PREVALENCE AND DETERMINANTS OF DEPRESSION AMONG WOMEN ATTENDING GENERAL OUT-PATIENT CLINIC AT SPECIALIST HOSPITAL SOKOTO

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DEDICATION

I wish to dedicate this project to almighty Allah for the strength and favour given to me from the beginning of this course till the end.

CERTIFICATION

We hereby declare that this dissertation titled ‘’Prevalence and determinants of depression among women attending general out-patient clinic, Specialist Hospital Sokoto. Nigeria’’ was carried out by Abdulkadir Isah of the Department of Community Health, Usmanu Danfodiyo University Sokoto under our supervision.

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May God reward you all abundantly - Amen.

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LIST OF ABBREVIATIONS

APA	American Psychiatric Association
IPV	Intimate Partner Violence
PHQ	Patient Health Questionnaire
BDI	Beck Depression Inventory
ECT	Electro-convulsive Therapy
DALYS	Disability Adjusted Life years
GOPC	General Out-patient Clinic
SHS	Specialist Hospital Sokoto
MDD	Major Depressive Disorder
ICD	International Classification of Diseases
DSM	Diagnostic Statistical Manual
SSRIs	Selective Serotonin Re-uptake Inhibitors
SNRIs	Serotonin/ Norepinephrine Reuptake Inhibitors
SDAMs	Serotonin- Dopamine Activity Modulators
TCAs	Tricyclic Anti-Depressants
MAOIs	Mono- Amine Oxidase Inhibitors
MINI	Mini International Neuro Psychiatric Interview

SCAN Schedule for Clinical Assessment in Neuro psychiatry

ABSTRACT

Introduction: Depression is the leading cause of disability worldwide, and a major contributor to the overall global burden of disease. Depression is the leading cause of disease burden for women in both high-income and low- and middle-income countries, and burden of depression is 50% higher for females than males. Addressing the underlying social and economic determinants of women's health matters not only to women themselves. It is also crucial to the health of the children they will bear. Despite the increase in knowledge of depression, little is known about depression among African populations, especially African woman. This study assessed prevalence and determinants of depression among women attending general out-patient clinic specialist hospital Sokoto.

Method: This was a descriptive cross-sectional study of 343 women attending general out-patient clinic Specialist Hospital Sokoto. Samples were selected by systematic sampling technique. A pre-tested, semi-structured interviewer administered questionnaire was used to collect data on research variables. Data were analysed using IBM SPSS version 20 statistical package.

Results: The mean age of respondents was 31.5 ± 11.3 years .Majority of the respondents were married(73.5%) , and belonged to lower social class(51.3%) . The study revealed high prevalence of depression among the respondents (42.6%). Depression was commoner among respondents who were aged 45years and above, widows, married in polygamous settings, of lower social class, un-happy with relationship, victims of sexual and intimate partner violence and those that had past history of depression and family history of mental illness. Predictors of depression from this study were social class, health status, past history of depression, serious financial difficulties and husbands neglect.

Conclusion: This study demonstrated high prevalence of depression among women and that social class, health status, past history of depression, serious financial difficulty and husbands neglect were strong predictors of depression among the respondents. Thus doctors should have high index of suspicion for depression in women especially those with aforementioned predictors, government should be more committed in empowering women

through poverty alleviation programmes and improvement in girl child education premarital counselling by community and religious leaders should be advocated.

Keywords: Prevalence, Determinants, Depression, Women.

CHAPTER ONE

INTRODUCTION

Depression is a disabling disorder, characterised by depressed mood (dysphoria) and loss of interest (anhedonia) during the larger part of the day, most days, during at least two weeks. In addition there are several symptoms, such as lack of energy, insomnia, loss or gain of body weight, preoccupation with guilt, poor concentration, and recurrent thoughts about death and suicide. Each of these symptoms brings about significant suffering and has an adverse impact on functioning. In order to meet the diagnostic criteria for depressive disorder, one must have one or both core symptoms, dysphoria and anhedonia, plus at least four other symptoms (Smit, 2007).

Depression results from a complex interaction of social, psychological and biological factorsRosenquist et al. (2011). People who have gone through adverse life events (unemployment, bereavement, psychological trauma) are more likely to develop depression. Depression can, in turn, lead to more stress and dysfunction and worsen the affected person's life situation and depression itself (WHO, 2017).

Studies have shown that intimate partner violence is associated with depression in women(Devries et al., 2013). Violence against women perpetrated by an intimate partner is a common and widespread problem. Rates of intimate partner violence (IPV, also called domestic violence) vary widely between countries but,

globally, nearly a third of women experience IPV at some time in their life. IPV is defined as physical, sexual, or emotional violence that is perpetrated on an individual by a current or former partner or spouse. Physical violence includes slapping, pushing or shoving, hitting with a fist or another object, and threatening or attacking a partner with a weapon; sexual violence means forcing a partner to take part in a sex act when the partner does not give consent; and emotional violence includes threatening a partner by, for example, preventing them seeing their family. The adverse effects of IPV against women include physical injury and sexual and reproductive health problems such as HIV infection, unwanted pregnancies and adverse mental health outcomes among women, such as depression and suicidal behaviour(Tsai et al., 2016).

Screening instruments for Depression can be self-report or interviewer administered. Self-report screening instruments for depression include Patient Health Questionnaire-9 (PHQ-9), Beck Depression Inventory (BDI) or the Beck Depression Inventory-II (BDI-II): 21-question symptom-rating scales providing a 0-63 severity score, BDI for primary care: A 7-question scale adapted from the BDI., Zung Self-Rating Depression Scale: A 20-item survey, Centre for Epidemiologic Studies-Depression Scale (CES-D): A 20-item instrument that allows patients to evaluate their feelings, behaviour, and outlook from the previous week. Other screening instruments include Hamilton Depression Rating psychosocial Scale and Geriatric Depression Scale (Jerry, 2017) .

The American Psychiatric Association (APA) guideline recommended intervention in mild cases of depression and combination of psychotherapy with antidepressant medication for patients with moderate to severe major depressive disorder. Electroconvulsive therapy (ECT) is a highly effective treatment for depression indicated where there is need for a rapid antidepressant response, Failure of drug therapies, history of good response to ECT, Patient preference, high risk of suicide, high risk of medical morbidity and mortality (Jerry, 2017).

Depression carries a poor prognosis. According to estimates of the World Health Organisation, the mean episode duration is six months. According to Dutch data about people aged 18 – 65 years, the average time spend in this condition is also six months, and 20% will be depressed for longer than two years . After recovery, the risk of recurrence is high: 85% will experience a new episode within five years after the index episode, but this might be an over estimate (Smit, 2007).

1.1 PROBLEM STATEMENT

About 322 million people are living with depression globally which constitute about 4.4% of the world population, this has increased by about 18.4% between 2005 and 20015 (Friedrich, 2017). Women are 1.5 to 3 times affected than men (Picco et al., 2016, Friedrich, 2017). Current estimates suggest a lifetime incidence of between 13.3 and 17.1% in the United States and a yearly cross-sectional prevalence ranging from 2.3–4.9% (Rosenquist, Fowler et al. 2011).

Depression is the leading cause of disability worldwide, and a major contributor to the overall global burden of disease. Depression is the leading cause of disease burden for women in both high-income and low- and middle-income countries, and burden of depression is 50% higher for females than males (WHO, 2008). Depressive disorders were single largest contributor to nonfatal health loss in 2015 (Friedrich, 2017). Mental disorders are an important source of lost years of healthy life for women aged 15–44 years. Depression is a major contributor to suicide with mortality rate due to suicide 20 times greater among depressed individuals than the general population (Molla et al., 2016). Research in developing countries suggests that maternal depression may be a risk factor for poor growth in young children (Rahman et al., 2008). This risk factor could mean that maternal mental health in low-income countries may have a substantial influence on growth during childhood, with the effects of depression affecting not only this generation but also the next. Depression is an important cause of work absenteeism, loss of productivity, mortality and co-morbidity such as anxiety disorders and substance abuse (Musić Milanović et al., 2015).

Evidence suggests that intimate partner violence (IPV) experience is associated with increased risk of depression, but also that people with mental disorders are at increased risk of violence (Devries et al., 2013). Depressive disorders erode quality of life, productivity in the workplace, and fulfilment of social and familial roles. In today's knowledge- and service-driven economies, the population's mental capital (i.e., cognitive, emotional, and social skills resources required for

role functioning) becomes both more valuable and more vulnerable to the effects of depression. It is estimated that mental, neurological and substance use disorders account for 13% of the total global burden of disease and that depression alone accounts for over 40% of the mental disabilities. Moreover, people with depression have a 40 -60% chance of dying prematurely compared to the general population (Othieno et al., 2014). Depressive disorders, severe mental illnesses that should not be confused with normal mood variations, are part of a vicious circle of poverty, discrimination, and poor mental health in middle- and low-income countries. These realities also have major economic ramifications: treatment costs of depression are soaring but are only a fragment of the costs of reduced productivity due to depression (Cuijpers et al., 2012). At its worst, depression can lead to suicide. Close to 800 000 people die due to suicide every year. Suicide is the second leading cause of death in 15-29-year-olds (WHO, 2017).

In South Africa, small rural-based studies have found a prevalence rate of depressive symptomatology of 18% and a rate of depression of 27%. Other results include a prevalence of depression of 25.2% in an urban setting, and a 34.7% prevalence of postpartum depression in a peri-urban settlement in Cape Town (Cooper et al., 2009). To date there have not been any nationally representative data on the prevalence of major depressive disorder in South Africa (Mark , 2009).

In developing countries like Nigeria, the prevalence rates of depression are higher because environmental factors that contribute to the genesis of depressive disorders are more preponderant. These include high rates of poverty, a lack of social welfare and high rates of endemic infectious diseases(e.g. HIV and Tuberculosis), to mention just a few (Afolabi et al., 2008).

The lifetime prevalence rate of a major depressive episode among adults aged 18 years and over in Nigeria has been reported to be 3.1%. Consequently, with the current population estimates for the country, about five million Nigerians would have experienced a major depressive episode in their lifetime (James et al., 2012). The prevalence rates range from 11.7% to 34.4% in private general medical practice in Nigeria (Afolabi et al., 2008).

The demand for curbing depression and other mental health conditions is on the rise globally. A recent World Health Assembly called on the World Health Organization and its member states to take action in this direction. (WHO 2012).

The high prevalence of depressive disorder in women is well established. However, it has not been convincingly explained (Bebbington, 1996) . This reflects a more general failure of research to provide a comprehensive aetiological account of depression.

1.2 RATIONALE OF THE STUDY

Prevalence of depression is on the increase globally. Depression is the leading cause of disease burden for women in both high-income and low- and middle-income countries and women are 1.5 to three times more affected than men. (WHO 2008).

In view of the profound and widespread burden caused by depression it is hardly surprising that analysis of Disability Adjusted Life Years (DALYs) puts depression among the leading causes of burden of diseases worldwide. As the infectious diseases, especially in developing countries, are progressively controlled, depression is predicted to become the major health burden worldwide. Thus prevention and treatment of depression must be seen as a priority medical challenge for the 21st century (Lépine and Briley, 2011).

