

**PREVALANCE, KNOWLEDGE AND PERCEPTION OF DEPRESSION AMONG  
FIRST YEAR UNDERGRADUATE STUDENTS IN THE UNIVERSITY OF  
IBADAN, OYO STATE, NIGERIA**

**BY**

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## **CERTIFICATION**

This is to certify that this study was carried out by **ALONGE JOY ABIODUN** under my supervision in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan.

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## DEDICATION

This work is dedicate to Almighty God, who has always been my helper and my rock.

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## ABSTRACT

Depression is a mental disorder, characterised by sadness, loss of interest, tiredness and poor concentration. The transition from secondary schools to the university can be a highly stressful period for the adolescent and young adults, as they experience a double transition mentally and institutionally which may have negative impact on students and possibly lead to suicide. Knowledge on depressive signs is essential as it aids prevention of depression and promotes student's mental health condition. Therefore, this study investigated the prevalence, knowledge and perception of depression among first year undergraduate students in the University of Ibadan, Oyo State.

This study employed a descriptive cross-sectional design. A multi-stage sampling technique was used to select three hundred and three (303) First Year Undergraduate Students from the University of Ibadan. A self-administered questionnaire was used to elicit information on respondents' socio-demographics, knowledge, perceived causes, experience and perception of depression. A 12-point knowledge scale was used to assess knowledge on depression; a knowledge score (KS) of <5 was rated poor, KS of 5-8 was rated fair while KS>8 was rated good. Also, perception was assessed using a 11-Point Perception Scale, a perception score of <4 was rated as poor perception, 4-7 was rated as fair, while >7 was rated as good perception. A 76-point Zung depression scale was adopted in this study to assess the experience of depression. The data were analysed using descriptive and inferential statistics such as regression, Chi-square and Fisher's exact analysis at  $p < 0.05$  level of significance.

Mean age of the respondents was  $18.3 \pm 2.3$  years, 50.6% were male and 92.7% were single. Respondents' knowledge on depression shows that some (48.5%) had good knowledge, while (9.6%) had poor knowledge. Romantic relationship (38.3%), low self-esteem (54.1%) and trouble from home (56.1%) were the most identified perceived cause of depression. A few (21.1%) experienced mild depression and 1.7% experienced severe depression. Majority (57%) had good perception of depression and (11%) had poor perception. Majority indicated that they spoke to their pastors/priest (45%), used antidepressant (51.2%) and prayed to God (70%) when they experienced depression. There was a significant association between respondents' knowledge and perception of depression ( $X^2 = 28.185$ ,  $df = 4$ ;  $p = 0.000$ ). Also, there is a significant relationship between romantic relationship ( $X^2 = 11.893$ ;  $p < 0.05$ ),

insecurity ( $X^2 = 16.589$ ;  $p < 0.05$ ), trouble from home ( $X^2 = 13.001$ ;  $p < 0.05$ ), not being able to make friends ( $X^2 = 20.801$ ;  $p < 0.05$ ), and too much academic stress ( $X^2 = 6.84$ ;  $p < 0.05$ ) and the experience of depression. Regression analysis shows that family background and academic stress were more significant to the experience of depression among the respondents.

Many of the respondents had good perception and knowledge. Irrespective of the level of depression experienced, majority of the respondents coped by speaking to their pastor and priest and making supplications to God. It was therefore recommended that more awareness programmes to orient young adults on the right decision making and management of depression in order to improve the quality of their mental health.

**Keywords:** Depression, Experience, First year undergraduate students

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## DEFINITION OF TERMS

**Depression:** It is a period of unhappiness or morale which lasts longer than several weeks and may include ideation of self-inflicted injury or suicide

**Knowledge:** Awareness of a particular fact or situation; a state of having been informed or made aware of something

**Perception:** Conscious understanding of something

**Experience:** An event or occurrence which leaves an impression on someone.

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

Depression is a recurring feeling of emptiness and loss that over time becomes severe. According to World Health Organisation (WHO), depression is a common mental disorder, characterised by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness and poor concentration. Depression is a leading cause of disability worldwide in terms of total years lost due to disability and is projected to become the 2<sup>nd</sup> most burdensome disease by the year 2020 (WHO, 2012). Currently, depression is estimated to affect 350million people (WHO, 2012). Often times, depression disorders begin at a young age, overtime the capacity of people to function effectively well reduces and in most cases, it continues for a lasting period of time and it may result to substantial impairments. About five percent of the general population of children and adolescents may experience depression at any given point in time (AACAP, 2008) and its prevalence continues to rise (William *et al.*, 2009). Thus, the need for curbing the experience of depression and other mental health condition cannot be over-emphasized globally (WHO, 2012).

The mental health challenges of students is a global issue that occurs in both developed and non-developed societies, modern and traditional (Bayram and Bilgel, 2008). Adolescence is a transitional stage and it is characterized by major changes in all areas of functioning and it is the most stressful period. Young people including adolescents are often times challenged with a lot of activities and responsibilities for them to succeed during their academic years, especially at the Universities or any higher institution. First year students are faced with a lot of challenges which vary from living away from family for the first time, missing family or friends, feeling lonely or isolated, experiencing conflict in relationships, facing new and sometimes tough school work, worrying about finances, physical inactivity to mention just a few. These factors constitute a risk factor for developing depression (Ang and Huan, 2006).

The commencement of University life is very crucial and it requires that newly admitted students to develop strategies/ approaches that would enable the rate of youth depression is

the highest among psychological disorders; this affects millions of youngsters and their families. Unfortunately, it can also be fatal due to its association with suicide them adjust and adapt this negatively on the mental health of students and also the academic performances (Brandy et al., 2015). Studies have shown that despite the high prevalence of depression among youth or young adults, these students do not seek help from appropriate sources. Young people find themselves in difficult condition/circumstances with respect to help seeking for mental health problems/issues. Also, these young adolescents are highly dependent on others, but at the same time independence and do not want their parents or guidance to know about their problems and they lack emotional competence to seek help for their problems (Wilson and Deane, 2012). Thus, depression is seen as a very important mental health concern worldwide because of its high prevalence rates, chronic nature of the condition and difficult treatment and recovery (Melo-Carrillo *et al.*, 2012). Studies have revealed that in low and high income countries there are poor mental health literacy, stigma, ignorance of own illness and financial constraints to seeking care for mental problem (Jordans *et al* 2014, Topper 2013, Christensen, 2010).

## **1.2 Statement of the problem**

According to mental health research conducted by the National Alliance on Mental Illness (2011), one in four students have a diagnosable illness, 50% have become so anxious that they struggled in school. A variety of other mental health concerns are both topical and common among students today, among which includes depression, anxiety, suicide, eating disorders, and addiction.

The World Health Organization has declared depression to be the leading cause of disability because of its physical, psychological and social impacts. Also, students have been found to be more vulnerable to depression which is probably caused by stress during and over examinations, relationship problems with partners, parents, siblings, lecturers, course mates and loved ones. In addition, recent studies in the area of mental illness indicated that the psychological and mental problems of students continue to increase (Field, Diego, Pelaez, Deeds and Delgado, 2012). For instance, in the United States a national survey in 2005 mentioned that 86% of University counseling centers noted an increase in serious mental

health and psychological problems among University Students (Gallagher, Weaver-Graham and Tylor, 2005).

Some of the prominent challenges or problems students in the Universities are faced with include; time pressure, fear of failure, struggle to establish identity, pressure of academic excellence, tough competence, inferiority complex, worrying too much, feel life is not worth living, feel anxious without any apparent reason, sexual harassment or assault to mention just a few. The first year student are often time more susceptible to developing depression due to aforementioned challenges and due to low adaptive capacity and strategies to over them.

Lewinsohn *et al.*, (2002) revealed that a wide range of negative health outcome such as suicide attempt, completed suicides and early pregnancy are associated with depression among students. Also Omigbodun, Dogra, Esan and Adedokun (2008), reported about 12% prevalence of suicide attempt among young adult in South West Nigeria. Functional impairment is also found to be related to depression severity among young adult as well as co-existing emotional and behavioural problems (Joycox *et al.*, 2009). Substance use disorder, poor academic performance and impaired psychosocial functioning were among the problem identified to be associated with depression (Wagner, 2003).

According to Naicker *et al.*, (2013) opined that those who develop the depressive syndrome for the first time in adolescence have a higher risk of developing new episodes in adulthood, and depression in adulthood in this cohort is considered to have begun in adolescence. Furthermore, Rudolph (2002) and others argued that in adolescence, gender differences in affiliative needs become highly salient and render girls emotionally susceptible to pressures for popularity and acceptance by peers and potential romantic partners thereby leading most of them to a depressive state. Therefore, this study seeks to understand the experiences, knowledge and perception of depression among first year undergraduate student in the University of Ibadan, Oyo State.

### **1.3 Justification for the study**

There is a gap in knowledge about the cause, management and prevention of depression among students, this account for the alarming prevalence of depression that has been occurring even till date. It has been reported in different studies that there is an increasing prevalence of

depression among undergraduate students, however little or no research has been conducted among first year students to examine their knowledge, perception and the management strategies. This study will be carried out to provide better understanding about students' experiences, knowledge and perception of depression that would be of benefit to parents, school authorities, organizations and even future/ potential freshmen to prevent the occurrence of new cases of depression (primary prevention) and avoid the recurrence among those that have experienced depression by developing feasible and practical interventions, raise the level of awareness by creating health education programs for parents and students and this would invariably influence the student academic performances.

This study will be of great beneficial in determining the experience, level of knowledge and perception of depression among students most especially the next first year students in the study setting. This will serve as an aid to the target population which will enable parents, school authorities and peer educators have a comprehensive understanding of mental illness (depression) and develop a preventive mechanism in order to inhibit recurrence from those who have once experience it before. It will help reduce the rate of suicide committed by students which is usually associated depression and it would help promote mental health which will invariably improve the cognitive capacity among students. This study will also provide health personnel and members of the public (parents, guardians and counselors) with information and help in educating young ones on how to cope with their new life experience especially in the University and help to achieve a better academic performance and achievement. This will enable students cope well with stress and depression in the later years. Many University students have misconceptions and misbelieve about mental illness, which leads to stigmatization among individuals between ages 15 to 21 years, who are mostly at higher risk of a first episode of mental illness, with around 12% to 18% reporting a diagnosable mental disorder. Experiencing depressive symptoms leads not only to psychological distress, but may also lead to learning difficulties, interpersonal relationship problems, various dependency problems, and many other issues.

#### **1.4 Research Questions**

1. What is the knowledge of depression among first year students in the University of Ibadan?
2. What are the perceived causes of depression among first year students in the University of Ibadan?
3. What are the risk factors associated with depression among first year students in the University of Ibadan?
4. What are the factors that predisposed students to depression first year undergraduate students in the University of Ibadan?
5. What is the experience of depression among first year students in the University of Ibadan?
6. What are the self-management strategies to address depression among first year students in the University of Ibadan?

#### **1.5 General Objective**

To investigate the prevalence, knowledge and perception of depression among first year students in the University of Ibadan, Oyo state, Nigeria.

#### **1.6 Specific Objectives**

1. To assess the level of knowledge of depression among first year students in University of Ibadan.
2. To assess the perceived causes of depression among the first year students in University of Ibadan.
3. To examine personal experiences of depression among the first year students in University of Ibadan.
4. To assess the risk factors associated with depression among first year students in the University of Ibadan.
5. To assess students' perception on depression among the first year students in University of Ibadan.
6. To identify the self-management strategies to address depression among the first year students in University of Ibadan.



## 1.7 Research Hypotheses

### Null hypotheses (H<sub>0</sub>)

H<sub>0</sub>: There is no significant relationship between sex and experience of depression among the first year students in University of Ibadan. (P=0.05)

H<sub>0</sub>: There is no significant association between knowledge of depression and experience of depression among the first year students in University of Ibadan. (P=0.05)

H<sub>0</sub>: There is no significant relationship between knowledge and perception of depression among first year students in University of Ibadan. (P=0.05)

H<sub>0</sub>: There is no significant relationship between students' (age, monthly allowances, course of study, family background) and experience of depression. (P=0.05)

## CHAPTER TWO

### LITERATURE REVIEW

This chapter focuses on review of literatures related to the research study and the theoretical framework that would be applied to explain the concept of experiences, knowledge and perception of depression.

#### 2.0 Introduction

Mental health, according to the World Health Organization is a status of well-being in which the person realizes his or her aptitudes to handle customary strain of life and work efficiently in order to make a contribution to his or her community. The mental health of an individual is very crucial not only to his or her health and wellbeing but also to the society at large. At every stage of human development, the level of knowledge about mental health differs from person to person (WHO 2013). Buchanan, (2012) reported that depression ranks as one of the four major illnesses, which can affect anyone regardless of the gender, religion, social status or geographical location.

According to Kuwabara, Van Vorhees, Gollan, and Alexander (2007), one in four young adults suffers a depressive episode, making depression as the prevailing cause of dysfunction worldwide, which contributes to the increased total years lost due to disability globally and it is estimated that 350 million people of the world experience depression. By 2020, depression is projected to reach second place in the ranking of Disability Adjusted Life Year calculated for all ages. Currently, depression is the second cause of DALYs in the age category 15-49years (WHO, 2012).

Depression, by definition, is a condition in which an individual suffers from a low mood with constant feelings of worthlessness, sadness, anxiety, and total loss of interest in pleasurable activities. Also, Mayo clinic (2012) defines depression, as medical illness that causes a constant feeling of sadness and loss of interest. The indicators and symptoms of depression are physical, behavioural, and emotional, these symptoms include low energy, weight gain/loss, overeating/loss of appetite, headaches, fatigue, aches/pain, insomnia,

disinterestedness in sex, forgetfulness, indecision, restlessness, guilt, hopelessness, anxiety, low self-esteem, self-doubt, withdrawal, suicide attempts, and intrusive thoughts.

A mnemonic for depression was created based on the ten letters of the word “depression” to help therapists/psychologist remember the main symptoms (Beck 1967).

“D” is for depressed mood,

“E” is for energy loss (fatigue),

“P” is for pleasure (interest) loss,

“R” is for retardation or agitation,

“E” is for eating changes (appetite/weight),

“S” is for sleep changes,

“S” is for suicidal thoughts,

“I” is for impaired concentration,

“O” is for only me to blame (guilt/worthlessness), and

“N” is for not able to function.

Beck (1967) defined depression as having attributes such as; specific alteration in mood (e.g. sadness, loneliness, and apathy), negative self-concept associated with self-reproaches and self-blame, regressive and self-punitive wishes (e.g. desires to escape, hide, or die), vegetative changes (e.g. anorexia, insomnia, and loss of libido) and change in activity level (e.g. retardation or agitation). Also, Wallace (2009) indicated that depression is simply, not about lying on the bed crying all day or sobbing without doing anything else. He stated during his explanation that someone can manifest functional depression wherein the person “may go to work every day, go to school, socialize, and seem just fine but not be just fine”. This implies that depression is a serious mental health concern that affects all areas of functioning involved in a successful experience at University including motivation, concentration, feelings of self-worth, and mood (Andrews and Wilding, 2004).

Depression in adolescents/young adults is a particular example of an emotional and behavioral disorder, typical for the puberty period. It is associated with changes in the endocrine system that normally happens during this period. These changes are due to the development of new cognitive functions and taking new roles in society. Early adulthood composes of the years

(19-25) in which more new roles (partner, parent, and worker) are learnt and more life changes occur as compared to the other life stages. Although early adulthood is the best time for physical strengths, it is also the worst time of mental health due to the demanding tasks. Also, young adult account for a larger proportion of the population with major depression and they belong to the group having the highest number of individuals experiencing depression, as early as their late teens (youth) and early 20s (early adulthood) (Eisenberg, Golberstein, and Gollust, 2007; NIMH, 2012).

University is a new, challenging experience which most often can be linked to the early adulthood of individuals and entrance to a university or other tertiary institutions is a usually an interesting and cheerful time, it can also be viewed as a demanding life event for some students (Wong *et al.*, 2006). Hence, students who have just been admitted into the university are faced with the challenges, and requirement to meet the best required results which predispose them to diverse mental and emotional distress which in variably affect their academic performance and social involvement amongst their colleagues (Bee, 1994).

In addition, being a University student for the first time is a great milestone for early adulthood. Most of the young people, especially students who live apart from their families, meet and socialize with new people, gain financial responsibilities e.t.c for which they have not been exposed to. It also requires that individuals carefully define their own career interests, demonstrate performance, and present themselves as attractive on a competition dominated and individualistic labor market (Vaez and Laflamme, 2002). Study have shown that psychological distress or mental health disorder may result in withdrawal from study as first-year students were found to be twice as likely to drop out as their counterparts in the second and third years (Field and Curtis, 1999). Adlaf *et al.*, (2001) found a prominent inverse relationship between year of study and mental health in university students, those at greatest risk being first-year students.

