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SCHOOL OF PUBLIC HEALTH

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UNIVERSITY OF GHANA, LEGON

PERCEPTIONS OF POSTPARTUM DEPRESSION AMONG WOMEN IN THEIR PUERPERIUM IN SHAI OSUDOKU DISTRICT

BY

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DECLARATION

I do hereby declare that apart from references to other people‟s works, which have been duly acknowledged, this dissertation is result of my own independent work. I further declare that this dissertation has not been submitted for award of any degree in this institution or other universities elsewhere.

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DEDICATION

This research work is dedicated to my mother Madam Agnes Essuman for her tremendous support.

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ABSTRACT

Introduction: Maternal mental health care is an abandoned area, in low and middle income countries. Priorities are on decreasing infant and maternal mortality, and promoting infant physical health.

Puerperium is the period of six weeks after delivery, during which time the mother‟s reproductive organs adjust to their original non pregnant state. It is a critical stage in the life of a mother, where the mother experiences many things which includes biological and emotional changes.

Postpartum depression is one of the conditions that a woman suffers within this period. The condition is characterized by extreme sadness, neglect of personal hygiene, loss of interest in once environment and suicidal tendencies in some cases. This study was to determine the perceptions of women in their puerperium on postpartum depression.

Methods: The study adopted a qualitative data collection approach. Four focus group discussions were held with women who have delivered within six weeks and six in-depth interviews conducted with health staff, specifically mid wives and medical doctors in the Shai Osudoku District. The results were analyzed using NVIVO software.

Results: Women in their puerperium were found to have some knowledge on postpartum depression, however, they did not know the period after birth that the condition occurs. Both health workers and women interviewed attributed the causes of postpartum depression into physical, psychological, social and spiritual factors.

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Participants in the study were of the view that financial problems leading to excessive worrying, unplanned pregnancy resulting from rape, deformities of a new born, curse by someone, sex preference of a child and domestic violence were some of the causes of postpartum depression.

The study indicated infection of the mother due to neglect of personal hygiene and malnutrition of the baby resulting from mother not breast feeding as some of the consequences of postpartum depression. Also the mother committing suicide and child infanticide was mentioned as consequences of postpartum depression.

Conclusions

Although health workers admitted that postpartum depression was becoming a common condition, they did not routinely screen women when they come for postnatal services. The focus of the health staff was on the physical condition of the mother and child. Attention was paid to whether the mother was breast feeding well and other general conditions. The psychological welfare of the mother is often ignored. Participants in the study mentioned that postpartum depression can negatively affect the health of mother and baby in diverse ways.

There is the need for health workers to intensify education to mothers on postpartum depression and pay more attention to postpartum depression as it has devastating effects.

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LIST OF ABBREVIATIONS

APA……………………………..American Psychological Association

CDC……………………………..Centre for Disease Control

CHAG……………………………. Christian Health Association of Ghana

CHPs………………………………Community Health Based Planning Services

DSM……………………………Diagnostic and Statistical Manual of Mental Disorder

EPDS……………………………Edinburgh Postnatal Depression Scale

FGDs……………………………Focus Group Discussions

GHS………………………………Ghana Health Service

ICD………………………………International Classification of Diseases

IDIs………………………………In Depth Interviews

LMICs……………………………Low and Middle Income Countries

PND………………………………Perinatal Depression

PPD………………………………Postpartum Depression

PPME……………………………Policy, Planning, Monitoring and Evaluation

WHO……………………………World Health Organization

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DEFINITION OF TERMS

Perception: The way in which something is regarded, understood or interpreted

Puerperium: The period of about six weeks after childbirth during which the mother‟s reproductive organs return to their original non pregnant condition.

Postpartum depression: Is a type of mood disorder associated with childbirth, which is characterized by crying episodes, changes in sleep pattern, irritability and anxiety.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Depressive disorders are among the leading causes of disability worldwide (WHO, 2010). Postpartum depression (PPD) is one of the world‟s increasing epidemics, and attack roughly 11-42 % of postpartum women worldwide. This indicates that postpartum depression is a major public health concern for women of childbearing age. Postpartum depression (PPD) refers to as a non-psychotic depressive occurrence that starts within the first 4 weeks after birth (WHO, 2010). It is the most common impediment of child birth affecting about 10-20% of all mothers.

Postpartum depression is a serious, but treatable medical illness involving feelings of extreme sadness, indifference and anxiety, as well as changes in energy, sleep and appetite. (American Psychological Association, 2017).

Although childbirth is a positive experience for women, it can be a traumatic one for others. The child bearing period is a complex life event, which can activate psychiatric disorders in women with prone genetic or psychosocial vulnerabilities (Krishman & Nestler, 2008).

The onset of depression and other mood disorders during childbirth is a major public health issue. Most women experience the condition within 6 weeks postpartum. It is associated with loss of interest, fearfulness, loss of energy, feeling of worthlessness and guilt (Monzon et al., 2014). About 60% of mothers across cultures experience postpartum depression (Monzon, Lanza Sclera & Pearlstein, 2014), with high prevalence among developing countries compared to developed countries (Bener et al., 2012).

The exact cause of postpartum depression is unknown. Nevertheless, social, biological and psychosocial factors have been recognized as predisposing factors (Brody, 2011).

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Guo et al, (2013) indicated still birth, spontaneous abortion, low social support and financial constraint as causal factors to developing postpartum depression among women in Ghana. Postpartum depression can have devastating results on the mother and her infant, causing social and physical impairment. Mothers with postpartum depression have relationship challenges with their children, which has negative impact on child development from infancy to adolescence (Myers & Johns, 2018).

Partners of women with postpartum depression experiences disruption in their relationship, express feelings of frustration and are at a higher risk for mental health problems (Magistris et al., 2013).

Women who receive strong social support after delivery are less likely to develop postpartum depression. Support is provided in a form of information, finance, empathy, care and love.

1.2 Statement of the Problem

One out of four persons may develop mental disorders during their lives (Hwu et al; 2007). Women and the poor are particularly vulnerable (O Atta et al; 2010).

According to the Centers for Disease control (2015), 11 to 20% of women develop postpartum depression after child birth each year. A study by Koenen, & Edwards (2011) indicated that one in seven women are diagnosed with postpartum depression within one year after child birth. Young, minority, low-income mothers face many barriers (lack of knowledge, mental illness stigma, and transportation) this makes them susceptible to the condition although postpartum depression can affect women in any population, Edwards et al., (2012).

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Many studies have recognized several psychosocial and medical determinants to developing postpartum depression. These determinants are lower education, high work load, unemployment, higher number of children, and marital or challenges with partner.

Grote et al, 2010 indicated in their study that infants of depressed mothers, manifest diminished child interactions, lower cognitive growth, have more behavioral problems and a higher risk of psychiatric disorder during adolescent years, than those of non-depressed mothers.

Despite the devastating effects of this condition, only 15% of women who suffer it ever receive professional treatment. This is as a result of medical professional not screening for postpartum depression. When mothers go for follow up visits after birth, focus is on physical aspect of care, including breastfeeding and birth control option (Corrigan et al, 2015).

Another reason is ignorance on the part of the mothers recognizing the condition and reporting it. The perception of been tagged as mentally ill and the thought of being stigmatized discourages mothers from seeking help from a psychiatric facility (Boafo, 2013; Edward &Timmons, 2005; Russel, 2006). The few who seek for professional help, do not adhere to the treatment regimen (Baines et al., 2013).

This study therefore seeks to explore, the perceptions of women in their puerperium on postpartum depression.

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1.3 Conceptual Framework for Postpartum Depression

The development of postpartum depression and how it is perceived is influenced by a number of factors. The conceptual framework below describes some of the factors that can lead to the development of postpartum depression.

