

# Assessment of knowledge and attitude of undergraduate students' of Ahmadu Bello University Zaria towards depression

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## ABSTRACT

**Background and Aims:** Depression is a leading cause of disability worldwide and was projected to become the second most burdensome disease by 2020. While there is growing literature on the mental health literacy of adults, there has not been a parallel interest in mental health awareness of young people in Nigeria. Thus, the objective of this study was to assess the knowledge of and attitudes towards depression in undergraduate students.

**Methods:** The study was a cross-sectional survey conducted from August to November 2019. Ethical approval for the study was sought from the University's research ethics committee. Consenting students across all levels were then sampled and recruited. Participants were presented with the 'friend in need' questionnaire designed to elicit the participants' recognition of mental health disorders depicted in the form of a vignette.

**Results:** Out of the 415 questionnaires distributed, only 365 were adequately filled indicating an 88% response rate. The majority of the participants were female (62.5%) and a total of 132 respondents (36.2%) correctly identified and labelled the depression vignette. Insomnia was the most identified symptom (29%) of depression by the participants. More than one-quarter (30%) of the participants reported that they would be extremely worried about the depressed character and believed it will take the character longer than a few months to recover (54%). Friends were the most recommended source of help (33.1%), followed by professionals (30.7%) and then others.

**Conclusion:** It was established that university undergraduate students do not have adequate knowledge about depression.

**Keywords:** Depression, Knowledge, Attitude, Undergraduate-students, Nigeria

## INTRODUCTION

Depression and anxiety symptoms are reported to be common among university students in many regions of the world, which impacts their quality of life and ability to receive education; the extent of the problem of depression and anxiety among students in low- and middle-income countries (LMICs) is largely unknown (January, Madhombiro, & Chipamaunga, 2018). Depression is a leading cause of disability and was projected to become the second most burdensome disease by 2020 (Reddy, 2010). There's a well-established link between suicide and mental disorders, in particular, depression and alcohol use disorder in high-income countries, many suicides happen impulsively in moments of crisis with a breakdown in the ability to deal with life stresses, such as financial problems, relationship break-up or chronic pain and illness; Suicide was the second leading cause of death among

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young people aged 15-29 years, after road injury (WHO, 2019). Also, depression is a significant contributor to the global burden of disease and affects people in all communities across the world. It has been estimated to affect 350 million people: the world mental health survey conducted in 17 countries found that on average about 1 in 20 people reported having an episode of depression in the previous year (Marcus, Yasamy, Ommeren, Chisholm & Saxena, 2012). Stressful life events are well-known risk factors of depression and are suggested to be the major causative factor of depressive symptoms (Dawood, Mitsu, Ghadeer, & Alrabodh, 2017). Mental health literacy has been described as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention." Although there is a large body of research examining mental health literacy of various populations, with depression extensively studied, most research focuses on developed countries, with inadequate examination of this area in the non-western developing world (Amarasuriya, Jorm, & Reavley, 2015). The prevalence of depression in LMICs is similar to that in developed countries; however, reliable data are unavailable in most countries in sub-Saharan Africa (Kutcher, 2015). In recent years few studies reported high prevalence of depression among health care students and the presence of depressive symptoms over their studying years (Dawood *et al.*, 2017). Exposure to stressful situations is a decisive factor that increases the risk of suffering from mental disorders, and in this sense, the pressure experienced during the years of university studies can be particularly stressful for many young people (Miron, Goldberg, Lopez-Sola, Nadal & Armario, 2019). Depression has long been recognized as an important target of intervention in psychology and psychiatry, but these fields have focused efforts primarily on treatment rather than prevention (Mc Laughlin, 2011). Although effective preventive intervention methods targeting high risk groups have been developed, they have thus far had poor reach and sustainability in the community (Tamez, Du & Shah, 2016). While, there is a growing literature on the mental health literacy of adults, there has not been a parallel interest in mental health awareness of young people in Nigeria (Aluh, Anyachebelu, Anosike & Anizoba, 2018). Thus, the objective of this study was to assess the knowledge of and attitudes towards depression of undergraduate students in a Nigerian University.