A study conducted in Nigeria indicates that depression is common among University students and a significantly associated exists with socio demographic factors and the experience of depression. Also, as the country's lifestyle continues to evolve, it is revealed that 4 out of every 10 women and 1 out of every 10 men are being diagnosed with some form of clinical depression.

Likewise, the current report released by National Health Morbidity Survey (NHMS) in 2015 in Malaysia revealed that the prevalence of mental health problems among adults of 16 years and above shows an increasing trend, escalating from 10.7% in 1996 to 29.2% in 2015. Therefore, this indicates that, mental health problems are commonly higher among younger adults, with adolescents aged 16 to 19 (34.7%), than those aged 25 to 29 (30.5%) (Ahmad *et al*, 2015).

It was observed that many young people experience the first symptom of depression during their college or University years. However, many depressed students are not seeking the help they need (NIMH, 2012). Also, in 2011, about 30 percent of university students were reported feeling so depressed that it was difficult for them to sometimes function effectively (ACHA, 2012). Among the wide range of mental health problems frequently faced by student anxiety and depression is the highest or most common. For which at any given time 25% of student population report symptoms of depression (Beck and Young, 1978). It can also be deduced that the prevalence of depressive symptoms varies across different population, which implies that the depressive symptoms are common among university students worldwide and this prevalence appears to be increasing. The prevalence can be explained by the fact that the period of youth comprise of a time of contradictions when an individual goes through many changes and experiences such as emotional, behavioral, sexual, economic, academic and social and as well as efforts of discovering ones identity with psychosocial and sexual development. During this period, the mental health of university students also constitutes one of the main components of social health.

According to Katz, Chapman and Chun, (2010) states that depression is higher in those who have school problems. This implies that the groups of students who have school problems comprises of those with learning disabilities. In an international review (Patel, Flisher, Hetrick, and McGorry, 2007), it was estimated that approximately 20% of young people will experience at least one mental disorder in any given year. It was also reported that university students are faced with a lot of challenges and these challenges or difficulties affects their mental health status.

Also, a study revealed that students who are just commencing their study in any university are particularly at-risk as they face a number of new stressors during the transitional period of

beginning a new life in university or college (Voelker, 2003). Some of the stressors and mental health problems that are associated with undergraduate students are itemized.

Students' mental/emotional and psychological problems include:

1. Anxieties about aspects of study including exams, continuous test and presentations
2. General stress and anxiety
3. Depression
4. Relationship difficulties
5. Eating problems
6. Bereavements and parental separations
7. Loneliness and homesickness
8. Lack of self-confidence or low self esteem
9. Managing transitions
10. Making difficult decisions
11. Traumatic experiences including rape, assault and abuse
12. Difficulties with alcohol or drugs
13. Issues around sex and sexuality
14. Self-injury
15. Suicidal thoughts
16. Anger management
17. Worries about appearance. (Yerker-Dodson, 1908)

In addition, the University period is vital for the evolution of self-sufficiency and the first years of University education overlap the late adolescence period, which is frequently described as a stressful period to be survived. The levels of stressful experiences varied significantly from the transition period to young adulthood. During the transition period, students have problems especially in relation to the new environment, but when they have adapted to the new environment, student encounter challenges as regard their educational pursuits. More so, university students encountered life's issues such as personal and social adjustment, academic and career concerns, stress, and other related psychosomatic issues that lead to an unhealthy mental condition. Thus, depression tends to be more concentrated among the first year students.

It is commonly assumed that first year students experience the greatest amount of pressure and exposure to stressors related to the transition into a new environment, this pressure also means a greater vulnerability to the development of psychological problems (Wong *et al.*, 2006). Several problems have been related to depression including sleep disturbance, anxiety, academic performance problems (Field *et al.*, 2009). Adolescent romantic relationship problems are one of the major predictors of depression and suicidal attempts or completion (Fessenden 2000; Joyner, and Udry, 2000), Similarly, a finding report that a first year/ 100 level female student of university of Ibadan in Nigeria drank a poisonous substance called hypo bleach after her boyfriend, a student of the same institution, ended their romantic affairs (Adeyemo, 2012). It has been found that adolescents who date, particularly those who experience stress in their romantic relationships, report higher levels of depressive symptoms than their non-dating peers (Davila, *et al.*, 2004)

Also, there is evidence that students experience some slight variations in symptoms. For example, changes in sleep and appetite may indicate depression in a clinical population but this might not be a reliable indicator of depression in a student population as the University lifestyle may influence sleep and eating patterns and may not reflect changes related to depression only (Whisman, Perez and Ramel, 2000). Evidence has shown that students may experience cognitive symptoms, such as concentration difficulties, perfectionism and low self-evaluation, more frequently than clinical population (Cox *et al.*, 1999; Vredenburg *et al.*, 1988).

A population based study, which used data from the Global school based student health survey of school children aged 13 – 17 years between 2003 and 2015 in 59 low income and middle income countries across six World Health Organization region, shows that pre-university students in Africa have the highest prevalence of suicidal thoughts and planning rates among developing countries. Similarly, Kashani and Orvaschel (1988) reported that the most common psychological problems of young adults are depression and anxiety. Also, depression is less common during childhood but it increases during the onset of adolescence to adulthood (Beest and Baerveldt, 1999). During adolescence, depression is experienced mostly short and depending on the certain conditions. Young adults suffering from depression are usually sad and broken down. Some may feel loneliness, but still would continue doing their daily chores.

However, in deeper cases of depression, low self-esteem, self-blame, hopelessness, suicide thoughts, anger, and peevishness might be presented in such individual (Elgard and Arlett, 2002).

It can also be asserted that depression and anxiety are accompanied with 12 to 75% of the studies conducted among students (Kashani and Orvaschel, 1988). Students, in particular, are susceptible to depressive symptoms because the academic environment has been associated with several demanding challenges and a number of stressful events. These include regular attendance for lectures, completion and submission of term/seminar papers, continuous assessment test, writing of examinations, field work and so on. According to NIMH (2014), an estimate of 2.8 million adolescents aged 12 to 17 in the United States had at least one major depressive episodes in the past year. Undisputedly all young adults, undergraduate students need to cope not only with psychological and psychosocial changes that are connected to the development of an independent personal life but also with the academic and social demands that they encounter in university studies in their preparation for professional careers. Therefore, the period of undergraduate education can be assumed to be a very sensitive period in an individual's life span, and this period is regarded by many as important for developing systems and intervention methods that may prevent or reduce mental problems (Gjerde, 1993).

Adlaf, Gliksmann, Demers, and Newton-Taylor (2001) opined that undergraduate students are in the socio-demographic age span where in the rates of psychological distress and disorder are prominent. This implies that students who are unable to manage or adjust to academic life demands can be seen as a frustrating and overtime this could trigger depressive symptoms in students. Also, being a student has even been recognized as one of the factors that predisposes a person to depression (NIMH, 2009). Eisenberg, (2007) states that depression among youth/young adult can cause a major effect in the academic success, future relationships, employment, and might lead to alcohol and substance abuse. Evidence that suggests that university students are vulnerable to mental health problems; this has generated increased public concern in many societies (Stanley and Manthorpe, 2001). Several studies (Adewuya *et al.*, 2006; Nerdrum *et al.*, 2006; Ovuga *et al.*, 2006; Voelker, 2003) propose the high rates of psychological morbidity, especially depression and anxiety, among University students all over the world.



Mental illness like depression and anxiety has an intense and deleterious effect on social adjustment to university life more especially among the first year students, this also affects academic attainment by impeding the student's level of assimilation, and more serious problem could be the effect of depression to adverse health outcomes which includes death by suicide. Based on these observations, there is a growing awareness of the need for effective prevention, early detection, and novel treatment approaches for mental illness/depression among university students within a public mental health paradigm.

A study revealed that students face a lot of stress when moving to the University, it was observed that at the first phase into the university students who encounter difficulty in the new environment this may lead to psychological distress and symptoms of psychopathology. Also entering university typically entails leaving home, adapting to a new social environment, increased academic pressure, greater opportunities for substance misuse, and financial pressure (Kessler *et al.*, 2007). Thus, the transition often coincides with the emergence of psychopathology (depression), as pre-existing mental health problems are exacerbated or new symptoms emerge in response to novel environmental stressors (Eisenberg *et al.*, 2007). Consistent with these observations, data collected in 21 countries as part of the World Health Organisation (WHO) World Mental Health Surveys indicated that an average of 20.3% of college students across countries had 12-month depression disorders, 83.1% of which had pre-matriculation onsets, most of these students reported mood disturbances and symptoms of anxiety as part of the mental health problems (Auerbach *et al.*, 2016).

Edwards and Holden (2001) found that among college students seeking counseling services, anxiety and depression were ranked first and third as presenting problems, respectively; academic and work-related concerns were ranked second as the presenting problem. Brackney and Karabenick (1995) also noted that high levels of distress, concomitant with limited coping resources, render students less able to meet academic demands.

Generally, the transition to adulthood represents a period with high risk for the onset of depression (Reinherz *et al.*, 1999). While the transition to adulthood represents a high risk period for the onset of depression in general (Eldelekl *et al.*, 2006), young people who enter tertiary education may face new social and intellectual challenges that may increase their risk of suffering depression, anxiety and stress (Swift and Wright, 2000).

Also, prolonged untreated depression, anxiety or stress may impact upon the functioning and productivity of the people who are affected, thus presenting a public health problem (Hawkins, 1995). The high rates of depression and anxiety among university students have major implications, not only with psychological morbidity that will have adverse effects on students' health, development, educational attainment and quality of life, but also the deteriorating influence on their own families, institutions and even on other people's lives. Higher institution counselors could play an important preventative role by considering anxiety symptoms as a potential warning sign for depression (Poyrazli *et al.*, 2002).

Depression, anxiety and stress symptoms are not unusual among university, undergraduate and graduate college students and are recognized as the most frequent problem among them. (Sohai, 2013) University students, especially the junior students, are exposed to various psychosocial changes as they have to adapt with the academic and social demands, prepare future prospects and deal with homesickness (Thompso *et al.*, 2001).

In a study conducted on depression and associated Factors Among University Students in Western Nigeria revealed that a moderate prevalence of depression which was found to be 7.0% for severe depression and 25.2% for moderate to severe depression (Karl Peltzer, Supa Pengoid and Sola Olowu, 2013). In another study conducted on the prevalence and associated factors of depression among Ambo university students indicated that the prevalence of depression among students was 32.2%. It was observed that the depression occurred across the year of the study, however it was documented that depression is higher among the first year students when compared with students in other year of study (Adamu and Kadi 2016). The female students were two times more likely to be depressed when compared with the male students, also the first year students when compared with the other academic year is found to be three time more likely depressed. As a result, depression can foster negative occurrences to other aspect of life.

According to WHO, in any given year, about 20% of young adults will experience a mental health problem, most commonly depression or anxiety (WHO, 2011), also studies have shown that depression can be linked to suicide which is one of the leading causes of death in young people (WHO, 2011). Thus, depression in University students is an increasing concern worldwide (Boyre and Bildel, 2008). It is important to note that Nigerian students have one

of the highest rates of suicidal ideation and attempts. These rates and attempts are comparable to those of other developing countries and higher than developed countries. (Omigbodun *et al.*, 2008)

The psychological morbidity in undergraduate students represents a neglected public health problem and holds major implications for campus health services and mental policy-making (Poch *et al.*, 2004; Stewart-Brown *et al.*, 2000). In terms of life quality, understanding the impact of this neglected public health phenomenon on one's educational attainment and stable mental health achievement is very germane. Related to the increasing number of students, who are dismissed from the university because of the low, cumulative grades, as well as some of them who change their academic fields, more concern should be geared toward understanding the causes of depression on academic demands for newly admitted students. Similarly, studies into university year level and depression have tended to focus on the experiences of first year students. It is commonly believed that first year students experience the greatest amount of pressure and exposure to stressors related to the transition into a new environment (Wong *et al.*, 2006).

### **Symptoms of depression**

The incidence of depressive symptoms can lead to negative life events in the lives of university students, the most significant of which is suicide, thus, it is important to be able to identify symptoms of depression early and this would aid prompt intervention. The American Psychiatric Association provides specific symptomatic criteria for the medical diagnosis of Major Depressive Episode. The symptoms indicative of a Major Depressive Episode include the following:

- a. Depressed mood for most of the day, nearly every day as indicated by either subjective report of observation made by others;
- b. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day;
- c. Significant weight loss when not dieting or weight gain, or decrease or increase in appetite nearly every day;
- d. Insomnia or hypersomnia nearly every day;
- e. Psychomotor agitation or retardation nearly every day;

- f. Fatigue or loss of energy nearly every day;
- g. Feelings of worthlessness or excessive or inappropriate guilt nearly every day;
- h. Diminished ability to think or concentrate, or indecisiveness, nearly every day;
- i. Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide (American Psychiatric Association, 2000).

The occurrence of any of these depressive symptoms may increase the risk of developing a major depressive episode (Peden, Hall, Rayens, and Beebe, 2000). Similarly, Kessler and Bromet (2013), asserted that a depressive episodes present with low mood, reduced pleasure in previously enjoyable activities, sleep problems, increase or decrease in appetite and weight, lack of energy, increased fatigability, attention and concentration problem, psychomotor agitation or retardation, undue guilt feeling, suicidal thoughts, which may lead to suicides among students.

Depression is a serious medical condition that has a variety of symptoms, including; trouble sleeping, weight loss or weight gain, a loss of motivation to perform normal daily activities, the development of suicidal thoughts, extreme fatigue to the point of exhaustion, and feeling a sense of worthlessness (Ahern, 2008).

### **Type of depression experience**

There are two types of depression experience. They include;

**Anaclitic depressive experience** is characterised by discomfort and interpersonal separation, Anaclitic depression is marked by dependency, helplessness, fears of abandonment, and feelings of being lonely, weak, depleted and unloved. When threatened with loss, a person with anaclitic depression may cling to others or desperately search for a substitute.

**Intro-jective depressive experience** is characterised by negative self-evaluation with respect to self-imposed standards. Introjective depression is described by self-criticism, a sense of failure to live up to standards, guilt, inferiority and concerns about approval, recognition, and being unlovable.

Depressive disorders can exist in different forms which includes;

Major depressive disorders

Major depressive disorders is where a person suffer from combination of symptoms that weaken his or her ability to cope with daily life activities, such as to eat, sleep ,work, study and pleasurable activities. Major depressive disorder can be disabling, to the extent of preventing one from performing normally.

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), describes major depressive disorder as a classic condition and it is characterised through symptoms during a similar, consecutive two week period and it represents a change from previous functioning with at least one of the symptoms is either (i) depressed mood or (ii) loss of interest or pleasure.

Psychotic depression (dysthymia)

Psychotic depressive disorder is a severe illness where a person experiences symptoms such as delusions, hallucinations or withdrawing from reality.

Dysthymic disorder

Dysthymic disorder or mild chronic depression is where a person have depressive episode for long period, may be more than one year. The symptoms of dysthymic disorder are not as severe as in major depression. However, it does not disable the person as in major depressive disorder though; the person may find it hard to function normally.

Postpartum depression (postnatal depression)

Postpartum depression (postnatal depression) is a type of depression that affects women after giving birth. It is characterised by episodes of fatigue, sadness reduced libido, crying, anxiety, and irregular sleeping patterns. Typically, this type of depression can happen within four to six months or even after several months (MNT2011)

## **2.1 Knowledge of depression among first year students in the University**

For any mental health illness, the knowledge and beliefs about the causes determines to a large extent influences the mental health status of an individual and the tendency to seek help when necessary. Factors such as the level of awareness, socio-economic status, literacy level and residential affect the level of knowledge (causes, prevention and treatment) of an individual to his or her mental health related problems especially as regard the topic depression.

Understanding the causes of depression from different peoples' perspectives is basic to enhance the knowledge level among the public and most especially among students as it relates to this study.

Obtaining adequate knowledge of any mental disorders is the foundation in mental health, hence it is of great important to understand the various causes of depression from different articles or research that will enrich the mental health promotion and the prevention of depression. Thus, it would help improve the knowledge of students on depression which would enable students detect depression early and aids prevention of associated problem such as drug abuse, alcohol abuse and possibly suicide.

Students in any nation are future leaders and potential nation builders. As such, they are the heart of the nation and their mental and physical health need to be examined and controlled. Those who experience mental health problems (depression and/or suicidal ideation) need abrupt intervention so that they do not commit suicide.

A study conducted on depression literacy among first year university students in Bangladesh revealed that there is poor literacy status among the first-year university students. It also reported an insignificant variation between the male and female students, this imply that gender is a negligible role in depression literacy among the university students in Bangladesh (Arafat *et al.*, 2019). Another study in British revealed that gender differences in health literacy status (Swami 2012). Lower knowledge in depression with higher levels of stigma was found to be associated with mental disorders; also, they can acts as barriers to seeking help from professionals (Kiroopoulos *et al.* 2011).

