ORIGINAL ARTICLE

PREVALENCE OF SUICIDAL IDEATION AMONG SAMPLE OF UNIVERSITY UNDERGRADUATE STUDENTS IN SOUTHWESTERN NIGERIA

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ABSTRACT

Background:

Suicidal ideation among university students is a public health concern. It is found to complicate suicide itself. Decedents would have had terrible crippling thoughts about killing themselves before doing so. Prevalence estimates of suicidal ideation especially among university students are scarce in Nigeria as the focus is more on actual suicide.

Objective:

, this study aimed to report the prevalence and potential sociodemographic factors of suicidal ideation among sample of undergraduate students in selected Nigerian universities.

Methods:

This was an institution-based cross-sectional study that collected data from 2702 participants across six universities in the southwest geopolitical zone in Nigeria. Ethical approval was obtained at Olabisi Onabanjo University Teaching Hospital Research Ethics Committee.

Results:

The study revealed that suicidal ideation was more severe among females than males, 26-30 agers than other age groups, and self-identified African Traditional Religious practitioners than Christians or Muslims in a sample of undergraduate students in the university.

Conclusions:

Suicidal thoughts were more common in females, students between the ages of 26 and 30, and self-described adherents of African Traditional Religion than in other groups.

Keywords: Prevalence, Suicidal Ideation, Undergraduate, Nigeria

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INTRODUCTION

Suicidal ideation is a common, especially among university students [1]. This mental health condition has been suggested to have multilevel factors among this cohort which could be universityrelated, result from getting used to the new school environment, or related to finances and or peer pressure [2]. Suicidal ideation is a cognitive-based behaviour involving hopelessness and thoughts and plans of suicide [3]. Perhaps, university students engage in suicidal ideation because the standards in the university are much tougher than what was obtainable in high school and students are faced with a set of social and developmental issues such as initiating new friendships, substance abuse, and rolling with value changes that come with exposure to new ideas [4]. Young adulthood represents a period of getting tertiary education which will equip the youths for the future of any country. Moreover, Nigeria has been identified as a vibrant youthful country[5] whose survival depends on its youths. Unfortunately, these youths have been reported to die by suicide on installment while trying to get a university degree.

In Nigeria's internet space and in mainstream news media, there have been a lot of reports of university students dying by suicide [6]. However, few studies have focused on suicidal ideation among university students; instead, there were suicidal ideation estimates from secondary school students [7] and among community youths [8]. The

reports from the internet maybe inadequate to get the correct figures of suicidal ideation because what is known is the completed action of suicide. It is therefore essential to embark on studies that will determine the prevalence of suicidal thoughts among university students as such studies will help to measure the level of the impact of suicidal behaviour, prioritize treatments and pinpoint development and research in this area.

Some factors that could influence studies on the prevalence of suicidal ideation among university students are but not limited to the methods used in gathering data [9], individual socio-demographic factors [10], and individualized differences in particular to the university [11]. These factors determine the continental estimates of suicidal ideation. In one recent study from Asia, [12] found out from a meta-analysis that about 10.72% of students from some Chinese universities had suicidal ideation experiences. 37.3. % of UK college students thought about suicide [13]. In a trans-border study on suicidal ideation among college students by [14], it was shown that one year estimate of suicidal ideation was put at 10.6%. These estimates came from highly developed countries of the world; what can we say about low and middle-income countries like Nigeria with attempts to study suicidality being characterized by few sample size, under reportage of suicidal behaviour because of strong religious and cultural factors beclouding it[15. 16,]?.

Gender difference has been inconsistent in predicting suicidal ideation among university students. In the study of [17] from Malaysia and that of [18] from

Korea, thinking of dying by suicide was more common among males than females whereas the female gender was shown to experience more suicidal ideation than males from a study in Ethiopia [19] and one study from Ghana [20]. Generally, the culpability of the age of university students in suicidal ideation is not in doubt. Evidence from a study that selected its participants using probabilistic sampling revealed that younger university students from an Islamic-based university had more suicidal thoughts than older ones [21]. While [22] agreed that there was no significant difference in age group and suicidal ideation among college students, one of the results of [23] revealed that younger college students had less suicidal thoughts. [24] provided that university students in Kenya in the age range of 20-22 were more vulnerable to suicidality than other age groups.

