



## The Presence of Depression, its Risk Factors, Suicidal Ideation and Attempts among Undergraduate Students of a Nigerian University

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### Abstract

**Background:** Depression is one of the most serious health problems among the human population. It is the fourth foremost cause of social exhaustion in the world, yet it is almost completely preventable if it is identified and treated promptly. Recently, the increasing rate of suicide traceable to reported episodes of depression among students is worrisome. **Aim:** This study aimed to assess the presence of depression, its risk factors, suicidal ideation and attempts among undergraduate students of a Nigerian University to make evidence-based recommendations capable of curbing the increasing incidence of suicide among students. **Methodology:** A descriptive survey was adopted. Data were collected using self-administered structured questionnaires. The data were analyzed using the statistical package for the social sciences (SPSS) version 16.0. **Results:** The study revealed that 69.2% of those that have been admitted and/or treated for depression were in their third academic year. Moreover, 74.4% and 63.5% had moderate and severe depression, respectively. Specifically, 3.2%, 4.7%, and 4.4% of the students had fathers, mothers and siblings, who had suffered from depression before data collection, respectively. Besides, 5.0% of the students had attempted suicide at least once before data collection. **Conclusion:** Therefore, the management of the university should embark on regular mental screening programs for students for the prompt recognition of mental health problems. Also, nurses and other relevant health workers could plan mental illness and wellness outreaches for university students and staff.

**Keywords:** *Depression, Risk Factors, Suicide Ideation, Suicide Attempt.*

### Introduction

In recent times, stories of suicide attempts and suicides fill the pages of most of the Nigerian national dailies. It is believed that such self-inflicted harm must have been preceded by moments of depression. Most Nigerians are worried as depression and its consequences have become major serious health problems among students of tertiary educational institutions, particularly in universities

(Othieno, Okoth, Peltzer, Pengpid, & Malla, 2014).

Globally, depression is the 4<sup>th</sup> foremost cause of social exhaustion capable of engendering suicide ideation, and subsequent attempts or actual successful suicide (Sarokhani, Delpisheh, Veisani, Manesh & Sayehmiri, 2013). The fact remains that one in every twenty persons suffers from depression in

their lifetime. The occurrence of depression is frequent among people within ages 20 – 50 years but it is usually diagnosed around 40 years (Reavley & Jorm, 2010). Depression is known to cause declined productivity in studies, work, cognitive, and psychomotor activities. It results in vegetative alterations, loss of initiative, and apathy (Dawood, Mitsu, Al Ghadeer, & Alrabodh, 2017).

Depression presents a sad, empty or irritable mood and it is accompanied by somatic and cognitive changes that considerably interfere with the individual's capacity to function (American Psychiatric Association (APA), 2013). Depression perceptibly interferes with the sufferer's eating habits, sleeping patterns, and thoughts. Thus, it could lead to disturbances of daily life activities (Aghakani, Nia, Eghtedar, Rahbar, Jasemi & Zadeh, 2011). During early adulthood, depression can disrupt academic success, future relationships, employment, and may lead to alcohol and substance abuse (Eisenberg, Gollust, Golberstein & Hefner, 2007; Ibrahim, Kelly, Adams & Glazebrook, 2013).

Meanwhile, students sometimes develop depressive disorder due to academic stressors; such as the end of the semester's examinations, continuous assessment, academic performance, and learning materials ((Papazisis, 2008; Sidana, Kishore, Ghosh, Gulati & Anand, 2012). They may express their distress by crying all of the time, missing classes, or isolating themselves without being insightful (Perveen, 2015; Mahmoud, Staten, Hall & Lennie, 2012). Besides, poor interpersonal communication and inadequate quality of care are known to trigger depressive disorders in people ((Aghakani, et al., 2011; Quince, Wood, Parker & Benson, 2012). Besides, stressful life events have been identified as risk factors for depression and depressive symptoms.

The increased reported cases of suicide attempts and actual suicide among undergraduate students in Nigeria is worrisome. One wonders what the antecedence and panacea could be. For

instance, a 27-year-old final year student of the University of Ilorin (name withheld) was said to have failed in his final year project for the second time. The deceased from one of the faculties was believed to have died after he drank a pesticide. The news of depressed undergraduate students of a Nigerian university who terminated his life abruptly by drinking a bottle of insecticide prompted the researchers to design this study to measure levels of depression, suicidal ideation, and suicidal attempts among undergraduate students of the university.