## MATERIAL AND METHODS

The study was a cross sectional descriptive survey carried out among undergraduate students of Ahmadu Bello University in Zaria, Nigeria, from August to November 2019, after obtaining ethical approval from the University's Human Research and Ethics Committee. A sample size of 380 students was calculated for the study using the Rao soft online sample size calculator, maintaining a confidence interval of 95% and an estimated population of greater than 20,000. After allowing for attrition, a sample size of 415 was finally decided upon. A multi-stage sampling technique was used for the study. During the first stage, stratified sampling was used to calculate the number of participants required from each of the 13 faculties of the institution. This was followed by convenient sampling, which was then used to select participants from each faculty until

the required sample size was achieved from each stratum. Any undergraduate or diploma student of the university, who was willing to participate was eligible for inclusion.

A self-administered structured questionnaire adapted from an earlier study (Aluh *et al.*, 2018) was used to collect data. The questionnaire had two sections: the first section collected data on the students' demographic characteristics including age, gender, year of study etc. The second section assessed the participants' knowledge of and beliefs about depression through the use of both open and closed ended questions. To assess participants' knowledge, a case-vignette was used about a young male student suffering from fatigue, insomnia and weight loss, and whose academic performance had worsened over the past few months. After respondents had read the case, they were required to answer several open-ended questions about the case including what they thought was wrong with him, what gave them the strongest hints about it, how long it would take him to get better, whether he would require help to cope with the situation, and who could help him. The closed-ended questions, which were rated on a four-point likert scale enquired about respondents' degree of worry towards the character's emotional wellbeing. Possible answers were: not at all worried, a little bit worried, quite worried and extremely worried. To collect data, respondents were approached in the evenings while they were in the hostel after lectures were over. The data collector introduced herself and briefly explained the aim of the study, after which she invited them to participate. If they provided verbal consent, she gave them a copy of the questionnaire and returned after five days to retrieve the questionnaires.

Quantitative data collected was analyzed using Microsoft Excel 2016 software, and the results were presented as descriptive statistics using charts and tables. The open-ended responses were categorized based on similarity of thematic content and their frequencies/percentages that were reported. Responses to the open-ended question about what was wrong with the vignette character were coded according to the presence or absence of key words such as "depressed/depression", "emotional" or "psychological". Where participants were asked to state whose help they believed the vignette character required to cope with his problem, their responses were grouped into five categories. The first category covered professionals and included responses mentioning psychiatrists, psychologists, therapists etc. The second category was for family, which included parents, siblings, cousins, uncles and aunts. The friend category included friends, classmates and peers. A spiritual category was also created which included God, priests, pastors or imams etc. The "other" category contained responses that did not fall into any of the four previously listed categories.

## RESULTS

### Demographic characteristics of respondents

Out of the 415 questionnaires distributed, only 365 were adequately completed, indicating a response rate of 88%. The students were aged between 15 and 35 years of age, with a modal age of 19 years. Furthermore, only around 40% of them were male, with the majority being female. The majority of the respondents were in their second year (40.1%) and the small-

est group were 6<sup>th</sup> year students (1.4%), followed by others (1.7%) including those doing associate degrees, diplomas or other certificate courses as seen in Table (1) below:

Characteristics	Variables	n (%)
Gender	Female	228 (62.5)
	Male	137 (37.5)
Age	15-20	169 (46.3)
	21-25	151 (41.4)
	26-30	42 (11.5)
	Above 30	3 (0.8)
Faculty	Administration	27 (7.4)
	Law	20 (5.5)
	Medicine	62 (17.0)
	Pharmacy	31 (8.5)
	Veterinary medicine	24 (6.6)
	Engineering	31 (8.5)
	Environmental design	10 (2.7)
	Agriculture	26 (7.1)
	Physical sciences	25 (6.9)
	Life sciences	29 (7.9)
	Education	32 (8.8)
	Arts	28 (7.7)
Social sciences	20 (5.5)	
Year of Study	1 <sup>st</sup> Year	51 (14.0)
	2 <sup>nd</sup> Year	146 (40.1)
	3 <sup>rd</sup> Year	40 (11.0)
	4 <sup>th</sup> Year	66 (18.1)
	5 <sup>th</sup> Year	50 (13.7)
	6 <sup>th</sup> Year	5 (1.4)
	Other	6 (1.7)