Women's health matters not only to women themselves. It is also crucial to the health of the children they will bear. This underlines an important point: paying due attention to the health of girls and women today is an investment not just for the present but also for future generations. This implies addressing the underlying social and economic determinants of women's health (WHO, 2009).

Despite the increase in prevalence and knowledge of depression, little is known about depression among African populations, especially African woman (Ngcobo and Pillay, 2008). Few studies focused on depression in women. Assessing the prevalence and determinants of depression among women in the study population

will help to identify the burden and possible predictors of depression for possible implementation of appropriate preventive strategies. In addition, this study used diagnostic interview in assessing prevalence of depression which is more accurate than screening instruments used by many other similar studies. Findings from this study will be published thus providing useful information on prevalence and determinants of depression among women in the study area.

1.3 RESEARCH QUESTIONS

1. What is the prevalence of depression among women attending General out-patient clinic (GOPC) Specialist Hospital Sokoto?
2. What are the determinants of depression among respondents?

1.4. AIM AND OBJECTIVES

General Aim

To assess the prevalence and determinants of depression among women attending Specialist Hospital Sokoto.

Specific objectives

1. To determine the prevalence of depression among women attending GOPC Specialist Hospital Sokoto.
2. To assess the determinants of depression among respondents

CHAPTER TWO

Literature Review

2.1 Overview of Depression.

Clinical depression (major depression, major depressive disorder) is a mental disorder characterised by pervasive and persistent low mood that is accompanied by low self-esteem and loss of interest or pleasure in normally enjoyable activities. It is a serious disabling condition which includes a number of symptoms and adversely affects a person's family, work or school life, sleeping and eating habits, and general health (Musić Milanović et al., 2015).

Depression is a significant public health concern worldwide and has been ranked as one of the illnesses having the greatest burden for individuals, families, and society(Akhtar-Danesh and Landeen, 2007). The proportion of the global population living with depression is estimated to be 322 million people (4.4% of the world's population) , the number of people in the world living with depression has increased by 18.4% between 2005 and 2015, and depressive disorders were the single largest contributor to nonfatal health loss globally in 2015(Friedrich, 2017). The lifetime incidence of depression in the United States is more than 12% in men and 20% in women (Belmaker and Agam, 2008).

2.2 Risk factors for Depression

Risk factors for depression simply means factors that increases the likely hood of developing depression, thus they do not seem to be the direct cause of depression but have some association. The presence of risk factor increases the chance but does not always lead to depression. Likewise, the absence of any risk factor or having protective factor does not necessarily prevent development of depression.

Whereas the cause of depression is still obscure, it is becoming clear that a number of diverse factors are likely to be implicated, both genetic and environmental, the pathophysiology of depression is gradually becoming accessible through research strategies, such as functional neuroimaging paired with mood altering(Doris et al., 1999).

Risk factors for depression include gender (increased rate in females), experiencing a separation or divorce, chronic medical illnesses, low socioeconomic status, and age. Although major depression may develop at any age, the average age of onset is 15 to 19 years in females and 25 to 29 years for males with the average age of onset steadily decreasing over past decades being divorced, separated, or widowed and having low family income (Hussein et al., 2016). Psychosocial risk factors for late life depressive disorders include death of a spouse or other loved one, medical illness and injuries, disability and functional decline, and lack of social contact. Additional evidence suggests that

the impact of these psychosocial risk factors on depression can be enhanced or buffered by personal or environmental factors. Although many of these psychosocial risk factors are more prevalent among older than younger adults, it is not clear that their impact on the risk of depression differs by age (Bruce, 2002). Other risk factors include prior depression chronic minor daily stress, chronic pain syndrome, family history of depression, and traumatic brain injury (Maurer, 2012), intimate partner violence (Devries et al., 2013).

2.3 Classification of Depression

The lack of a highly reliable or valid classificatory system has significant and practical clinical consequences, particularly in primary care where the full range of depression presents. A major concern is whether depression should be classified using dimensions or categories. Categories help distinguish cases from non-cases, while dimensions help distinguish severe disorder from mild (Cole J, 2008).

Depending on the number and severity of symptoms, a depressive episode can be categorized as mild, moderate, or severe. A key distinction is also made between depression in people who have or do not have a history of manic episodes. Both types of depression can be chronic (i.e. over an extended period of time) with relapses, especially if they go untreated (WHO, 2017).

The American Psychiatric Association's Diagnostic Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) classifies the depressive disorders as disruptive mood dysregulation disorder, major depressive disorder (including major depressive episode), persistent depressive disorder (dysthymia), premenstrual dysphoric disorder, and depressive disorder due to another medical condition. In addition, depressive disorders may be further categorized by specifiers that include peripartum onset, seasonal pattern, melancholic features, mood-congruent or mood-incongruent psychotic features, anxious distress, and catatonia. The common feature of the depressive disorders is the presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function. What differs among them are issues of duration, timing, or presumed aetiology.

The diagnosis of major depressive disorder requires a distinct change of mood, characterized by sadness or irritability and accompanied by at least several psychophysiological changes, such as disturbances in sleep, appetite, or sexual desire; constipation; loss of the ability to experience pleasure in work or with friends; crying; suicidal thoughts; and slowing of speech and action. These changes must last a minimum of 2 weeks and interfere considerably with work and family relations (Belmaker and Agam, 2008).

2.4 Diagnostic Criteria of Major Depressive Disorder.

The criteria for diagnosing depressive episodes in ICD–10 and DSM–V overlap considerably but have some differences of emphasis. In ICD–10 the patient must have two of the first three symptoms (depressed mood, loss of interest in everyday activities, reduction in energy) plus at least two of the remaining seven symptoms; while in DSM–IV the patient must have five or more out of nine symptoms with at least one from the first two (depressed mood and loss of interest). Both diagnostic systems require symptoms to have been present for at least 2 weeks to make a diagnosis (but can be shorter in ICD–10 if symptoms are unusually severe or of rapid onset). In both ICD–10 and DSM–IV the symptoms must result in impairment of functioning that increases with the episode severity.

2.4.1 Diagnostic Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) Criteria

According to DSM V, Depression is referred to as Major Depressive Disorder, and is diagnosed by the following criteria A to E (Regier, 2013).

A Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, and hopeless) or observation made by

others (e.g., appears tearful). (Note: In children and adolescents, can be irritable mood.)

2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).

3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (Note: In children, consider failure to make expected weight gain.)

4. Insomnia or hypersomnia nearly every day.

5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).

6. Fatigue or loss of energy nearly every day.

7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).

8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).

9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

C. The episode is not attributable to the physiological effects of a substance or to another medical condition.

D. The occurrence of the major depressive episode is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.

E. There has never been a manic episode or a hypomanic episode.

Criteria A-C represent a major depressive episode.

Sub threshold depressive symptoms: fewer than five symptoms of depression

Mild depression: few, if any, symptoms in excess of the five required to make the diagnosis, and the symptoms result in only minor functional impairment. Moderate depression: symptoms or functional impairment are between ‘mild’ and ‘severe’. Severe depression: most symptoms, and the symptoms markedly interfere with functioning; can occur with or without psychotic symptoms.

Specifiers include: with anxious distress, with mixed features, with melancholic features, with atypical features, with mood-congruent psychotic features, with mood-incongruent psychotic features or with catatonia.

2.4.2 ICD 10 CRITERIA

Diagnostic criteria for depression ICD-10 uses an agreed list of ten depressive symptoms(Saito et al., 2010).

Key symptoms: include: persistent sadness or low mood, loss of interests or pleasure, fatigue or low energy. At least one of the symptoms must be present most days, most of the time for at least 2 weeks .If any of the key symptoms is present, the associated symptoms include : disturbed sleep, poor concentration or indecisiveness, low self-confidence, poor or increased appetite, suicidal thoughts or acts, agitation or slowing of movements, guilt or self-blame.

The 10 symptoms define the degree of depression and management is based on the particular degree as follows: not depressed (fewer than four symptoms), mild depression (four symptoms), moderate depression (five to six symptoms), and severe depression (seven or more symptoms, with or without psychotic symptoms). Symptoms should be present for a month or more and every symptom should be present for most of every day.

2.5 Women and Depression

Depression is the leading cause of disease-related disability in women. Epidemiological studies have shown that the lifetime prevalence of a major depressive disorder in women (21.3%) is almost twice that in men (12.7%). This ratio has been documented in different countries and ethnic groups. Sex

differences relating to depression vary with age, with male and female children showing similar incidence rates. National comorbidity data reveal that sex differences in prevalence first appear around the age of 10 years and persist until midlife, after which they disappear. Therefore, women have the greatest risk for developing depressive disorders during their child-bearing years. In a study of dizygotic twins, women displayed more sensitivity to interpersonal relationships, whereas men displayed more sensitivity to external career and goal-oriented factors (Albert, 2015). Several biological processes are thought to be involved in the predisposition of women to depression, including genetically determined vulnerability, hormonal fluctuations related to various aspects of reproductive function, and an undue sensitivity to such hormonal fluctuations in brain systems that mediate depressive states. Psychosocial events such as role-stress, victimization, sex-specific socialization, internalization coping style, and disadvantaged social status have all been considered to be contributors to the increased vulnerability of women to depression. Women are more susceptible than men to stress-induced depression and to changes in photoperiod (more than 80% of individuals with seasonal affective disorder are women). Depression in women may develop during different phases of the reproductive cycle (premenstrual dysphoric disorder, depression during pregnancy, postpartum depressive conditions, and menopausal depression). Other reproductive events such as infertility, miscarriage, oral contraceptives, and hormone replacement treatment have been reported to cause depression in women.

2.6 Prevalence of depression

The lifetime prevalence and course of depression vary substantially across countries for reasons that could involve both substantive and methodological processes (Kessler and Bromet, 2013).

The proportion of the global population with depression in 2015 is estimated to be 4.4% , commoner among females (5.1%) than males (3.6%). (Organization, 2017) Weismann et al. Published the first cross-national comparison of major depression from 10 population-based surveys that administered the Diagnostic Interview Schedule (DIS) to representative community samples. DSM-III criteria were used to define depression. Lifetime prevalence estimates of MDE ranged from 1.5% (Taiwan) to 19.0% (Beirut) in these studies, with the midpoints at 9.2% (West Germany) and 9.6% (Edmonton, Canada). Twelve-month prevalence estimates ranged from 0.8% (Taiwan) to 5.8% (Christchurch, New Zealand), with the midpoints at 3.0% (US) and 4.5% (Paris) and Lifetime prevalence estimates of MDD ranged from 1.0% (Czech Republic) to 16.9% (US), with midpoints at 8.3% (Canada) and 9.0% (Chile). The 12-month prevalence estimates ranged from 0.3% (Czech Republic) to 10% (US), with midpoints at 4.5% (Mexico) and 5.2% (West Germany) (Kessler and Bromet, 2013).

In South Africa, a research was conducted among elderly attending a local primary health care clinic which showed a high rate of undetected depression of 40% (Padayachey et al., 2017). Similarly, a study conducted in Malawi found the

prevalence of depression among the patients attending the outpatients department to be 30.3% while detection rate of depression by clinician was 0% (Udedi, 2014). The lifetime prevalence rate of a major depressive episode among adults aged 18 years and over in Nigeria has been reported to be 3.1%. Consequently, with the current population estimates for the country, about five million Nigerians would have experienced a major depressive episode in their lifetime (Gureje et al., 2010).