### **Significance of the study**

The findings from this study will provide information on depression, its risk factors, suicide ideation, and a suicide attempt to nurses, other health care workers, and the general public at large. It is hoped that such information would form the basis for instituting measures to reduce the prevalence of depression, especially among undergraduate students.

It will inform nurses, other health workers, and the general public about the signs and symptoms of depression so that prompt diagnosis and treatment of depression can be made before it emanates into suicide ideation and/or suicide attempt.

### **Methods and Study Design**

The research was carried out at the University of Ilorin, Ilorin, Kwara State between July and September 2019. The University of Ilorin is a tertiary institution in Nigeria. The University covers a large landmass and is located at the University road, Tanke, Ilorin, Kwara State. It was established in August 1975 by a decree of the Federal Military Government as a Federal government institute of Nigeria. The University is a public type of educational system with an urban form of campus. It comprises 15 faculties and 113 departments with over 500 administrative staff. The total number of undergraduate students at the University of Ilorin is 44,515 students for the academic year 2018/2019 (Deputy Registrar Academic Support Services, 2019). This study employed a descriptive cross-sectional

research design to assess the presence of depression, its risk factors, suicidal ideation, and attempts among undergraduate students of a Nigerian university.

### Population and Sample

The target population consisted of undergraduate students of the University of Ilorin, Ilorin, Kwara State, Nigeria. In the 2018/2019 academic session, the student population was 44,515

A multistage sampling method was used for participants' selection. First of all, out of the existing 15 faculties, five (one-third) were selected through simple random technique (balloting: random selection with replacement). Subsequently, a department was randomly selected from each of the selected faculties. Next, willing students were then purposively selected in the study. Thus, 374 students from 300 level of study and above were selected proportionately from each department. Students in their third year (300 level) and above were considered suitable for the study because they were believed to have been exposed long enough and sufficiently to challenges known to be associated with academic rigorous.

The sample size was obtained by standard sample size estimation in a cross-sectional study using the formula

$$n = \frac{Z^2 pq}{d^2}$$

Where:

n = the desired sample size when population is >10,000

z = the standard normal deviation which is set at 1.96 (this corresponds to 95% confidence level)

p = the prevalence of depressed students in Nigeria of depression in Nigeria - 33% (0.33)

q = 1.0 – p (i.e. 0.67)

d = the desired degree of accuracy, which is set at 0.05 (95%)

Thus, a sample size of 340 + 10% (attrition) making the total sample 374

### The instrument for Data Collection

The data for the study was collected using a 4-section self-administered structured questionnaire. Section A elicited the socio-demographic characteristics of the students; section B was designed to seek students' personal information and social support system; section C assessed students' academic status. Section D contains the contents of Beck's depression inventory (Beck, Ward, Mendelson, Mock, Erbaugh, 1961). The depression inventory is a 21-item self-reported instrument. Each item is evaluated on a scale of 0 - 3 points, denoting mild - severe (Wang & Gorenstein, 2012). The validity of the instrument was achieved through scholarly review by Nursing and Biostatistics experts, while the reliability coefficient (Cronbach's alpha) was 0.8.

### Method of Data Collection

The questionnaire was administered to 374 students in the five selected faculties following informed consent. Confidentiality and anonymity of the collected information were assured. Participation was voluntary. Some questionnaires were retrieved at the point of administration while some were retrieved a few days after administration depending on participants' schedule-based agreements. The administration and retrieval of the questionnaires spanned four weeks.

The returned rate of the questionnaire in percentage??

### Method of data analysis

The collected data were entered into SPSS version 23. The data were analyzed descriptively and results were presented using frequency/percent tables and charts.

### Ethical Consideration

Ethical clearance was obtained from the Ethical Review Committee of the College of Health Sciences, University of Ilorin. Informed consent was obtained. Participation

in the study was voluntary. The respondents were at liberty to refuse to participate in the study and were also free to withdraw from it any time without penalty. They were assured of confidentiality and anonymity.

**Results**

Out of 374 questionnaires administered to students, 368 were retrieved but 343 were

found to be valid for analysis. Thus, the response rate was 91.7%.

Table 1 shows that the ages of the participants ranged from 16-36 years, 273 (79.6%) of the students are between 16-22 years of age and 241 (70.3%) are in 300 level of study.