Religious practices' function has attracted many discussions from researchers about different phenomena. Meanwhile, this may not be out of place most especially in Africa in the context of suicidality because religious beliefs are being used to cope with various problems. [25] found out that religious affiliations influenced suicidal ideation among university students. Religious affiliations influencing suicidal ideation are subject to the cultural view about religion i.e. whether religious affiliation is a matter of compulsion or laissez-faire [26]. Extending this argument, [27] proposed that a religion that enjoys minority status in a cultural

setting would be a problem for its practitioners. A multinational study also confirmed that Christianity heightened the likelihood of suicidal thoughts among university students [26]. This opinion is not different from the study of [28] with the finding that university students who have a Muslim religious orientation have lowered suicidal intentions compared to Christians and those who did not believe in God. Likewise, Pentecostal Christians expressed 21% suicidal behaviour more than other religious affiliations [24]. For instance, among Chinese college students, there was a 1.5% odd of risk for Christian college students to be actively suicidal [29]

This study is anchored on the hopelessness theory of suicidality [30]. Initially, this theory was an extension of a hopelessness theory of depression by the same authors which proposed that proneness to depression and also to suicidality is a function of negative attribution to events with the expectations that future events will be negative as well. This theory borrows so much from the diathesis-stress model with the assertion that there is vulnerability (diathesis) which appears as a negative cognitive thinking style making proneness to suicide ideation possible. Similarly, [31] established that stress-vulnerability propositions can be used to further the explanation of suicidal ideation, most especially among university students. The hopelessness model of suicidality means that negative cognitive thought (diathesis) arises from negative events to the extent of triggering suicidal ideation. This suggests an indirect relationship exists between suicidal ideation and negative cognitive

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thoughts which happens as a risk factor when negative events happen [33]. However, [34] showed that suicidal ideation could result directly from negative thinking styles. This current study aims to investigate the prevalence and potential sociodemographic factors of suicidal ideation among large university students.

METHODS

Design

This was an institution-based cross-sectional study that involved six universities in the southwest region of Nigeria.

Study Site

The southwest region of Nigeria has six states namely: Oyo, Ogun, Ondo, Ekiti, Osun, and Lagos States. These states have the presence of state and federally-run public universities and we alternated between state and federal universities to collect the data.

Sampling technique

Multistage sampling technique was used to select the one out of the six geopolitical zones in Nigeria. Then, six universities which are publically-run were conveniently drawn from the pool of universities in the southwest region of Nigeria. Three states universities namely: Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Adekunle Ajasin University, Akungba, Ondo State, Ekiti State University, Ekiti State while the Federal Universities were: Obafemi Awolowo University, Ile-Ife, Osun State, University of Ibadan, Oyo State and University of Lagos, Akoka, Lagos

State.

Procedure

The data collection ran through August 2019 and January 2020. A sampled participant of 2, 702 students were recruited. The participants were registered university undergraduate students. Ethical consideration: Ethical clearance was obtained at Olabisi Onabanjo University Ethical Committee and all relevant ethical codes such as confidentiality, liberty to discontinue participation, and informed consent were abided by.

Inclusion criteria

Participants who were all regular students of the sampled universities, enrolled in different programmes in the universities we chose were qualified to be enrolled into the study.

Exclusion Criteria

Exclusion criteria were that the students should not be critically ill and must give consent before the commencement of answering the questionnaire.

Research assistants who were class representatives from each department where our research was based were recruited and trained to collect data. They gave the questionnaire to consenting members of the class alone. This study utilized self-report questionnaires to collect data from the participants. Questionnaire Structure: The questionnaire divisions has two involving sociodemographic information of the participants such as age, gender, religious affiliation (Christians, Muslims, or African Traditional Religion), and the second division asked questions about suicidal ideation with the aid of an instrument called Adult Suicidal Ideation Questionnaire [3]. The instrument has 25 items questions to be answered on a 5-likert format of strongly agreed to strongly disagree. The internal validity score of this scale was returned as 0.94.

