, and Very Low Extent (VLE) = 1. To establish the validity of the research instruments, the instruments were given to three experts for validation: two in health education, the Department of Human Kinetics and Health Education, and one in measurement and evaluation, all in the Faculty of Education at Ebonyi State University, Abakaliki. The reliability of the instrument was ascertained through trial-and-error testing to determine the internal consistency of the items and reliability coefficient using Cronbach's alpha. The instrument yielded a reliability coefficient of 0.88. The researcher, with the help of four (4) research assistants, visited each of the sampled universities, administered the instrument to the respondents, and collected the data on the spot in order to avoid waste and ensure a high rate of return. A total of 387 copies of the instruments, representing a 99.5% return rate, were recorded. This showed a very high return rate for the instrument in the field. Also, recorded cases of completed and attempted suicide were collected for analysis.

Data Analysis

Means and standard deviations were used to answer research question 1. The decision rule was based on a criterion mean of 2.50, whereby a mean below 2.50 was interpreted as low extent (LE) of suicidal behaviour, while a mean equal to 2.50 and above was interpreted as high extent (HE) of suicidal behaviour. For research questions 2 and 3, the responses from the documentary evidence collected from the student affairs, security department, and medical records of the medical units were converted into raw scores and put into frequency tables. The conversion was done using simple descriptive statistics of prevalence rate (number of suicides and suicide attempts per 10,000 of the student's population per year {time point prevalence rate}) and for the 10 years' time period of 2012–2021 {total prevalence rate}. Hypothesis one was tested using an independent t-test, while hypotheses 2 and 3 were tested using z-test statistics at the 0.05 level of significance. For test of hypotheses, if the probability value (p-value) is less than 0.05, the null hypothesis was rejected but if the p-value is greater than 0.05, the null hypothesis was not rejected.

Results

This section presents the result of the data collected and analysed in line with the specific purposes of the study.

Research Question One: What is the extent of suicidal ideation among undergraduates of universities in Northeastern States, Nigeria?

Table 1: Mean and Standard Deviation on Extent of Suicidal Ideation among Undergraduate Students in North East States of Nigeria (N = 387)

S/N	Item statement	Mean	SD	Decision
1.	Contemplate killing yourself.	1.69	0.46	LE
2.	Feel there is nothing to live for.	1.63	0.48	LE
3.	Feel highly dejected about and feel there is no point living.	1.45	0.50	LE
4.	Feelings of hopelessness.	1.63	0.67	LE
5.	Feel like staying alone to my fate.	1.64	0.71	LE
6.	Lost interest in everything about life	1.63	0.77	LE
7.	Feel like dying when I am not doing well in school.	1.38	0.55	LE
8.	See no need withstanding heartbreak from anybody.	1.56	0.66	LE
9.	Will rather kill myself than facing too much problems in my life.	1.57	0.65	LE
10.	Feel so bad that I would not mind if something happened to put my life in danger	1.58	0.67	LE
11.	make specific plans to commit suicide	1.57	0.63	LE
12.	Will not take any steps that were necessary to save my life even if it is in danger	1.46	0.50	LE
13.	Wished I was never born	1.45	0.50	LE
14.	Thought of writing suicide note	1.42	0.50	LE
Overall Mean		1.55	0.36	LE

Note: LE = Low Extent, HE = High Extent

Table 1 presents result on suicidal ideation among the students. It indicates that the suicide ideation among the students was to a low extent (1.55 ± 0.36). The result also shows that the most common suicidal ideation is “Contemplate killing yourself” while the least is “Feel like dying when I am not doing well in school”. The result reveals that all the items on suicidal ideation were to a low extent with the mean lower than the criterion mean of 2.50 for taking decision.

H₀₁: There is no significant difference in the extent of suicidal ideation among undergraduates of universities in Northeastern States, Nigeria by gender.