**Table 1: Socio-Demographic Profile of the Students (N = 343)**

Socio-demographic variables	Frequency	Percent	Mean ± SD
<b>Age (years)</b>			
16-22	273	79.6	21 ± 2.52
23-29	67	19.5	
30-36	3	0.9	
<b>Level of study</b>			
300	241	70.3	
400	71	20.7	
500	31	9.0	
<b>CGPA grade</b>			
First Class	37	10.8	3.72 ± 0.64
Second Class Upper	237	69.1	
Second Class Lower	52	15.2	
Pass	15	4.4	
Certificate of attendance	2	0.6	
<b>Nature of accommodation</b>			
Campus hostel	130	37.9	
Living alone off-campus	99	28.9	
Living with parent(s) off-campus	28	8.2	
Living with other students off-campus	86	25.1	
<b>Religion</b>			
Islam	139	40.5	
Christianity	202	58.9	
Traditional	1	0.3	
Atheist	1	0.3	

Table 2: shows the respondents' personal information and social support system. The majority (4.7%) of the respondents' family members indicated to be living with depression were the mothers. Over 1/5<sup>th</sup> of the

respondents indicated having been admitted or treated for depression in the past. A little below 1/5<sup>th</sup> of the respondents indicated to have attempted suicide in the past, 1.5% of the respondents indicated to be on scholarship.

**Table 2: Students' Risk Information and Social Support System (N = 343)**

<b>Information and Social support system</b>	<b>Frequency</b>	<b>Percent</b>
<b>Family member living with depression</b>		
Father	11	3.2
Mother	16	4.7
Siblings	15	4.4
Other relatives	6	1.7
Friends	3	0.9
None	292	85.1
<b>Have you been admitted or treated for any type of depression in the past?</b>		
Yes	26	7.6
No	313	91.3
Gave no response	4	1.2
<b>Have you ever attempted suicide in the past?</b>		
Have attempted suicide	17	5.0
Have never attempted suicide	317	92.4
Gave no response	9	2.6
<b>What type of sponsorship do you have?</b>		
Self-sponsorship	12	3.5
Mother only	32	9.3
Father only	24	7.0
Both parents	265	77.3
Scholarship	5	1.5
Unspecific	2	0.6
Relatives	3	0.9
<b>What is the quality of social support you are receiving?</b>		
Not satisfactory	24	7.0
Fairly satisfactory	62	18.1
Satisfactory	188	54.8
Very satisfactory	69	20.1
<b>State of relationship with your parents, siblings and other family members</b>		
Friendly	300	87.5
Fairly bearable	37	10.8
Hostile	6	1.7

Moreover, Table 3 shows that 161 (46.9%), and 25 (7.3%) of the students viewed the lecturer-student relationships they were going through as being 'fairly bearable', 'hostile', respectively. Similarly, 39 (11.4%), and 141

(41.1%) indicated that the administrative management of your department was 'not satisfactory' and 'fairly satisfactory', respectively.

**Table 3: Students' Campus Life Experiences (N = 343)**

<b>Campus-life experience</b>	<b>Frequency</b>	<b>Percent</b>
<b>State of relationship with lecturers</b>		
Friendly	157	45.8
Fairly bearable	161	46.9
Hostile	25	7.3
<b>What is your view about the administrative management of your department?</b>		
Not satisfactory	39	11.4
Fairly satisfactory	141	41.1
Satisfactory	147	42.9
Very satisfactory	16	4.7
<b>Are you having challenges/issues/problems with any of your courses?</b>		
Yes	109	31.8
No	229	66.8
Decline	5	1.5
<b>Are you currently facing any form of harassment on campus?</b>		
Yes	14	4.1
No	317	92.4
Gave no response	12	3.5

**Table 4: Students' Feelings of Satisfaction with Self (N = 343)**

<b>Feelings of Satisfaction with Self</b>	<b>Frequency</b>	<b>Percent</b>
<b>Do you feel always sad</b>		
I do not feel sad	216	63.0
I feel sad	112	32.7
I am sad all the time and I can't snap out of it	6	1.7
I am so sad and unhappy that I can't stand it	8	2.3
Not always	1	0.3
<b>What are you view about the future?</b>		
I am particularly discouraged about the future	151	44.0
I feel discouraged about the future	29	8.5
I feel I have nothing to look forward to	22	6.4
I feel the future is hopeless and that things cannot improve	7	2.0
The future is Bright	20	5.8
Not Sure	114	33.2
<b>Do you at any point in life feel you are a failure?</b>		
I do not feel like a failure	279	81.3
I feel I have failed more than the average person	31	9.0
As I look back on my life, all I can see is a lot of failures	13	3.8
I feel I am a complete failure	3	0.9
Not sure	17	5.0