In Ado-Ekiti, Nigeria, depression was assessed in a Primary Care Setting using the PHQ-9 which showed that 47.8% of the respondents had significant depressive symptoms with majority (49.2%) being classified as mild (Obadeji et al., 2015).

Afolabi et al in a study of Pattern of depression among patients in a Nigerian family practice population reported higher prevalence of depression of 59.6% (Afolabi et al., 2008).

Another study in Akwa Ibom State, Nigeria to determine the prevalence of mixed anxiety and depression in an outpatient of a general clinic, revealed that 17.5% of the respondents had mixed anxiety and depression, 36.7% had anxiety and 24.5% had depression (Albert , 2015).

In Kano North-Western Nigeria, the prevalence of depression among general outpatients was found to be 49.8% (mild 26.9%, moderate 20.4% and severe 2.5%), with 33.7% prevalence in women. The researcher recommended the use of screening instrument like PHQ2 for depression at general outpatient

department with the aim of improving its identification and treatment (Salihu and Udofia, 2016).

Bakare et al determined the prevalence of anxiety and depression among people with leprosy in Sokoto, North- Western Nigeria. Among the respondents interviewed, 14% had moderate depressive episode, 5.5% had severe depressive episode, 19.2% had generalized anxiety disorder and 8.9% had mixed anxiety and depressive disorder (Bakare et al. , 2015).

A retrospective study of prevalence of psychiatric morbidity in a tertiary hospital in north-western Nigeria, reported prevalence of Depression of 7.7% (Yunusa and Enokela, 2013).

2.7 Determinants of depression

Social determinants of health (i.e., income, education, health status, and acculturation) among Hispanic women may play a crucial role in the development or exacerbation of depression (De Oliveira et al., 2017). A review of the evidence of 150 similar studies from all over the world between 2004 and 2014 on Social determinants of mental health revealed that female gender, younger age, lower socioeconomic status , lower income , lower job satisfaction, food insufficiency, being an immigrant from a low- or middle-income country, interpersonal adversity in childhood, feeling powerlessness, negative life events , lack of social/emotional support , and living alone were found to be associated with mental health problems or mental disorders in Cross-sectional panel surveys or nationally representative epidemiological surveys while In the longitudinal

studies reviewed the factors associated with worse psychological health over time were female gender , lower job satisfaction , age lower than 55 years , living in common-law relationships or being widowed , lower socioeconomic status , lower income , and financial concerns (Silva et al., 2016).

A study of Relation between depression and socio-demographic factors in Canada revealed that depression is commoner in women .The lowest and highest rates of depression are seen among people living with their married partners and divorced individuals, respectively. Prevalence of depression among people who live with common law partners is similar to rates of depression among separated and divorced individuals. The lowest and highest rates of depression based on the level of education is seen among individuals with less than secondary school and those with "other post-secondary" education, respectively. Prevalence of 12-month and lifetime depression among individuals who were born in Canada is higher. Compared to Canadian residents who immigrated to Canada irrespective of gender. There is an inverse relation between income and the prevalence of depression (Akhtar-Danesh and Landeen, 2007).

A study of Prevalence and Psychosocial Correlates of Depressive Symptoms in Urban Chinese Women during Midlife found out that being single/divorced/separated/widowed, having an educational level of primary school level or below, having multiple chronic diseases, loss of hobby or loss of

close social support in the past 12 months in midlife were associated with clinically relevant depressive symptoms (Wong et al., 2014) .

Being female and family history of mental disorders or depression were found to be strongly related to the experience of depressive symptoms compared to others in a study of prevalence and socio-demographic correlates of depressive symptoms among Cypriot university students: a cross-sectional descriptive co-relational study (Sokratous et al., 2014).

Childhood sexual abuse is associated with adult-onset depression in both men and women, and occurrence of such abuse is more common in girls than in boys (Weiss et al., 1999).

A Canadian National Population Health Survey found that the prevalence of 12-month depression varied in men from "too low to report" for men over 65 to a high of 5.2% for the 12 to 24 age group. Women's prevalence also varied by age, ranging from a low of 3.1% for women over 65 to a high of 9.6% for the 12 to 24 age group . The Ontario Health Survey found comparable variation based on age. This pattern is consistent with findings from Australia (Akhtar-Danesh and Landeen, 2007).

A study conducted at Eastern Cape Province, South Africa to determine prevalence and factors associated with depressive symptoms among young women and men, revealed an association between depressed symptoms and lower

socio-economic status, men who had lost a mother, childhood adversity, (sexual abuse before the age of 18years, alcohol abuse illicit drug problem) men who had been forced into sex by women, women who were raped outside intimate relationship, women with higher numbers of lifetime sexual partners, a partner who was more controlling, relationship conflict and physical or sexual intimate partner violence. On the other hand, living with one's biological mother as a child and perceiving family and community closeness was less common among men and women with depressive symptoms (Nduna et al., 2013). A study to determine the role of socio-economic status in Depression : results from the Courage(Aging study in Europe) revealed that low socio-economic status is strongly associated with higher prevalence of depression (Freeman et al., 2016).

The association of depression and employment status has been reported in several studies. For instance, Comino et al. in a study among patients attending general practice in Australia reported that unemployed patients have an increased risk of developing depressive symptoms (Comino etal. 2000). Similarly, Andersen et al. reported significant association between depression and unemployment (Anderson et al., 2009). However, in Nigeria Afolabi et al. found no significant relationship between depression and unemployment among general outpatients (Salihu and Udofia, 2016) .

Shittu et al, in a study of Association between Depression and Social Demographic Factors in a Nigerian Family Practice Setting found significant

association between depression and low income, low income , subjects with no formal education, female gender ,age group 51-60yrs and negative association between depression and marital status (Shittu et al., 2014) . Gender, employment, education, and age have been found to be associated with depression (Salihu and Udofia, 2016).

A study of Depression amongst Nigerian university students Prevalence and socio-demographic correlates in south-western Nigeria, revealed that depression was significantly associated with female gender, academic problems in school, accommodation problems in school, family size, number of cigarette smoked per day (Adewuya et al., 2006) .

Afolabi et al in a study of Pattern of depression among patients in a Nigerian family practice population reported significant association between depression and substance use , age 45years and above, low educational status, and living below poverty line (Afolabi et al., 2008). Cross-sectional studies revealed that experience of intimate partner violence is strongly and consistently associated with both depressive disorders and suicide (Devries et al., 2013).

CHAPTER THREE

METHODOLOGY

3.1 Background of study area

This study was carried out in Specialist Hospital Sokoto which is located in Sokoto metropolis the capital of Sokoto state in north western Nigeria. Sokoto State was created in February 1976 and it is bordered to the north by Republic of Niger, Kebbi state to the south and west and Zamfara state to the east. Sokoto state has twenty-three local government areas with land mass of 25,972km2 (10,028m2), and a population of 3,666,999 million people based on 2006 census, with a projected population of 4,886,888 people in 2015 (UNFPA, 2015). Sokoto metropolis is the capital city of Sokoto state, and also the seat of government. It occupies the Sudan Savannah between latitudes 13001′48″ – 13006′06″ north of the equator and longitude 05014′55″ – 05016′00″east of Greenwich and covers an area of 60.33 square km. It comprises of Sokoto North, Sokoto South and some parts of Dange-Shuni and Wamakko local government areas (SURPB, 2012). Farmers form the greater percentage of the population, while the rest are civil servants, traders, artisans and people of other occupations like tanning and dyeing. The common food crops produced include millet, guinea corn, maize, rice, onion, beans and groundnut.

There are three tertiary health institutions in the state; the Usmanu Danfodiyo University Teaching Hospital Sokoto, Federal Neuro -psychiatric Hospital Kware and the Specialist Hospital Sokoto, Secondary health centres in the metropolis include; the Noma Hospital for maxillofacial surgery and Maryam Abacha women and

children hospital. In addition there are a number of private clinics and primary health centres rendering health services to the community within the metropolis.

The research was carried out at the General out-patient department of Specialist Hospital, Sokoto. The hospital is one of the three tertiary health institutions in the state. The hospital is a 570 bed capacity with one thousand, one hundred and fifty (1,150) working staffs. It has twenty-five units which include accident and emergency unit, general out-patient department, medical and surgical out-patient departments, female medical and surgical wards, male medical and surgical wards, emergency paediatrics unit, paediatrics medical and surgical wards, maternity, gynaecological unit, NHIS/Retainer ship clinic, pharmacy, laboratory department, dialysis unit, theatre, radiology unit and administrative departments.

The hospital also serves as a training institution for students of State College of Nursing and Midwifery Sokoto, Sokoto State.

3.2 Study Design

This was a Hospital based descriptive, cross sectional study that was carried out in General outpatient Clinic, Specialist Hospital Sokoto (SHS) in January 2018.

3.3 Study Population

Study population comprised of Women attending GOPC clinics Specialist Hospital Sokoto.

3.4 Selection criteria

3.4.1 Inclusion Criteria:

1. Adult women 18 to 65 years

2. Those who consented to the study

3. Those who were fluent in English or Hausa.

3.4.2 Exclusion criteria

1. Those receiving treatment for any psychiatric disorder.

2. Those who declined to give consent.

3. Those who were too ill to take part in the study

4. Those who could not understand English or Hausa.

3.5 Sample Size Estimation

The minimum sample size was determined using the formula

$n = Z^2pq / d^2$ (Ibrahim, 2009)

n = Minimum Sample size

z = Standard normal deviate at 95% confidence interval= 1.96

p = Proportion of women that had depression in a previous Study is 33.7%(Salihu and Udofia, 2016).

q = q= 1-P

d = Precision expected at 95% confidence limit (0.05) precision of tolerable alpha Error.

From $n= Z^2pq / d^2$

$n= (1.96)^2 \times (o.337) \times (0.663) / (0.05)^2$ Therefore **n= 343**

3.6 Sampling Technique

The sample was drawn using systematic random sampling method from all the patients who attended the general outpatient clinic (both new and follow up) during the period of the study who met inclusion criteria and accepted to take part in the study. The list of all the registered patients formed the sampling frame. The study commenced from 1st to 31st January 2018. (About one month duration) Data was collected on Mondays to Fridays 8 to 4pm.

Thus, sample interval (k) = $\frac{\text{sample population}}{\text{sample size}}$

About 200 patients are seen every day, 1000 per week, and 4000 in four weeks.

Using sample population over one month = 4000

Therefore, sample interval (k) = $\frac{4000}{343}$ = 11.66 = 12

Thus, every twelfth patient was recruited for the study an average of 17 patients daily, 85 patients per week and 340 patients per month. The desired sample size was achieved over one month.

The first participant was selected using simple random sampling by balloting. Numbers 1 to 12 were written on a piece of paper and any of the first 12 patients that picked 1 was recruited as the first subject.