Table 2: t-test on extent of Suicidal Ideation among Undergraduates of Universities in the North Eastern States of Nigeria by Gender

S/N	Suicidal Ideation	Male (n=226) Mean(SD)	Female (n=161) Mean(SD)	t-test	p-value
1	Contemplate killing yourself.	1.72(0.45)	1.65(0.48)	1.407	0.160
2.	Feel there is nothing to live for.	1.63(0.48)	1.64(0.48)	0.278	0.781
3	Feel highly dejected about and feel there is no point living.	1.49(0.50)	1.40(0.49)	1.855	0.064
4	Feelings of hopelessness.	1.65(0.63)	1.60(0.72)	0.638	0.524
5	Feel like staying alone to my fate.	1.65(0.67)	1.63(0.77)	0.322	0.747
6.	Lost interest in everything about life	1.62(0.75)	1.65(0.81)	0.383	0.702
7.	Feel like dying when I am not doing well in school.	1.45(0.59)	1.27(0.45)	3.287	0.001
8	See no need withstanding heartbreak from anybody.	1.58(0.63)	1.54(0.70)	0.514	0.607

9.	Will rather kill myself than facing too much problems in my life.	1.58(0.57)	1.57(0.74)	0.211	0.833
10.	Feel so bad that I would not mind if something happened to put my life in danger	1.58(0.61)	1.58(0.76)	0.031	0.976
11.	make specific plans to commit suicide	1.59(0.62)	1.54(0.66)	0.729	0.466
12.	Will not take any steps that were necessary to save my life even if it is in danger	1.51(0.50)	1.39(0.49)	2.322	0.021
13.	Wished I was never born	1.49(0.50)	1.39(0.49)	2.116	0.035
14.	Thought of writing suicide note	1.46(0.50)	1.36(0.48)	2.043	0.042
Overall Mean		1.571(0.70)	1.51(0.35)	1.541	0.124

SD= standard deviation, $p < 0.05$ indicates significance

Result in Table 2 shows t-test on extent of suicide ideation among undergraduate students in Universities in Northeastern States of Nigeria by gender. The result indicates $t = 1.541$; $p = 0.124$. Since the p-value is higher than 0.05 level of significance, the null hypothesis is not rejected. Inference drawn therefore is that there is no significant difference in the extent of suicide ideation among undergraduate students in Northeastern States of Nigeria by gender.

Research Question Two: What is the prevalence rate of suicidal attempts among undergraduates of universities in Northeastern States, Nigeria?

Table 3: Prevalence Rate of Attempted Suicide among Undergraduates of Universities in the Northeast States of Nigeria 2012-2021

Year	Prevalence Rate n(0/000)
2012	9(9.7)
2013	6(6.4)
2014	11(11.4)
2015	8(8.1)
2016	6(5.9)
2017	3(2.9)
2018	2(1.9)
2019	5(4.6)
2020	13(11.8)
2021	3(2.2)
Overall	66(6.3)

n=frequency, 0/000= per 10,000

Table 3 presents data on prevalence rate of attempted suicide per 10,000 persons among students in Universities in Northeastern States of Nigeria. On average, the overall is about 6 per 10,000. Attempted suicide among the student was more prevalent in 2020 with approximately 11/10000, followed by 2014 and most minimal in 2018 with prevalence rate of approximately 6 per 10,000.

H₀₂: There is no significant difference in the prevalence rate of suicidal attempts among undergraduates of universities in Northeastern States, Nigeria by gender.

Table 4: Z-test statistic on prevalence rate of attempted suicide among Undergraduate Students in Northeastern Nigeria by gender

Year	Gender		Overall n(0/000)	z-test	p-value
	Male n(0/000)	Female n(0/000)			
2012	8(8.7)	1(1.1)	9(9.7)	2.334	0.020
2013	4(4.2)	2(2.1)	6(6.4)	0.817	0.414
2014	9(9.3)	2(2.1)	11(11.4)	2.111	0.035
2015	7(7.1)	1(1.0)	8(8.1)	2.122	0.034
2016	5(4.9)	1(1.0)	6(5.9)	1.633	0.102
2017	2(1.9)	1(1.0)	3(2.9)	0.577	0.564
2018	1(0.9)	1(0.9)	2(1.9)	-	-
2019	5(4.6)	-	5(4.6)	-	-
2020	9(8.1)	4(3.6)	13(11.8)	1.387	0.165
2021	2(1.5)	1(0.7)	3(2.2)	0.577	0.564
Overall	52(5.0)	14(1.3)	66(6.3)	4.678	<0.0001

P<0.05 indicates significant difference

Result in Table 4 shows z-test for prevalence rate proportions of attempted suicide by undergraduate students in Universities in Northeastern States of Nigeria by gender. The result indicates a z-test score of 4.67 and a p-value of 0.0001. Since the p-value is less than 0.05 level of significance, the null hypothesis is rejected. Inference drawn therefore is that the difference in the prevalence rate of attempted suicide among undergraduate students in Northeastern States of Nigeria by gender is statistically significant.