For mental health prevention among students, knowledge about depression or depression literacy is an important prerequisite for preventing the disorder as it will focuses on the identification of depressive symptoms, receiving appropriate treatment options and making critical decision during emergencies (Jeong *et al.*, 2018; Arafat *et al.*, 2018). It is observed that the level of knowledge of students on any illness such as depression has an influence on their behaviour, management and attitude towards seeking help from the appropriate source.

A study conducted among first year student of a Public University in Dhaka, revealed that the level of knowledge of student on the recognition of the psychotic symptoms of depression as well as the treatment aspect of depression to be low (Arafat *et al.*, 2018). Similarly, knowledge

on depression compared with the medical graduates revealed high literacy status reason for this could be as a result of clinical exposure during their academic studies (Arafat *et al.*, 2017). This shows that the level of depression literacy differs from different group of people, this could be explained by the educational status of the individual, level of exposure/awareness, and educative system of the country.

According to Falcato *et al.*, (2003), poor and inaccurate beliefs about the causes of depression influenced the knowledge level among patients and the public, it was suggested that, poorly educated people indicated that depression is primarily caused by psychosocial stresses such as occupational and family stressors or by weakness of character or losing self-control, this was also influenced by the belief system.

The study of depression, despite being comparatively well documented in older adults, much less is known about such experiences and responses in depressed young adults (McCann, Lubman, and Clark, 2012). Arafat *et al.*, (2018) reinstated that adequate knowledge on depression among young adults may affect disease care, help seeking behavior, prevention of further complications and reduce the suffering in the long term. The common causes of depression for any first year students were observed to be related to the transitory period in which an individual grows from being an adolescent to adult. This phase in the life of students is the most hectic times which requires skill to build the capacity to adapt to the new environment/ change, maintain good grades, plan for the future, and be away from home for the first time, to mention a few, and this can lead to depression for most of the students and this may interfere with their day to day activities and academic performance.

In a study conducted by Lauber, Falcato, Nordt and Rossler (2003), only 14.1% of the participants were able to attribute symptoms to depression and more than half considered family difficulties, occupational difficulties, or other traumatic factors as the main causes for the symptoms. Similarly, Angermeyer, Breier, Kenzine and Matschinger (2005) observed that people who have poor knowledge of depression are less likely to recommend treatment from a counselor, psychologist, or a psychiatrist than those who had better knowledge and those with poor knowledge consider psychiatrists to be harmful.

Another study on mental health literacy among those with major depression and suicidal ideation, it was reported that 55% of participants involved in the study did not seek help; the reason for these revealed that they did not consider the depressive episode serious or recognize it as an illness and believed that they could handle the episode themselves, such behavior or attributed to poor mental literacy level. On the other hand, those who sought help felt that their experience of the depression episode was too painful, lasted too long, and disrupted their interpersonal and role functioning. The help seeking attitude between those who sought for help and those who did not can be deduced from the level of knowledge at their disposal (Goldney *et al.*, 2002).

In a study conducted among non-medical students on mental health literacy in Malaysian university, revealed that the students had a moderate knowledge level about the symptoms of depression and a causes of depression. The study demonstrated that students with personal experience of depression had better knowledge of the symptoms and therapy.

The lack of knowledge of and negative attitudes towards depression are other vital issues that can be addressed by evaluating students' level of mental health literacy, this is described as the knowledge and beliefs of the public about mental disorders which aid their recognition, help seeking behaviours and prevention.

The few studies on depression literacy among students found inadequate knowledge of depression and appropriate source of help seeking. Awareness of stress and depression existing among young people and of its causes can give adults ideas for solving such problems (Dixon *et al.*, 2008).

In Nigeria, research has shown high levels of ignorance about mental illness and negative attitudes towards individuals with mental disorders. Traditional healers and religious leaders are usually the first point of consultation for mental illness, with consequent prolongation of the pathway to appropriate treatment and care. There remains a striking gap in the body of knowledge regarding the knowledge of students about depression in Nigeria.

Also, the idea that depression is a clinical condition that requires treatment is almost unheard of which implies that there is low awareness on depression prevention and managements. Thus, lack of awareness about symptoms of depression may lead to delay in seeking help and



thereby worsening of disorder to the level that it becomes difficult to treat. In India, multiple myths are found amongst general population about mental illness and their treatments.

The social media sites provide great venues for people to share their experiences, vent emotion and stress, and seek social support. The role of social media to mental health literacy cannot be over emphasised. Several advantages on the information gotten from the social media on mental health studies are enormous (Inkster *et al.*, 2016). For instance, these digital footprints contain vast amounts of implicit knowledge, which are useful for medical practitioners to understand patients' experiences outside the controlled clinical environment. In addition, information captured during clinical consultation generally reflects only the situation of the patient at the time of care. The social media is a platform where real life experience and situation are displayed.

## **2.2 Perceived causes of depression among first year students in the University**

There is no single source of depression. Depression is a multifactorial disease, which means it might be caused by a range of factors, including genetic, hormonal, biological, as well as the impact of family and other socio-cultural factors. Different factors can predispose students to depression, the possible factors that can lead to depression among undergraduate students includes the following;

**Age:** The normal age of start of the depression disorder is usually early, this makes depression a predominantly leading problem zone for university students and the prevalence seems to be increasing (Reavley and Jorm, 2010). Every young person considers that period of life as extremely difficult. They require greater understanding from their family and the environment, as well as more attention to unusual behavior. Not all young people are equally exposed to depression. In United States for instance, several studies have reported a positive screening of depression, 13.8% to 11.4% undergraduate students had depression (Eisenberg, Gollust, Golberstein and Hefner, 2007).

**Academic related causes:** Depression can be caused basically due to factors like tough study schedule, examinations, and project failures in achievement and low grades in examination. Student who are just enrolled in the university are faced with challenges on how to cope with their academic as they are not well familiar with new academic calendar and stress. Moon

(2006) and Choi (2008) stated that poor academic performance could aggravate depression and suicidal ideation among students. Also, university freshmen face academic pressures and expectations that are considered greater than what they had experienced in secondary school (Rayle and Chung, 2007). It has been reported that as many as one-third of university freshmen are, “frequently overwhelmed by all they have to do” (Brown and Schiraldi, 2004). Moon (2006), Oh, Park and Choi (2008) asserted that poor academic performance could aggravate depression and suicidal ideation among students. It should be noted that while poor academic performance can occur generally in students, it is one of the major factors that denominate an individual as having learning disabilities (Steenken, 2000). Weak academic results are associated with the presence of depressive symptoms in postsecondary students, especially in female ones (Pelkonen *et al.*, 2003).

**Home sickness:** Research by the National Union of Students shows that 50-70% of new students suffer from homesickness to some extent within in their first two or three weeks. Although most students find their symptoms begin to fade after a few weeks, the symptoms tend to stay longer for students with who have negative affectivity also known as neuroticism. These feeling overtime lead to the development of depressive disorder among undergraduate students.

**Death of loved one:** Death of loved ones among family or close person can lead to depression.

**Relationship problem:** It has been reported that students with intimate relationships with a partner can be a great source of love, support and excitement. However, such relationships can also be a source of grief and distress if the relationship goes wrong or if both parties in the relationship fail to sustain the relationship. In a recent study, the finding shows that breaking up with a romantic partner because of issues such as infidelity or a quarrel were identified as factors responsible for mental health problems among 13.5% of students in a tertiary institution (Uner *et al.* , 2008). Also, since the university students are in a period of personal change, which can then make them feel less sure of what they want and how to cope with relationship problems can lead to the development of depression disorder. Thus, relationship problems such as breakup with boyfriend/girlfriends, disagreement with one’s partner, fight and augment in relationship can cause depression. A study conducted in Japan found that the most often cause of mental illness was problems in interpersonal relationships

(Chikomo 2011). Also, Kendler, Hettena, Butera, Gardner and Prescott (2003) indicated that losses in life, including marital or relationship dissolution have been identified as a major life event that can lead to depression. Romantic rejection causes a profound sense of loss and negative consequences. It can induce clinical depression and in extreme cases lead to suicide (Fisher *et al.*, 2001)

In addition, increased sensitivity to rejection in romantic relationships and feelings of worthlessness among other factors were also discovered in the work of Bansal and Yamuna (2012) as predicting depression in students. Romantic relationship problems were linked to depression in students by Andrews (2010).

**Sadness and guilt feelings:** The feelings developed from an unpleasant situation can arouse sadness over time this can result into depression if it persist for a long period of time.

**Gender:** Studies have shown that gender differences in the prevalence of depression. Some significant differences appear along with maturation (depression symptoms are more frequent in girls), clearly these differences are revealed between 13 and 15 years of age, and reach its peak at the age of 15-18 years, between this age group the female are at a higher risk to suffer from depression. The female students have higher tendency of developing depression than the male students, this may be as result of the physiological composition and the way female react to different situation. According to Cheung and Dewa (2006) depression were found to be higher in female students when compared to their male participants. Also, Shaffer and Waslick (2002) reported that adolescent females are at higher risk for developing depression and suicidality compared to their male counterparts. On the contrary, a study conducted in Nigeria using the Mini International Neuropsychiatric Interview, found depression to be two times more prevalent among male university students (Adewuya *et al.*, 2006).

**Self-esteem:** Low self-esteem is one of the factors that predispose student to developing depression disorder. According to a study by Sowislo and Orth (2013) low self-esteem is a major predictor for depression. The researches of Orth, Robins and Roberts (2008), and Jayanthi and Rajkumar (2014) revealed a correlation between low self-esteem and depression among students.

**Financial Problem and Accommodation:** Depression has been linked to the experience of financial strain (Roberts, Golding, Towell, and Weinreb, 1999). In the general population financial strain has been found to be an important risk factor for the likelihood of long-term depressive symptoms (Honkalampi *et al.*, 2005). Students facing financial problems from debts gathered through university and day to day living have been found to be at an increased risk of poor mental health, including depression (Andrews and Wilding, 2004). Linked to financial situation is the type of accommodation a student can afford. For students living in rental accommodation, poor quality housing has been found to reduce psychological well-being (Christie, Munro, and Rettig, 2002). It is common for students to live in shared rental accommodation, for which the benefits are reduced costs and more social support; however, for some, a shared living arrangement may be a source of stress as they face increased noise and distraction from academic work (Heath and Kenyon, 2001). In a study among 351 undergraduate students in the United Kingdom, 20% of the participants reported a major financial crisis, requiring them to go without food or other essential items due to a lack of money. This revealed that financial difficulties had a significant effect on the development of depression symptoms among students, which invariably affects their academic performances (Andrews *et al.*, 2004).

**Family:** The family plays a major role in the development of a child, the family from which an individual lives, develops and mature determines to a large extent the psychological and health status/well-being. Parent either biological or adoptive influences the wellbeing of an individual. The socio demographic characteristics of a family determines the level of development of the family members, this may either positively or negatively influence the development of depression. According Gourion *et al.*, (2008) and Blackwood *et al.*, (2004), the presence of a depressed parent is one of the principal risk factors for depressive symptoms in emerging adulthood, especially for the females, this influence has been found from both biological and adoptive parents (Marmorstein, Iacono, and McGue, 2012). Likewise, coming from a dysfunctional, violent, or neglectful family, the absence of emotional support and encouragement of autonomy, and being in conflict with one's parents (Galambos, Barker, and Krahn, 2006) are predisposing element to the presence of depressive symptoms in emerging young adults.

**Personal quality/ individual socio demographic factors:** For the most part, there is agreement among authors that female adolescents are more than twice as likely as their male counterparts to suffer from depressive symptoms.

**Negative life experience:** Students who have previously experienced had negative life experiences, such as being in a car accident, fire accidents, rape, robbery attack are more likely to develop depression than students that do not have such experience (Najman *et al.*, 2008), this also have an influence on the development of depressive symptoms in emerging adulthood. Having been the victim or perpetrator of bullying in a school setting during adolescence is also thought to be linked to a higher level of depressive symptoms in emerging adulthood (Lencl and Matuga, 2010).

**Socio-economic status:** A large cross national (from 23 countries) study (Steptoe, Tsuda, Tanaka & Wardle, 2007) on the relationship between symptoms of depression and socio-economic background of university students showed that family and personal income level, parental education and family wealth, contributed to depression in students. Similarly, data from an analysis of Egyptian studies on the relationship between socio economic status and depression among undergraduate students found that socio-economic background associated negatively with symptoms of depression in students. According to Ibrahim *et al.*, (2013), students from families with a low level of income and parental occupation have a tendency towards depression. More notably, the financial problems of students and their families have a negative impact on depression in students (Andrews and Wilding, 2004)

**Social support:** A lack of social support from peers during adolescence represents a risk factor in depressive symptoms during adolescence and emerging adulthood (Gore and Aseltine, 2003). According to Pelkonen *et al.*,(2003), the effect of social support is especially significant among female youths, some authors emphasize that social support from peers does more to explain the level of depressive symptoms during adolescence and emerging adulthood, the social support from parents and teachers had no significant on the level of depression (Garcia *et al.*, 2005). It has been reported that the greater an individual's perception of family support, friendship support, and a supportive school environment, the lower incidence of depressive symptoms in college freshmen (Hall, Peden, Rayens, and Beebe, 2004). A lack of social support from peers during adolescence/ early adulthood represents a

risk factor in depressive symptoms during early adulthood (Yaroslavsky *et al.*, 2011). According to several studies, female youth are mostly affected by lack of good social support. Particularly in late adolescence, young people are more likely to turn to peers than family as a source of information and support (Bokhorst, and Westenburg, 2010).

**Stressful life events:** Stressful life events are well-known risk factors of depression and are suggested to be the major causative factor of depressive symptoms (Aghakani, *et al.*, 2011). A consistent finding in the literature revealed the significant relationship between stress and the development of depressive symptoms in the university student (Dyson and Renk, 2006). Studies also revealed that students are more prone to depression, this could probably be caused by stress during and over examinations, relationship problems with partners, parents, siblings, lecturers, course mates and loved ones. Similarly, adjustment to university life and attending a university for the first time can be a stressful experience for this group of students, and the stress that students face during this time of transition will require that the use of previously developed coping mechanisms, as well as the development of new strategies to effectively adjust to university life. Because of the challenges faced when adapting to these life changes, as well as difficulty adjusting to the changes, the first year students are at risk of developing depressive symptomatology. The incidence of depressive symptoms can lead to negative life events in the lives of these students, the most significant of which is suicide. It is well known that stressful life events can cause psychological symptom. Highly stressful life events were suggested to be antecedents and even predictor of majority of depression symptoms (Eremsoy *et al.*, 2005). Also, university student are often subjected to different kinds of stressors, such as moving away from the family home for the first time, residing with other students, experiencing reduced adult supervision (Lopez and Murray, 1997), the pressure of academics with an obligation to succeed, an uncertain future and difficulties of integrating into the system.

Students also face social, emotional and physical and family problems which may affect their learning ability and academic performance (Sreeramareddy *et al.*, 2007; Chew-Graham *et al.*, 2003) and these changes may increase the risk of depression and affects general health status (Read *et al.*, 2002).

### 2.3 Risk factors associated with depression among first year students in the University

A wide range of risk factors are associated with the development and persistence of depression (e.g., biological, psychological or cognitive), however, psychosocial are among the strongest (Slavich and Irwin, 2014). The onset and recurrence of depression can be triggered by stressful life events (Essau, 2004). Thus, it is not surprising that the transition from late adolescence to early adulthood is a critical period of vulnerability for the onset of MDD. It follows, then, that vulnerable first-year students may be particularly at risk for developing depression given the many challenges that they face.

**Biochemical factors:** Depression is a type of mood disorder that some believe is triggered when neurotransmitters in the brain are out of balance. Neurotransmitters are chemical messengers that help the brain communicate with other parts of the body. These chemicals help regulate many physiological functions. Low levels of neurotransmitters may play a role in why some people are more susceptible to depression, including the neurotransmitters; serotonin, norepinephrine and dopamine.

**Genetic factors:** Having an immediate family member with depression or a mood disorder can increase the risk of depression. The American Psychiatric Association states that if one identical twin is diagnosed with depression, the other twin has a 70% chance of developing it. However, depression can occur in people with no family history, which is why some scientists believe it can be a product of both genes and life experiences. Also, women are twice as likely to develop depression as men, but this may be due to the fact that more women seek treatment for their symptoms than men.

Other studies have shown that many risk factors for depression; physical and functional health, loneliness and financial worries, marital state, years of formal education, socio-demographic factors such as gender and age, disability, poor social support and cognitive function, history of self-harm, family history of psychiatric problems and substance use.

#### **Social risk factors**

Abuse: students who were once abused as children have a high risk of major depression. Such negative experiences can cause other mental disorder. Depression and alcohol misuse are the top disorders associated with suicidal behaviour (WHO 2014).