3.7 Instruments

The following instruments were used for data collection:

3.7.1 Quantitative data

This was used to obtain information about the socio-demographic characteristics of the woman participating in the study. Items in the questionnaire included age, marital status, marriage type, religion, state of origin. socioeconomic status (SES) was assessed using Oyedeji' s classification of social class, classified into Upper, middle and lower based on the occupation and level of education (Oseni and Odewale, 2017). Average score of the level of education and occupation of the respondents and their partners were taken. The total sum was graded on a score of 1 to 5, 1 being the highest and 5 being the lowest. A person with a score of 1 to 2 belonged to the high socioeconomic class, 2.1 to 3 and 3.1 to 5 belonged to the medium and low socioeconomic class, respectively.

3.7.2 Mini-international Neuropsychiatric Interview (M.I.N.I)

The Mini-International Neuropsychiatric Interview (M.I.N.I.) is a short structured diagnostic interview, developed jointly by psychiatrists and clinicians in the United States and Europe, for DSM-IV and ICD-10 psychiatric disorders. With an administration time of approximately 15 minutes (Sheehan et al., 1998). A score of 5 points or more, with at-least a positive response from either question 1 or 2 on the MINI indicates the presence of major depressive disorder. This instrument has been validated against Structured Clinical Interview for DSM IV (SCID IV) and Composite International Diagnostic Interview (CIDI) and has been specifically used

to examine the nature and distribution of Axis I DSM–IV disorders in a group of patients with epilepsy (Owolabi and Owolabi, 2017).

3.7.3 Determinants of Depression

This section assessed respondents for possible determinants of depression which comprised of questions about method of payment of hospital bills, description of health status, current medical conditions and medications, current challenges in life, number of children, past history of depression, family history of mental illness, sexual violence and intimate partner violence. The Intimate partner violence was assessed using HITS- Intimate partner violence screening tool which is a simple screening test that gives a rapid review of the components of Intimate partner violence in a mnemonic form (HITS) which stands for how often does your partner? H= physically hurt you? I= Insult or talk down to you? T=Threaten you with harm? S= Scream or curse at you? It has a 5 points Likert scale never=1, rarely =2, sometimes=3, fairly often=4 frequently=5. Score of 10 is positive (Sherin et al., 1998).

3.8 **Consent form**

See appendix III

3.9 Data Collection Technique

The study was carried out in January 2018 within a period of one month. The questionnaire were interviewer- administered to eligible participant who have

consented to the study at the female wing of General Outpatient Clinic SHS in either English or Hausa language depending on the educational level and preference of the study participants. All participants were informed about the objectives of the study as well as their rights to refuse participation, with absolutely no negative consequences to them. In addition, they were assured of utmost confidentiality of their responses.

3.10 Personnel and Training

Six research assistants comprising Medical students, and Health records students from Usmanu Danfodiyo University Teaching Hospital Sokoto, were recruited for data collection. They were trained for two days by the principal researcher on introduction to questionnaire/ survey instruments, sampling, field activities, ethics of fieldwork, general principles, objectives and conduct of research also on interpersonal communication skills and use of research instruments. Emphasis was laid on the need for confidentiality.

3.11 Pretesting of Instrument

The research instruments was pre-tested in General out-patient clinic Usmanu Danfodiyo University Teaching Hospital Sokoto by the principal researcher. About 10% (Thirty four) of the total sample size respondent were enrolled into this study. After conclusion of the pre-testing corrections were made appropriately before the actual study was carried out.

3.12 Data Processing and Analysis

The data collected was analyzed using Statistical Package for the Social Sciences, version 20. (SPSS 20). Descriptive statistics such as mean, standard deviation, and percentages were used to summarize variables. Likewise charts and frequency tables were generated where appropriate. A confidence interval of 95% was used in this study and a P-value ≤ 0.05 was considered statistically significant.

The Chi square statistical test for significance was used to determine association between socio-demographic profile and prevalence of depression (dependent variable) and also between determinants of depression and prevalence of depression. For results that shows significant statistical association, their predictive relationship was determined using binary logistic regression. Confidence intervals and odd ratios were estimated.

3.13 Ethical Consideration

Ethical approval for the study was obtained from Specialist Hospital Sokoto Ethics Committee. Permission from GOPC SHS and consent from the respondents was also obtained.

3.14 Limitations of the study

1. The study was hospital based and therefore may not be generalised, systematic random sampling was used to minimise this effect.
2. Response bias, because the questionnaires were administered by the researcher. Confidentiality was assured and respondents were encouraged to be free and honest.
3. Scarcity of data on studies of prevalence and determinants of depression in women. Comparison was made with studies on general population.

CHAPTER FOUR

Results

A total of 343 participants were recruited and interviewed by the researcher with 100% response rate

Table 1: Socio-demographic characteristics of the respondents

Variables	Frequency (n = 343)	Percentage (100.0%)
Age group (in years)		
≤19	32	9.3
20 - 24	84	24.5
25-29	59	17.2
30-34	50	14.6
35-39	38	11.1
40-44	29	8.5
45-49	17	5.0
50-54	18	5.2
55-59	3	0.9
60-64	5	1.5
>64	8	2.3

Religion of the respondents		
Islam	324	94.5
Christianity	19	5.5
Tribe		
Hausa/Fulani	310	90.3
Yoruba	19	5.5
Igbo	7	2.0
Others eg Igbira, Mada, Ninzo.	7	2.0
State of origin		
Sokoto	287	83.7
Kebbi	9	2.6
Zamfara	5	1.5
Kaduna	5	1.5
Others eg Katsina, Kwara, Niger.	37	10.7
Marital status		
Single	53	15.5
Married	252	73.5
Divorce	14	4.1
Separated	9	2.6
Widow	15	4.4
Marriage type n=252		
Monogamous	146	57.9
Polygamous	106	42.1

Social class category		
Upper class	53	15.5
Middle class	114	33.2
Lower class	176	51.3

Majority 84(24.5%) of the respondents were in the age group 20-24years with mean age of 31.5 ± 11.3. Three hundred and twenty four (94.5%) of the respondents were Muslims and 19 (5.5%) were Christians.

Three hundred and ten (90.3%) of the respondents were Hausa/Fulani, 19 (5.5%) were Yorubas, 7(2.0%) were Igbos and 7(2.0%) were other tribes. Fifty three (15.5%) of the respondents were single, 252(73.5%) were married of which 146 (42.6%) were in monogamous setting while 106 (30.9) of the respondents were in polygamous setting. Fourteen (4.1%) of the respondents were divorced, 9 (2.6%) were separated and 15(4.4%) were widows. Majority 176 (51.3%) of the respondents belong to lower social class category, 114 (33.2%) belong to middle class and 53 (15.5%) were of upper social class.

Table 2: Symptoms of depression among respondents

Variable	Frequency (n=343)	Percentage (n=100.0)
Low mood		
Yes	150	43.7
No	193	56.3
Loss of interest		
Yes	151	44.0
No	192	56.0
Change in appetite		
Yes	171	49.9
No	192	56.0
Trouble with sleep		
Yes	139	40.5
No	204	59.5
Psychomotor agitation or retardation		
Yes	135	39.4
No	208	60.6
Decrease energy		

Yes	181	52.8
No	162	47.2
Worthlessness		
Yes	84	24.5
No	259	75.5
Difficulty in concentration		
Yes	101	29.4
No	242	70.6
Suicidal ideation		
Yes	68	19.8
No	275	80.2

Majority of the respondents 181(52.8%) had decrease energy, 68(19.8%) had suicidal ideation.

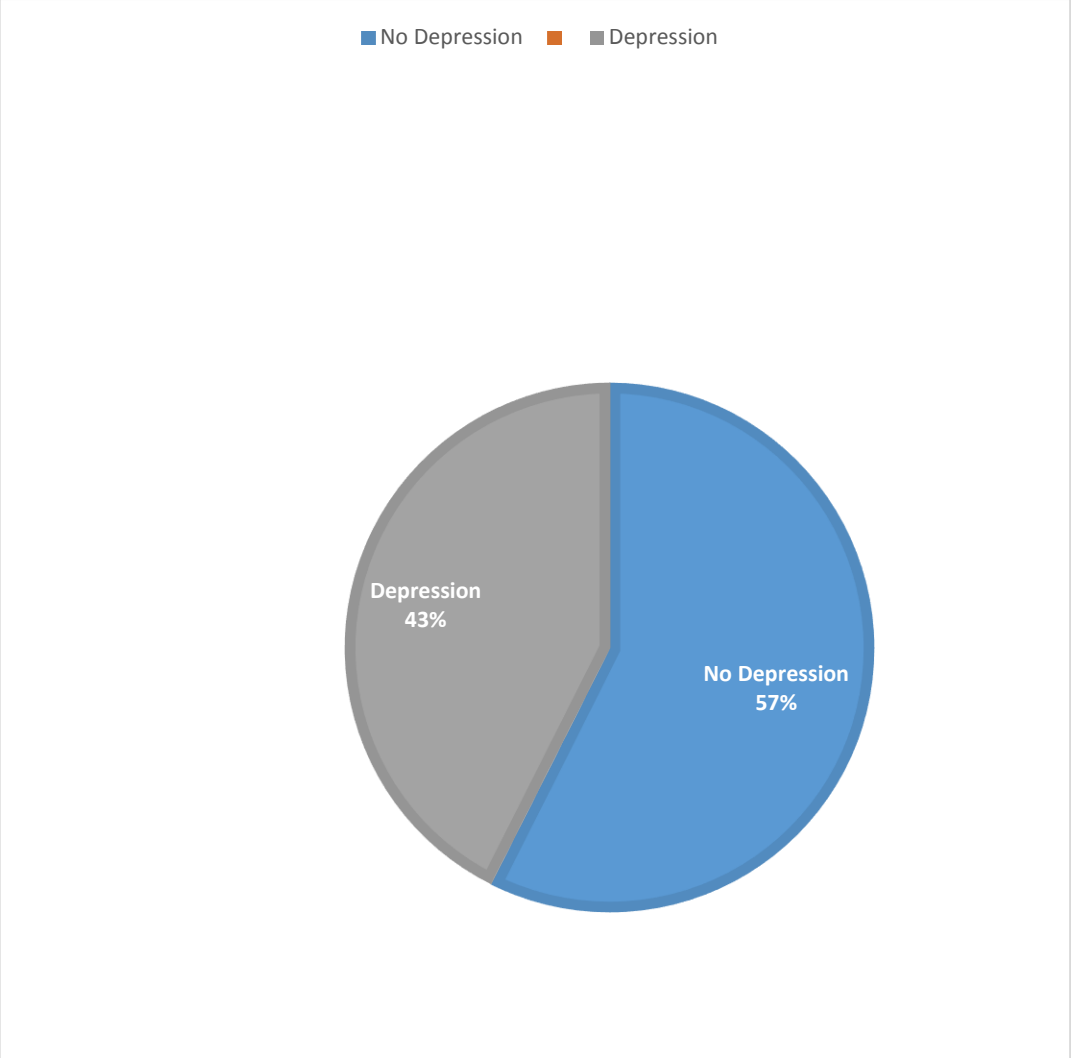

Figure 1: Prevalence of depression among respondents.

About 43% (42.6%) of the respondents had depression.