Research Question Three: What is the prevalence rate of completed suicide among undergraduates of universities in Northeastern States, Nigeria?

Table 5: Prevalence Rate of Completed Suicide among Undergraduates of Universities in the Northeast States of Nigeria 2012-2021

Year	Prevalence Rate n(0/000)
2012	3 (3.3)
2013	1(1.1)
2014	1(2.0)
2015	3(3.0)
2016	2(2.0)
2017	-
2018	3(2.8)
2019	3(2.8)

2020	4(3.6)
2021	-
Overall	20(2.0)

n=frequency, 0/000= per 10,000

Data in Table 5 presents prevalence rate of completed suicide per 10,000 people among undergraduates of Universities in the Northeast States of Nigeria from 2012-2021. On average, the overall prevalence rate over the years under review is 2 per 10,000 while the time point prevalence rate for all the universities is shown at the last column of the table. The highest point prevalence rate was in 2020 (4/10000) while the lowest point prevalence rate was in 2013 and 2014 with a prevalence rate of 1/10000 of the population. There was no recorded case of completed suicide in 2017 and 2021.

H₀₃: There is no significant difference in the prevalence rate of completed suicide among undergraduates of universities in Northeastern states, Nigeria by gender.

Table 6: Z-test statistic on prevalence rate of completed suicide among Undergraduate Students in Northeastern Nigeria by gender

Year	Gender		Overall	z-test	p-value
	Male n(0/000)	Female n(0/000)			
2012	3(3.3)	-	3 (3.3)	-	-
2013	1(1.1)	-	1(1.1)	-	-
2014	1(1.0)	-	1(2.0)	-	-
2015	2 (2.0)	1(1.0)	3(3.0)	0.5774	0.5637
2016	2(2.0)	-	2(2.0)	-	-
2017	-	-	-	-	-
2018	2(1.9)	1(0.9)	3(2.8)	0.5774	0.5637
2019	3(2.8)	-	3(2.8)	-	-
2020	3(2.7)	1(0.9)	4(3.6)	1.0001	0.3173
2021	-	-	-	-	-
Overall	17(1.6)	3(0.3)	20(2.0)	3.132	0.0017

P<0.05 indicates significant difference

Result in Table 6 shows z-test for prevalence rate proportions of completed suicide by undergraduate students in Universities in Northeastern States of Nigeria by gender. The result indicates a z-test score of 3.132 and a p-value of 0.001. Since the p-value is less than 0.05 level of significance, the null hypothesis is rejected. Inference drawn therefore is that the difference in the prevalence rate of completed suicide among undergraduate students in Northeastern States of Nigeria by gender is statistically significant.

Discussion

Extent of Suicidal Ideation among Undergraduates of Universities in Northeastern States, Nigeria

The result of the study on the extent of suicidal ideation among undergraduate students in the North Eastern States of Nigeria shows that the majority of the undergraduate students indulge in suicidal ideation to a low extent. This result is true since the majority of the respondents stated that they rarely think of the following acts: feeling there is nothing to live for, feelings of hopelessness, feeling like staying alone with my fate, losing interest in everything about life, seeing no need to withhold heartbreak from anybody, wanting to kill myself rather than facing too many problems in my life, and feeling so bad that I would not mind if something happened to put my life in danger, among others. One would agree that suicidal ideation is influenced by depression, loneliness, rejection, poor family background, and sometimes drug abuse, as evidenced in the literature.

The result of this study is therefore consistent with Banerjee and Chatterjee (2016), who conducted a study on academic stress, suicidal ideation, and mental well-being among undergraduate students at Calcutta University, India, and found, among other things, that the students in the 3rd semester are more stressed and more prone to suicidal ideation than first semester students. The authors also found that a significant correlation exists between academic stress and suicidal ideation among undergraduate students. In a similar vein, Adedeji, Azikiwe, Aroso, Tenibiaje, and Damilare (2019) also carried out a study on a measure of aggression and anxiety as a factor in suicide among undergraduates in Nigerian universities and found that aggression has a significant influence on suicidal ideation and attempt, but anxiety has no significant influence on suicidal ideation and attempt. The result of the study also agrees with Chen, Bai, and Zhai (2021), who conducted a correlation study between family background and suicidal ideation among university students in China and found that family background impacts suicidal ideation among Chinese university students, especially those from poor families.