**Identification and labelling of the vignette**

A total of 132 respondents (36.2%) correctly identified and labelled the vignette character as suffering from depression, while the other respondents labelled the vignette character as suffering from emotional distress (25.2%), psychological distress (5.4%), and others (33.2%)

**Identification of symptoms presented in the vignette**

The vignette used provided clear references to the most common symptoms of a Major Depressive Episode from the DSM-IV. Most of the respondents 219 (60%) were able to correctly identify some of the symptoms as a sign that something was wrong with the character depicted in the vignette, even when they did not know exactly what was wrong with him. Insomnia was the most identified symptom of distress (23.2%). Others were lack of concentration (17.2%) and fatigue (15%), while the least identified symptom was weight loss (4.1%) as shown in table (2) below:

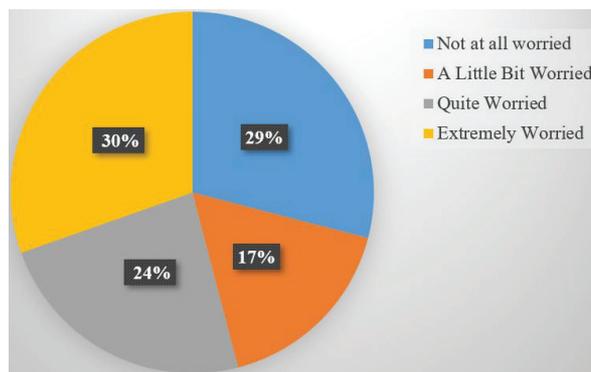
**Respondents estimated degree of concern and recovery times for the character in the vignette**

Participants indicated their degree of worry for the character in the vignette using a four-point Likert-type scale, ranging from 1 (not at all worried) to 4 (extremely worried) as shown in figure 1.

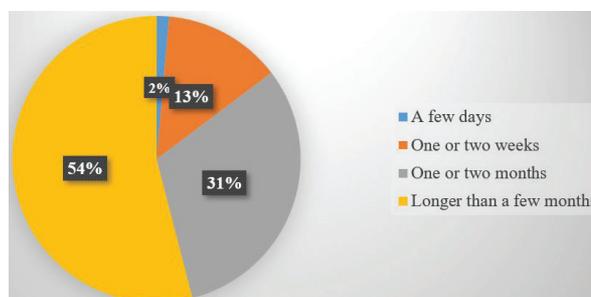
**Table 2. Identified symptoms by respondents (n=365).**

Identified Symptom	n (%)
Constantly tired	54 (15)
Difficulty in sleeping	85 (23.2)
Lack of concentration	63 (17.2)
Weight loss	15 (4.1)
Lack of interest	51 (14)
Loss of appetite	25 (6.8)

Just a little over half of the respondents (54%) said that they would be quite or extremely worried for the character. When the respondents were asked how long they thought it would take for the character to ‘get better’ using a four-point Likert-type scale from 1 (a few days) to 4 (longer than a few months), a majority of them (54%) felt that the character in the vignette would require more than a few months to get better, as shown in figures 1 and 2 below:



**Figure 1.** Respondents degree of concern for the vignette (n=365).



**Figure 2.** Respondents estimated recovery time for the character in the vignette (n=365).

**Recommended sources of help for the vignette character**

332 of the respondents (93.4%) answered in the affirmative that the character would need help to cope with the situation. Details of their answers can be seen below in table 3. Respondents’ identified friends as the most common source of help (33.1%), followed by professionals (30.7%) and then family (28.4%).