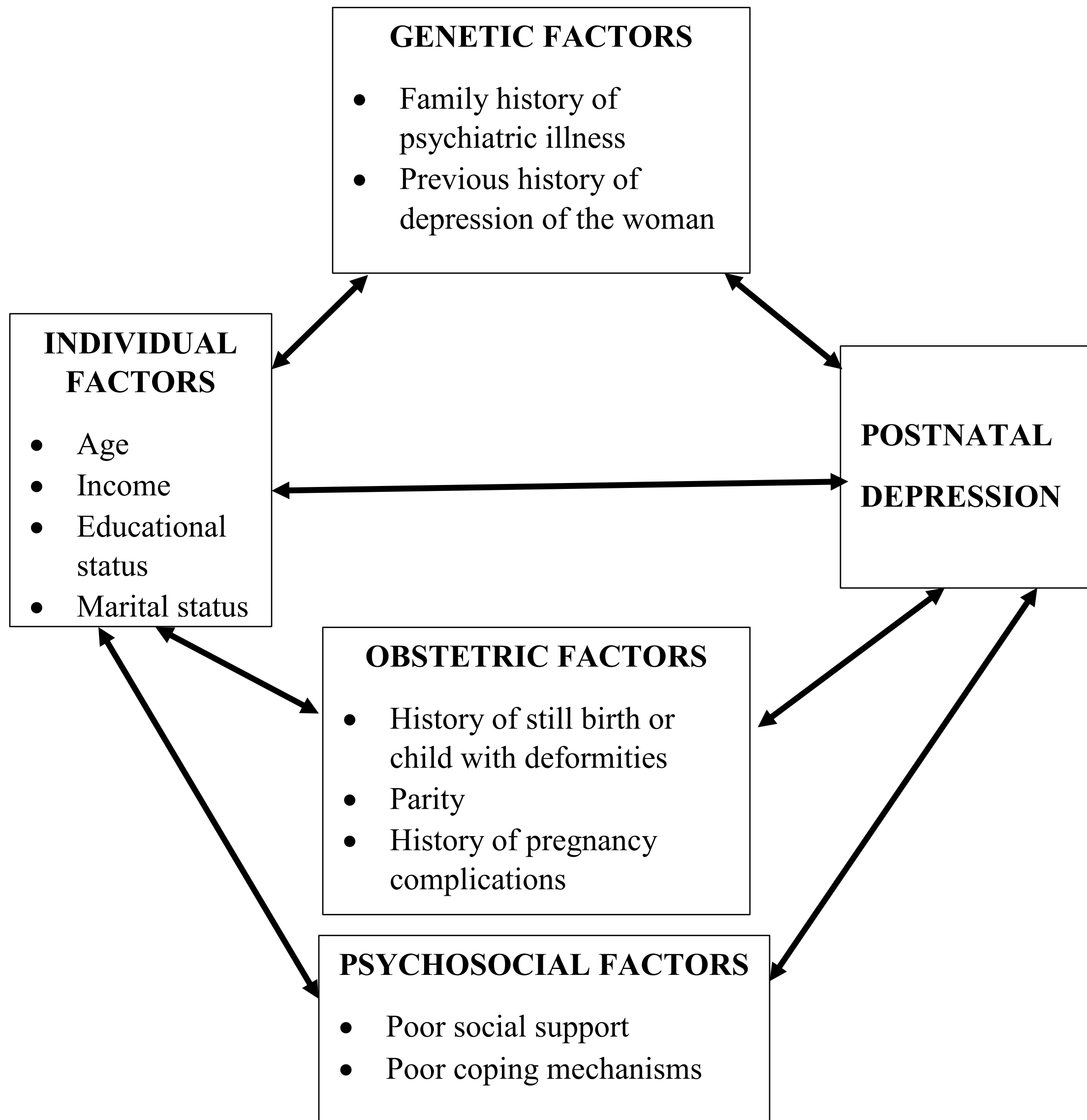

Figure 1: Conceptual Framework on the perceived factors, which predisposes women in their puerperium in developing postpartum depression.

Source: Constructed by Researcher.

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Factors likely to influence the development of postpartum depression are individual factors of the woman, genetic factors, obstetric factors and psychosocial factors.

1.3.1 Individual Factors

The probability of developing postpartum depression is higher among some population of women. These population include financially vulnerable women, adolescent girls, and single mothers (Abrams & Curran, 2007). One in four minority low income mothers are likely to develop PPD (Sampson, Zayas, & Seifert, 2013).

Educational level, age at marriage and history of marital violence can aggravate or accord to the development of postpartum depression. There is high prevalence rates of the condition among low income pregnant women.

1.3.2 Genetic Factors

A woman‟s previous history of mental health disorders can be evocative of developing postpartum depression. Research has revealed that when a mother does have a past history of mental health disorder, she is significantly more likely to develop postpartum depression (Mayo Clinic Staff, 2015).

Numerous studies have shown that genetic factors are related to depression, and some studies have found that there is a strong heritability of depression (Sejourne et al., 2011). This is an indication that, a woman whose mother or relative have ever experienced postpartum depression, is highly susceptible to developing the condition.

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1.3.3 Psychosocial Factors

Psychosocial support has been recognized as a protective factor, to the development of postpartum depression. Support during pregnancy and after birth can remarkably help, in reducing the incidence of depression.

Women who are socially and emotionally disadvantaged are more likely to develop PPD (Luke et al., 2009). Lack of strong emotional support from a spouse, partner, family, or friends have remarkable influence in determining the development of postpartum depression (Sampson, Villarreal, and Padilla, 2015).

The woman‟s incapacity to manage and adjust to having a child is likely to lead to the development of postnatal depression.

1.3.4 Obstetric Complication

The Centers for Disease Control and Prevention (CDC, 2013) indicates that having a challenging birth with either long recovery time for the mother, or having additional worry related with preterm delivery, pre disposes a woman to developing postnatal depression. Teen pregnancy, having a child with birth defects can also influence the development of the condition (CDC, 2013).

1.3.5 Postpartum Depression

The development of postpartum depression cannot be directly linked to one factor, as the exact cause of the condition is unknown (Brody, 2011). Exposure to multiple causal factors, contributes to the development of postpartum depression. Thorough investigations need to be done when diagnosing a woman, to come out with all the factors that lead to the development of

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the condition. That way a holistic approach can be used to ensure successful treatment by health care providers.

1.4 Justification of the study

Issues of mental health remains an abandoned topic and involvement targeted at reducing the load of psychiatry illness are restricted, especially in low and middle income countries (Jacon et al; 2007). Mental health services in Ghana are available at most levels of care. Nevertheless, the greater part of care is provided through specialized psychiatric hospital close to the capital and serving small percentage of the population, with comparatively little government provision and funding for general hospitals and primary health care based services (Basic Needs Ghana, 2011).

Research on mental health in Ghana is limited and few studies have been published about the prevalence of mental disorders. The outcome from the study will help bring out evidence based information on the perceptions that women have on postpartum depression, what they perceive as causing the condition and their knowledge on the consequences of postpartum depression.

This will inform facilitators of health educational programs on better ways of educating the public on mental illness.

The study will also inform community mental health nurses, psychiatrist, health workers especially midwives and stakeholders on the perceptions of postpartum depression of women in their puerperium, so that strategic facility and community programs can be developed to help reduce the incidence of postpartum depression and make women seek help from appropriate health facilities.

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1.5 Research Questions

1. What are the perceptions of women in their puerperium of postpartum depression?

2. What do women perceive to be the causes of postpartum depression?

3. What do women know about the consequences of postpartum depression?

1.6 Study Objectives

1.6.1 General Objective

The general objective of this research is:

To explore the perceptions of postpartum depression among women in their puerperium.

1.6.2 Specific Objectives

The study sought to specifically:

Explore the perceptions of women about postpartum depression.

Examine their views on the causes of postpartum depression.

Describe their knowledge on the consequences of postpartum depression.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed other studies that have been carried out regarding postpartum depression. It focused on the concept of postpartum depression, perceptions of the condition, its causes and knowledge on the consequences of postpartum depression among others.

2.2 Postpartum Depression

According to the International Classification of Diseases (ICD-10), postpartum depression is a mild mental and behavioural disorder beginning within the first 6 weeks of delivery. Clinical presentation of the condition may include a depressed mood, markedly decreased pleasure in almost all activities, significant weight loss or weight gain, psychomotor agitation or retardation, difficulty in sleeping , weakness, feelings of uselessness and guilt, loss of dignity and self-assertiveness, challenges in attentiveness, and suicidal ideation (APA, 2000;WHO, 2007).

Depression is of public health concern because of the short and long term harmful consequences to the woman and her family. People with depression have high rates of anxiety, suicidal tendencies, substance use, and poor spouse/child relations (Kessler et al. 2008; Sunderland et al. 2010; Zbozinek et al. 2012); depression is also highly related to prevalent health outcomes such as cardiovascular disease, one of the five major causes of death in the United States (Minino & Murphy 2012; Elderon & Whooley 2013).