**Do you have satisfaction in what you do?**

I get as much satisfaction out of things as I used to	251	73.2
I don't enjoy things the way I used to	43	12.5
I don't get real satisfaction out of anything anymore	16	4.7
I am dissatisfied or bored with everything	16	4.7
Indifferent	17	5.0

**Do you always feel guilty sometimes?**

I don't feel particularly guilty	193	56.3
I feel guilty a good part of the time	106	30.9
I feel quite guilty most of the time	29	8.5
I feel guilty all of the time	3	0.9
Indifferent	12	3.5

**Do you always feel punished when things go bad?**

I don't feel I am being punished	172	50.1
I feel I may be punished	129	37.6
I expect to be punished	11	3.2
I feel I am being punished	16	4.7
Indifferent	15	4.4

**Do you feel disappointed in yourself?**

I don't feel disappointed in myself	292	85.1
I am disappointed in myself	28	8.2
I am disgusted with myself	9	2.6
I hate myself	6	1.7
Indifferent	8	2.3

**Table 5: Students' Feeling of Worthlessness (N = 343)**

Feeling of Worthlessness	Frequency	Percent
<b>Do you feel that you are worse than anybody?</b>		
I don't feel I am any worse than anybody else	258	75.2
I am critical of myself for my weaknesses or mistakes	41	12.0
I blame myself all the time for my faults	23	6.7
I blame myself for everything bad that happens	8	2.3
Indifferent	13	3.8
<b>Have you any suicidal thoughts before?</b>		
I don't have any thoughts of killing myself	285	83.1
I have thoughts of killing myself, but I would not carry them out.	40	11.7
I would like to kill myself	6	1.7
I would kill myself if I had the chance	2	0.6
Indifferent	10	2.9
<b>Are emotional to the extent of crying?</b>		
I don't cry any more than usual	256	74.6
I cry more now than I used to	26	7.6
I cry all the time now	14	4.1

I used to be able to cry, but now I can't cry even though I want to.	30	8.7
Indifferent	17	5.0
<b>How often do you feel irritated?</b>		
I am no more irritated by things than I ever was	208	60.6
I am slightly more irritated now than	78	22.7
I am quite annoyed or irritated a good deal of the time	30	8.7
I feel irritated all the time	8	2.3
Indifferent	19	5.5
<b>Do you get interested in people and what you do?</b>		
I have not lost interest in other people	245	71.4
I am less interested in other people than I used to be	52	15.2
I have lost most of my interest in other people	20	5.8
I have lost all of my interest in other people	10	2.9
Indifferent	16	4.7
<b>Can you make tangible decisions often?</b>		
I make decisions about as well as I ever could	283	82.5
I put off making decisions more than I used to	29	8.5
I have greater difficulty in making decisions more than I used to	19	5.5
I can't make decisions at all anymore	5	1.5
Indifferent	7	2.0
<b>Do you look worse than you used to be?</b>		
I don't feel that I look any worse than I used to	273	79.6
I am worried that I am looking old or unattractive	35	10.2
I feel there are permanent changes in my appearance that make me look unattractive	14	4.1
I believe that I look ugly	10	2.9
Indifferent	11	3.2

### Results and Discussion

This study reveals that the majority of the respondents were between the ages of 16 and 22 years, with a minimum age of 16 years and the maximum age of 36 years. This shows that the respondents are majorly young adults. This is not surprising, because the respondents were undergraduate students who were either in their third or a higher academic year. The majority of the respondents (70.3%) were at the 300 level. About 70% of the respondents were in the Second Class (Upper Division) grading system. Less than 40% of the respondents were living in the campus hostels. This was as a result of inadequate residential hostels on the campus, despite the increasing

admission rate. This study agrees with the previous survey carried out among undergraduate students of the University of Ibadan (Ani, Onibokun, & Aluko, 2013; Aluko, Fanifosi, Ani, & Onasoga, 2019).