Lack of social support: Prolonged social isolation and having few friends or supportive relationships is a common risk factor for depression. Feelings of exclusion or loneliness can lead to depression episode in students. The change in the social support networks and the stress of separation associated with first-year students moving away from home, as well as the increased exposure to and use of alcohol and other recreational drugs, frequent sleep pattern disruptions, romantic relationship break-up, financial worries, and changing social roles are all possible risk factors for depression (Andrews and Wilding, 2004)

The study done in the Iran shows that depression is more frequent among university students (medical students) than general population, it also revealed that negative correlation exist between depression and the level of social support in students and the prevalence of depression had significant relation with their satisfaction with the educational staff, university employees and their attitude and environmental facilities (Muhammad *et al.*, 2006).

**Major life events:** life events such as death of loved one, students who grieves over the death of a loved one can constitutes a great risk for the development of depressive disorder.

**Substance abuse:** A lot of students who engage in substance abuse are at higher risk of developing depression. Drugs and alcohol may lead to chemical changes in the brain that raise the risk for depression. The high rate of depression among university students were found to be associated with factors such as students educational life, social factors like alcohol use, drug addiction, family problems, family history of depression, and staying away from home (Dianssarokhani *et al.*, 2013).

## 2.4 Consequences of Depression among Students

Depression is an important health problem due to its prevalence and associated consequences. According World Health Organization (WHO), depression is estimated to become the second leading cause leading cause of dysfunctions by the year 2020. It implies that by the year 2020 depression would be the leading cause of burden of disease in developing countries (Murray and Lopez, 1997; Ozdmir and Rezaki, 2007).

Depression is a disorder that can be reliably diagnosed and treated in primary care, Marcus *et al.*, (2012). However, if untreated in the early age of occurrence, it can lead to different



problems among students such as school failures, conduct disorder and delinquency, eating disorders such as anorexia and bulimia, school phobia, panic attacks, substance abuse or even suicide (Yalemork, 2015).

Psychological problems such as depression have significant implications for students' lives, academic performance, and behavior. Students who reported experiencing at least one period of depression-like symptoms were significantly more likely to experience academic problems than were those without symptoms, in terms of receiving a lower grade (Wechsler 1999).

The consequences of depression may be chronic or difficult to manage. Depression is impairing and is also associated with many problems, such as school difficulties and drop out, unwanted pregnancies, health problems, drug and alcohol abuse and smoking, intimate partner violence, and problematic peer and family relationships, as well as anxiety, eating, and health care costs (Imhasly, 2008 and Jeon, 2011).

According to Hirsch and Ellis, (1996), students in higher institution face unique stressors intrinsic to the academic system that differ from their peers who are not students. Stressors such as fear of failure, demands on time, loneliness, financial pressures, low self-esteem, and poor coping strategies to mention a few affects their academic performance. The development of depressive symptoms among students has significant impact on the ability of students to successfully complete academic requirements. In a nationwide study, 43% of college students reported feeling so depressed that it was difficult for them to study (American College Health Association, 2009).

In a study which examined the relationship between depression and the academic performance of undergraduate college students revealed that students reporting depressive symptoms missed significantly more classes, and experienced on average a 0.49 drop in their grade point average than their peers that did not report depressive symptoms. Hysenbegasi *et al* (2005) reported that depression lead to poor academic achievement and low level of exam performance.

Unlike stress which is the mind's negative response to a seemingly, overwhelming amount of daily responsibilities, depression affect the body chemically, emotionally and psychologically and only a trained expert can properly treat it. Thus, depression in young adult is a disabling

condition that is associated with serious long term morbidities and even suicide (William *et al.*, 2009). A study by Medoff (2007) showed that there is a strong link between depression and suicidal behaviours in students with and without learning disabilities. Also, female students reported to have higher levels of depression and suicidal behaviours. Saghatoleslami (2005) opined that there is a link between depression and suicidal ideation in students with learning disabilities.

More so, depression not only indicates current maladjustment but may also signal risk for recurrent or chronic depression and its associated impairment. Due to students' response to stressful events and circumstances, it generally affects the mental health status of student in the University.

Depression damages students' self-esteem, self-confidence, and student's ability to accomplish everyday tasks. People who are depressed find daily tasks to be a significant struggle. They tire easily, yet cannot get a good night's sleep, this implies that depression leads to the development of low self-esteem among students and consequently, lead to poor sleeping habits, as the mind is unrest, and they also have no motivation and lose interest in activities that were once pleasurable.

Depression puts a dark, gloomy cloud over how students see themselves, the world and our future. This cloud cannot be willed away, nor can we ignore it and have it magically disappear (Kessler *et al.*, 2015). It remains a significant problems among the university population, negative outcomes associated with the disorder includes lower academic achievement, attempting or committing suicide (Givens and Tija, 2002).

Depression leads to suicide, which has been reported as the third leading cause of mortality in young people worldwide in the Global Burden of Disease Study (Patton, 2011), and Suicidal behaviour exists along a continuum that extends from suicidal ideation or thoughts, suicide related communications, suicide attempts and finally suicide (CDCP, 2008). Wilson *et al.*, (2009) found in their study that there was a high level of depression and suicidal thoughts among participants with learning disabilities. The most significant negative outcome associated with depressive symptoms is suicide. Suicidal ideation has been reported in as many as 44% of college students during the previous year (Abramson, *et al.*, 1998). According

to McCarthy and Salotti (2006), approximately 10% of college students have seriously thought about committing suicide. Depression and suicidality in the work of Cheung and Dewa (2006) were found to be higher in female students when compared to their male participants. Other effect includes substance and alcohol abuse, poor academic performance due to poor concentration.

Another study by Field *et al.*, (2012) reported that depression brings various mental problems, which lead to psychological, social and physical problems for students during and after their academic life. It is believed the major problems in students' depression include poor self-assessment, lack of pleasure and interest in their daily activities, problems in eating and sleeping, and suicidal thoughts (Arslan *et al.*, 2009), in addition, depression has a negative effects associated with personal, cognitive, and emotional problems, most especially, decision making and problems of time management (Chen *et al.*, 2013) decreased attention and drug abuse, over consumption of alcohol and increased levels of smoking in adults and university students (Yusoff *et al.*, 2013).

Most importantly, the most serious consequence of depression is the threat of suicide in students. An earlier study on suicide in students explained that depression is the most prevalent cause of suicide attempts among students (Eisenberg *et al.*, 2007)

## **2.5 Self-Management Strategies to Address Depression among First Year Students in University**

In depressive situation, coping strategies are the acts or thoughts that people adopt to overcome the internal and external demands posed by a stressful and overwhelming conditions/situation. Coping strategies are categorised as emotional-focused and problem-focused. The first year students are most being displaced from family and friends and are observed to adapt to a new learning environment which causes this group of students to be stressed and depressed.

It was found that high levels of alcohol consumption and illicit drug use as a coping strategy among the UK medical students was related with high anxiety/depression and it is a major cause for public health concern.

In a study among non-medical university students in Malaysia on treatment of depression among students show that the most of the students were inclined towards the use of alternative medicines or treatments such as yoga, massage and traditional medicines. The students demonstrated the willingness to consult both psychiatrists and general practitioners (GPs). Also, among the Malays (Muslims), the majority claimed benefits from religious/spiritual therapies and psychotherapy. Tahir *et al.*, (2010) Enrolling in a university is a major life-changing event that imposes new stresses on students who may not have the skills or maturity to manage them. Many new students find it difficult to balance their social lives, study time, expectations of family, and relationships with new friends. This can generate negative self-esteem, which in turn can cause new stresses that lead to development of depressive symptoms (Ceyhan *et al.*, 2009; Crocker and Luhtanen, 2003; Lee, Olson, Locke, Michelson and Odes, 2009).

Over time, individuals develop a preference for specific coping styles for dealing with transition and stress. Two coping strategies have been observed to adopted by students; approach and avoidance coping. In approach coping, attempts are made to address directly the perceived problems, while in avoidance coping, attempts are made to manage stress by ignoring the problems or repressing the anxiety associated with the problems.

Also, Billings and Moos (1985) identified three specific coping strategies: Active behavioral coping, which “reflects behavioral attempts to directly deal with the problem”; Active cognitive coping, which “indicates attempts to manage one’s appraisal of the stressfulness of the event”; and Avoidance coping, which “includes avoidance, denial and tension reduction”.

Approach coping strategies have a more positive impact on depression than avoidance coping (Bouteyre, Maurel, & Bernaud, 2007; Grant *et al.*, 2013). Studies of college students in France and Turkey have shown that students who use approach coping strategies are better adjusted to college stresses and are less vulnerable to depression than those who use avoidance coping strategies (Bostanci *et al.*, 2005; and Kovess-Masfety *et al.*, 2010).

In addition, studies have shown that women often cope with stress in social contexts differently than do men (Yeh, Huang and Choum, 2009). Women tend to be less instrumental (i.e., less direct) in their approach to social stress problem-solving than men. Women are more

likely than men to engage in discussions of their problems and emotionally vent, while men tend to suppress and control their emotions, thus engaging in more cognitive than behavioral avoidance (Melendez, Mayordomo, Sancho, and Tomas, 2012).

Feeling unable to handle the academic, social, and emotional demands of postsecondary education can also have an impact on young people's mental health throughout the transition into adulthood (Land & Legters, 2002; Pelkonen *et al.*, 2008). Students who feel overwhelmed by the stress of arriving in a new institution, with all the adjustment that this entails, could very quickly feel insecure and in pain (Barnett, 2007; Schwartz *et al.*, 2005). Some students engage in heavy drinking, a study conducted among US College students aged 18-29 years revealed that 7% met the criteria for alcohol abuse and 9.2% met the criteria for alcohol dependence among student who reported to have experienced depression (Dawson *et al.*, 2004). Alcohol use and abuse among students can be linked to reduced supervision, freedom from family and friend, this predisposed depressed students to this additive behaviour.

## **2.6 Theoretical Framework: Ecological Model (Urie Bronfenbrenner, 1980)**

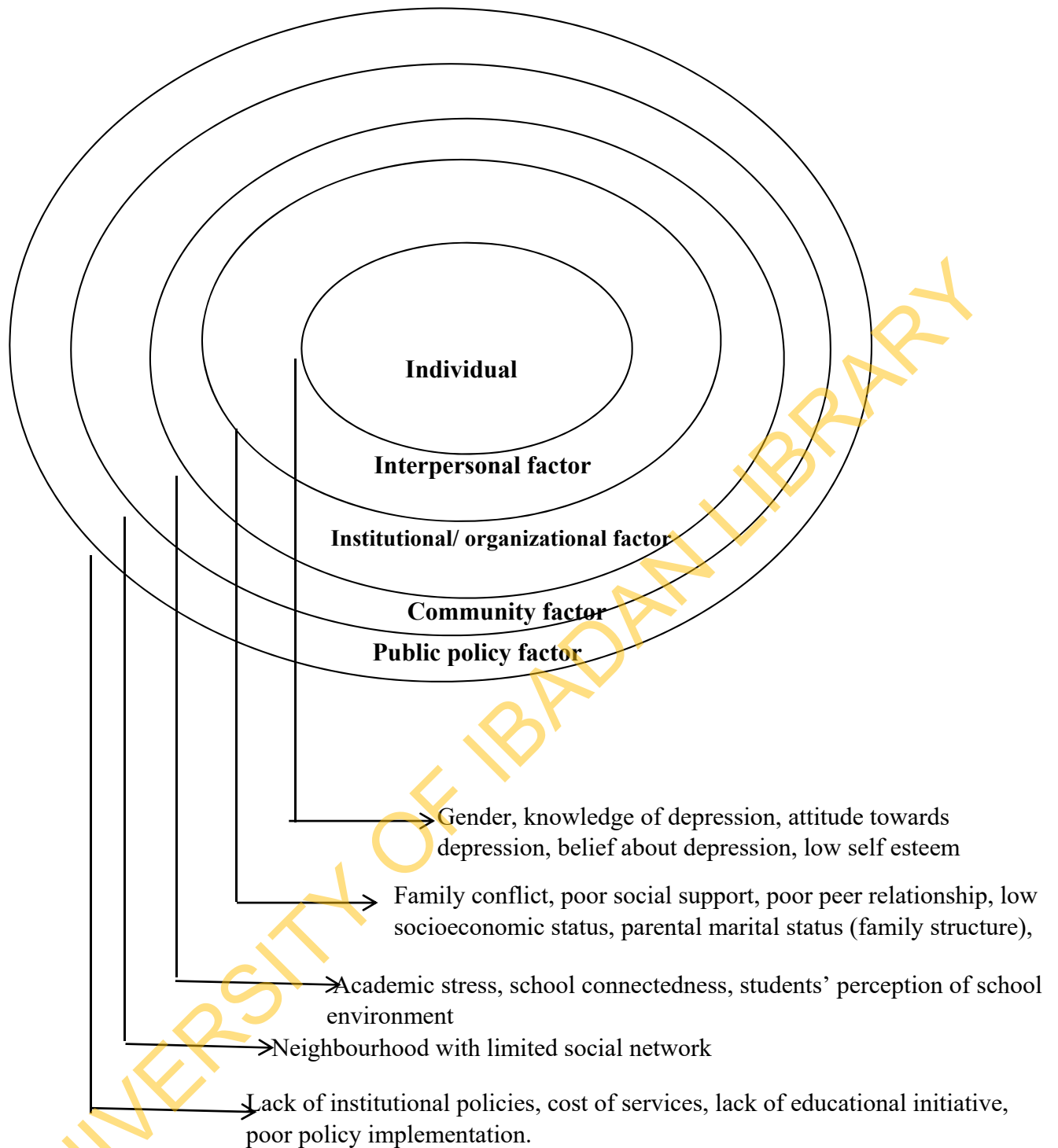
The conceptual framework that will be applied for this study is the ecological model. This model is chosen because it provides a concrete framework to account for the behaviour-environment interaction in a practical setting. Ecological model of health behaviour explains the influence of environment on a person's health. According to this model, an individual's health outcomes result from interactions with the five ecological systems.

The model consists of 5 concentric layers, which includes;

- Individual factors
- Interpersonal factors
- Community
- Organization
- Policy

1. Individual factors: These includes the individual characterises or qualities which influence behaviour among students such as knowledge and perception about the causes, symptoms, prevention and symptoms, attitudes towards seeking help and personality traits such gender, age, socio-economic status, e.t.c.

2. Interpersonal factors: These factors comprises of the interpersonal relationship among students that may predispose them to experiencing depression. Interactions with other people can provide social support or create barriers to interpersonal growth that promotes healthy behaviour. At the interpersonal level, family, friends and peers provide social identity, social support and role definition to the first students. Poor parent-child relationship, unsupportive family environment, family dysfunction, poor peer relationship and support may lead to depression among the first year students.
3. Institutional and organizational level: At the institutional level, factors such as rules, regulations, policies and informal structures can constrain or promote healthy behaviour. Examples of the institutional factor that may influence depression among first year students include; academic stress, school attainment, school connectedness and students perception of school environments.
4. Community: There are social networks, norms or standards which exist as formal or informal among individuals, groups and organizations. A community or environment characterised by violence, unrest, limited social networks may influence depression among students and limit or enhance healthy behaviours
5. Public policy: These include local, state and federal policies and laws that regulate or support health actions and practices for disease prevention including early detection, control and management. As regard depression, there is a lack of institutional policies or weak laws, lack of educational initiatives and public avoidance of information.



**Application of ecological model to experience, knowledge and perception of depression among students (Urie Bronfenbrenner, 1980)**

## CHAPTER THREE

### METHODOLOGY

This chapter presents the study design, description of the study area, the inclusion and exclusion criteria, sampling method and instruments used for data collection, validity and reliability of the research instrument, method of data collection, methods of analysis and ethical consideration

#### 3.1 Study Design

A descriptive cross-sectional survey using self-administered questionnaire was employed in this study. A descriptive cross-sectional survey is a study design which is used to assess a sample or a proportion of a particular population at a specific point in time, it is sometimes referred to as a snapshot of the frequency and characteristics of a condition in a population at a particular point in time. This design enabled the researcher to collect and analyze the data collected from a sample of the general population which would also aid wide coverage of the characteristics of students at a given point in time.

#### 3.2 Study area

The study was conducted at the University of Ibadan.