Postpartum depression encompasses almost all the crucial signs of depression along with unexpected incidents during the first four weeks after delivery. To classify as PND, symptoms must last for at the quoted rate of 10% to15% (Palo, 2009). A progressively number of proof now highlights that, for a relatively large segment of women, the process of having a baby can

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activate serious emotional challenges and lead to a muddle and sad time (Green et al., 2006) In Ghana, research show that Perinatal Depression (PND) is prevailing and has negative infant outcomes (Weobong et al., 2009).

Evidences suggest that postpartum depression is often overlooked and misdiagnosed and most vulnerable women are rarely recognized during pregnancy or after delivery, thus do not always receive the necessary care (Babatunde, 2010). This is especially common in developing countries where mental health is generally ignored (Seda & Naile, 2010).

2.3 Types of Postnatal Mood Disorders

There are three types of postnatal mood disorders, these are, postpartum blues; postpartum depression; and postpartum psychosis. Postpartum blues, also known as "baby blues" affects 70%-80% of new mothers (Murray & McKinney, 2013). It usually starts from first week postpartum and continues into the second week. The exact cause is unknown, but may be due to a mother‟s altered emotions after birth, postpartum malaise, tiredness, anxiety about taking care of the infant, and worries about changes in body image (Murray & McKinney, 2013).

Postpartum depression lasts at least two weeks, affects 10 - 15% of women who have delivered and usually develops in the first three months however, can show up at any time within a year after birth (Murray & McKinney, 2013). The condition is characterized by a loss interest in once enjoyable things, panic attacks, racing thoughts, worthlessness ,perturbation, sadness and crying uncontrollably for long periods of time, fear of not being able to take care of the baby, fear of being left alone with the infant, insomnia, challenges concentrating or making decisions, and thoughts of hurting oneself (Camp, 2013).

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Psychosis is defined as a "mental state in which a person's ability to recognize reality, communicate, and relate to others is impaired," (Murray & McKinney, 2013). Postpartum psychosis affects 1 or 2 women per 1000 births and can happen two days after birth. Experts consider postpartum psychosis as a psychiatric emergency requiring hospitalization. The condition is manifested by extreme changes in mood, irritability, disorientation, disorderly behavior, misapprehension about the baby and apparition.

2.4 Etiology of Postpartum Depression

The exact cause of postpartum depression is unknown, however, there are factors that predisposes a woman to the disease. These are: signs of depression during pregnancy, history of the condition in once family, first pregnancy, personality attribute such as immaturity and lack of self-confidence (Murray & McKinney, 2013).

It is necessary to note that even a mother with a normal pregnancy and uncomplicated delivery can have postnatal depression (CDC, 2013).

2.5 Diagnosing Postnatal Depression

The most commonly used screening tools are the Edinburgh Postnatal Depression Scale and the Postpartum Depression Screening Scale (Camp, 2013). The Edinburgh Scale has 10 questions, including: I have been able to laugh and see the funny side of thing; I have looked forward with enjoyment to things; I have blamed myself unnecessarily when things went wrong; I have been anxious or worried for no good reason; I have felt scared or panicky for no very good reason; things have been

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getting on top of me; I have been so unhappy that I have had difficulty sleeping; I have felt sad or miserable; I have been so unhappy that I have been crying; and the thought of harming myself has occurred to me. Answers range from much as "I always could or did," to "No, not at all." The scale scores each question on a scale from zero to three, 30 being the maximum score. In women without a history of postnatal depression, a score above 12 has a sensitivity of 86 percent and specificity of 78 percent for postnatal depression. The Postpartum Depression Screening Scale asks questions about whether the mother has recently been overly anxious, worried or panicky for no apparent reason (Murray & McKinney, 2013).

These tools are usually administers during a follow-up visit, at 6 to 8 weeks postpartum. These tools do not give a conclusive diagnosis. Aditional clinical evaluation is needed in order to establish a definitive diagnosis (Lehne, 2010). Nonverbal cues such as mother looking untidy, having a flat affect, neglecting her baby, challenges with focusing, and insomnia need to be further investigated (Camp, 2013).

Early detection of postnatal depression and suitable treatment is important to the prediction of the woman with postnatal depression (Murray & McKinney, 2013).

2.6 Treatment of Postnatal Depression

Cognitive behavioral therapy and pharmaceuticals are the two treatments available for treating postpartum depression (Camp, 2013). Some women use other treatments such as herbal supplements, massage, exercise and acupuncture, but they are not common (Camp, 2013). American Psychological Association (2015) advocate that psychotherapy should be the first line of treatment.

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Cognitive behavior therapy involves a trained therapist, who works on the mother's thoughts, beliefs, and behaviors that may cause the depression after the childbirth (Camp, 2013). This help the mother to verbalize her feelings, both positive and negative.

Postnatal depression is best treated by the combined use of anti-depressant medication, social support and psychotherapy (Murray& McKinney, 2013). The medications helps to "normalize mood and optimize maternal combined use of anti-depressant medication, social support and psychotherapy (Murray& McKinney, 2013).

2.7 Perceptions of Women about Postpartum Depression

A study in Ghana by Scorza et al., (2015) on prevalence of perinatal depression at Kintampo revealed that, women associated perinatal depression to lack of social support, domestic problems and poverty. "Thinking too much" was the term used to delineate perinatal depression.

A study on illness perceptions of depressed mothers by (Mahen et al., 2009), found out that women attributed their depression to their own state of mind, lack of sleep, changes in pregnancy, and difficulties in adopting and adjusting to pregnancy and child birth.

Research conducted by (Habet et al., 2014) on women‟s perception on postpartum depression symptoms indicated that, women attributed the development of the condition to transition of parenthood, life stressors and perceived societal pressure.

Work done in the United Kingdom by Baines et al., (2013) on illness perception in mothers with postpartum depression, noted that the women ascribed their condition to stress of taking care of the new born, family problems, hormonal changes and difficulties concentrating.

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2.8 Factors responsible for Postpartum

Research shows that women who are at the highest risk of developing PPD have a history of depression, experience depression during pregnancy and have an episode of major depression after the delivery (Thompson & Fox, 2010). Other factors that could predispose one to developing the condition include experiencing stressful life events during pregnancy: including a difficult pregnancy or delivery, marital challenges, a history of mood disorders, and feelings of apprehension during pregnancy (Sejourne, Onorrus, Goutaudier, & Chabrol, 2011; Tian et al., 2011).

Genetic is said to be the major risk factor for developing postpartum depression (Stewart et al, 2003). Jones & Craddock (2001) indicated that the rate of puerperal psychosis after birth among women with bipolar disorder is higher.

Risk factors for postpartum depression have broadly been divided into five major groups: Biological, Psychological, Obstetric/Paediatric, Socio-Demographic and Cultural factors (Klainin et al.; 2009). Beck (2001) did a meta-analysis to ascertain the enormity of the relationship between postpartum depression and its risk factors on 84 existing studies. The study identified 13 risk factors; 10 were of moderate effects and 3 of small effects. The moderate factors of postpartum depression included low self-esteem, history of previous PPD, poor marital relationship, and maternity blues. The mild contributing factors were low socioeconomic status and planned/ unplanned pregnancy.

Family History

A study by Sejourne et al., (2011) found that if a woman"s mother had PPD or depressive symptoms, their daughters were more likely to develop PPD. Furthermore, postpartum

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depression was shown to have an impact on the mother-daughter correlation. Mothers and daughters who had thunderous relationships resulted in the daughter being at a higher risk of developing PPD.

Biological Factors

When a woman gets pregnant she begins to experience biological changes, to adjust to the pregnancy, the most common change women experience biologically is an increase in hormones. There is high levels of estrogen and progesterone allowing for the uterus to expand, preserve the uterine lining and maintain the placenta (Komaroff, 2011).

These hormones drop remarkably within 48 hours after delivery. This sudden crash can cause new mothers to experience an emotional imbalance making them more susceptible to depressive symptoms (Komaroff, 2011). During this time, the mother‟s hormones that are accountable for controlling stress may also be disturbed adding to the new mother‟s distress. Other biological risks are changes in cortisol levels, thyroid dysfunction. More recently neurological components such as brain sensitivity in the hypothalamus, the limbic system and the cortex which can work together and function differently have been identified in mothers who experience depressive symptoms.