The result of the study also showed that the extent of suicidal ideation among undergraduate students in the Northeastern States of Nigeria was higher among males than females. Further findings, however, showed that the difference in the extent of suicidal ideation among undergraduate students in the Northeastern States of Nigeria by gender was not statistically significant. This implies that gender is not a significant factor in determining undergraduate students' suicidal ideation in north-eastern Nigeria. Mapayi (2016) also submitted that suicidal ideation was significantly associated with having repeated a class, parents separated, depressed mood, experience of lethargy, loneliness, and the use of cannabis, while suicidal attempts were significantly associated with depressed mood, lethargy, and feeling lonely for both males and females. Moreover, female respondents were significantly more likely than boys to think about and seriously plan suicide. However, the result of the study is not consistent with Adam, Lothrenz, and Harper (2020), who carried out a study on early parental loss and suicidal ideation in university students and found that male and female students show no significant difference in their suicidal ideation when they lose their parents. The inconsistencies between these findings have created a gap for subsequent researchers to explore.

Prevalence Rate of Suicidal Attempts among Undergraduates of Universities in Northeastern States, Nigeria (2012 – 2021)

The study also found that attempted suicide among the students was more prevalent in 2020, followed by 2014, and most minimal in 2018, with a prevalence rate of attempted suicide (2012–2021) of approximately 6 per 10,000. In all, 66 cases of suicidal attempts were recorded between 2012 and 2021 in federal universities in the Northeast, Nigeria. This result is not surprising because depression, low self-esteem, a negative attitude towards life, financial difficulties, and the poor socio-economic status of parents, among others, have been identified as the causes of suicidal attempts among youths.

The result of the study is somewhat consistent with Nyorere, James, and Udom (2020), who conducted a study on personal-psycho characteristics and attitudes towards suicidal behaviours among university students in south-eastern Nigeria and found, among others, that there exist a very high positive and significant relationship between self-esteem, depression, and attitude towards suicidal behaviour among university undergraduates. The result also agrees with Owusu-Ansah et al. (2020), who conducted a study on suicide among university students: prevalence rate, risks, and protective factors, and found that psychological wellbeing plays a significant role in suicidal ideation, while subjective wellbeing is involved in attempts. The findings of this study clearly show that suicide attempts are influenced by so many factors, such as finances, depression, a lack of family support, psychological wellbeing, and peer pressure, among others. One possible explanation for this finding is that if these variables that influence suicidal attempts are controlled in the study area and many other places, the rate of suicide attempts may be reduced to the barest minimum.

The result of the study, which dwelt on the prevalence rate of suicidal attempts among undergraduate students of universities in the North Eastern States of Nigeria (2012–2021) by gender, shows that between 2012 and 2021, fifty (52) cases of suicide attempts by male undergraduates were recorded, while fourteen (14) cases of suicide attempts were recorded for female undergraduates. This result equally shows that more male undergraduate students in northeastern states indulged in suicide attempts than their female counterparts. The study further found that the difference in the prevalence rate of attempted suicide among undergraduate students in federal universities in the Northeastern States of Nigeria by gender is statistically significant. This implies that gender is a significant factor in determining undergraduate students' indulgence in suicide attempts. The above finding is in agreement with that of Adewuya and Oladipo (2019), whose study on the prevalence and associated factors of suicidal behaviours (ideation, planning, and attempt) amongst secondary school adolescents in Lagos, Nigeria, found that the prevalence for suicidal ideation was suicidal planning at 4.4% and suicidal attempt. The factors significantly associated with suicidal attempts included being female, not staying with the mother, maternal drinking, witnessing domestic violence, past and present academic difficulties, having no close friend in school, and having problems relating to peers and teachers. In the same vein, the finding lends support to that of Norhayati, Noh, Nomah, and Hui (2017), who carried out research on gender differences and psychological factors associated with suicidal ideation among youths in Malaysia and reported that suicidal ideation was higher among male participants compared with female participants.

Conversely, the findings of the study are not consistent with those of Owusu-Ansah et al. (2020), who conducted a study on suicide among university students:

prevalence rate, risks, and protective factors, and found that no statistically significant difference exists between suicidal attempts by male and female university students. The inconsistency in the findings of these studies has created a gap for other researchers to fill. The researcher therefore concludes that gender is a strong determinant of university students' indulgence in suicidal attempts.