The University of Ibadan was established in 1948. It is the first University in Nigeria. It is located at the centre of the city of Ibadan, South West Nigeria. It is located in Ibadan North Local Government Area, Oyo state. Until 1962 when it became a full fledged independent university, the university which took off with academic programmes in arts, science and medicine, is now a comprehensive citadel of learning with academic programmes in sixteen faculties namely, Arts, science, Basic Medical sciences, clinical sciences, agriculture, the social sciences, education, veterinary medicines, pharmacy, technology, law, public health, dentistry, economics, renewable natural resources and environmental design and management. The University of Ibadan has twelve halls of residence ten undergraduate and two postgraduate, with a total optimum capacity of nearly 8,000. The list of hall of residence includes;



### List of Halls of Residence

S/N	Hall of residence	Type	Gender
1.	Alexander Brown hall	Undergraduate	Mixed
2.	Obafemi Awolowo Hall	Undergraduate/ Post graduate	Female
3.	Idia hall	Undergraduate	Female
4.	Independence hall	Undergraduate	Male
5.	Kuti hall	Undergraduate	Male
6.	Mellanby Hall	Undergraduate	Male
7.	Nnamdi Azikiwe hall	Undergraduate	Male
8.	Queen Elizabeth II hall	Undergraduate	Female
9.	Sultan Bello hall	Undergraduate	Male
10.	Tedder hall	Undergraduate	Male
11.	Abdulsalami Abubakar Hall	Post graduate	Mixed
12.	Tafawa Balewa Hall	Post graduate	Mixed

### 3.3 Target population

The study was conducted among 100 level students in the University of Ibadan. Students were drawn from all the facilities and hall of resident.

### 3.4 Inclusion criteria

- First year students in the university of Ibadan
- First Students who are residents in the hostels
- Students who are in their early youthful stage include age range 15 – 22years
- Students who give consent to participate in the study

#### 3.4.1 Exclusion criteria

- Student who are not in their first year in the university of Ibadan
- Students who are not willing to participate in the study and who do not give their consent
- Students who are not from university of Ibadan

### 3.5 Sample size

To calculate the sample size, this Leslie Kish formula was used.

$$n = \frac{Z^2 pq}{d^2} \quad (\text{Leslie Kish, 1965})$$

Where n = minimum sample size required

z = standard normal deviation at 95% confidence level (1.96),  $Z^2 = 1.96^2 = 3.8416$

Proportion estimated to be obtained in the target population (A study carried out in Enugu State on the prevalence of depression among University students showed a prevalence rate of 23.3%; Peltzer, Olowu, Olasupo and Pengpid, 2013)

Where P = 23.3%, P = 0.233 (Peltzer et. al., 2013)

q = 1 - P, 1 - 0.233 = 0.767

d = level of precision at 5% (0.05%)

$d^2 = 0.05^2 = 0.0025$

$$\text{Therefore, } n = \frac{1.96^2 \cdot 0.233 \cdot 0.767}{0.05^2}$$

$$n = \frac{0.6865361776}{0.0025}$$

$$= 274.61$$

$$= 275 \text{ samples}$$

In order to accommodate non response and incompletely filled questionnaire a rate of 10% was added to the sample size.

A non-response rate of 10% of 275 =  $275 \times 10\% = 27.5$  approximately 28

Therefore, a total sample size of 303 first year students were selected for the study

### 3.6 Sampling technique

The eligible participants were selected by multistage sampling techniques. The halls of residence in University of Ibadan were selected for the study.

**Stage 1:** The hall of residence was stratified into undergraduate and postgraduate halls of residences, University of Ibadan.

**Stage 2:** The undergraduate hall of residence were selected at random.

**Stage 3:** The undergraduate block at each hall of residence was randomly selected by balloting

**Stage 4:** The rooms in the block selected at the hall of residence were randomly picked.

**Stage 5:** Number of respondents from each selected hall of residence was selected using systematic sampling technique for fair representation.

### **3.6 Instrument for data collection**

The instrument used in this study was a semi structured questionnaire to assess the experience, knowledge and perception of depression among first year students.

The questionnaire was divided into 6 Sections. The first section covered the socio-demographics of the respondents, the second section assessed the level of knowledge of respondents on depression, the third section was used to identify the perceived causes of depression, the fourth section, assessed the personal experiences of depression using a standardized depression scale developed by WHO- Zung depression scale, the fifth section assessed the perception of the respondent on depression and the sixth section assessed the self-management strategies to address depression among the respondents

#### **3.6.1 Validation of instrument**

Validity determines whether the instrument truly measures that which it was intended to measure or how truthful the research results are (Joppe, 2000). To ensure the validity of the instruments, the instruments was drafted through; reviewing of literatures to obtain knowledge and relevant details needed to draft the questionnaire which was formulated based on the research objectives. Also, the project supervisor was consulted on how the instrument should be designed, subsequent corrections and observations were used to improve the tool. Appropriate adjustment and review from the project supervisor was conducted before administering the questionnaire.

### **3.6.2 Reliability of instrument**

Reliability is the extent to which a result is consistent over time and an accurate representation of the population under study (Joppe, 2000). To ensure reliability and sensitivity of the instruments, pretesting is essential to allow the researcher familiarize with the obstacles that may arise in the process of carrying out the research and also to make necessary adjustment before administering the instrument.

In order to ensure the reliability of the self-administered questionnaire, a pre-test was conducted on a sample size of 30 students (10% of the target population). The pre-test was conducted among the student of Obafemi Awolowo University Ile-ife, Osun state. A Cronbach Alpha measurement and reliability co-efficient measure was carried out on the pre-test questionnaire to know how reliable the instrument is. A co-efficient of 0.721 was obtained, hence the instrument was considered reliable.

### **3.7 Data collection procedures**

Self-administered questionnaire was adopted in this research to elicit information from the first year students in the University of Ibadan, Oyo State. Data was collected by the researcher with 3 research assistants who for the sake of the study were empowered and trained before the commencement of data collection. The research assistants collected data from the respondents selected purposively from each undergraduate hall of residence. Students were approached in their room and administered question, this was done between the hours 4.00pm to 6.00pm (visiting hours). Efforts were put in place to ensure honesty and openness from respondents and the researcher in collaboration with the research assistants assisted the respondents where necessary.

### **3.8 Data Management and Analysis**

The copies of the questionnaire administered were serially numbered. This was done to ensure easy identification, entry and recall. The entire administered questionnaire was checked carefully before data entry commenced to ensure that they were completely and accurately filed. A coding guide was developed in order to facilitate an easy coding and data entry.

Respondents' knowledge of depression was measured on a 12 points scale and it was classified as:  $\leq 5$  (Poor),  $>5-8$  (Average) and  $>8$  (Good). The respondents' perception was measured on a 11-point scale, scores  $\leq 4$  represented- poor perception,  $>4-7$ (fair) and  $>7$  represented good perception. A 76-point Zung depression scale was used to measure the experience of depression and the scores were classified into normal ( $\leq 49$ ), mild ( $>49-59$ ) and moderate ( $>59-69$ ) and severe depression (69 and above).

Data were analysed using Statistical Package for Social Science (SPSS version 20) Software. A descriptive statistics and inferential statistics; Chi-square test, Fisher's exact analysis and bi-regression analysis was used to analyse the data obtained and entered into the computer. Frequency, percentage, table and charts was used to summarize the data and for proper data presentation.

Cross tabulation were performed to determine the relationship the socio-demographic characteristics of respondents and their level of knowledge by Fisher's exact analysis and chi-square test with the level of significance at  $p < 0.05$ .

### **3.9 Ethical Considerations**

Ethics approval was obtained from the Social Science and Humanities Research Ethics Committee (SSHREC), University of Ibadan. The reference number assigned by ethic committee was UI/SSHREC/2019/0055. The following ethical considerations were ensured in the conduct of this study.

#### **3.10.1 Beneficence**

The respondents were informed that the result of the research would be of immense benefit and will not constitute any harm. The result obtained from the study would provide adequate information on the knowledge, perception and self-management strategies of depression among first year undergraduate students. The respondents were made to understand that the findings from the study would help policy makers to develop intervention to curb and effectively manage depression and also it would be of great assistance to the government to develop programmed for those presently experiencing depression within the school environment and promote awareness in the society at large on depression.

### **3.10.2 Non-Maleficence to participants**

There is no risk associated with this research

### **3.10.3 Informed Consent**

The purpose of the research was adequately communicated to research participants and the entire community and every individual respondents gave verbal and written consent prior to enrolment for the study.

### **3.10.4. Voluntariness**

Verbal/written informed consent was obtained from each participant and they were informed that they have full rights to voluntarily withdraw at any stage of the study.

**3.10.5 Risk:** There is no risk associated with this research

### **3.11 Limitation of the study**

The data used in the study were obtained by self-report which could have been the result of desired participants' responses. However, efforts were made to reduce these challenges by assuring the respondents of the confidentiality of all information provided and that it would be used for academic purpose alone.

## CHAPTER FOUR

### RESULTS

This chapter presents the results of the study and it is divided into five (5) sections.

#### 4.1 .1 Socio-demographic characteristics of the respondents

A total of 303 first year undergraduate students of the University of Ibadan participated in the study. Table 4.1 shows the breakdown of the demographic characteristics of the respondents. The table 4.1a reveals that there were a little more (50.8%) male than (49.2%) females in the sampled population. A few (2.6%) of the respondents were younger than 16 years and 0.7% were older than 27 years while others (54.1%) were between the age of 16-18 years. Christianity (78.9%) were the dominant religion among the respondents, while others (19.8%) were practicing Islam and (1.3%) are traditional worshippers. The major ethnic groups in the study were Yoruba (77.6%), Igbo (15.5%), Hausa (2.6%) while 4.3% were of the minority. Likewise, most of the respondents (92.7%) were single, (5%) were married while 2.3% were in a relationship. Most (34.3%) of the respondents' monthly allowances were below ₦5000 while (14.2%) monthly allowance were between ₦11,000 -16,999.

Table 4:1 also revealed that the respondents' parental marital status which states that 78.9% were happily married, few (3%) of the respondents' parental marital status were divorced while 7.9% were single parents. The family types of the respondents shows that 88.1% were monogamous while 11.9% were polygamous.

Table 4.1 also shows the hall of residence of the respondents, 19.5% of the respondents were from Queen Idia hall, 17.2% were from Queens Elizabeth II, 11.9% were from Obafemi Awolowo Hall, which represents the female hall of residence respectively while 16.8% of the respondents were from Mellamby hall, 13.9% were from Sultan Bello hall, 4.0% are from Nnamdi Azikwe hall, 3.6% are Kutu, 4.0% are Independence hall of residence, 4.3% are from Tedder which represents the male hall of residence from which the sample were obtained. The study also shows the faculties of the respondents, 20.1% of the respondents were from faculty of Science, 60(19.8%) of the respondents were from education, 20.8% were from faculty of Art, while minority were from pharmacy and veterinary medicine with 0.7% and 1% respectively.

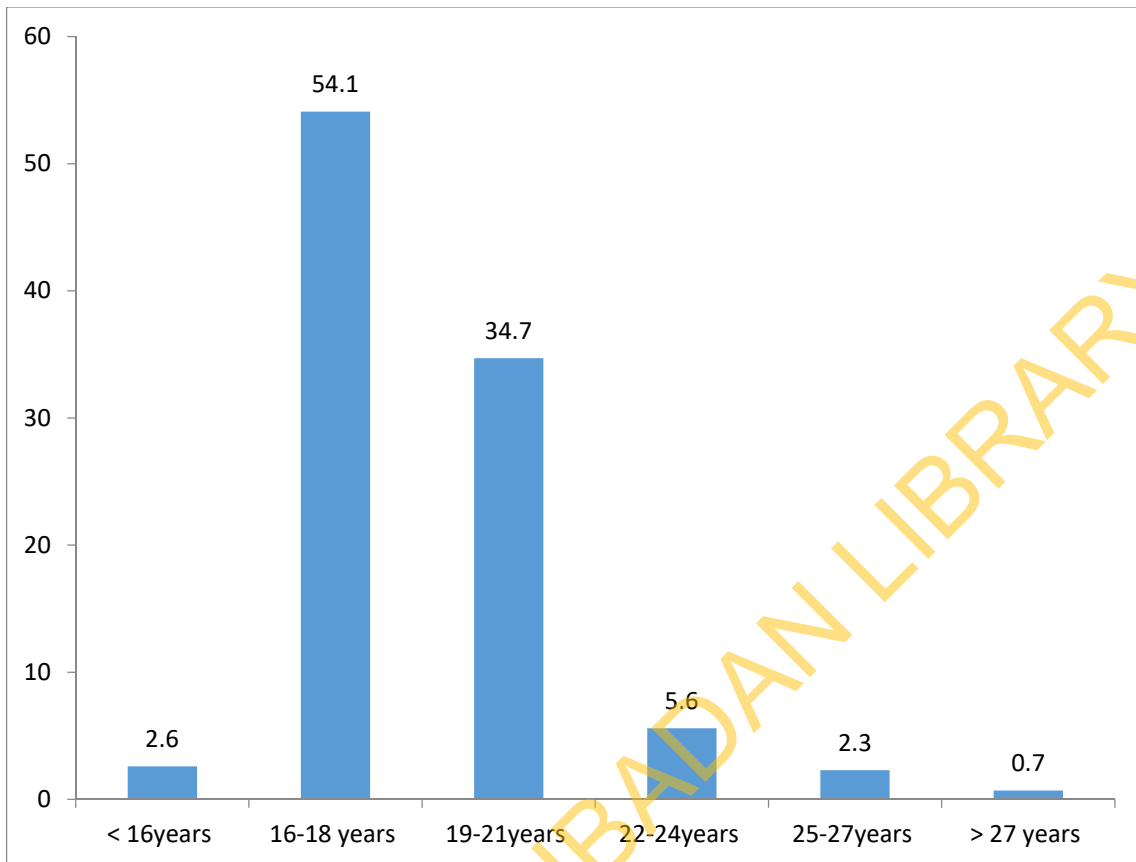
**Table 4.1: Socio-demographic characteristics of respondents (N=303)**

<b>Variables</b>		<b>Frequency</b>	<b>Percent (%)</b>
Sex	Female	149	49.2
	Male	154	50.8
Religion	Christianity	239	78.9
	Islamic	60	19.8
	Others;	4	1.3
Ethnicity	Yoruba	235	77.6
	Igbo	47	15.5
	Hausa	8	2.6
	Others	13	4.3
Marital status	Single	281	92.7
	Married	15	5.0
	Engaged	7	2.3
Monthly allowances	Below 5,000	105	34.7
	5,000-10,999	97	32.0
	11,000-16,999	43	14.2
	17,000 and above	58	19.1
Parental marital status	Happily married	239	78.9
	Married but staying in separate rooms	15	5.0
	Divorced	9	3.0
	Single parenting	24	7.9
	Widow/widower	16	5.3
Family type	Monogamous	267	88.1
	Polygamous	36	11.9
Hall of residence	Queen Elizabeth II Hall	52	17.2
	Queen Idia Hall	59	19.5
	Mellamby Hall	51	16.8
	Sultan Bello hall	42	13.9
	Obafemi Awolowo Hall	36	11.9



**Table 4.1contd: Socio-demographic characteristics of respondents (N=303)**

<b>Variables</b>		<b>Frequency</b>	<b>Percent (%)</b>
Hall of residence	Nnamdi Azikwe Hall	27	8.9
	Independence Hall	12	4.0
	Kuti Hall	11	3.6
	Tedder Hall	13	4.3
Faculty	Education	60	19.8
	Science	61	20.1
	Agriculture	29	9.6
	Art	63	20.8
	Clinical science	26	8.6
	Technology	21	6.9
	The Social sciences	22	7.3
	Pharmacy	2	0.7
	Law	16	5.3
	Veterinary Medicine	3	1.0



**Figure 4.1: Age distribution of the respondents**

#### **4.1.2. Source of information**

Fig. 4.2 shows the source of information. Nearly all the respondents (96.7%) have heard about depression while (3.3%) of the respondents have not heard about depression. Sources of information/awareness of depression among the respondents shows that, (39.6%) sourced the knowledge about depression from the social media when compared to other sources of information/knowledge.