Cultural factors

Cultural influences also can impact an individual‟s perceptions around mental health and treatment. Women from diverse cultural backgrounds may show different behaviors and reactions when suffering from depression. Some cultural differences that have been identified are how one shows their anxiety, their exhibition of symptoms, and how depressive symptoms are reported. Another recognized cultural difference is the irregularity of what is appropriate when

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communicating one"s feelings and the receipt of exterior emotions such as crying and laughing (Amankwaa,2003).

In 2003, Rahman et al reported that surveys and epidemiological studies showed progressively high rates of postpartum depression in diverse cultures across the world. According to a study conducted by Kim and Buist in 2005, women in the Asian cultures present their psychological problems through somatic symptoms while their Western counterparts communicate their depressive symptoms overtly.

In some cultures, religious ceremonies and supportive mechanism influence the perception of women who believe that these rituals protect them from the devastating symptoms of depression (Halbreich & Karkun, 2006). Culture as a risk factor however, may possibly be limited by the use of existing appraisal tools within diverse ethnic groups.

Caesarean Section

A prospective study by Sadat et al in Iran in the year 2013 indicated a negative association between mode of delivery and PPD although women with vaginal delivery had greater decrease in Edinburgh Postnatal Depression Scale (EPDS) score from 2 to 4 months postpartum. A study on women living in Beirut, Lebanon revealed Caesarean section has a stronger protective factor against PPD Chaaya et al., (2002).

Obstetric complications And Previous History of Depression

Mothers who gave birth to babies with major congenital malformations were more depressed than other women (Josefsson et al, in 2002).

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A study conducted in a tertiary hospital in Nigeria indicated that the incidence of postpartum depression was 27.2% and that preterm delivery was found to be a risk factor for postpartum depression, (Ebeigbe & Akhigbe 2008).

Social Factors (Stressful Life Events)

Depression and stress have a bidirectional relationship whereby depression may be both a cause and an effect of psychological stress (Kinser et al. 2012). The brain moderates the effects of stressors to maintain optimal functioning. Micro processes regulate neurotransmission, endocrine, and immune functioning centrally, and sympathetic and parasympathetic activity in the periphery, all of which maintain all stasis or psychological and physical balance (McEwen and Lasley 2003; Peters and McEwen 2012). These regulatory functions amplify the persons response to stressors and the capacity to handle cynical physiological effects (Epel, 2009). Nevertheless, when stressors continue unabated, these same processes begin to impede neuronal task and other regulatory systems (Logan and Barksdale 2008; Kinser et al. 2012). The progressive wear and tear associated with these physiological attempt to control chronic stressors can cause depression and additional comorbidities .Without the availability and use of biopsychosocial resources, long-term exposure to the chronic stress of depression and/or repeated episodic life stressors can overload one"s coping capacity; this may place an individual in a continuous cycle of stress response with negative affect states which can decrease quality of life and increase morbidity and mortality (McEwen 2000, 2007; McEwen and Lasley 2003; Luyten et al., 2006; Clark e al. ,2007; Taylor et al., 2010).

The association between life occurrence and the onset of depression is confirmed .Occurrences such as the death of a loved one, relationship breakdowns or divorce, losing a job are known to

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bring stress and can activate depressive episodes in individuals with no previous history of affective disturbance. Nevertheless, some researchers have studied the consequences of other stressful life events that women experience during pregnancy and the puerperium. These incidents, are thought to reflect extra stress at a time during which women are unsafe, may play a determinant role in postpartum depression.

Social Support

Social support through friends and relatives during stressful periods is thought to be a preservative factor against developing depression and many earlier studies have assessed the role of social support in minimizing postpartum depression. Social support is a multifaceted concept, the sources of support include a partner, relatives, friends or associates. There are also varying types of social support, for example informational support (where advice and guidance is given), emotional support (Stewart et al; 2003).

Lack of social support and concern of taking care of the infant, when one has to resume official duties at work causes postpartum depression (Santos Jr., Gualda ,& Hall, 2013).

Poor correspondence with the baby"s father, partner being absent at the time of the baby"s birth and provision of what is perceived by her to be inadequate emotional or empirical support, including low involvement in infant care (Adrienne Burges, 2011) are some of the partner related factors . The father"s duty as a partner and a support person is key to the existence of the mother and the baby. This can contribute remarkably to the mother and baby"s well-being, even during the most strenuous situations, and if his support is not forthcoming this constitute a significant shortfall for the family.

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Socioeconomic Status

The capacity of socioeconomic status in the etiology of psychiatric illness and depression has received much attention. Socioeconomic impoverishment indicators such as low income, low education and unemployment have been quoted as risk factors in mental health disorders (World Health Organization, 2001).

Perinatal depression (PND), depression during pregnancy and in the year after birth, has been delineated across cultures, 18–25% of pregnant women in low and middle income countries experience PND (Fisher et al., 2012; Husain et al., 2006).

2.9 Consequences of Postpartum Depression

Postpartum depression is a weighty mood disorder that may carry life- long consequences for a woman and her family (Corwin *et al.,* 2010). The condition has unfavourable sequel on the mother‟s social accommodation after birth, the marital association, as well as the mother-infant interaction.

Studies in Low and Middle Income Countries (LMICs) have identified maternal psychological illness has an adverse effect on fetal growth (Parsons et al., 2012; Patel & Prince, 2006; Rahman et al., 2007) and that maternal depression is related with infant diarrheal morbidity, independent of the effects of factors such as under-nutrition, socioeconomic status, and parental education (Parsons et al., 2012; Rahman et al., 2007).

Depressed women have remarkably breastfeeding challenges, and show lower levels of breastfeeding self-efficacy (Dennis & McQueen, 2007). There is also infant diarrhea which leads to dehydration of the infant (Berlin & Van den Anker, 2013; Winkel & Scheafer, 2014). There is reduced maternal-child interactions, lower cognitive development, more behavioural problems,

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and a higher risk of psychiatric disorders among children born by depressed mothers (Grote et al., 2010).

Even mild depressive symptoms can have a remarkable bang on maternal bonding (Moehler et al., 2006). This bonding is necessary for emotional and psychological development of the infant (Bandura, 2004). This lack of bonding is linked to aggressive behaviour childhood (Riggs& Riggs, 2010).

Postpartum depression can also be the first episode in a life-long pattern of repeated depression and is related with an increased usage of health services (Dennis, 2004) alongside notable cost for health services (Civic and Holt, 2000). Consequently, effective treatment and moderate support for mothers with depression after childbirth are important. Clinical guidelines (National Institute of Clinical Excellence, 2000) advocate that, depending on severity, women experiencing depression during the postnatal period should be provided access to guided self-help and other forms of productive talking therapies. Nonetheless, some mothers refuse to seek professional care for fear of been admitted to a psychiatric unit, get „locked up" or have their baby taken away from them (Hall, 2006).

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CHAPTER THREE

METHODS

3.1 Introduction

This chapter describes the methods and procedures that were used for the research. It includes the study area, study design, study participants, sampling procedure, data collection techniques and tools, data processing and analysis and ethical consideration.

3.2 Study Design

Qualitative research design was used for this study. Focus group discussions (FGDs) were used to collect data among women in their puerperium. In-depth interviews (IDIs) were used among service providers. This was done to provide a detailed understanding of the perceptions of postpartum depression among women who have delivered mid wives and doctors who deal directly with these women.

3.3 Study Area

Background information and demographics of the district

The Shai Osudoku District is situated in the southeastern part of Ghana. The District was re-demarcated in June 2012 when it was carved out of the Dangme West District by L I 2137. Is among the four purely rural Districts in the Region and it is the District with the largest surface area.