Prevalence Rate of Completed Suicide among Undergraduates of Universities in Northeastern States, Nigeria (2012 – 2021)

The result of the study on the prevalence rate of completed suicide (2012–2021) among undergraduate students in the Northeastern States of Nigeria was 2 per 10,000. This result, to some extent, is in line with the findings of the study by Mba (2010), which determined the prevalence and prevention of suicidal behaviors among undergraduates of universities in the Southeastern States of Nigeria from 1999–2008 and revealed that there was a very low prevalence of completed suicide. However, the 2 per 10,000 students could be due to the fact that many Nigerian students face serious and excruciating financial difficulties on campus, including the inability to pay school fees, purchase essential course materials, feed and clothe themselves, cope with academic work, and obtain proper medical care. Difficulties faced by students in school such as these might contribute to suicidal conduct among undergraduates. It is no longer news that suicide is one of the top twenty causes of death worldwide. No wonder it was reported by the World Health Organization (WHO, 2014) that suicide is the second-highest cause of death among young people aged 15 to 29. It was also found that suicide rates are highest in low and middle-income nations, where stigma around suicide is severe and mental health promotion programs, as well as treatment alternatives, are poorly organized and inadequate.

The result of the study is consistent with Chen, Bai, and Zhai (2021), who conducted a correlation study between family background and suicidal ideation in university students in China and found, among other things, that family background impacts suicidal ideation among Chinese university students, especially those from poor families. This implies that the poor socio-economic status of parents and all the difficulties faced by students in school are possible predictors of complete suicide and can also contribute to undergraduate suicidal behaviours and attempts.

The result of the study also shows the prevalence rate of completed suicide among undergraduates of federal universities in the Northeastern States of Nigeria between 2012 and 2021 based on gender. The results show that between 2012 and 2021, seventeen male undergraduate students committed suicide, and only three female undergraduates committed suicide. This implies that cases of completed suicide in north-eastern state universities are more prevalent among male undergraduate students than their female counterparts. The result further showed that the difference in the prevalence rate of completed suicide among undergraduate students in federal universities in the Northeastern States of Nigeria by gender is statistically significant. This implies that gender is a significant factor in determining the prevalence of suicide among undergraduate students in federal universities in the north-eastern states of Nigeria.

The finding is in disagreement with that of Mba (2010), which showed that there was no significant influence of gender on the prevalence of suicidal behaviours among

the undergraduates of universities in the Southeastern States of Nigeria. The finding, however, lends support to the findings of the study by Nwanyanwu and Okowa (2017), who carried out a study on suicide and gender vulnerability among youths in urban cities in Nigeria and discovered that males were more prone to suicide than females. In the same vein, the findings of the study are consistent with those of Adekola (2021), who investigated gender influence on suicidal ideation among undergraduates in Ilorin Metropolis, Kwara State, Nigeria, and found, among others, that there was a significant gender difference in the suicidal ideation of undergraduates in Ilorin Metropolis. This could be so because male and female students may vary in how they handle their economic and emotional challenges. Such variations can reflect in the prevalence of suicide between male and female undergraduate students, as portrayed by the findings of this study.

Conclusion/Recommendation

Based on the findings of the study, it is therefore concluded that undergraduate students in the Northeastern States of Nigeria indulge in suicidal ideation to a low extent. It is also concluded that there are cases of attempted and completed suicides in federal universities in the north-east of Nigeria. Cases of attempted and completed suicide are more prevalent among male undergraduate students than their female counterparts. However, gender is not a significant factor in determining undergraduate students' suicidal ideation. It was recommended that university management in Nigeria establish suicide prevention strategy centers with telephone hotline services. This center should be managed by professionally trained suicidologists or medical practitioners versed in the identification and treatment of risk factors associated with suicidal behaviours.

Limitations

Some limitations emerge from the study

- The major limitation of this study is based on the use of the questionnaire to collect data. The use of questionnaires is prone to faking by respondents. Respondents can supply fake information on their responses to items, especially when it has to do with suicidal behavior and ideation. This may affect the results of the study.
- In addition, universities may not have released all the available data on the prevalence rate of attempted and completed suicide in their schools for the fear of tarnishing the image of the school, this also may constitute another limitation to the study.

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