**Table 3. Recommended sources of help by respondents for the vignette character (n=332).**

Recommended Source	n (%)
Friends	110 (33.1)
Professionals	102 (30.7)
Family	94 (28.4)
Spiritual	9 (2.7)
Others	17 (5.1)

**DISCUSSION**

This study aimed to assess the knowledge and perceptions of undergraduate students towards depression, with a specific focus on their abilities to identify a depressed individual and their attitudes about seeking help. Findings from this study showed that the majority of respondents were unable to identify key symptoms of depression or label the character as suffering from depression. Previous studies have also reported that females are more likely to correctly label depression-based vignettes and endorse concern over a depressed peer than males (Burns & Rapee, 2006). Only a little over a third of this study's respondents were able to correctly label the vignette. This was relatively higher when compared to a previous study conducted among Nigerian secondary school students where only 10.4% of the respondents correctly identified the character as suffering from depression (Adeosun, 2016). This may be explained by the increased emotional and mental development of undergraduates through experiences, when compared to secondary school students. Other studies conducted in Sri Lanka and China have also reported that undergraduate students' ability to recognize depression is low: 9.5% and 12%, respectively (Amarasuriya *et al*, 2015; Lei, Xiao, Liu & Li, 2016). Some of the more common wrong labels for the character in the vignette were 'Emotional distress' and 'Worry'. This is in line with findings from a previous study where depression vignettes were mislabeled as 'emotional problems' and 'stress' (Adeosun, 2016; Gureje, Lasebikan, Ephraim-Oluwanuga, Olley & Kola 2005). The ability of adolescents to 'label' depression has been linked to their urgency in seeking help and who they seek help from (Aluh *et al*, 2018). Consequently, their inability to recognize depression leads to poor help-seeking attitudes. Proper diagnosis often leads to effective treatment, which in turn improves the patient's quality of life and decreases the morbidity and mortality associated with the condition (Yang *et al*, 2015). However, the fact that almost all of the undergraduates surveyed reported that the 'depressed' case needed to get help from another person indicated that they had some awareness of the severity of the symptoms portrayed. The most common source of help recommended by them in this study was friends. This is contrary to some reported instances where elders were the most recommended sources of help (Kutcher *et al*, 2015) This suggests that there may be a disconnect between the older generation and young adults. Thus, efforts should be made to improve relationships and communication between these populations so parents can be involved in improving mental health awareness and support

proper help seeking attitudes. However, only a very little percentage of surveyed respondents suggested God as a source of help for the 'depressed' case. This is inconsistent with the fact that in Nigeria, mental disorders are usually attributed to supernatural forces and spiritual healers are preferred sources of treatment over medical advice (Gureje *et al*, 2005; Egwuonwu, Okafor, Ogunyemi, Yusuf & Adeyemi, 2019). Almost a third of respondents recommended seeking professional help from psychiatrists, therapists, counsellors or psychologists. This was inconsistent with the findings from a similar study conducted in secondary school students where only four respondents recommended professional help from a psychiatrist or psychologist (Aluh *et al*, 2018).

Limitations of this study include the fact that the research relied on the use of a written case vignette. The extent to which such data can be translated into what actually is likely to happen in the real world is unclear. In addition, the questionnaire was administered in English, and this may have affected respondents' abilities to correctly label the vignette since all the respondents were non-native speakers of English.

**CONCLUSION**

The knowledge and perceptions of the respondents towards depression was found to be inadequate. This implies that the need to improve mental health awareness in undergraduates of the university is urgent because there has been a rise in the number of cases of suicides in the study area.

Friends were the most recommended source of help. As such, this group of people can be targets of interventions to increase mental health awareness. Schools are important settings for such intervention programs, because they are the places where young people spend most of their time. These programs should also target teachers and school counsellors who work with young people. They spend a significant amount of time with young people and should therefore be able to recognize first signs and symptoms and give first aid and support.

**Abbreviations**

LMICs= Low- and Middle-Income Countries

**Peer-review:** Externally peer-reviewed.

**Informed Consent:** Written consent was obtained from the participants.

**Ethics Committee Approval:** This study was approved by the Ahmadu Bello University Human Research and Ethics Committee (No: ABUCUHSR/2019/UG/002).

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**Conflict of Interest:** The authors have no conflict of interest to declare.

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