The data was analysed using Statistical Package of Social Sciences 20, (SPSS 20). Descriptive statistics showing the mean, standard deviation, skewness and kurtosis was used to analyze the sociodemographic factors such as age, sex and religious orientation of the participants, the questionnaire used for the data collection as well while the prevalence of suicidal ideation was determined by scores of <20=normal 20-41=mild; 42-76=moderate; 77-125=severe.

RESULTS

Changes in body weight and sperm parameters

Table below shows the descriptive sociodemographic properties of the study's participants. From the result, about 1267(46.9%) males and 1435 (53.1%) females participated in the study. Meanwhile, participants whose age ranges between 15-20years old were 1074(39.7%), 21-25 years old were 1375(50.8%), 25-30 years old were 236 (8.7%), while above 30 years old were 20(.7%) of the participants took part in the study. Based on the religion, about 2007(74.3%) were Christianity, 618(22.9%) were Islam while 77 (2.8%) were from other religious affiliations.

From the Table 2 below, the scores of participants on suicidal ideation scale ranged between zero (20) and two (125). The mean is 41.93 while standard deviation

is 17.332. A score of <20=normal 20-41=mild; 42-76=moderate; 77-125=severe.

Prevalence of Suicidal Ideation

From the Table 3 below, the prevalence of levels of the suicidal ideation of the participants were shown. The result showed that most of the female participants (46.1%) experience mild suicidal ideation than male participants (42.3%). Also based on participants' age, participants whose age ranged between 15 and 20 years mostly have mild suicidal ideation than other age groups of study. Based on the religion of the participants, about 45.6% of the participants who practice Christianity have mild suicidal ideation. Summarily, prevalence of suicidal ideation among the participants of this current study is low, with about 44.3% suggesting that they score within the range of 20-41 on the suicidal ideation questionnaire. While participants with moderate suicidal ideation were about 38.5% and those with high suicidal ideation were 17.2%.

DISCUSSION

This study examined the prevalence of suicidal ideation and sociodemographic factors that could influence suicidal ideation among university students in Nigeria. We discovered that suicidal ideation among our participants was similar, and at the same time, was at variance with some of the extant results. This

was clear despite the distinction in the socioeconomic characteristics of Nigeria with the sites of these other studies. For instance, while our result estimate may share a little bit of similarity with that of [21] among Chinese college students, there was a significant difference from that of [22] among UK students. But, a study that gathered participants from universities in Belgium, Netherland, and the United States of America in 2017 had much lower prevalence estimates than this current study regardless of the high socioeconomic features of those countries. It can be argued that the difference observed could result from methodologies, [9] and peculiar characteristics university [11]. Interestingly, the prevalence of suicidal ideation from countries sharing similar sociocultural, socioeconomic, and low and middle-income classifications with Nigeria also threw up variegated rates. [16] pointed out that 21.3% of nursing and midwifery trainees from Ghana had suicidal ideation in one year period. [8] who recently collected data on depression and suicidal ideation among community youngsters in Edo state; Nigeria aged 10-25 revealed 14.9% estimates of suicidal The ideation. difference in the results could be said to be due to the operationalization of young people between this present study and that of [18]'s, while the difference in [16]'s could be adduced to the fact that the participants were from a school of nursing and midwifery which is a diploma awarding institution while this current study was purely on university students who receive bachelor's degree after completion of their programme.

Regarding gender differences in suicidal ideation, the research output of [18] and [17] disconfirmed our own output as we found that more female undergraduate students rather than males experienced more suicidal thoughts. However, there was congruence between this present study and that of [19] and [20]. [4] averred that females are more vulnerable to suicidality even across different cultures of the world while the sense of masculinity seems to influence completed suicide for males.