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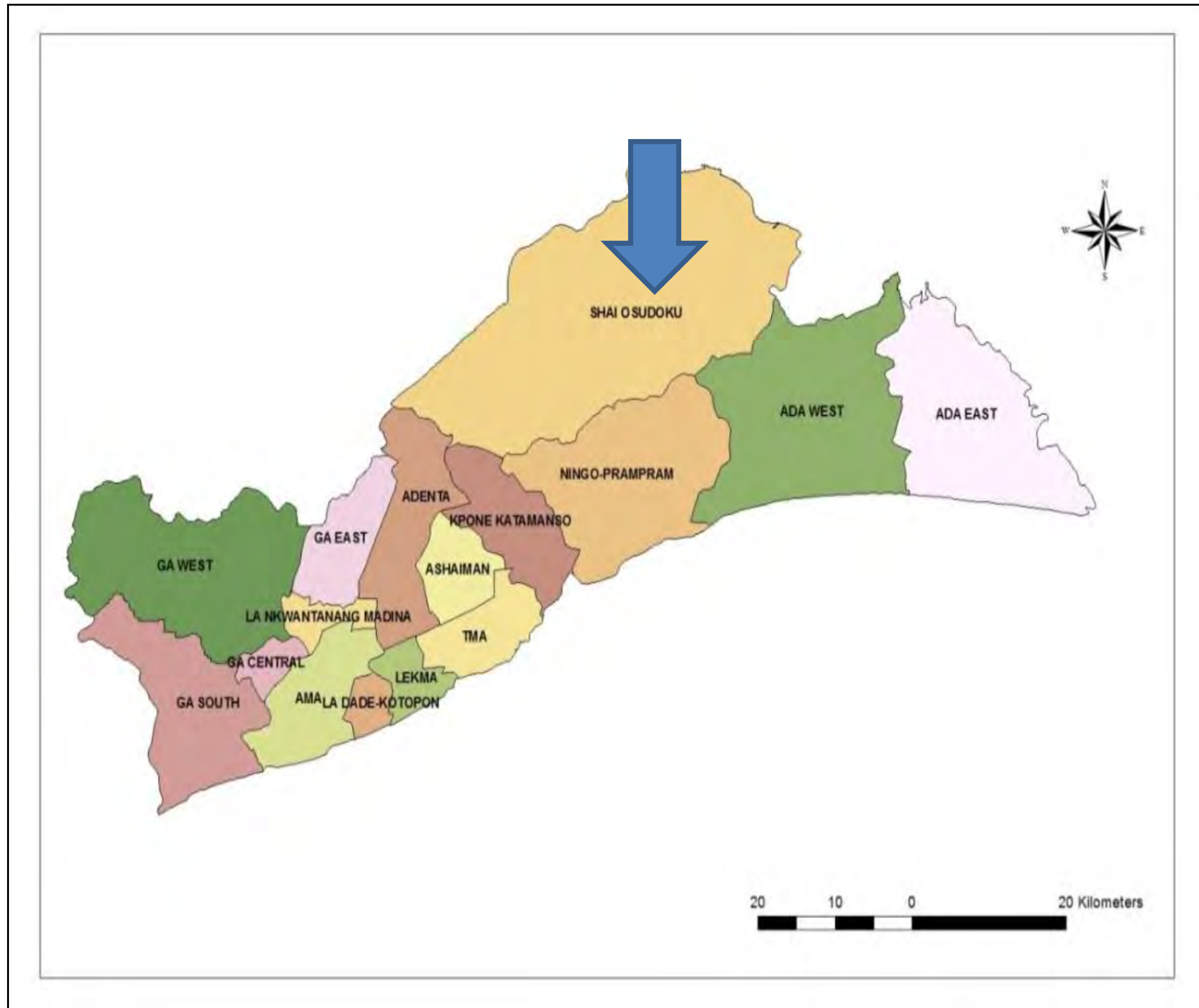

Figure 2: Geographic location of the Shai Osudoku District in the Greater Accra Region

It has a total land surface area of about 721 square kilometers and the largest land surface area in the Greater Accra region as depicted in the map above. It is bounded on the North-Eastern by North Tongu District; to the North West by Yilo and Manya Krobo Districts; to the West by North Akwapim Districts; to the South-West by the Kpone Katamanso District; to the South by the Ningo/Prampram District; and to the East by Ada West District as shown in the map. The land is flat and at sea level with isolated hills. Among the hills are the ancient „Shai hills" which are a tourist attraction.

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The District is divided into two administrative sub-Districts, namely Dodowa (Shai) sub-District and the Osudoku sub-District, within two traditional areas notably the Shai and Osudoku traditional areas. There are four area councils - two at the Dodowa sub-District (Dodowa and Ayikuma) and two at Osudoku (Asutsuare and Osuwem).

Demography

The District has a 2017 projected population of about 59,658. The major Communities include; Dodowa (District Capital), Asutsuare, Osuwem, Ayikuma, Kordiabe, The table below depicts the distribution of the population by sub-District.

Table 3.1 Break down of population

INDEX	%	DISTRICT	DODOWA SUBDISTRICT	OSUDOKU SUBDISTRICT
Total Population	**100.0%**	**59,658**	**37,585**	**22,073**
Under 1 year/ Expected Pregnancies	**4.0%**	**2,386**	**1,503**	**883**
Under 5 years	**14.2%**	**8,462**	**5,331**	**3,131**
WIFA	**24.0%**	**14,318**	**9,020**	**5,298**
Children 12 - 23 months	**2.21%**	**1,318**	**831**	**488**
Children 24 - 59 months	**6.63%**	**3,955**	**2,492**	**1,463**
Children 6 - 59 months (90% of <5s)	**90%**	**7,616**	**4,798**	**2,818**

***Source: GSS/ GHS PPME**

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Economic Activities

People in the district are and mostly farmers and fisher men, with few petty traders and civil servants.

Health care provision in the District

The District has a District Hospital, 3 Health Centres, 10 CHPS compounds in 24 demarcated CHPS Zones, a private Hospital, a mission clinic and a maternity home.

Two of the CHPS compounds became operational in the beginning of the year 2017 (Lower Dodowa & Kasunya).

Table 3.2: Distribution of Health facilities by Sub-District 2017

	Sub-District		
Health Facility	**Dodowa**	**Osudoku**	**District Total**
District Hospital	1	0	**1**
Health Centre	1	2	**3**
CHPS Compound	4	6	**10**
CHPS Zones without Compound	8	6	**14**
Maternity Home	1	0	**1**
Private Hospital	1	0	**1**
Mission Clinic	1	0	**1**
District Total	**17**	**14**	**31**

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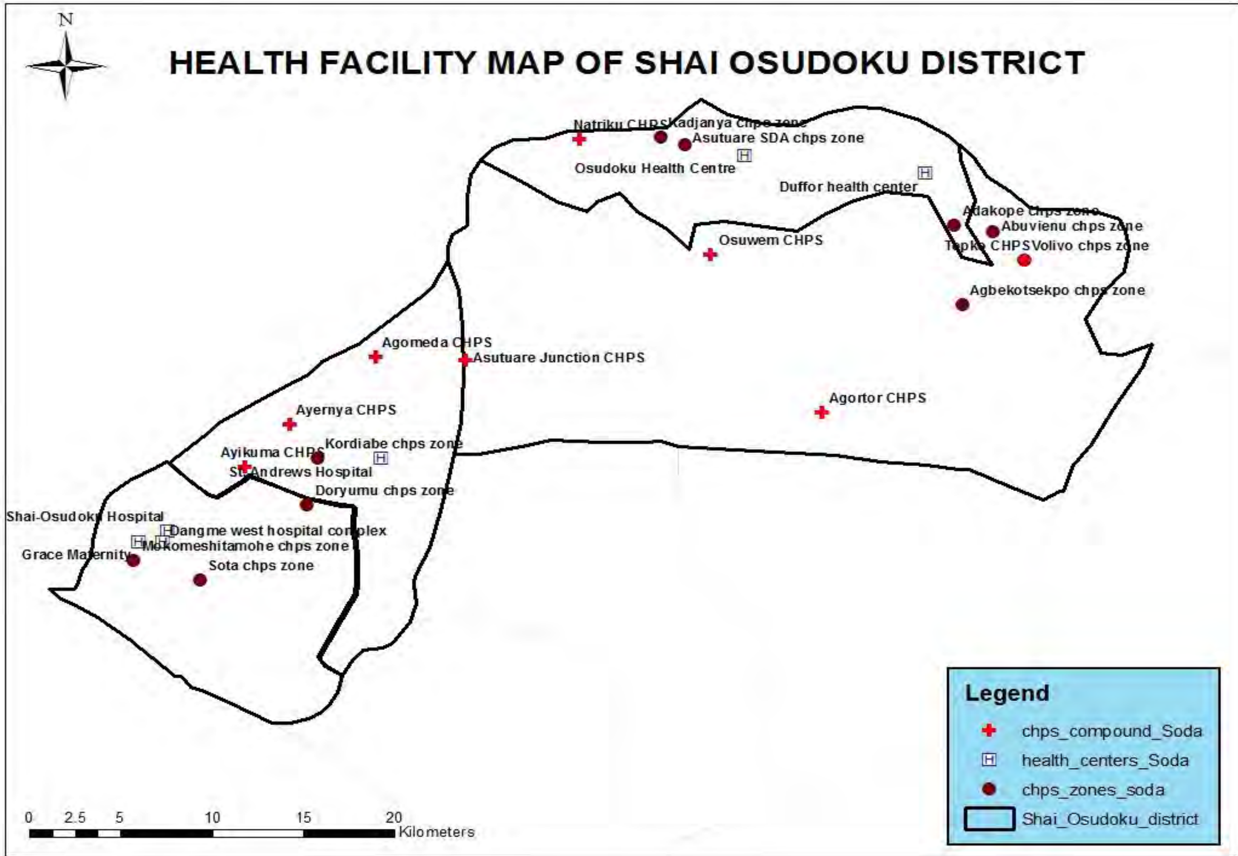