Table 3: Determinants of Depression among respondents

3a: Method of payment of the respondents

Variable	Frequency (n=343)	Percentage (%=100.0)
Out-of pocket	337	98.2
NHIS	5	1.5
Others	1	0.3

3b: Health status of the respondents over three month

Variable	Frequency (n=343)	Percentage (%=100.0)
Poor	21	6.1
Fair	105	30.6
Good	121	35.3
Very good	37	10.8
Excellent	59	17.2

3c: Medical conditions of the respondents

Variable	Frequency(n=343)	Percentage(%=100.0)
Hypertension		
Yes	53	15.5
No	290	84.5
Diabetes mellitus		
Yes	4	1.2
No	339	98.8
HIV/AIDS		
Yes	1	0.3
No	342	99.7
Kidney Diseases		
Yes	3	0.9
No	340	99.1
Bone and joint diseases		
Yes	252	70.4
No	91	29.6
Peptic Ulcer Diseases		
Yes	59	17.2
No	284	82.8

Recurrent Fever		
Yes	9	2.6
No	334	97.4
Asthma		
Yes	3	0.9
No	340	99.1
Others		
Yes	27	7.9
No	116	33.8

3d: Current medications of the respondents

Variable	Frequency(n)	Percentage(%=100.0)
Anti- hypertensives	38	11.1
Analgesics	50	14.6
Anti-diabetics	1	0.3
Anti-ulcers	53	15.5
Antibiotics	4	1.2
Traditional	2	0.6
Anti-retroviral	1	0.3
Anti-asthmatics	3	0.9
Anti-malarial	3	0.9
Anti-hypertensive + Analgesics	9	2.6

Anti-ulcers + Analgesics	1	0.3
Anti-hypertensive + Anti-ulcers	4	1.2
Anti-ulcers + Analgesics	1	0.3
Anti-hypertensive + Anti-ulcers	4	1.2
Anti-hypertensive + Antibiotics	1	0.3
Other Medications	2	0.6
None	170	49.6

3e: Happiness with relationships amongst respondents

Variable	**Frequency (n=343)**	**Percentage (%=100.0)**
Un-happy	48	14.0
Neither happy nor unhappy	49	14.3
Happy	215	62.7
Not applicable	31	9.0

3f: Number of children of the respondents

Variable	Frequency(n)	Percentage(n=100.0)
Total number of children		
0	27	7.9
1-5	170	49.6
6-10	73	21.3
11-15	7	2.0
Not applicable	66	19.2
Number of male children		
0	61	17.8
1-5	189	55.1
>5	17	5.0
Not applicable	76	22.2
Number of female children		
0	55	16.0
1-5	200	58.3
>5	12	3.5
Not applicable	76	22.2

Number of children living with the mother		
All	182	53.1
None	21	6.1
Some	57	16.6
Not applicable	83	24.2

3g: Past history of depression

Variable	Frequency(n=343)	Percentage(%=100)
Yes	118	34.4
No	225	65.6

3h: Family history of mental illness

Variable	Frequency(n=343)	Percentage(n=100)
Yes	42	12.2
No	301	87.8

3i Ever been forced to have sex against wish

Variable	Frequency(n=343)	Percentage(%=100.0)
Yes	66	19.2
No	277	80.8

Majority of the respondents (98.3%) pay medical bill out-of pocket. 35.3% of the respondents described their health status as good, 17.2% as excellent and 6.1% as poor. Majority of the respondents (17.2%) have Peptic Ulcer Disease. Majority of the respondents 128(37.3%) were happy with their marital/partner relationship and 15(4.4%) were very un-happy. Twenty seven (7.9%) of the respondents had no children, 170(49.6%) had 1-5 children. Fourty two (12.2%) of the respondents had past history of depression. Sixty six (19.2%) of the respondents reported ever been forced to have sex against their wish.

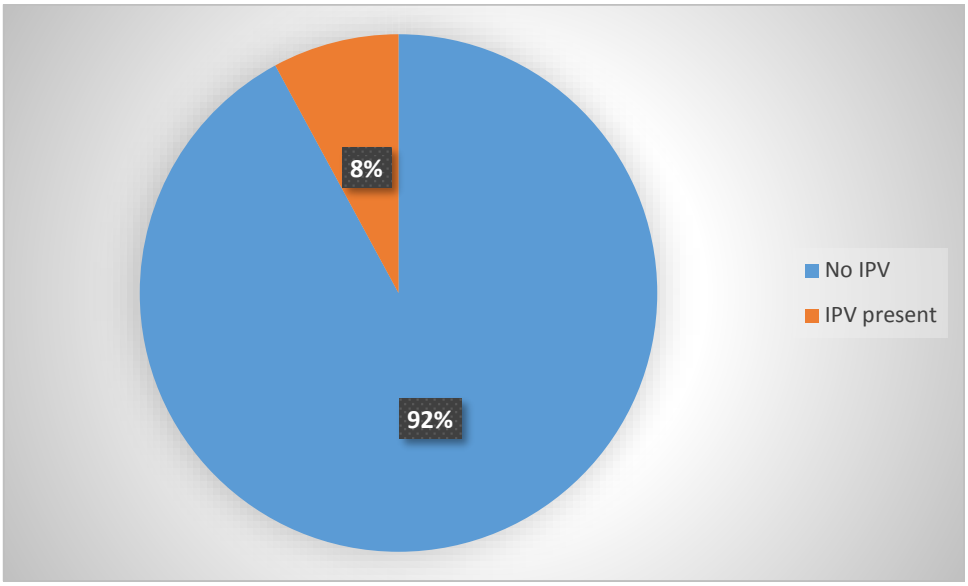

Fig 2: Intimate partner violence among respondents

Twenty seven (8%) of the respondents were screened positive for intimate partner violence.

Table 4a: Current challenges of the respondents

Variable	Frequency (n= 343)	Percentage (%= 100.0)
Chronic illness		
Yes	58	16.9
No	285	83.1
Death of close friend or relative		
Yes	83	24.2
No	260	75.8
Separation from close friend or relative		
Yes	49	14.3
No	294	85.7
Serious financial difficulty		
Yes	122	35.6
No	221	64.4
Challenges faced at work		
Yes	9	2.6
No	126	36.7
Not applicable	207	60.6

Type of challenge faced at work		
Lack of buyers	7	2.0
No prompt payment of debt	3	0.9
Not applicable	333	97.1

Table 4b : Current marital /relationship challenges

Variable	**Frequency** (n=343)	**Percentage** (%=100)
Husbands neglect		
Yes	38	11.1
No	305	88.9
Husband planning to add more wife		
Yes	11	3.2
No	87	25.4
Not living peacefully with the co-wife		
Yes	24	7.0
No	319	93.0
Lack of sexual satisfaction		
Yes	19	5.5
No	324	94.5
Childlessness		
Yes	24	7.0
No	319	93.0

Pressure from in-laws for not having a child		
Yes	4	1.2
No	339	98.8
Inability to get along with husbands relatives		
Yes	10	2.9
No	333	97.1
Neglect of child/children		
Yes	11	3.2
No	332	96.8
Lack of progress of child/children		
Yes	4	1.2
No	339	98.8
Serious health condition of child/children		
Yes	14	4.1
No	329	95.9

About thirty six percent of the respondents had serious financial difficulties, and 16.9% of the respondents had chronic illness.

Thirty eight (11.1%) of the respondents were neglected by their husbands, 19(5.5%) lack sexual satisfaction from their partners and 24(7.0%) had childlessness.

Table 5: Distribution of socio-demographic profile by status of Depression among respondents

Variables	No depression Frequency (%)	Depression present Frequency (%)	Test of significance	
Age in years				
<45years	177(60.6)	115(39.4)	X^2=8.13	P=0.004
45years and above	20(39.2)	31(60.8)		
Religion of the respondents				
Islam	185(57.3)	138(42.7)	X^2 =0.746	P=0.689
Christianity	11(57.9)	8(42.1)		
Marital Status				
Single	27(50.9)	26(49.1)	X^2=7.81	P=0.009
Married	155(61.5)	97(38.5)		
Divorced	5(35.7)	9(64.3)		
Separated	4(44.4)	5(55.6)		
Widow	6(40)	9(60)		
Type of marriage				
n=252				
Monogamous	93(63.7)	53(36.3)	X^2 =7.128	P=0.03
Polygamous	62(58.5)	44(41.5)		
Social class category				
Upper class	37(69.8)	16(30.2)	X^2 = 14.079	P=0.001

Middle class	76(66.7)	38(33.3)
Lower class	84(47.7)	92(52.3)

There is statistically significant difference between age, marital status, marital type and Social class category of the respondents and their status of Depression, with p-values 0.004, 0.009, 0.03 and 0.001 respectively.

Table 6: Distribution of Determinants of Depression by status of Depression among respondents

Variable	No Depression Frequency (%)	Depression present Frequency (%)	Test of significance	
Happiness with marital/partner relationship				
Un-happy	17(35.4)	31(64.6)	χ 2=18.08	P<0.01
Neither happy nor unhappy	24(49.0)	25(51.0)		
Happy	143(66.5)	12(33.5)		
Currently living with spouse				
Yes	153(59.8)	103(40.2)	χ 2=2.24	P= 0.13
No	44(50.6)	43(49.4)		
Total number of children				
0	14(51.9)	13(48.1)	χ 2=2.89	P=0.24
1-5	105(61.8)	65(38.2)		
>5	41(51.2)	39(48.8)		
Number of male children				
0	38(59.0)	25(41.0)	χ 2=0.85	P=0.65
1-5	110(58.2)	79(41.8)		
>5	8(47.1)	9(52.9)		

Number of female children				
0	34(61.8)	21(38.2)	χ 2=1.01	P=0.60
1-5	112(56.0)	88(44.0)		
>5	8(66.7)	4(33.3)		
Children living with the respondents				
Yes	108(59.3)	74(40.7)	χ 2=5.45	P=0.14
No	8(38.1)	13(61.9)		
Some of the children	37(64.9)	20(35.1)		
Past history of depression				
Yes	35(29.7)	83(70.3)	χ 2=56.76	p<0.001
No	162(72.0)	63(28.0)		
Family history of mental illness				
Yes	15(35.7)	27(64.3)	χ 2=9.24	P=0.002
No	182(60.5)	119(39.5)		
Ever been forced to have sex against wish				
Yes	30(45.5)	36(54.5)	χ 2=4.79	P=0.028
No	167(60.3)	110(39.7)		
Intimate partner violence screening				
Positive	8(28.6)	20(70.4)	χ 2=10.52	P=0.001
Negative	189(60.2)	125(39.8)		

Seventeen (35.4%) of the respondents who were un-happy with relationships with their husbands or partners were not depressed, while 143(66.5%) of the respondents who were happy had no depression. Thus there is statistically significant difference between happiness in partners relationships and depression status $\chi 2=18.08$ $p <0.01$.