Generally, [22] revealed that no age bracket of university students could claim to be more suicidal than others. Surprisingly, the result of the current study showed that students in the age bracket of 26-30 experienced more suicidal ideation than other age groups. Our sentiment informed by our results was not shared by [21] who believed that older age should serve as protection against suicide ideation because wisdom comes with old age. Another stark contrasting evidence of this current study is that students who self-identified as practitioners of African traditional religion experienced more suicidal ideation

than students who were neither Christians nor Muslims. Most prior literature was of the opinion that college Christians [29] and most especially Protestants Christians [24] experienced more suicidal ideation than other religious affiliations. African Traditional religion is having a minority status in most African countries because of the influence of Christianity and Muslim religions. This minority status of ATR could burdensome to the practitioners, therefore, permitting thoughts of suicide. This is expressed by [27] in their study examining relationships between selfidentification with the Christian religion and depressive illness in China where Buddhism is a major religion. They argued that being a Christian was a risk factor for the experience of severe depression than being a Buddhist. This calls for a more intentional investigation of the actual influence of religion on suicidal ideation among university students in this part of the world.

LIMITATION

This study collected data from one geopolitical zone out of six in Nigeria; therefore generalizing the results to other geopolitical zones can be misleading. Likewise, the number of universities recruited for this study could not be said to be representative of all the universities in

the setting of the study not to talk of Nigeria as a whole. Further studies should invest more in gathering more participants by recruiting more universities and selecting more than one geopolitical zone with appropriate sampling techniques.

IMPLICATION

This study implies that university administrators should help more in designing suicidal ideation interventions focused on undergraduate students who are females, who are within 26 years and above, and or practice African Traditional Religion.

CONCLUSION

This study revealed that suicidal ideation was more severe among more females gender than males gender, more 26-30 agers than other age groups, and among self-identified African Traditional Religious practitioners than Christians or Muslims in a sample of undergraduate students in the university.

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Table 1: Summary of Descriptive Statistical Analysis on the socio-demographic factors of the participants

Variables		Groups	N (%)	Min	Max.	Mean	Std. Dev.	Skewness	Kurtosis
	Sex	Male	1267(46.9)			42.57	17.342	12	-1.99
_		Female	1435(53.1)			41.2	17.202		
Socio-	Age	15-20	1074(39.7)			40.94	16.66		
		21-25	1372(50.8)			41.78	17.09		
demographics		26-30	236(8.7)			46.63	20.24	.55	.03
F	Religi on	Christianity	2007(74.3)			40.56	16.11		
		Islam	695 (25.7)			43.43	18.57	1.57	1.56
		ATR	77 (2.8)			57.88	22.59		

Table 2: Showing Summary of Adult suicidal ideation scale of participants

Valid	2702
Mean	41.93
Std Deviation	17.332
Skewness	1.414
Std Error of Skewness	.047
Range	105
Minimum	20
Maximum	125

Table 3: Summary of Descriptive Statistical Analysis showing the prevalence of levels of suicidal ideation by the Socio-demographic of the participants of study

-	Group	Suicidal Ideation						
Factors		Mild Suicidal	Moderate	High Suicidal	Total	R	X^2	P
		Ideation	Suicidal Ideation	Ideation				
		N (%)	N (%)	N (%)				
Sex	Male	536(42.3)	513(40.5)	218(17.2)	1267	029		
	Female	661(46.1)	528(36.8)	246(17.1)	1435	029	4.53	>.01
Age	15-20	509(47.4)	406(37.8)	159(14.8)	1074			
	21-25	597(43.5)	541(39.4)	234(17.1)	1372	.078	27.94	<.01
	26-30	83(35.2)	87(36.9)	66(28)	236	.078		
	Above 30	8(40)	7(35)	5(25)	20			
Religion	Christianity	916(45.6)	802(40)	289(14.4)	2007			
	Islam	262(42.4)	223(36.1)	133(21.5)	618	004	94.75	<.01
	Others	19(24.7)	16(20.8)	42(54.5)	77	.094		
Total		1197	1041	464	2702			
		44.3%	38.5%	17.2%	100.0%			