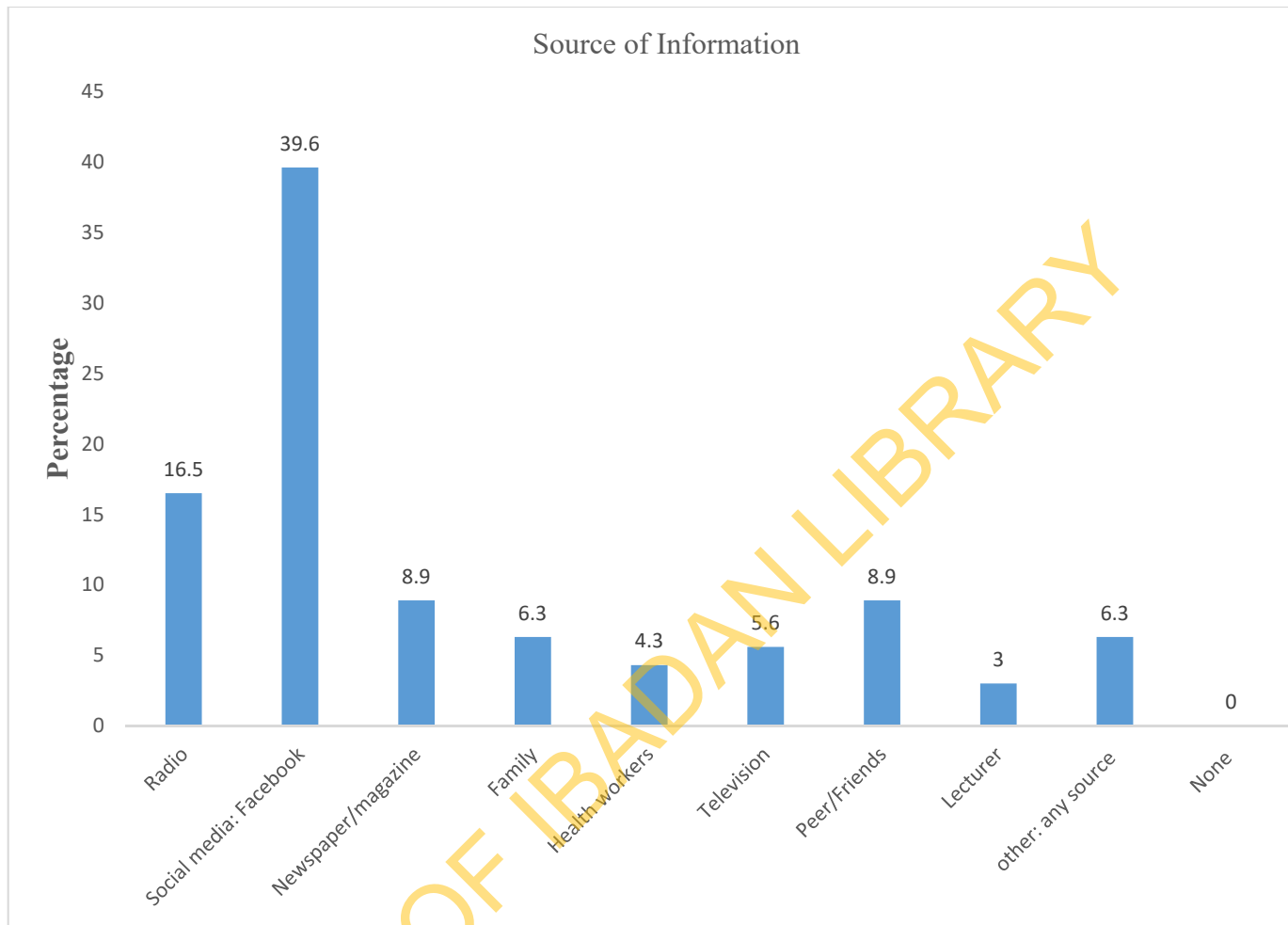
#### **4.2 Respondents' knowledge of depression**

Table 4.2 presents information on the knowledge of depression among the respondents. In total, 147(48.5%) of the respondents' had good knowledge score, 121(41.9%) had fair knowledge score, while 29(9.6%) had poor knowledge score.

#### **Respondents' definition of depression**

As regard the definition of the term depression Table 4.2, 77(25.4%) of the respondents defined depression as a state of mind or period of unhappiness, or long term lowering of enjoyment of life and suicidal thought, 63(20.8%) defined depression as dejections, sadness, despondency and lowness, lonely, hopeless, and 50(16.5%) defined depression as a mental related condition associated with stress and which is characterised by overthinking, emotional problem.

On the other hand, 14(4.6%) defined depression as a bad state of having low self-esteem than usual that causes problem while 20(9.2%) of the respondents had no idea of definition of depression.



**Fig 4.2: Source of information of respondents**

**Table 4.2: Knowledge of depression****(N=303)**

		<b>Frequency</b>	<b>Percent (%)</b>	
Definition of depression	Depression is a state of mind or period of unhappiness, or long term lowering of enjoyment of life and suicidal thought	77	25.4	
	Depression is a mental related condition associated with stress and characterised by overthinking, emotional problem	50	16.5	
	Depression is a state of being sad or being overwhelmed	43	14.2	
	Depression means dejections, loneliness and hopeless	63	20.8	
	/	Depression is a bad state of having low self-esteem	14	4.6
		Depression is a state of being depressed or medical illness that negatively affect how you feel or think	8	2.6
		Depression is related to being mentally unstable or mental disorder	20	6.6
	No idea	28	9.2	
Is depression a mental illness	Yes	245	80.9	
	No	58	19.1	
Signs of depression	Loss of interest	239	78.9	
	Good self esteem	12	4.0	
	Headache	16	5.3	
	Happy mood	36	11.9	
Can you recognize a person who is depressed	Yes	206	68.0	
	No	97	32.0	

**Table 4.2 Cont'd: Knowledge of depression****(N=303)**

		<b>Frequency</b>	<b>Percent (%)</b>
Depression can lead to the following except	Substance abuse	12	4.0
	Rapid physical growth	207	68.3
	Academic problem	35	11.6
	Suicide	12	16.2
Prevention of depression	Seek help	132	43.6
	Speak to a someone	59	19.5
	Be happy	35	11.6
	Take antidepressant drug	77	25.4
Knowledge Score (KS)	Good (> 8)	147	48.5
	Fair (5-8)	127	41.9
	Poor (<5)	29	9.6

#### 4.3.1 Respondents' perceived causes of depression

The perceived causes of depression as identified by the respondents are presented in Table 4.3. A total of 164(54.1%) of the respondents strongly agreed that low self-esteem to be a perceived cause of depression on the other hand 6(2%) of the respondents disagreed. 134(44.2%) of the respondents agreed that poor eating habits could be a factor that causes depression. 142(46.9%) of the respondent agreed that romantic relationship (breakup/ quarrels in relationship) can cause depression. Insecurity was perceived by the respondent to a major cause of depression for which 127(41.9%) agreed, 113(37.3%) strongly agreed and 38(12.5%) strongly disagreed. 170(56.1%) of the respondent stated that trouble from home can lead to depression among the first year university students. Environmental factors such as change in environment can cause depression among students 157(51.8%) of the respondents agreed while 41(13.5%) disagreed.

Financial problem on the other is another perceived cause of depression 143(47.2%) of the respondents agreed, other perceived causes of depression reported by the respondents includes having extreme/deathly diseases or illness and death of loved ones.

**Table 4.3: Perceived causes of depression****(N=303)**

	<b>Strongly Agree (%)</b>	<b>Agree (%)</b>	<b>Strongly Disagree (%)</b>	<b>Disagree (%)</b>
Low self esteem	164 (54.1)	115 (38)	18 (5.9)	6 (2.0)
Poor eating habits	35 (11.6)	134 (44.2)	68 (22.4)	66 (21.8)
Romantic relationship breakup	116 (38.3)	142 (46.9)	41 (13.5)	4 (1.3)
Insecurity within the hostels (accommodation)	113 (37.3)	127 (41.9)	38 (12.5)	25 (8.3)
Trouble from home	170 (56.1)	97 (32.0)	33 (10.9)	3(1.0)
Financial problem	143 (47.2)	119 (39.3)	28 (9.2)	13 (4.3)
Fear of exam	115 (38.0)	142 (46.9)	32 (10.6)	14 (4.6)
Not being able to make new friends	90 (29.7)	143 (47.2)	47 (15.5)	23 (7.6)
Too much academic workload/pressure	105 (34.7)	155 (51.2)	27 (8.9)	16 (5.3)
Deathly disease/ illness	5 (1.7)	0 (0)	298 (98.3)	0 (0)
Death of loved ones	6 (2.0)	1 (0.3)	296 (97.7)	0(0)
Change of environment	61(20.1)	157(51.8)	44(14.5)	41(13.5)



#### **4.3.2. Regression analysis showing the correlation between perception of causes and the experience of depression**

Table 4.4 shows the regression analysis between the perception of cause and the experience of depression among the respondents. The findings revealed that family background ( $p=0.971$ ,  $0.377 \leq CI \leq 2.497$ ) has a significant association with the experience of depression among the respondents. This also indicated that any respondent with family issues will predispose them to experiencing depression. The data also suggests that those respondents who encounter academic stress ( $p=0.771$ ,  $0.407 \leq CI \leq 1.946$ ) have more tendency to experience depression. Also, respondents who perceived that insecurity in the hotel and not being able to make friends has a significant association with the experience of depression.

The findings also shows that romantic relationship/break up ( $p=0.064$ ,  $0.947 \leq CI \leq 6.470$ ) may not have significant association with the experience of depression. This implies that the respondents who perceived that romantic relationship/break up is a weak/negative association between experiences of depression.

**Table 4.4: Regression of perception of causes and experience of depression (N=303)**

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>p-value</b>	<b>Exp(B)</b>	<b>95.0% C.I. for EXP(B)</b>	
							<b>Lower</b>	<b>Upper</b>
<b>Romantic relationship/ break up</b>	0.906	0.490	3.419	1	0.064	2.476	0.947	6.470
<b>Insecurity in hostels</b>	0.290	0.355	0.671	1	0.413	1.337	0.667	2.679
<b>Family background; trouble from home</b>	-0.030	0.482	0.004	1	0.951	0.971	0.377	2.497
<b>Not being able to smake friends</b>	0.201	0.338	0.354	1	0.552	1.223	0.631	2.371
<b>Academic stress</b>	-0.116	0.399	0.085	1	0.771	.890	0.407	1.946
	-1.651	0.504	10.726	1	0.001	.192		

#### 4.4 Experiences of depression among respondents

Table 4.5 depicts the experiences of depression among the respondents. 196(64.7%) of the respondents experienced depression sometimes, 37(12.2%) experience depression often and 68(22.4%) of the respondents never experience depression.

The Table also revealed that 211(69.6%) reported that someone around them have experienced depression/low mood. Two-third of those who have experienced depression around the respondents were family relatives of which 38(12.5%) were brothers, sisters 33(10.9%), mother 21(6.9%) and friend (24.8%).

The Table 4.6 presents that using the Zung depression scale, 234(77.2%) were within the normal range, 64(21.1%) are mildly depressed and 5(1.7%) are severely depressed. The respondents' self-management strategies shows that, 28(9.2%) of the respondents smokes cigarette, 69(22.8%) seeks counsel from psychologist/counselor, 118(38.9%) sometimes talk to their friend/classmates, 212(70%) prayed to God when they experience depression.

**Table 4.5: Experiences of depression among respondents**

**(N=303)**

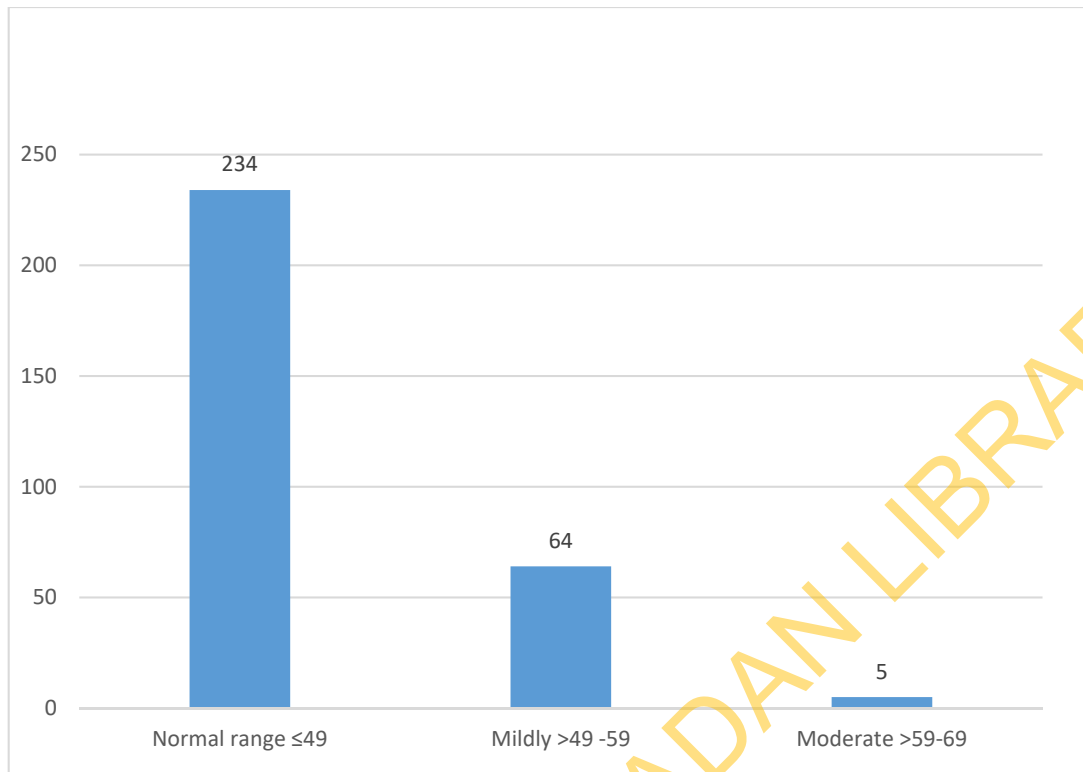
		<b>Frequency</b>	<b>Percent (%)</b>	
<b>Do you ever feel depressed</b>	Sometimes	196	64.7	
	Often	37	12.2	
	Always	2	0.7	
	Never	68	22.4	
<b>Has anyone around you experienced depression</b>	Yes	211	69.6	
	No	92	30.4	
<b>Persons experiencing depression</b>	Brother	37	12.2	
	Sister	33	10.9	
	Mother	21	6.9	
	Father	3	1.0	
	Friends	54	17.8	
	Roommate	23	7.6	
	Aunt/uncle	10	3.3	
	Classmates	17	5.6	
	Neighbour	13	4.3	
	None	92	30.4	
	<b>Self- management strategies</b>			
Smoke cigarettes		Always	28	9.3
		Sometimes	25	8.3
		Rarely	11	3.6
	Never	239	78.9	
uses antidepressants	Always	155	51.2	
	Sometimes	25	8.3	
	Rarely	20	6.6	
	Never	103	34.0	
Visit the hospital	Always	20	6.6	
	Sometimes	71	23.4	
	Rarely	70	23.1	
	Never	142	46.9	

**Table 4.5 Cont'd: Experiences of depression among respondents****(N=303)**

		<b>Frequency</b>	<b>Percent (%)</b>
Seek counsel from psychologist/counselor	Always	31	10.2
	Sometimes	69	22.8
	Rarely	54	17.8
	Never	149	49.2
Speak to priest/pastor	Always	138	45.4
	Sometimes	61	20.1
	Rarely	68	22.4
	Never	36	11.9
Talk to friend/classmates	Always	62	20.5
	Sometimes	118	38.9
	Rarely	66	21.8
	Never	57	18.
Call my parents/relatives	Always	70	23.1
	Sometimes	101	33.3
	Rarely	71	23.4
	Never	61	20.1
Sleep still am better	Always	75	24.8
	Sometimes	123	40.6
	Rarely	57	18.8
	Never	47	15.
Withdraw from school activities and friends	Always	18	5.9
	Sometimes	63	20.8
	Rarely	75	24.8
	Never	147	48.5
Pray to God	Always	212	70.0
	Sometimes	47	15.5
	Rarely	24	7.9
	Never	20	6.6

**Table 4.6a: Items on Zung depression scale****(N=303)**

	<b>Most often</b>	<b>Sometimes</b>	<b>Occasionally</b>	<b>Rarely</b>
	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>
I feel down hearted and blue	71(23.4)	81(26.7)	61(20.1)	90(29.7)
I still enjoy the things I used to do	29 (9.6)	47(15.5)	113(37.3)	114(37.6)
I have crying spell or feel like it	49(16.2)	71(23.4)	62(20.5)	121(39.9)
Morning is when I feel the best	82(27.1)	106(35.0)	66(21.8)	49(16.2)
I have trouble sleeping at night	41(13.5)	64(21.1)	69(22.8)	129(42.6)
I feel that I am useful and needed	132(43.6)	85(28.1)	57(18.8)	29(9.6)
I notice that I am losing weight	81(26.7)	99(32.7)	53(17.5)	70(23.1)
I eat as much as I used to do	92(30.4)	107(35.3)	60(19.8)	44(14.5)
My heart beats faster than usual	70(23.1)	85(28.1)	60(19.8)	88(29.0)
I still enjoy sex	89(29.4)	57(18.8)	44(14.5)	113(37.3)
I have trouble with constipation	44(14.5)	61(20.1)	53(17.5)	145(47.9)
I find it easy to do the things I used to	104(34.3)	97(32.0)	58(19.1)	44(14.5)
I get tired for no reason	70(23.1)	91(30.0)	67(22.1)	75(24.8)
My life is pretty full	108(35.6)	102(33.7)	60(19.8)	33(10.9)
I am restless and can't keep still	60(19.8)	97(32.0)	56(18.5)	90(29.7)
I find it easy to make decisions	85(28.1)	98(32.3)	82(27.1)	38(12.5)
I am more irritable than usual	68(22.4)	88(29.0)	75(24.8)	72(23.8)
I feel hopeful about the future	150(49.5)	82(27.1)	50(16.5)	21(6.9)
My mind is as clear as it used to be	118(38.9)	85(28.1)	53(17.5)	47(15.5)