Table 7: Distribution of Health status and medical conditions by Depression status of the respondents

Variable	No Depression Frequency (%)	Depression Frequency (%)	Test of significance	
Description of health status over three months				
Bad	47(37.3)	79(62.7)	χ 2=33.0	p<0.001
Good	150(69.1)	67(30.9)		
Medical conditions of the respondents				
Hypertension				
Yes	19(35,8)	34(64.2)	χ 2=11.95	P=0.01
No	178(61.4)	112(38.6)		
Diabetes mellitus				
Yes	4(100)	0 (0)	χ 2=2.99	P=0.08
No	193(56.9)	146(43.1)		
HIV/AIDS				
Yes	O (0)	1 (100)	χ 2=1.35	P=0.24
No=	197(57.6)	145(42.4)		
Kidney diseases				
Yes	1(33.3)	2(66.7)	χ 2=0.72	P=0.39
No	196(57.6)	144(42.4)		

Bone and joint pains				
Yes	32(52.5)	29(47.5)	χ 2=0.75	P=0.39
No	165(58.5)	117(41.5)		
Peptic Ulcer Disease				
Yes	26(44.1)	33(55.9)	χ 2=5.21	P=0.02
No	171(60.2)	113(39.8)		
Recurrent fever				
Yes	4(44.4)	5(55.6)	χ 2=0.63	P=0.42
No	193(57.8)	141(42.2)		
Asthma				
Yes	3(100)	0 (0)	χ 2=2.24	P=0.13
No	194(57.1)	146(42.9)		
Other illness				
Yes	16(59.3)	11(40.7)	χ 2=0.057	P=0.97
No	67(57.8)	49(42.2)		

Seventy nine (62.7%) of the respondents who described their health status over three months as bad had depression while 67(30.9%) of the respondents with good health status had depression, thus there is statistically significant difference between health status and depression P <0.001 χ^2 = 33.0. 34(64.2%) of the respondents with hypertension had depression while 112(39.8%) of the respondents without hypertension had depression, thus there is statistically significant difference between depression and hypertension p = 0.01 χ^2 = 11.95. 33(55.9%) of the respondents with PUD had depression while

113(39.8%) with no PUD had depression thus there is statistically significant difference between PUD and depression $p = 0.02$ $\chi^2 = 5.21$.

Table 8: Distribution of Current challenges by status of Depression among respondents.

Variable	Depression Frequency (%)	No depression Frequency (%)	Test of significance	
Chronic illness				
Yes	21(36.2)	37(63.8)	χ 2 =12.87	p<0.001
No	176(61.8)	109(38.2)		
Death of close friend or relative				
Yes	47(56.6)	36(43.4)	χ 2 =0.03	P=0.86
No	150(57.7)	110(42.3)		
Separation from close friend or relative				
Yes	27(55.1)	22(44.9)	χ 2 =0.13	P=0.71
No	170(57.8)	124(42.2)		
Serious financial difficulty				
Yes	42(34.)	80(65.6)	χ 2 =41.0	p<0.001
No	155(70.1)	66(29.9)		
Husbands neglect				
Yes	12(31.6)	26(68.4)	χ 2= 11.68	P = 0.001
No	185(60.7)	120(39.3)		

Husband planning to add more wife				
Yes	5(45.5)	6(54.5)	χ 2= 6.67	P =0.14
No	192(57.8)	140(42.2)		
Not living peacefully with co-wife				
Yes	4(36.4)	7(63.6)	χ 2=2.06	P =0.15
No	193(58.1)	139(41.9)		
Lack of sexual satisfaction				
Yes	6(31.6)	13(68.4)	χ 2=5.50	P=0.19
No	191(59.0)	133(41.0)		
Childlessness				
Yes	14(58.3)	10(41.7)	χ 2=0.09	P =0.47
No	183(57.4)	136(42.6)		
Pressure from in-laws for not having a child				
Yes	2(50)	2(50)	χ 2=0.91	P =0.76
No	195(57.5)	147(42.5)		
Inability to get along with husbands relatives				
Yes	3(30.0)	7(70.0)	χ 2=3.17	P =0.08
No	194(58.3)	139(41.7)		

Neglect of child/children				
Yes	5(45.0)	6(54.5)	χ 2=0.68	P =0.41
No	19257.8)	140(42.2)		
Child/children not progressing				
Yes	1(20)	4(80)	χ 2=3.34	P =0.19
No	155(58.9)	108(41.1)		
Serious health condition of child/children				
Yes	5(35.7)	9(64.3)	χ 2=3.36	P=0.19
No	151(59.4)	103(40.6)		

Thirty seven (63.8%) of the respondents with challenge of serious illness had depression while 109 (38.2%) of the respondents without serious illness had depression, there is statistically significant difference between serious illness and depression among respondents $p<0.001$ $\chi^2 = 12.87$. 80(65.6%) of the respondents with serious financial difficulties had depression while 66(29.9%) of the respondents without serious financial difficulty had depression, thus there is statistically significant difference between depression and serious financial difficulties $p<0.001$ $\chi^2 = 41.0$.

Table 9: Binary logistic regression for predictors of Depression

Variable	OR	P	Lower limit	Upper limit
Social class category				
Upper social class	0.35	0.02	0.15	0.82
Middle social class	0.46	0.02	0.24	0.86
Health status				
Bad health status	4.24	<0.01	2.32	7.77
Past history of depression				
Past history of depression	5.75	<0.001	3.08	10.74
Serious financial difficulty				
Serious financial difficulty	3.76	<0.001	2.07	6.81
Husbands neglect				
No husbands neglect	0.31	0.01	0.13	0.76
Marital status				
Single	3.31	0.32	0.32	3.45
Married	0.81	0.86	0.09	7.75
Divorced	0.78	0.88	0.04	17.56
Separated	0.37	0.50	0.20	6.72

Respondents in upper social class category have more than 3 times less likely chance of depression than those in lower social class category(p=0.02) , while those in middle class category have 2 times less likely chance of depression than those in lower social class category (p=0.02). Respondents with Bad health status have more than four times chance of depression than those with Good health status (p<0.01). Respondents with past history of Depression have about 6 times more likely chance of Depression than those without past history of Depression (p<0.01). Respondents with serious financial difficulty have about 4 times more likely chance of Depression than those without serious financial difficulty (p<0.01). Respondents with no husbands neglect have more than 3 times less likely chance of Depression than those with Husbands neglect (p = 0.01). Marital status is not a predictor of Depression.

CHAPTER FIVE

DISCUSSION

It is worthy of note that despite consistent literature findings of higher prevalence of depression in women, few of such studies focussed solely on women both locally and internationally for comparison.

Respondents ranged between the ages of 18 and 65years with mean age of 31.5 ± 11.3. This is similar to result obtained in the study conducted in Sokoto with mean age of female respondents 32.47 ±10.72 (Yunusa and Enokela, 2013). Another study conducted in Kano reported slightly higher mean age of the respondents of 36.8 yrs.± 11.6 and similar age range of 18 to 64years (Salihu and Udofia, 2016). This could be due to similarity in geographical and cultural characteristics and it also means that older women patronise hospitals in Kano than in the study area.

The study revealed that there was statistically significant association between Social class and depression status of the respondents (p=0.001) and that Social class is a strong predictor of depression, thus the higher the social class the less likely chance of having depression. Respondents in upper social class category have three times less likely chance of having depression than those in lower social class (p = 0.02).This finding is similar to a study in Europe which showed that Socio-economic status index is a predictor of depression among European countries(Freeman et al., 2016). This is in contrast to the result of study on determinants of depression among medical students in two medical

schools from South-eastern Nigeria which showed no association between social class and prevalence of depression among medical students (Tamunosiki et al., 2017). This could be due to the fact that there could be no significant difference in socio-economic status amongst medical students.

The prevalence of depression from this study was found to be 42.6%. This is higher than 33.7% prevalence recorded in Kano North-western Nigeria (Salihu and Udofia, 2016), which shares similar geographical and cultural characteristics with the study area . Even-though both studies used diagnostic interviews, while this study used MINI -5, the other study used SCAN interview , thus the difference might be attributed to the different types of interviews used , variations in local rates of predisposing factors for depression and deploring socio-economic status. Previous retrospective study of prevalence of psychiatric morbidity in a tertiary hospital in Sokoto revealed much lower prevalence of 9.6% (Yunusa and Enokela, 2013). However the later study was retrospective in nature and a lot of cases might be missed by the attending physicians in a busy clinic setting in addition to increasing preponderance of predisposing factors over time. Another retrospective study on prevalence of depression among women in mental health clinic Bayelsa, south-southern Nigeria revealed a high prevalence of 37.9% in 2012 (Jack-Ide, 2016).This could be due to poor case detection in the former, as the later was conducted in mental health clinic and variations in local rates of predisposing factors for depression in the various communities which were ethnically and culturally diverse. Higher

prevalence of 59.6% was recorded in a study of pattern of depression among patients in a Nigerian family practice population Ilesha (Afolabi et al., 2008).

Also in this study, depression was more common among respondents aged 45years and above compared to those aged 45years and below (p =0.004). About 61% of those aged 45years and above were depressed. This is in agreement with finding of Blanchflower *et al.* who reported that typical individuals happiness reached its minimum at about age 44years (Blanchflower and Oswald, 2009) . Salihu and Udofia also reported similar finding recently in Kano (Salihu and Udofia, 2016).This study revealed that there is statistically significant association between marital status (p =0.009), and marriage type (p =0.03).

There is statistically significant difference between marital status of the respondents and depression (p = 0.009) with depression being more common in divorced and least in married respondents. More than 64% of the divorced respondents were depressed compared to about 39% of the married respondents. This is in agreement with finding of a study of relationship between depression and socio-demographic factors in Canada which revealed that depression is commoner in women .The lowest and highest rates of depression are seen among people living with their married partners and divorced individuals, respectively(Akhtar-Danesh and Landeen, 2007). In addition, Holt-Lunstad reported that happily married individuals have greater satisfaction with life, lower stress and less depression due to satisfaction and support associated with such relationship(Holt-Lunstad et al., 2008). Another study in agreement with this finding

revealed that higher prevalence of Depression was observed among widows and women not in a marital relation (Archana et al., 2017). In contrast, Salihu and Udofia reported that depression was diagnosed more frequently in married than single women (Salihu and Udofia, 2016) .

The study also revealed statistically significant difference between type of union of the respondents and depression (p = 0.03), with those in polygamous setting having higher chance of depression than those in polygamous setting. This is in agreement with finding of Al-Krenawi who reported that women in polygamous marriages experienced lower self-esteem, less life satisfaction, less marital satisfaction and more mental health symptomatology like depression than women in monogamous marriages (Al-Krenawi, 2013). This could be due to competition between the wives, tendency for the husband to neglect one wife over the others and deploring socio-economic status that make it hardly possible for men to effectively cater for the needs of the family especially in polygamous settings.

In this study, there is statistically significant association between happiness in relationship and depression among respondents (χ^2 = 18.08 p = <0.001), past history of depression (χ^2 =56.76 p = < 0.001), Family history of mental illness (χ^2 = 9.24 p = < 0.002). This is in agreement with studies conducted by Maideen et al. and Monroe et al. (Monroe et al., 2014, Maideen et al., 2014).

The study revealed statistically significant association between ever been forced to have sex against wish and depression (χ^2 =4.79 p = < 0.028). This is in agreement with result

of a study conducted by Rees Daniel which suggested that forced intercourse is strongly related to depression (Rees and Sabia., 2013).

This study also showed that there was statistically significant difference between Intimate partner violence and depression (χ^2 =10.52 p = 0.001). Cross-sectional studies revealed that experience of intimate partner violence is strongly and consistently associated with both depressive disorders and suicide (Devries et al., 2013).