This study revealed that a larger proportion of the respondents were from Kwara State since the study was carried out in Ilorin, Kwara State; Previous studies usually reflect the dominance of indigenous groups over other groups that are residents in the same state. Examples were studies carried out in one of the states in south-west Nigeria (Oluwatosin & Aluko, 2014; Akinwaare, Ogueze, & Aluko, 2019).

This study reveals that close to 40% were residing in Kwara State. This is not surprising because the study was carried out in Ilorin, Kwara State, while approximately one-quarter were residing in Lagos, less than 10% were residing in Oyo State, and those residing in Anambra, Kano, Enugu, Benue, and Akwa Ibom and others were less than one percent. Moreover, more than 80% of the respondents belonged to the Yoruba ethnic group since Ilorin is dominated majorly by Yorubas.

The history of depression among students' close relatives (fathers, mothers, and siblings) was less than 5%. This perhaps indicates that the students were exposed to other factors other than a family history of depression. More than one-quarter have been admitted and/or treated for depression before the data collection. A study by Gress-Smith, Roubinov, Andreotti, Compas, & Luecken, (2015) revealed other risk factors of depression among undergraduates. Therefore, further studies may be required. Furthermore, nearly 20% of the students had attempted suicide at least once. This is another area of serious concern requiring urgent and appropriate intervention. A previous survey where over 3% of students reported non-suicidal self-injury (NSSI) one-third of these individuals also attempted suicide (Taliaferro & Muehlenkamp, 2015).

.Far above three-quarters of the students were being sponsored by both parents, while, about 5% were self-sponsored and those on scholarship were just a little above one percent. This is a very negligible percentage with the rate at which education has become a criterion for achieving one's dreams. Therefore, governments and non-governmental organizations are implored to endeavour to provide scholarships to the less privileged to reduce the stressed caused by economic hardship.

Above 25% of the respondents described the social support they were receiving as not satisfactory. These could have contributed to the occurrence of depression, students'

families and the Students' Affairs Department should be committed to, providing good social supports for them from home and on campus, respectively. A previous study has linked depression-provoking anxiety, worry in response to stress to feelings of rejection and inadequacy evident by lack of adequate social support (Reeve, Shumaker, Yearwood, Crowell, & Riley, 2013).

Nearly 20% of the students described their relationship with their parents, siblings, and other members of their family as either hostile or fairly bearable. This report has an implication for parental care, in that parents, have a responsibility to relate with their children in a way to foster their emotional and psychological wellbeing. Parents' educational desire for their children has been proven to contribute to strong positive effects on all five motivational outcomes (Fan & Williams, 2010). Moreover, more than half of the students described their relationship with lecturers as either hostile or fairly bearable. This is not good enough! Positive teacher-student relationships shield students from depression and misbehaviour (). Additionally, positive teacher-student relationships curb negative propensities in students and help such at-risk students to attain less delinquent developmental trajectories over time (Wang, Brinkworth, & Eccles, 2013).

Similarly, over 10% and more than 40% of the students described the administrative management of their departments as being 'not satisfactory', and 'fairly satisfactory', respectively. This unfortunate administrative report by the students could also contribute to emotional and psychological instability in the students. A previous study has implicated unsatisfactory university administration for students' emotional problems (Koshkin, Rassolov & Novikov, 2017). Over 30% of the respondents were having varying challenges with some of their courses. This is also capable of affecting the students' morale negatively, particularly, if such are not attended to. Depression and students' academic performance have synergic effects

on each other in students' life (Bisson, (2017). Therefore, students experiencing any of them need prompt attention from their respective homes and universities.

The report of Beck's depression inventory revealed that among those between 20 and 36 years nearly 75% had moderate depression, while more than 60% had severe depression. This is far above normal. Another study carried out among medical students also reported that more than half of the respondents were affected by depression. Therefore, the school management should address this by conducting regular mental screening for the students for prompt identification of mental health problems. Besides, mental health education outreaches should be considered to promote mental wellness among the students.

### Conclusion

Summarily, very few students had a family history of depression; the infinitesimal percentage of them enjoyed scholarship but more than half experienced hostile lecturer-student relationships. Depression inventory report shows that most of them were suffering from moderate-severe depression. Therefore, stakeholders of education should establish regular scholarship funding to ease students' financial burdens. The university management should find a way of solving lecturer-students relationship problems. Regular screening for mental status should be instituted in all universities. Future, studies should focus on the identification of factors other than family history contributing to depression among students.

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