**Fig 4.3: Experience of depression among respondents; Zung Depression Score.**

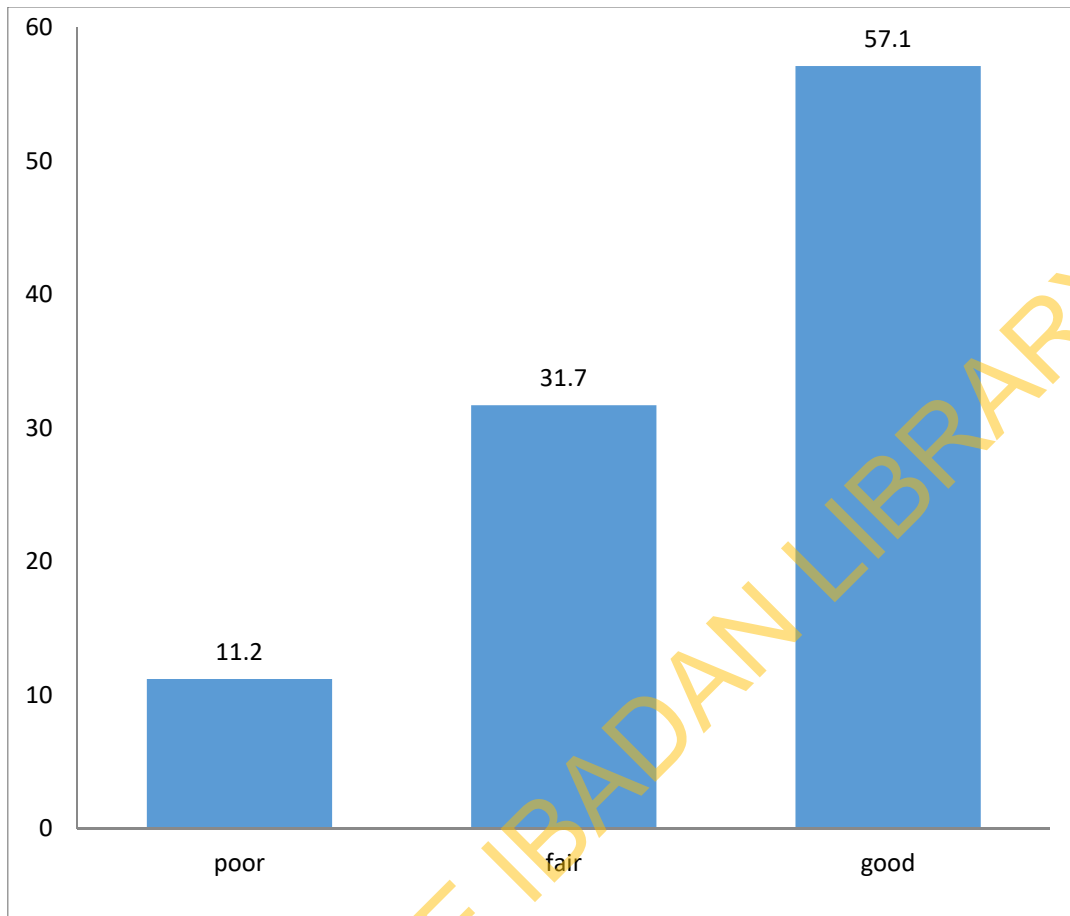
#### 4.5 Perception of depression towards depression

Fig 4.4 shows the perception of depression towards depression. A total of 173 (57%) of the respondents had good perception towards depression while 34 (11%) of the respondents had poor perception towards depression. Table 4:7 revealed that 206 (68%) of the respondents disagreed that depression is a spiritual attack. 231(76.2%) of the respondents disagreed having negative thought is good, 145 (47.9%) agreed that changes in one behavior is a risk factor for depression. In addition, 220(72.6%) disagreed that smoking cigarette/weed can reduce depression while 39(12.9%) agreed that smoking cigarette/weed can reduce depression. Many of the respondents 249 (82.2%) disagreed that suicide is the only way to solve depression, 214(70.6%) disagreed that depression cannot be cured, while 195 (64.4%) agreed that depression can be managed by consulting an expert and 237(78.2%) disagreed that depression cannot happen among youth, it is for old people.



**Table 4.7 Perception of depression towards depression****(N=303)**

<b>Perception statements</b>	<b>Agree (%)</b>	<b>Disagree (%)</b>	<b>I don't agree (%)</b>
Depression is a spiritual attack	53 (17.5)	206 (68)	44(14.5)
Having negative thought is good	37 (12.2)	231 (76.2)	35 (11.6)
Changes in ones behaviour is a risk factor for depression	145 (47.9)	91(30)	67 (22.1)
Depression is not a mental disorder, so don't bother	74 (24.4)	189 (62.4)	40 (13.2)
Drinking alcohol can be used to treat depression	33 (10.9)	232 (76.6)	38 (12.5)
Smoking cigarette/weed can reduce depression	39 (12.9)	220 (72.6)	44 (14.5)
Suicide is the only way to solve depression	26 (8.6)	249 (82.2)	28 (9.2)
Depression cannot be cured	54(17.8)	214 (70.6)	35(11.6)
Depression is hereditary , nothing can be done to it	36(11.9)	229 (75.6)	38 (12.5)
Depression can be managed by consulting an expert	195 (64.4)	74 (24.4)	34 (11.2)
Depression cannot happen among youth, it is for old people	32 (10.6)	237 (78.2)	34 (11.2)



**Figure 4.4: Perception of Respondents towards Depression**

#### 4.6. Statistical Test of Hypotheses

##### Hypothesis 1

**There is no significant difference between sex and experience of depression among the first year students in University of Ibadan**

The Table 4.6.1 presents the results of the relationship between sex of the respondents and experiences of depression. Fisher's exact analysis was used to test for the relationship between these two variables and this revealed that there is no statistical significant difference ( $p=0.272$ ;  $df=2$ ;  $X^2=2.565$ ) between them. Therefore, we fail to reject the null hypothesis.

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**Table 4.6.1: There is no significant difference between sex and experience of depression among the first year students in University of Ibadan**

Sex	Experience of depression			Fisher's exact(F)	df	p-value+
	Normal range (%)	Mildly (%)	Moderate (%)			
Female	117 (50.0)	28(43.8)	4(80.0)	2.565	2	0.272
Male	117(50.0)	36(23.4)	1(20.0)			
Total	234 (100.0)	64(100.0)	5(100.0)			

Not Significant (p > 0.05)

## Hypothesis 2

**There is no statistical significant difference between knowledge of depression and experience of depression among the first year students in University of Ibadan**

The Table 4.6.2 presents the results of the relationship between respondent's knowledge and experience of depression. Fisher's exact analysis was used to test for the relationship between these two variables and this revealed that there is no statistical significant difference between the level of knowledge and experience of depression ( $p= 0.115$ ;  $df= 4$ ;  $X^2=6.919$ ) between them. Thus, fail to reject the null hypnosis; there is no statistically significant difference between respondents' knowledge and experiences of depression.

**Table 4.6.2: There is no statistical significant difference between knowledge of depression and experience of depression among the first year students in University of Ibadan**

Knowledge scale obtained	Experience of depression				Fisher's exact	df	p-value+
	Normal range (%)	Mildly (%)	Moderate (%)	Total (%)			
Poor	22 (75.9)	7(24.1)	0(0.0)	29(100)	6.919	4	0.115
Fair	95 (74.8)	32 (25.2)	0(0.0)	127(100)			
Good	117 (79.6)	25(17.0)	5(3.4)	147(100)			
Total	234(77.2)	64(21.1)	5(1.7)	303(100)			

Not Significant ( $p > 0.05$ )

**Hypothesis 3: There is no significant difference between knowledge and perception of depression among first year students in University of Ibadan**

The table 4.6.3 presents the results of the relationship between respondent's knowledge and perception of depression. Chi-square analysis was used to test for the association between these two variables and this revealed that there is a statistically significant relationship ( $X^2=38.185$ ,  $df= 4$ ;  $p=0.000$ ) between them. The null hypothesis will be rejected. Thus, there is a significant relationship between the knowledge and perception of depression among the respondents

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**Table 4.6.3: There is no significant difference between knowledge and perception of depression among first year students in University of Ibadan**

Knowledge Scale	Perception of depression			Total (%)	Chi-square	df	p-value+
	Poor (%)	Fair (%)	Good (%)				
Poor	10(34.5)	11(37.9)	8(27.6)	29(100)	38.185	4	0.000
Fair	18(14.2)	49(38.6)	60(47.2)	127(100)			
Good	6(4.1)	36(24.5)	105(71.4)	147(100)			
Total	34(11.2)	96(31.7)	173(57.1)	303(100)			

Significant ( $p < 0.05$ )

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**Hypothesis 4: There is no significant relationship between students' (age, family background and monthly income) and experience of depression.**

Table 4.6.4 presents the result of the relationship between students' (age, family background and monthly income) and experience of depression. Fisher's exact analysis was used to test the relationship between the variables. The result shows that there is a significant relationship between students' parental marital status. On the other hand, there is no significant relationship between students' age, monthly income, family type and the experience of depression among respondents.

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**Table 4.6.4: There is no significant relationship between students' (age, family background and monthly income) and experience of depression.**

	Experience of depression			Fisher's exact	df	p-value+			
	Normal range (%)	Mildly (%)	Moderate (%)						
<b>Age</b>									
<16	4(1.7)	4(6.2)	0(0)	13.305	10	0.210			
16-18	13(56)	30(18.3)	3(60)						
19-21	79(33.8)	24(37.5)	2(40)						
22-24	14(6)	3(4.7)	0(0)						
25-27	6 (2.6)	1(1.6)	0(0)						
>27	0(0)	2(3.1)	0(0)						
<b>Family type</b>									
Monogamous	210 (89.7)	52(81.2)	5(100)	3.462	2	0.180			
Polygamous	24(10.3)	12(18.8)	0(0)						
<b>Parental marital status</b>									
Happily married	191 (81.6)	45(70.3)	3(60)	15.503	8	0.032***			
Married but staying in separate rooms	13(5.6)	2(3.1)	0(0)						
Divorced	7(3)	2(3.1)	0(0)						
Single parenting	14(6)	10(15.6)	0(0)						
Widow/widower	9(3.8)	5(7.8)	2(40)						
<b>Monthly allowance</b>									
Below 5,000	74(31.6)	27(42.2)	4 (80)				10.496	6	0.064
5,000-10,999	84(35.9)	12(18.8)	1 (20)						
11,000- 16,999	32 (13.7)	11(17.2)	0 (0)						
17,000 and above	44 (18.8)	14(21.9)	0(0)						

**Hypothesis 5: There is no significant difference between perceived causes and experience of depression**

There is no significant difference between perceived causes and experience of depression. Fisher's exact analysis was to analysed the two variables and the result is presented on Table 4.6.5;

Table 4.6.5 presents results on the relationship between the perceived causes and experience of depression. It is shown that there exists significant difference between experience of depression and romantic relationship ( $X^2=11.893$ ;  $p < .0.05$ ), insecurity ( $X^2=16.589$ ;  $p < .0.05$ ), trouble from home ( $X^2 = 13.001$ ;  $p < .0.05$ ), not being able to make friends ( $X^2 = 20.801$ ;  $p < .0.05$ ), and too much stress ( $X^2 = 6.84$ ;  $p < .0.05$ ). However, experience of depression had no significant relationship with low self-esteem, poor eating habits, change of environment to new institution, financial problem and fear of exams.

**Table 4.6.5: There is no significant difference between perceived causes and experience of depression**

Perception of causes against the experience of depression	Experience			Fisher's exact Analysis	P
	Normal (%)	Mild (%)	Moderate (%)		
<b>Low self esteem</b>					
Strongly agree	126(76.8)	36 22.0)	2 (1.2)	0.526	>.05
Agree	92 (80.0)	20(17.4)	3 (2.6)		
Strongly disagree	12 (66.7)	6 (33.3)	0 (0)		
Disagree	4 (66.7)	2 (33.3)	0 (0)		
<b>Poor eating habits</b>					
Strongly agree	28 (80)	7(20)	0 (0)	0.344	>.05
Agree	96 (71.6)	33(24.6)	5 (3.7)		
Strongly disagree	56 (82.4)	12(17.6)	0(0)		
Disagree	54 (81.8)	12(18.2)	0 (0)		
<b>Romantic relationship</b>					
Strongly agree	99 (85.3)	15(12.9)	2 (1.7)	0.048	<.05
Agree	104 (73.2)	35(24.6)	3 (2.1)		
Strongly disagree	27 (65.9)	14(34.1)	0(0)		
Disagree	4(100)	0(0)	0(0)		
<b>Insecurity in the hostels</b>					
Strongly agree	96 (85.0)	17(15.0)	0(0)	0.005	<.05
Agree	98 (77.2)	26(20.5)	3 (2.4)		
Strongly disagree	23 (60.5)	15(39.5)	0 (0)		
Disagree	17 (68.0)	6(24.0)	2(8.0)		
<b>Trouble from home</b>					
Strongly agree	144 (84.7)	24(14.1)	2 (1.2)	0.005	<.05
Agree	68 (70.1)	27(27.8)	2 (2.1)		
Strongly disagree	21 (63.6)	11(33.3)	1(3.0)		
Disagree	1 (33.3)	2(66.7)	0(0)		

**Table 4.6.5 Contd: There is no significant difference between perceived causes and experience of depression**

Perception of causes against the experience of depression	Experience			Fisher's exact Analysis	P
	Normal (%)	Mild (%)	Moderate (%)		
<b>Change of environment/ place</b>					
Strongly agree	41(67.2)	18(29.5)	2 (3.3)	0.072	>.05
Agree	130 (82.8)	26(16.6)	1(0.6)		
Strongly disagree	33 (75.0)	11(25.0)	0 (0)		
Disagree	30 (73.2)	9 (22.0)	2 (4.9)		
<b>Financial problem</b>					
Strongly agree	116 (81.1)	24(16.8)	3(2.1)	0.100	>.05
Agree	93 (78.2)	24(20.2)	2 (1.7)		
Strongly disagree	16 (57.1)	12(42.9)	0(0)		
Disagree	9 (69.2)	4 (30.8)	0(0)		
<b>Fear of exam and exam results</b>					
Strongly agree	95 (82.6)	18(15.7)	2 (1.7)	0.329	>.05
Agree	108 (76.1)	31(21.8)	3(2.1)		
Strongly disagree	21 (65.6)	11(34.4)	0(0)		
Disagree	10 (71.4)	4 (28.6)	0(0)		
<b>Not being able to make new friends</b>					
Strongly agree	69 (76.7)	21(23.3)	0(0)	0.001	<.05
Agree	121(84.6)	18(12.6)	4(2.8)		
Strongly disagree	26 (55.3)	20(42.6)	1 (2.1)		
Disagree	18(78.3)	5(21.7)	0 (0)		
<b>Academic stress</b>					
Strongly agree	88 (83.8)	16(15.2)	1 (1.0)	0.026	<.05
Agree	119 (76.8)	34(21.9)	2(1.3)		
Strongly disagree	18 (66.7)	9 (33.3)	0(0)		
Disagree	9 (56.2)	5 (31.2)	2(12.5)		

## CHAPTER FIVE

### DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter focuses on the discussion of the findings of study. This is related to the objectives and stated hypotheses of the study. This chapter also includes conclusions and recommendations based on the findings of the study.

#### 5.1 Discussion of Findings

Majority of the respondents fell within the age bracket 16-18years, followed closely by respondents within the age range 19-21years. According to Jegede and Dosunmu (2003), they reported that the age limit for admission into most Nigeria higher institutions is 16-17years, this implies that majority of undergraduates in the first year are in their teens and early twenties.

The finding also revealed that majority of the respondents were single while a few were married. Findings have shown that entry into first marriage can be delayed due to educational status, desire to pursue for higher education (Okunlola *et al.*, 2002), this could be one of the reason why most of the respondents' marital status indicated single. The major ethnic group in the study location was Yoruba, which was a true reflection of study location which is at Ibadan metropolis, which reflected that they were mainly from the South-Western states of Nigeria. Majority of the respondents were Christian while a few practice Islam, others were atheistic and traditional worshippers. The monthly allowances of the respondents revealed that majority received less than N5000 monthly allowances, followed by those who indicated that they majority received N5000- 10,999 per month.