Social class, health status, past history of depression, husbands neglect, serious financial difficulty and past history of depression were found to be predictors of depression in this study. This is in agreement with study of Maideen et al.which revealed that presence of anxiety, serious problems at work, unhappy relationship with children, high perceived stress, domestic violence, unhappy relationship with spouse, low self-esteem, unhappy relationship with family, serious financial constraint and presence of chronic diseases, and serious marital problems as predictors of depression among adults in community of Selangor, Malaysia (Maideen et al., 2014).Similarly, Monroe et al. revealed that three of the most consistently reported and powerful predictors of depression are a recent major life event, a positive family history for depression, and a personal history of past depressive episodes (Monroe et al., 2014) Another study in agreement with this finding reported that late-life depression was significantly associated with financial difficulties (Odds ratio 4.52) (Monroe et al., 2014). Another study found that Partner violence, mother of disabled children, history of postpartum Depression are independent predictors of Depression (Archana et al., 2017).

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

This study supported previous reports on prevalence and determinants of depression among women. The study revealed high prevalence of depression in women, and that depression in women was associated with health and socio-economic factors that are worth paying attention to, in a region of economic deprivation and inadequate healthcare. It was also evident that social class, health status, past history of depression, serious financial difficulty and husbands neglect were strong predictors of depression among the respondents.

6.2 Recommendations

1. In view of the high prevalence of depression among women in this study, doctors in general out-patient clinics should have high index of suspicion for depression when attending to women and should pay greater attention to those that had past history of depression, serious financial difficulty, those that were experiencing husband's neglect, those with bad health status and those of lower social class as they are at increased risk of depression.

2. In view of the finding of serious financial difficulty and lower social class as determinants of depression among respondents in this study, federal, states and local governments should work hand in hand to support effective implementation of poverty

alleviation programmes e.g. provision of soft loan for business, establishment of skills acquisition centres. Government and society should collectively support increase enrolment of girl child into school so as to raise their socio-economic status and subsequently reduce depression. On the other hand, every women forum weather in the city or rural area should be effectively used as class rooms to educate the illiterate ones amongst them on skills, knowledge, and values that will help them improve their social and economic life.

3. In view of finding of husbands neglect as a determinant of depression, there is need for religious leaders of this community should look into the possibility of introducing pre-marital counselling classes and continue to preach on rights of women on their husbands, the need to show them love care and compassion and treating them fairly in polygamous settings.

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APPENDIX 1

CONSENT FORM

I am a post graduate student from the Department of Community Health, Usmanu Danfodiyo University Sokoto. I am carrying out a research on Prevalence and determinants of depression among women attending Specialist Hospital Sokoto, Nigeria.

Benefit of the research

The information obtained would be useful in developing appropriate strategies in tackling the issue of depression in women.

Voluntary participation/withdrawal from the study

You are not under any obligation to participate in this study. Your decision to take part is voluntary and you have the right to freely withdraw without any penalty.

Risks

You are not and will not be exposed to any risk. You will be required to fill a questionnaire, the interview will take about 15 minutes and your responses will be confidentially treated. However, your honest answers to the questions will be appreciated.

Cost

You are not expected to pay for participating in the study

CONSENT

Now that the study has been well explained to me, I have full understanding of the contents, and hereby agree to participate in it.

_____ _____

Signature of participant Date

APPENDIX 2

QUESTIONNAIRE ON

PREVALENCE AND DETERMINANTS OF DEPRESSION AMONG WOMEN ATTENDING GENERAL OUT-PATIENT CLINIC (GOPC) SPECIALIST HOSPITAL SOKOTO.

Dear ma, I am an MPH student of Usmanu Danfodiyo University Sokoto carrying out research on Prevalence and Determinants of Depression among Women attending GOPC Specialist Hospital Sokoto.. Please kindly respond to the questions on this questionnaire to the best of your ability. All information obtained shall be treated with utmost confidentiality.

Thank you.

Yours faithfully.

Abdulkadir Isah

CONSENT

Do you agree to participate in this study? Yes [ ] No [ ]

Questionnaire no…….

SECTION A: SOCIO-DEMOGRAPHIC PROFILE OF THE RESPONDENTS

1. Age (in years): …….
2. Tribe:

   (a) Hausa [ ] (b) Yoruba [ ] (c) Igbo [ ] (c) Others specify….
3. Religion:

   (a) Islam [ ] (b) Christianity [ ] (c) Traditional [ ] (d) others Specify …….
4. Marital status.

   (a) Single [ ] (b) Married [ ] (c) Divorced [ ] (d) Separated [ ]

   (e) Widow [ ]
5. If married, (a) Monogamous [ ] (b) Polygamous [ ]
6. State of origin: ……
7. Educational level of the respondent :

   (a) University graduate/HND [ ]

   (b) Secondary school certificate with other teaching or professional training [ ]

   (c) Grade 11 Certificate teachers holder [ ]

   (d) Primary school certificate [ ]

   (e) Quranic [ ]

   (f) None [ ]
8. Educational level of the Husband /Partner :

   (a) University graduate/HND [ ]

   (b) Secondary school certificate with other teaching or professional training [ ]

(c) Grade 11 Certificate teachers holder [ ]

(d) Primary school certificate [ ]

(e) Quranic [ ]

(f) None [ ]

9. Occupation of the respondent :

(a) Senior Public servant / Professional/ Manager / Large scale trader / Business man / Contractor [ ]

(b) Intermediate grade public servant / Senior school Teacher [ ]

(c) Junior School Teacher/ Driver /Artisan [ ]

(d) Petty trader / Laborer /Messenger [ ]

(e) Un-employed / Full-time House wife / Student / Subsistence Farmer [ ]

(f) Others specify…….

10. Occupation of the Husband / Partner:

(a) Senior Public servant / Professional/ Manager / Large scale trader / Business man / Contractor [ ]

(b) Intermediate grade public servant / Senior school Teacher [ ]

(c) Junior School Teacher/ Driver /Artisan [ ]

(d) Petty trader / Laborer /Messenger [ ]

(e) Un-employed / Student / Subsistence Farmer [ ]

(f) Others specify…….

SECTION B: PREVALENCE OF DEPRESSION AMONG RESPONDENTS

(using questions adapted from MINI International Neuropsychiatric Interview).

11. Have you been consistently depressed or down, most of the day, nearly every day, for the past two weeks?

(a) Yes [ ] (b) No [ ]

12. In the past two weeks, have you been much less interested in most things or Much less able to enjoy the things you used to enjoy most of the time?

(a) Yes [ ] (b) No [ ]

Over the past two weeks, when you felt depressed or uninterested:

13. Was your appetite decreased or increased nearly every day? Or did your weight decrease or increase

With-out trying intentionally?

(a) Yes [ ] (b) No [ ]

14. Do you have trouble sleeping nearly every night? (difficulty falling asleep, waking up

In the middle of the night, early morning wakening or sleeping excessively)

(a) Yes [ ] (b) No [ ]

15. Do you talk or move more slowly than normal or were you fidgety, restless Or having trouble sitting still almost every day?

(a) Yes [ ] (b) No [ ]

16. Do you feel tired or without energy almost every day?

(a) Yes [ ] (b) No [ ]

17. Do you feel worthless or guilty almost every day?

(a) Yes [ ] (b) No [ ]

18. Do you have difficulty concentrating or making decisions almost every day?

(a) Yes [ ] (b) No [ ]

19. Do you repeatedly consider hurting yourself, feel suicidal, or wish that you were dead?

(a) Yes [ ] (b) No [ ]

SECTION C: DETERMINANTS OF DEPRESSION AMONG RESPONDENTS

20. Who pays for your drug treatment?

(a) Out- of- pocket [ ] (b) NHIS [ ] (c) Any other source …….

21. How would you describe your health in the past three months?

(a) Poor [ ]

(b) Fair [ ]

(c) Good [ ]

(d) Very good [ ]

(e) Excellent [ ]

22. Which of the following chronic medical conditions do you have?

(a) Hypertension (a) Yes [ ] (b) No [ ]

(b) Diabetes (a) Yes [ ] (b) No [ ]

(c) HIV / AIDS (a) Yes [ ] (b) No [ ]

(d) Kidney diseases (a) Yes [ ] (b) No [ ]

(e) Bone and joint pains (a) Yes [ ] (b) No [ ]

(f) Any other illness not mentioned above …….

(g) I don't have any chronic medical condition [ ]

23. Current medications…….

24. Which of the following challenges of life are you currently facing?

(a) Serious illness (a) Yes [ ] (b) No [ ]

(b) Death of a close friend or relative (a) Yes [ ] (b) No [ ]

(c) Separation from close friend or relative whom you depend for help

(a) Yes [ ] (b) No [ ]

(d) Serious financial difficulty (a) Yes [ ] (b) No [ ]

(e) Husbands neglect (a) Yes [ ] (b) No [ ]

(f) Husband planning to add more wife (a) Yes [ ] (b) No [ ]

(g) Not living peacefully with the co- wife (a) Yes [ ] (b) No [ ]

(h) Lack of sexual satisfaction (a) Yes [ ] (b) No [ ]

(i) Pressure from in-laws for not having a child (a) Yes [ ] (b) No [ ]

(j) Inability to get along with husbands relatives (a) Yes [ ] (b) No [ ]

(e) Others specify……..

25. How happy are you with your marriage / partner relationship?

a) Very unhappy [ ] b) Unhappy [ ] c) Neither happy nor unhappy [ ]

d) Happy [ ] e) Very happy [ ]

26. Are you currently living with your spouse? (a) Yes [ ] (a) No [ ]

27. Total Number of children…….

(a) Number of Male children ……. …..

(b) Number of Female children …….

(c) Not married / have no child yet [ ]

28. Do your children live with you? (a) Yes [ ] (b) No [ ] (c) Not applicable

29. Which of the following challenges are you facing with children/ child birth?

(a) I have no child [ ]

(b) My child/ children are neglected [ ]

(c) My child/ children are not progressing [ ]

(d) My child / children have serious health condition [ ]

(e) None of the above [ ]

30. Are you facing any serious challenge at your work place?

(a) Yes [ ] (b) No [ ] (c) Not applicable [ ]

31. If yes, what is the challenge you are facing at work...

32. During your life time, did you have an episode of two weeks or more when you felt depressed or

Un-interested in most things with most of the following; decrease or increase in appetite, trouble

Sleeping nearly every night, feeling tired or without energy almost every day, talking or moving more

Slowly than usual or restlessness, feeling worthless or guilty almost every day, difficulty concentrating or making decision almost every day?

(a) Yes [ ] (b) No [ ]

33. Has any member of your family had mental illness? (a) Yes [ ] (b) No [ ]

34. Have you ever been forced to have sex against your wish?

(a) Yes [ ] (b) No [ ]

Screening for Intimate Partner Violence Screening:

Please read each of the following activities and tick in boxes that best indicates the frequency with

Which your partner acts in the way depicted.

	How often does your partner?	Never 1	Rarely 2	Sometimes 3	Fairly often 4	Frequently 5
35	Physically hurt you					
36	Insults or talk down to you					
37	Threaten you with harm					
38	Scream or curse at you					
	Total					

Thank you.