Figure 3: Health Facility Map

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3.4 Study Population

The study participants for the focus group discussions were selected from the Shai Osudoku District Hospital, because they render post-natal care services on daily basis. Also the hospital have reserved rooms were the interviews were conducted in privacy. Respondents were mothers who have delivered within six weeks, coming for postnatal visit. The other group of respondents, were four mid wives (two from the District hospital, one from Agomeda Health Centre and one from Lower Dodowa CHPs) and two medical doctors from the District hospital(the Medical Superintendent and one junior Medical Doctor).

3.5 Inclusion and exclusion criteria for women and health staff

Inclusion criteria: Participants of the focus group discussions were postnatal attendance who have delivered within six weeks, who came for post-natal services and consented to be part of the focus group discussion. For health staff, the mid wives and doctors who consented to participate in the in depth interviews were interviewed.

Exclusion criteria: Women who have delivered within six weeks but refused to consent and those who were too ill to participant were excluded from the study. For the health staff, mid wives and doctors who did not give their consent to be part of the study were excluded from the interview.

3.6 Sampling

Focus group discussion: A total of four FGDs were conducted. Three of the FGDs were made up of 8 women with similar characteristics and one of the FGDs was made up of 10 women. . There was 1 FGDs for women under 19 years and 3 FGDs for women who were 20 – 29 years, 30 – 39 years and 40 years and above. These women were purposively selected into these age groups.

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This was done by explaining the purpose of the study to the women, who came for post-natal services. A total of 8 to 10 women who meet the inclusion criteria and consented to be part of the study were selected for each FGDs.

In-depth interviews: Four mid wives and two medical doctors as indicated in the inclusion criteria were also purposively selected for the IDIs.

3.7 Data Collection

Focus group discussion: A total of four focus group discussions (FGDs) were conducted. Participants for the FGDs were purposively selected at the postnatal clinic. An interview guide with questions on perceptions on postpartum depression, the causes and the consequence was used for the FGDs. Participants were taken to a secluded and private place in the facility. The Principal Investigator facilitated the FGDs and the note taker controlled the audio recording of the discussions as well as taking notes of the discussion. The FGDs took approximately 35 – 45 minutes.

In-depth interviews: Interview guide was used to guide the IDIs for the mid wives and medical doctors. The interviews included perspectives of the mid wives and doctors on postpartum depression, the causes and the consequences. The IDIs took approximately 25 – 40 minutes.

3.8 Quality Control

To check for accuracy, interviews were audio recorded in the local language (Twi) and written in English. The audio recorded scripts were transcribed and translated into English and compared with the hand-written field notes prepared during the FGDs and IDIs. After proof-reading and

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corrections, the transcripts for FGDs and IDIs were saved on a password-protected computer and Google drive online.

3.9 Data Processing

Interviews were recorded digitally and the audio files labelled appropriately for easy retrieval. Each recording was transcribed into English. I validated the transcripts by listening to a sample of the tapes to check accuracy and translation quality.

The transcribed and verbatim translated recordings were entered into the computer using

Microsoft Word. The textual data were imported into NVIvo 11.

The transcriptions were coded using identified themes from the interview guides and themes that emerged from the data. The analysis was focused on overall perspectives regarding postpartum depression, the perceived causes and consequences of the condition.

3.10 Data Security, Storage and Usage

Electronic data and hard copy were kept safe in locked file cabinet, which can be accessible only by the Principal Investigator and the Research Supervisor. Data on computers is passed word protected and tapes would be destroyed after five (5) years

3.11 Ethical Considerations

Ethical approval was secured from the Ghana Health Services Ethics Review Committee (GHSERC). Permission was sought from the District Director of Health Service and heads of facilities before the study.

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The study population was made up of women who have delivered within 6 weeks in the study district, as well as midwives and doctors from selected health facilities.

Participants were told about the study during recruitment and their consent were sought. Those who agreed to be part of the study were made to either sign or thumb print the appropriate informed consent forms.

No participant was coerced to take part in the study. It was made known to participants that participation in the study is voluntary. The participants were informed that, they have the right to refuse or withdraw from the study at any time they want to.

The study was conducted in a manner that ensured the privacy of the participants. All participants who gave consent were assured of anonymity. Data was reported in a manner that did not bear names of participants to ensure confidentiality of information being collected from participants. Participants were assured that information given cannot be accessed by any unauthorized persons.

.Participants were informed that information obtained from the study would help inform policy, which would intend improve services rendered by Midwives and Doctors in the facilities.

There were no financial compensation for participants in the study. However, participants of the Focus Group Discussion were given a bar of key soap each.

3.12 Pilot Study

The study instruments were piloted in Ayikuma CHPs and Agomeda Health Centre which has similar characteristics as the District Hospital. The purpose of the pretest was to ensure the interview guides were clear, without ambiguity and to determine how valid and reliable the questions were. The tools were finalized after the pretest.

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CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter presents results of the study on perceptions of postpartum depression among women in their puerperium in the Shai Osudoku District. Specific objectives spelt out were to explore how women in their puerperium view postpartum depression, to find out what they attributed as the causes of postpartum depression and the knowledge on the consequences of postpartum depression to mother and baby. The study employed the use of qualitative approach in the form of focus group discussions and in depth interviews.

4.2 Socio-demographic Characteristics of participants

Four focus group discussions (FGDs) were held (N=34) among women in their puerperium. Eighteen were between the age of 20-30 years and 27 were married. Majority (26) of the women had between 1-2 children with one person reported to have more than four children(Table 4.1).

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Table 4.1: Socio-demographic characteristics of FGD participants

Socio-demographic characteristic	Frequency (n)
Age	
< 20 years	2
20-30 years	18
>30 years	14
Marital status	
Never married	7
Married	27
Religion	
Christianity	30
Islam	4
Educational Attainment	
Below Senior High School	17
Senior High School	13
Tertiary	4
Number of children	
1-2	26
3-4	7
>4	1

In addition, six health workers were recruited for the in-depth interviews (IDIs); four among midwives and two among medical officers (Table 4.2).

Table 4.2: Health workers background

Code	Sex	Profession	Number of years of practice
IDI_001	Female	Midwife	2
IDI_002	Female	Midwife	8
IDI_003	Female	Midwife	9
IDI_004	Male	Medical Officer	21
IDI_005	Female	Midwife	5
IDI_006	Male	Medial Officer	2

4.3 Health challenges experienced by women in the postpartum period

Participants in this study identified a number of problems which in their view were common during the postpartum period. Malaria emerged as the most common health problem according to

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participant. Interviewees attributed this to mosquito bites. In the opinion of interviewees, people with malaria often get very cold and shiver. The following quotes illustrate these points:

> *"We often get infection and sometimes malaria where you feel so cold and cannot do anything. For I experienced it when I had my second child and it was so bad"* (21 year woman with 1 child, FGD 1).

Some participants also indicated bleeding after delivery was one of the problem women suffer. This merged unanimous among participants in FGDs as illustrated by the following quotes:

> *"Bleeding profusely after delivery which can even lead to death if care is not taken"* (27 years woman with two children, FGD 2).