A few of the respondents provided précised definition of depression, while some had no idea on definition of depression, some of the respondents indicated that depression is a mental illness while a few indicated that depression is not a mental illness. A large number of the respondents indicated loss of interest as a sign of depression, which provided the right answer to the question been asked. The respondents were asked if they could recognize a person who is depressed, majority of the respondents provide positive response, this indicate that the respondent can identify sign and symptoms of depression among their colleagues. Majority

indicated that experiencing rapid physical growth cannot be caused by depression, however, a few respondent indicated that substance abuse, academic problem and suicide cannot be caused by depression, and other options were completely false. Also, the respondents were asked, prevention of depression, a large number of the respondents indicated that seeking help from a counselor or psychologist would help in the prevention of depression, a few of the respondents indicated that speaking to someone (friend, family, classmates e.t.c) can reduce or prevent depression, a few indicated that being happy/optimistic can help prevent depression while a few others indicated that taking antidepressant drugs can help prevent depression. Furthermore, the study revealed that the respondents had a good knowledge on depression as regard recognition of the sign and symptom and the possible preventive measures. However, this is in contrast to the study by Arafat *et al.*, (2019) which revealed that poor literacy status of depression among the first year University students of Bangladesh. Also, a study in Portugal reported low level of literacy of depression which is a major barrier for help seeking behavior for any mental health issues (Fonseca *et al.*, 2017). It was also stated that the low knowledge in depression can be explained by the absence of resources in academic curricula in those county. The findings from this study which revealed the first year students have good knowledge on depression which is similar to the study conducted in Malaysia which shows that there was a moderate level of knowledge among the students, the Chinese students was recorded to have the best knowledge followed by Malaya and Indians. Thus, adequate knowledge of depression helps an individual identify, treat and also to make critical decisions regarding depression for themselves as well as many others in the society. Similarly, this study revealed an impressive depression literacy status among the first year university students, the respondents were able to recognize correctly sign of depression and provide good measures of preventing depression. This revealed that students who have good knowledge of depression would influence the help seeking behavior and treatments.

In addition, the finding revealed that there is no significant difference between knowledge and the experience of depression among the respondents, this implies that level of knowledge of depression among the first year students does not influence the incidence and experience of depression among the respondents, this could be due to the exposure of the respondents to factors such as academic stress, relationship problem, lack of support to mention a few, that contributes to the experience of depression among the first year students.

The awareness of depression was assessed among the respondents, the finding shows that most of the respondents have heard about depression while have not heard about depression. The source of information on depression among the respondents were evaluated, the findings revealed that most of the respondents source of information on depression were from the social media, followed by radio, peers/friends, generally the social media proved to be the major source of information for this group of individuals, from this findings it can be deduced that the social media has greatly contributed in the sensitization of the populace. Other sources of information include newspaper/magazine, family, health workers, television and lecturers.

A few of the respondents strongly perceived that an individual with low self-esteem can result into depression. According to Saghatoleslami (2005), Rappo and Pepi (2014) Rosetti and Henderson (2013) all observed that low self-esteem causes depression in students, this corresponds with the findings of this study. A number of the respondents perceived that insecurity within the school environment were one of the causes of depression, followed by trouble from home, romantic relationship breakup, poor eating habits, change of environment, financial problems, fear of exams, not being able to make friends, and others; death of loved ones and deathly diseases were reported by the respondent to be responsible for the development of depression.

The findings also revealed that there is a significant difference between the experience of depression and romantic relationship ( $X^2=11.893$ ;  $P<0.05$ ), insecurity ( $X^2=16.589$ ;  $P<0.05$ ), trouble from home ( $X^2=13.001$ ;  $P<0.05$ ), not being able to make friends ( $X^2=20.801$ ;  $P<0.05$ ), and too much stress ( $X^2=6.84$ ;  $P<0.05$ ). However, experience of depression had no significant relationship with low self-esteem, poor eating habits, change of environment to new institution, financial problem and fear of exams. This finding is consistent with a study by Mojs et al., (2012), reported that there was a strong relationship between rejection in romantic relationships, insecurity and stress and the experience of depression in students. Similarly, academic stress, academic failure and academic problems were reported by Park (2009) and Moon (2006) as correlating with depression in young adults and students in higher institutions. Grupp-Phelan and Delgado (2008) also described relationship difficulty such as a breakup with a significant other as correlating with depression in students. Family factors were reported by Consoli *et al.*, (2013) as having links to depression in students, while for some students, separation from home or family might cause depression. An important



finding mentioned in the recent study of Haldorsen *et al.*, (2014) found that the stress factors of students have a significant association with symptoms of depression.

The study shows that majority have a good perception of depression. A few respondents had a good perception towards depression which was measured on 11-point scale, the respondents were asked if depression cannot happen among youth, or if it was meant for old people, majority disagreed, this implies that depression is not restricted to a particular group of people, this is in accordance with Buchana, (2012) who reported that depression ranks as one of the four major illnesses and can affect anyone regardless of the gender, age, religion, social status or geographical location. Also, most of the respondents felt depression is not a spiritual attack, others 33(10.9%) felt drinking alcohol can be used to treat depression.

A large number of respondents provided positive response to question asked, the respondents considered smoking, alcohol abuse and suicide attempt as a wrong way to solve or reduce depression. This implies that they wouldn't encourage such behaviours. Also the respondents felt that depression can be managed by a counselor or psychologist. Most of the respondent felt depression is a mental disorder, and that attention should be geared toward reducing the incident. According to WHO, depression is a mental disorder with a wide global distribution, commonly commenced at an early age, it follows a relapsing and recurrent course and causes substantial impairments in multiple domains of life.

This finding also revealed that there is a significant relationship ( $X^2=38.185$ ,  $df= 4$ ;  $p=0.000$ ) between the knowledge and perception of depression among the respondents. This implies that the level of education of the respondents has a great impact on the belief/perception of depression, which would positively influence the health-seeking behaviour of the students and prevention practices on depression.

More than a quarter of the respondents reported they have experienced depression while a few reported they have never experienced depression. The experience of depression among the first year undergraduate students were measured using self-reported depression scale adopted from WHO (Zung depression scale), the findings shows that majority of the respondents experienced normal range of depression, a few experienced a mild depression while the minority reported to have experienced moderate depression. None of the respondents experienced severe depression. The large proportion of the respondents indicated that

someone around them had experienced depression, of which majority were family related, the respondents indicated that brother had experienced depression, followed by their sister, mothers, Aunt/uncle, father, on the other hand the respondents indicated that their friends had experienced depression. According to Gourion *et al.*, (2008) and Blackwood *et al.*, (2004), the presence of a depressed parent is one of the principal risk factors for depressive symptoms in emerging adulthood, especially for the females, this influence has been found from both biological and adoptive parents.

Furthermore, the findings revealed that there is no significant difference between sex and experience of depression among the respondents. This finding is consistent with Afifi (2006) stated that both male and female share common depressive symptomology. This implies that means that gender does not play a role in the experience of depression. Similarly, a study (Byaram & Bilgel, 2008) on the prevalence of depression in Turkey revealed that there was no difference in the score rate with regard to depression in male and female university students. Other recent studies by Arslan *et al.*, (2009) and Rosal, Ockene, Barrett and Hebert (1997), on the prevalence of depression in university students, have found that there was no significant difference between the sexes. Another study by Diana Sarokhani *et al.*, (2013) shows that there is no significant difference in the experience of depression between male and female students. The findings also revealed that there is a significant relationship between parent marital status and the experience of depression. Similarly, Ibrahim *et al.*, (2013) noted that students from families with a dysfunctional home or parent who are separated have a tendency to experience depression.

#### **5.1.6 Self-Management Strategies**

The finding revealed that majority would not indulge in smoking when depressed, a few respondents indicated that they always smoke. The respondents were asked if the use of antidepressants drug was a means of managing depression, majority indicated that they always use antidepressants while minority indicated they rarely use antidepressants. Also, concerning the use of health care services when experiencing depressive symptom, the respondents were asked if they visit the hospital, most of the respondents indicated that they had visit clinic/health center, a few indicated that they visit the hospital. In relation to health care services utilization, the respondents indicate that they never sought for counsel from a psychologist/counselor when depressed while indicated they always consult a psychologist

for help. The poor health seeking behaviour observed among the respondents can be deduced from the fact that many young adults do not seek mental health services, some of the reasons may include lack of time, confidentiality issues, negative experiences with seeking professional help, many students don't view depression as warranting professional intervention as well as preference for relying on other sources of support, including family and friends (Rickwood *et al.*, 2005).

This findings revealed that about most of the respondents spoke to their pastor/priest. Similarity majority of those respondents indicated that when they feel depressed that they prayed to God. Also, majority of those who experienced depression indicated that they spoke to people who counsels and advise them to feel better. Amongst, respondents indicated that they spoke to their friends/ classmates, followed by a few of the respondents who indicated that they spoke to their parents. This implies that the support systems that a person build help to provide relief from negative events that can lead to depression and its provides a sense of belonging, intimacy, sense of self-worth and control (Shimek *et al.*, 2014).

## **5.2 Conclusion**

The study assessed the experience, knowledge and perception towards depression among first year undergraduate University of Ibadan, Oyo state. It can be concluded that quite a number of students have experience depression, the level of depression experienced by the students varies from normal depression range to moderate, with over 21.1% reported mildly depressed. The key perceived causes reported by students includes family factor (trouble from home), relationship breakup, insecurity in the school environment. The perception and knowledge of depression among the students were above average. However, their health seeking behaviour was quite low, this invariably the school authority should endeavour to create more awareness and sensitization to inform the students on positive health seeking behaviours, the school counselor and mental health experts need to pay more attention to the mental health status of their students in order to help improve their performance and functioning in school. Another findings from this study shows that a lot of students turn to or look to their friend and family members for support when they experienced depression, this implies that a good social support network plays an important role for students who are depressed.

These findings suggests that knowledge of depression is essential and should be included in the curriculum of students to enhance the level of knowledge of the sign and strategies to prevent the occurrence of depression among students, as depression is one of the important mental health concern in public health, most especially among these group of students.

### **5.3 Recommendation**

**Based on the findings from this study, the following recommendations are offered;**

1. There is need to replicate this current study on larger sample size using a combined quantitative and qualitative research approach to better understand the factors leading to depression among first year undergraduate students.
2. University of Ibadan should collaborate with non-governmental organization to educate and increase the knowledge on depression among first year undergraduate students and help to address the poor health seeking behaviours.
3. Taking into account the findings of this study, in psychological counseling and guidance services should accessible to students.
4. There is need for awareness programmes to orient young adults on the right decision making and management as related to depression and other areas of life in order to improve the quality of their mental health and thus promote healthy living and development, this should be carried out at the university of Ibadan regularly especially for the subsequent fresh undergraduates and inculcated into student's programme of study.
5. Follow up programmes should be planned and implemented for those at risk for mental health problems and suicide attempt. Programmes on how to develop positive mental health attitudes should also be planned and promoted in order to ensure the balanced and holistic development of the younger generation.
6. Providing family support / motivation and encouraging participation in social activities are also recommended to prevent occurrence of depression in student.
7. Students could also be educated about these things so that they can provide peer support to students at risk of depression.

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## APPENDIX

### INFORMED CONSENT FORM

**Dear respondent,**

I am a postgraduate student at the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan. The purpose of this study is to gather information about the Experiences, knowledge and perception of depression among 100 level students in the University of Ibadan, Ibadan, Oyo State. Please note that your participation in this study is entirely voluntary.

All information that would be collected during this study will be treated with utmost confidentiality. Your participation in this study is very important as it would help to better understand students' experience on knowledge and perception of depression and how they coped. Please also note that there are no right or wrong answers to the questions asked or the statements made. Your willingness to be interviewed implies you have given consent to participate.

Thank you for cooperating.

I have read and understand the consent form and voluntarily agree/disagree to participate in the study by ticking (✓) in the appropriate box below

1. Agree ( )                      2. Disagree ( )

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Code Number:** \_\_\_\_\_

**Researcher's signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_





18. How can a person prevent the occurrence of depression: 1= seek help ( ) 2= speak to someone ( ) 3=be happy ( ) 4= take drugs ( )
19. Which factor triggers depression? (tick just one answer) 1. Relationship break-ups ( ) 2= loneliness ( ) 3. hereditary ( ) 4. Growth ( ) 5. exam pressure ( )
20. Depression can lead to which of the following EXCEPT? 1= suicidal thought/ideas ( ) 2= rapid physical growth ( ) 3= problem studying ( ) 4= Substance abuse ( )
21. Which of the following is a sign of depression? 1- Always very happy ( ) 2= sad and lonely ( ) 3=very optimistic ( ) 4 = cheerful
22. Can you recognize someone that is depressed? 1=yes ( ) 2-no ( )
23. What are the likely signs of depression you know? 1= Loss of interest ( ) 2=good self-esteem( ) 3=Happy mood( ) 4= headache ( )
24. Total scored obtained \_\_\_\_\_
25. Code: \_\_\_\_\_

**Section C: Question on perceived causes of depression among respondents**

Which of the followings can lead to depression among students?

	Causes	Strongly agree	Agree	Strongly disagree	Disagree
26.	When a person is having low self esteem				
27.	Poor eating habits can cause depression				
28.	Facing problems with romantic relationship				
29.	Insecurity (theft, fear of kidnap, fear of rape, e.t.c)				
30.	Trouble from family/ home				
31.	Change of environment				
32.	Not having money/financial problem				
33.	Fear of exam/test result				
34.	Not being able to make new friends				
35.	Encountering too much stress about school work (e.g. independent studying, loads of assignment e.t.c)				

Others, please specify if any \_\_\_\_\_

36. What could be the reason why you get disappointed in school? (tick one)

- 1= I don't like the course doing-( ) 2= my family demand more from me ( )  
 3=I cannot face my colleague-( ) 4= there is no time for fun ( ) 5= I am missing my family ( ) 6= I got jilted by my boy/girlfriend( ) 7=others \_\_\_\_\_

**Section D: Questions assessing experiences of depression among respondents**

Please read each statement and tick (√) how much the statement applied to you over the past 3months. There is no right or wrong answer. Thank you

37. Do you ever feel depressed 1=sometimes ( ) 2=often ( ) 3= always 4=never( )  
 38. Do you think depression is a mental disorder 1=Yes ( ) 2=No ( )  
 39. Has anyone around you experienced depression 1=Yes ( ) 2=No ( )  
 40. **Tick (√) which of the following person:** 1-Brother ( ) 2-sister-( ) 3- mother ( ) 4- father ( ) 5= friend-( ) 6- roommate-( ) 7-aunt/uncle-( ) 8=classmates( ) 9=others\_\_\_\_\_
41. What did you do to assist the person? 1-advice ( ) 2-encourage ( ) 3-pray ( ) 4-others\_\_\_\_\_
42. How often do you experience low mood in last 2 months? 1=very often( ) 2=sometimes ( ) 3=rarely ( ) 4=never ( )

**What are the common attributes you noticed when you are depressed?**

**Circle** where applicable, to each statements to describe how you have been feeling during the past 2weeks.

	Most often	Sometimes	Occasionally	Rarely
I feel down hearted and blue	4	3	2	1
I still enjoy the things I used to do	1	2	3	4
I have crying spell or feel like it	4	3	2	1
Morning is when I feel the best	1	2	3	4
I have trouble sleeping at night	4	3	2	1
I feel that I am useful and needed	1	2	3	4
I notice that I am losing weight	4	3	2	1
I eat as much as I used to	1	2	3	4
My heart beats faster than usual	4	3	2	1
I still enjoy sex	1	2	3	4

	I have trouble with constipation	4	3	2	1
	I find it easy to do the things I used to	1	2	3	4
	I get tired for no reason	4	3	2	1
	My life is pretty full	1	2	3	4
	I am restless and can't keep still	4	3	2	1
	I find it easy to make decisions	1	2	3	4
	I am more irritable than usual	4	3	2	1
	I feel hopeful about the future	1	2	3	4
	My mind is as clear as it used to be	4	3	2	1
Total score: _____					
code: _____					

### Section E: Questions assessing perception on depression among respondents

Tick where appropriate

	Perception statement	Agree	Disagree	I don't know
64.	Depression is a spiritual attack			
65.	Having negative thoughts is good			
66.	Changes in one's behaviour is a risk factor for depression			
67.	Depression is not a mental disorder, so don't bother			
68.	Drinking alcohol can be used to treat depression			
69.	Smoking cigarette/weed can reduce depression			
70.	Suicide is the only way to solve depression			
71.	Depression cannot be cured			
72.	Depression is hereditary, nothing can be done to it			
73.	Depression can be managed by consulting an expert			
74.	Depression cannot happen among youths, it is for old people.			
74. Total score obtained				
75. Code _____				

**Section F: Self-managements strategies for depression among respondents**

What strategy would you consider appropriate to adopt when you need help. **Tick where applicable**

S/N		Always	Sometimes	Rarely	Never
76.	I smoke cigarette				
77.	I use antidepressants sedative drugs				
78.	I visit the hospital				
79.	I seek counsel from a psychologist/counsellor				
80.	I speak to a priest/ pastor about it				
81.	I talk to friends/classmates				
82.	I call my parents / relatives				
83.	I sleep still am better				
84.	I withdraw from school activities and friends				
85.	I pray to God				
86.	Others (specify)				