APPENDIX 3

HAUSA VERSION OF THE STUDY QUESTIONNAIRE

ADADIN MASU CIWON DAMUWA DA ABUBUWAN DA SUKA TAALLAKA DASHI GA MATA MASU HALARTAR SASHEN KULA DA LAFIYA NA ASIBITIN KWARARRI DAKE SAKKWATO .

Ni dalibine na gaba da gigiri a Sashen karewa da hana yaduwar cututtuka na Jamiar Usmanu Danfodiyo dake sakkwato wanda ke gudanar da bincike akan Adadin masu ciwon Damuwa da abubuwan da suka taallaka dashi ga mata dake halartar sashen kula da lafiya na gamegari asibitin kwararru dake sakkwato. Amsa wadannan tambayoyi iya kokarinka. Kuma duk bayanan da na samu zasu zamo sirri abin karewa da kuma kiyayewa.

Nagode.

Abdulkadir Isah

Amincewa

Kin amince ki shiga cikin wannan binchike ? Eh [ ] A' a [ ]

Lambar takarda…….

SASHEN A: BAYANI GAMEDA KANKI

1. Shekaru : …….

2. Yare:

   (a) Hausa [ ]

   (b) Yarabanchi [ ]

   (c) Inyamuranci [ ]

   (d) Wasu bayyana……

3. Addini:

   (a) Musulunci [ ]

   (b) Kiristanchi [ ]

   (c) Addinin gargajiya[ ]

   (d) Wasu bayyana …….

4. Lamarin aure.

   (a) Bantaba aure ba [ ]

   (b) Inada aure [ ]

   (c) Aurena ya mutu [ ]

   (d) Mun rabu amma auren bai mutu ba [ ]

   (e) Abokin auren ya rasu [ ]

5. Idan kanna/kina da aure yaya auren?

   (a) Miji daya da mata daya [ ]

   (b) Akwai mata fiye da daya [ ]

6. Jihar asali : ……

7. Matakin aikin mai amsa tambaya :

(a) Babban maaikacin gwamnati / kwararre akan wata sanaa/ Manaja / Babban mai saye da sayarwa /

Babban dan kasuwa/ Dankwangila [ ]

(b) Matsakaicin maaikaci / Malamin babbar makarantar sakandire [ ]

(c) Malamin karamar makarantar sakandire / Direba /Mai sanaar hannu [ ]

(d) Mai saide saide / Lebura /Masinja [ ]

(e) Banida aiki / Matar gida / Daliba / Karamar mainoma [ ]

(f) Wasu bayyana…….

8. Matakin aikin maigida / Saurayi:

(a) Babban maaikacin gwamnati / Kwararre akan wata sanaa/ Manaja / Babban mai saye da sayarwa/Babban dan kasuwa/Dankwangila [ ]

(b) Matsakaicin maaikaci / Malamin babbar makarantar sakandire [ ]

(c) Malamin karamar makarantar sakandire / Direba /Mai sanaar hannu [ ]

(d) Mai saide saide / Lebura /Masinja [ ]

(e) Banida aiki / Matar gida / Dalibi / Karamin manomi [ ]

(f) Wasu bayyana…….

9. Matakin ilimin mai amsa tambaya :

(a) Digiri /HND [ ]

(b) Shedar karatun sakandire tareda wata kwarewa akan malanta ko gwanancewa akan wata sanaa [ ]

(c)Takardar shedar kamala Grade 11 [ ]

(d) Takardar shedar gama primare [ ]

(e) Ilimin karatun kurani [ ]

(f) Babu [ ]

10. Matakin ilimin maigida /Saurayi:

(a) Digiri /HND [ ]

(b) Shedar karatun sakandire tareda wata kwarewa akan malanta ko gwanancewa akan wata sanaa [ ]

(c)Takardar shedar kamala Grade 11 [ ]

(d) Takardar shedar gama primare [ ]

(e) Ilimin karatun kurani [ ]

(f) Babu [ ]

SASHEN B: ADADIN MASU CIWON DAMUWA

11. A mako biyu da suka gabata, kina samun tsananin damuwa akai akai, yawancin lokutan yini , kusan

kullum? (a) Eh (b) A' a

12. A makonni biyu da suka gabata, kina samun karancin shaawar mafi yawan alamurra, ko rashin

jindadin mafi yawan abubuwanda kike jin dadi a baya, a mafi yawan lokuta ?

(a) Eh (b) A' a

A cikin mako biyun da kike jin tsananin damuwa ko rashin shaawa :

13. Dandanonki na abinci ya karu ko ya ragu kusan ko wace rana ? Ko nauyin ki ya karu ko ya ragu ba tareda kinyi nufin hakan ba ?

(a) Eh (b) A' a

14. Wahalar samun bacci ko yin bacci da yawa kusan ko wane dare?

(a) Eh [ ] (b) A' a [ ]

15. Kina tafiya ko Magana a hankali ba kamar yadda kika saba ba ko akasin hakan (ki kasa zama a wuri

daya) kusan kullum? (a) Eh [ ] (b) A' a [ ]

16. Kina yawan jin gajiya ko rashin karfin jiki kusan kowace rana ?

(a) Eh [ ] (b) A' a [ ]

17. Kina jin takaicin kanki ko ganin kin kasa ?

(a) Eh [ ] (b) A' a [ ]

18. Kinajin wahalar mayarda hankali ga alamurra ko yanke shawara akan wani alamari kusan ko wace

rana ? (a) Eh (b) A' a

19. Kina yawan tunanin gwamma ki mutu ki huta ko ki kasha kanki ko tunanin yiwa kanki wata illa ?

(a) Eh [ ] (b) A' a [ ]

SASHEN C:ABUBUWAN DA SUKA TAALLAKA DA CIWON DAMUWA

20. Wace hanya kike biyan kudin magani ?

(a) Daga aljihuna [ ] (b) Tallafin gwamnati [ ] (b)Inshora [ ]

(c) Wasu (tantance)……

21. Ya zaki bayyana koshin lafiyarki a cikin wata ukku da suka gabata?

(a) Babu lafiya ko kadan [ ]

(b) Ba yabo ba fallasa [ ]

(c) Inada lafiya gwargwado [ ]

(d) Inada lafiya kwarai [ ]

(e) Ina cikin koshin lafiya matuka [ ]

22. Wane daga cikin wadannan rashin lafiyar kike fama dashi ?

(a) Hawan jini (a) Eh [ ] (b) A' a [ ]

(b) Ciwon suga (a) Eh[ ] (b) A' a [ ]

(c) Kanjamau (a) Eh [ ] (b) A' a [ ]

(d) Ciwon koda (a) Eh [ ] (b) A' a [ ]

(e) Ciwon kasussa da gabobi ? (a) Eh [ ] (b) A' a [ ]

(f) Wasu tantance …….

23. Wane magani kike akai yanzu…….

24. Wane daga cikin wadannan kalubalen kake fuskanta a rayuwa a yanzu ?

(a) Matsanancin rashin lafiya (a) Eh [ ] (b) A' a [ ]

(b) Mutuwar aboki ko danuwa na kusa (a) Eh [ ] (b) A' a [ ]

(c) Rabuwa da aboki ko danuwa na kusa wanda ke taimaka maki

(a) Eh [ ] (b) A' a [ ]

(d) Matsanancin rashin kudi (a) Eh [ ] (b) A' a [ ]

(e) Wasu tantance ……

25. .Yakike farin ciki gameda lamarin aurenki/ ko alakarki da sauryinki ?

(a) Bani farin ciki kokadan [ ]

(b) Bani farin ciki [ ]

(c) Ba yabo ba fallasa [ ]

(d) Ina farinciki [ ]

(e) Ina matukar farin ciki [ ]

26. Kina zama tareda maigidanki a yanzu ? (a) Eh [ ] (a) A' a [ ]

27. Wane kalubale kike fuskanta a shaanin aurenki?

(a) Rashin kular maigida [ ]

(b) Maigidana yana shirin karo aure [ ]

(c) Rashin zaman lafiya tsakanina da abokiyar zama [ ]

(d) Rashin gamsuwa wajen jimai da maigidana [ ]

(e) Matsi daga surukkai akan rashin samun haihuwa [ ]

(f) Gaza sabawa / samun kyakkyawar alaka da yanuwan miji [ ]

(g) Wasu tantance ……

(h) Bana fuskantar wani kalubale akan aurena [ ]

(i) Lamarin baiyi daidai da tambayarba [ ]

28. .Yawan yaya……..

(a) Yawan yaya maza …….. (b) Yawan yaya mata ……. (c) Lamarin baiiyi daidai da tambayarba [ ]

29. Yayanki suna zama tare dake ? (a) Eh [ ] (b) A' a [ ] (c) wasu daga cikinsu [ ]

30. Wane daga cikin wadandan kalubale kike fuskanta akan yaya ko haihuwa ?

(a) Rashin haihuwa [ ]

(b) Da/ Diyana suna fuskantar rashin kulawa [ ]

(c) Da/ Diyana basa samun cigaban rayuwa [ ]

(d) Da/ Diyana suna/ yana fama da matsanancin rashin lafiya [ ]

(e) Bana fuskantar wani kalubale akan yaya na [ ]

(f) Wasu tantance…….

31. Shin kina fama da wani kalubale a inda kike aiki ? (a) Eh [ ] (b) A' a [ ]

(c) Bani aiki [ ]

32. Idan hakane, wane kalubale kike fuskanta a wajen aikinki ?,.....

33. A lokacin rayuwarki,an taba samun mako biyu ko fiye da haka lokacin da kikaji matsanancin bacin rai ko rashin shawar mafi yawan alamurran rayuwa wanda ya hada da akasarin wadannan : raguwa ko karuwar dandano, matsalar bacci a mafi yawan dare, gajiyar ko rashin karfin jiki, tafiya ko Magana kadan kadan yadda wasu mutane zasu lura ko akasin hakan ba kamar yadda aka saba ba kusan kullum, jin takaicin kanki ko ganin kin kasa ko kin wulakantar da iyalinki kusan kowace rana,wahalar mayarda hankali ga alamurra ko yanke shawara akan wani alamari kusan ko wace rana ?

(a) Eh [ ] (b) A' a [ ] (c) Bazan iya tunawa ba [ ]

34. Akwai wani daga cikin danginki na kusa da ya taba samun ciwon tabin hankali?

(a) Eh [ ] (b) A' a [ ] (c) Ban saniba [ ]

35. An taba tursasaki da kiyi jimai ba tareda kina muradi ba ?

(a) Eh [ ] (b) A' a [ ]

Manuni ga rikichin maaurata/ Masoya:

Karanta wadannan bayanai sannan ki zabi amsar da tafi dacewa akan yawan lokutanda mijinki ko saurayinki yake maki wadannan abubuwa da zaa lissafo.

	Sau nawa maigidaki / saurayinki yake ?	Bai taba ba 1	Can baa rasa ba 2	Wasu lokutta 3	Akai Akai 4	Yawancin lokutta 5
36	Bugunki					
37	Wulakantaki ko yi maki zance marar dadi					
38	Barazanar zai cutar dake					
39	Maki kururuwa ko laantarki					
	Adadi					

Nagode.