> *"Bleeding after giving birth is common and is one of the problems that we woman go through after giving birth"* (34 years woman with two children, FGD 4).

Health workers interviewed in this study confirmed that postpartum bleeding was one of the common problems woman suffer. In addition, health workers indicated postpartum sepsis and depression as also common. The following quotes buttress these point:

> *"Postpartum haemorrhage, puerperal sepsis and depression as well"* (Midwife, IDI_003)

> *"Postpartum haemorrhage and depression are some of the problem we see in our facilities after delivery"* (Medical Officer, IDI_006).

4.4 Perceptions (knowledge and awareness) about postpartum depression

All interviewees indicated they have ever heard of postpartum depression and were generally aware of the condition. They perceived it as a medical condition which affects women after delivery. However, the name of the condition (postpartum depression) did not emerge spontaneously during interview with postpartum women. The following quotes illustrate these points:

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> *"Me I have lived close to a psychiatric hospital before, specifically Pantang hospital because my father was a staff there. I have seen women who came on admission after birth because their relatives said they did not want to see their children"* (33 year woman with 6 children, FGD 1).
>
> *"In Ewe we call it Tamavovo, meaning extreme pain after delivery which has led to sickness in the mind"* (16 year old with 1 child FGD 1).

Some health workers acknowledged that it was a condition that they did not often look out for despite the fact that they have seen cases of postpartum depression as illustrated:

> *"Postpartum depression is not always on our mind. I often look at issues concerning the physical body and not the mind. This interview is a wakeup call for me to look more at the psychological aspect of care"* (Midwife, IDI_001).
>
> *"Yes, we have puerperal psychosis which could be severe or mild. The psychosis can also spell over to what we call psychotic manic syndrome if the case is not managed well. She can also get depression, but in most cases is over looked because people think the woman is reacting to pain due to child birth. Difficulty of delivery as a result of pain, in most cases these women do not get anyone to listen to them even when on admission. The doctors and nurses are busy and tend to think, the woman will get better over time"* (Medical Officer, IDI_004).

Women interviewed in the study generally did not have knowledge on when it occurs. Nevertheless, health workers were of the view that postpartum depression occurs from birth till six weeks after birth as illustrated by the following quotes:

"*Soon after deliver till 6weeks and others carry it for long"* (Midwife, IDI_002)

"Normally after 24 hours to 6 months of delivery" (Midwife, IDI_003).

4.5 Perceived causes of postpartum depression

Participants in this study identified several causes of postpartum depression. In the view of participants, women who get pregnant without a responsible husband were likely to develop postpartum depression because of worries about how to take care of the child. In addition, women who perceived challenges in combining care for the child with her work may develop

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depression after delivery. Participants also attributed unfaithfulness, which leads to women thinking too much to be a cause of postpartum depression. The following quotes illustrate these points:

> *"Women who get pregnant without a responsible husband or do not know who is responsible of the pregnancy get worried and may develop depression after birth"* (32 year woman with three children, FGD_4).

> *"Difficulty of taking care of the baby and combining work and family life"* (Midwife, IDI_002).

> *"Thinking too much because of financial problems and our partners cheating on us"* (32 years with 3 children, FGD_1).

> *"Financial problems, where the woman do not have money to take care of herself and the husband also refuse to give money to her. If also the woman has more children and is also not prepared for the child. Loss of job and lack of social support to take care of the child"* (Midwife, IDI_003).

Some participants were also of the view that when there are problem in the relationship in particular a dispute between husband and the wife during pregnancy could lead to postpartum depression. According to study participant these relation problem usually results in women being anxious about how to take care of the child and possible neglect of the her and the baby by the father. These views are elucidated by the following quotes:

> *Women who are neglected by their partners, especially for women who are not married but get pregnant while they are in a relationship"* (23 years woman with one child, FGD 1).

> *"Marital problems, hmmm and anxiety during child birth"* (Midwife, IDI_001).

> *"The problems are diverse, there could be clinical problems that has got to do with the delivery. There could be social problems, relationship problems, and sociocultural problems with regards to the family that the woman is coming from. It could also be from the husband's family or the community. All these play a part in making the woman feel well or better after birth"* (Medical Officer, IDI_004).

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Perceived causes of postpartum depression

Participants were also of the view that unplanned pregnancies could result in postpartum depression. This was particularly so for women who conceive after being raped. In their opinion, the woman become worried about how to take care of the child and the rape as illustrated by the following quotes from participants:

> *Hmmm for me I think it happens to women who are raped by people, it can also happen if one gets pregnant and the man refuse responsibility of the child"* (32 years women with 3 children, FGD 1)
> *"When people are raped and they become pregnant they become worried about the rape and the pregnancy. How to take care of the baby. So this can cause depression after birth"* (19 year women with one child, FGD_3).

> *"I will say financial problem and neglect on the part of the partner and family members. For some women is lack of preparedness to have a baby"* (Midwife, IDI_005)

Sex preference also emerged as well-entrenched cause of postpartum depression. To participants women often prefer to give birth to either a male or female baby. However, if after birth the sex of the baby is different form the individual preference, she tend to refuse to accept the baby and become depression. This view was expressed by both puerperal women and health workers participants as illustrated:

> *"Sometime, we women prefer to give birth to either a male or female child but if we do not meet our expectation we become worried and this could lead to depression"* (39 year women with one child, FGD_3).

> *"Sometimes sex preference also is a contributing factor, when women want a particular sex be it male or female can also contribute to developing these psychological problems. This often occurs when the woman is multiparous mother and has had a particular sex of child continuously, if the husband puts pressure on the woman that, if she does not have a different sex, he will go out to have children of his choice with other women. There was another one that we had to bring the auntie of a teenager in to take the baby"* (Medical Officer, IDI_004).

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Perceived causes of postpartum depression

Participants in the study also attributed malformations and deformities of a new born, to the development of postpartum depression. They were of the view that children with deformities were not easy to take care of and also will be ridiculed by other members in the society. The following illustrated quotes support these views by respondents:

> *"No woman wants a problem child and will not be happy to care for a baby like that , this will make the mother unhappy and can cause her many mental problems"* (39 year women with one child, FGD_3).

> *"Children with deformities have many challenges and are difficult to manage, they drain you financially and always put you in a difficult situation"* (31 year women with one child, FGD_5).

Health workers interviewed in this study however, believed that postpartum depression could be aggravated by pain during labour as illustrated:

> *"In most times it starts from pregnancy and sometimes is aggravated with the pain of labour. This normally occurs when the woman feels that she is not loved by the partner. Practically it starts just after birth and sometimes is carried over into months"* (Medical Officer, IDI_004).

In addition, women interviewees believed that postpartum depression could be caused by spiritual factors. In their opinion when there is disagreement on the paternity of the child, the disgruntled family or partner could curse the pregnant women to become "mad" after delivery. The following quotes illustrate these points:

> *"A woman can be cursed to develop depression after giving birth. This happen when there are disagreement between the pregnant woman and the man as to who is responsible for the pregnancy"* (28 years woman with one child, FGD 3).

> *"It can be spiritual especially when your partner's family do not agree to your marriage. They will even prevent you from getting pregnant, so if you get pregnant then they will show you were power lies after you deliver"* (49 years woman with seven children, FGD 2).

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4.6 Knowledge on the signs and symptoms postpartum depression

Interviewees in this study indicated various behaviour of woman during puerperium that may be suggestive of postpartum depression. Participant indicated people with postpartum depression may be withdrawn and be extremely quiet. Also participant indicated that women with postpartum depression may look sad in their appearance. The following quotes buttress these points:

> *"The women with the condition [postpartum depression] will be sad and extremely quiet"* (41 years woman with three children, FGD-3).
>
> *"I have seen a woman with the condition before after giving birth. She was sad and withdrawn and did not interact with any of us at the ward including the nurses"* (36 years woman with three children, FGD 2).

Health workers also identified sadness, extreme quietness and neglect of personal hygiene as some of the ways they use to identify people with postpartum depression. The following quotes from health workers buttress these points:

> *"The woman was extremely quiet, you ask questions and she will refuse to respond, eermm she did not want to see her baby, touch and was not willing to bath. She also did not want to see her family members"* (Midwife, IDI_002).
>
> *"The woman will neglect her personal hygiene, she can even hurt the baby and will not want to talk to anybody"* (Midwife, IDI_003).
>
> *"She started talking incoherently after delivery, she was very sad, did not want to see the child and was giving inappropriate answers to questions. She would scream and cry out very loud, any time the nurses made attempts to give her baby to her"* (Medical Officer, IDI_004).

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4.7 Knowledge on consequences of postpartum depression

Study participants characterized the consequence of postpartum depression on the baby and the woman. Participants indicated that women with postpartum depression often neglect their physical expressions. The following quotes illustrate these points:

> *"I remember a woman complaining always that she did not like her baby when I was on admission. That was when I had my first child and this women will not carry her baby even if the baby cries"* (33 years woman with two children, FGD 2)

> *"The baby will be neglected, some of the women can even go and throw the baby in a gutter"* (22 years woman with one child, FGD 1).

Participants also stipulated that women with postpartum depression may reject the baby and therefore refuse to care for the baby. The mother may also refuse to feed the baby. In extremes cases, the women may throw away the baby. The following illustrated quotes support these views by respondents:

> *"Psychologically, the woman will not be stable, she cannot also take care of the baby and will refuse to breast feed the baby"* (Midwife, IDI_001).

> *"The child will be malnourished because the mother will not breast feed, the baby will also develop infection due to poor care"* (Midwife, IDI_001).

In addition, postpartum depression often results in lack of bonding between the women and the baby. In some cases some postpartum women may commit suicide as illustrated by responses from health workers:

> *"The child will lack bonding; will be pale and look malnourished"* (Midwife IDI_002).

> *"The child can be killed by the mother and even if he is not killed the child will not have any love from the mother"* (Midwife, IDI_003).

> *"Normally the baby is not breast feed, the baby does not get the first breast milk which is the colostrum and so does not get the appropriate nutrients. The baby is also seen as a curse and gets the negative effects of the mother's condition"* (Midwife, IDI_004)

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"I have seen one patient who tried to kill the baby and also committed suicide because of this condition. We were told the women did that because of depression after giving birth" (39 years woman with two children, FGD_3).

Study participants suggested a number of actions to be taken when a woman has postpartum depression. Some participants indicated that women with postpartum depression should be sent to hospital to see a psychiatrist. Others also suggested women with postpartum depression should seek spiritual care. The following quotes illustrate these views by study participants:

"The family members should take the woman to a health facility but when the cause is established you need to find spiritual intervention too" (27 years woman with one child, FGD 1).

"I will talk to her and find out what her problems are, will also talk to the family members and refer her to see a psychiatrist. I will do follow up at home after the referral to find out how is doing" (Midwife, IDI_001).

Health worker interviewed in this study indicated the need for screening of antenatal women for factors that may lead to postpartum depression. The following quotes support these points:

"I think this observation should start from the antenatal care, because these depressions normally start from pregnancy" (Midwife, IDI_003).

"For me I think the education should start from antenatal care, also we do look out for it somehow but concentration is often on the physical looks" (Midwife, IDI_003).

"Not really, ones a woman comes for review it is assumed that the woman if fine. Unless the relative of the woman complains that she is behaving weird, our attention will not go there. The emphasis is mostly on their physical conditions and not on the social well-being. This is usually because of the work pressure and due to the low doctor to patient ratio. For me I think as doctors we need to develop the interest in total postpartum care and also reorient ourselves" (Medical Officer, IDI_006).

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CHAPTER FIVE

DISCUSSION

This study set out to explore Perceptions of postpartum depression among women in their puerperium in Shai Osudoku District, using focus group discussions and in-depth interviews.

5.1 Perceptions of women on postpartum depression

Generally the findings in the study indicated that women perceived postpartum depression, as a medical condition which is associated with pregnancy and child birth but did not know the period that the condition begins to manifest. They attributed it to physical, psychological and social challenges. The women in the study, attributed the development of postpartum depression to lack of love and support from their partners. This finding are consistent to a study conducted by Scorza et al, (2015) on prevalence of perinatal depression at Kintampo which revealed that, women associated perinatal depression to lack of social support, domestic problems and poverty.

The findings in this study also corresponds to that of Luke el al., (2009) specified in the theoretical framework. Which indicated in their work, that women with strong social and emotional support are less likely to develop postpartum depression.

The results of the study was also similar to findings of a work done in the United Kingdom by Baines et al., (2012) on illness perception in mothers with postpartum depression. The women attributed their condition to stress of taking care of the new born, family problems, hormonal changes and difficulties concentrating.

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5.2 Perceived Causes of postpartum depression

Both health workers and women interviewed in this study characterised the cause of postpartum depression into physical, psychological, social and spiritual factors. The study identified physical causes such as health challenges of both the baby and woman. Participants in a study in Brazil identified family expectation, sex preference challenges in breastfeeding, lack of support and worries about returning to work without anyone to take care of the baby as key causes of postpartum depression (Santos Jr., Gualda, & Hall, 2013). A study in Quebec Canada among men and women reported that participants identified relationship factors, physical health of women and child and societal expectations, life stressors and unmet needs as the main causes of postpartum depression (Habel, Feeley, Hayton, Bell, & Zelkowitz, 2015).

Participant in this study were of the view that unplanned pregnancy and rape could lead to postpartum depression. Also domestic violence was a cause of depression. The laws in Ghana allow for abortion for a woman when the pregnancy is a result of rape. Hence with the possibility of postpartum depression among rape victims, it would be important for women who have been raped to receive counselling and safe abortion where necessary. Domestic violence can also be reduced by introducing stiffer punishment for offenders. A study in eastern Turkey forum that domestic violence and previous mental disorder is contributing to depression in pregnancy and postpartum period (Kirkan et al., 2015). The finding of this study is therefore similar to the one conducted in Turkey.

A study in Japan found that women with endometriosis and menstrual problems were at risk of developing postpartum depression (Muchanga et al., 2017). In this study participant also mentioned that health condition of the mother during pregnancy and after childbirth could result in postpartum depression. They were also of the view that pain during labour could lead to

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postpartum. This therefore calls for the need to implement pain reduction measures during labour to prevent postpartum depression outcome.

This study also identified that women who have babies with malformations and deformities were more prone to developing postpartum depression. This confirms what CDC reported on in the year 2003, as indicated in the theoretical frame work under obstetric complication. That having a child with birth defects, can lead to the development of postnatal depression. This is also consistent with the findings of work done by Josefsson et al., (2002). They indicated in their study that, mothers with babies with major congenital malformations were more depressed than other women.

5.3 Signs and symptoms of depression

Participants identified sadness and withdrawal as signs of depression. An earlier study among women with postpartum depression were reported to feel sad and less sensitive to giving care for the baby with others reported to have suicidal ideations (Roswiyani, 2010).

Health workers indicated they usually do not routinely screen postpartum women for depression and therefore indicated the need for more attention to be given to the condition. Postpartum depression is a very common condition that affects women across the world. In Canada the prevalence of minor/major and major postpartum depression on Canada was found to be 8.46% and 8.69% (Lanes, Kuk, & Tamim, 2011). In Pakistan, it was found to be 17% (Ayoub, Shaheen, & Hajat, 2017), 34.7-50.3% in South Africa women it was found to be 34.7 to 50.3% (Stellenberg & Abrahams, 2015; Tomlinson, Cooper, Stein, Swartz, & Molteno, 2006), 22.9% in Nigeria (Chinawa et al., 2016) and 7% in Ghana (Anokye, Acheampong, Budu-Ainooson, Obeng, & Akwasi, 2018).

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Goyal, Park and McNiesh (2015) have intimated that given how common postpartum has become, education on it should commence during first antenatal visit and continued throughout pregnancy and postpartum period. There is therefore the need for midwives to be oriented on postpartum depression for it to be incorporated to the routine health education that is provided during antenatal period in Ghana. The condition is often severe and can be associated with suicide and infanticide (Vigod & Stewart, 2017) as also found in this study and therefore need for attention in health care delivery.

5.4 Consequences of postpartum depression: Physical and psychological consequence on the health of the baby and mother

This study found that postpartum depression can affect the baby and mother both physically and psychologically. Physically, women with depression will refuse to eat and neglect personal hygiene. Refusal to eat can negatively affect the production of breast milk for the baby and this could lead to inadequate feeding of the baby with its associated effect such as malnutrition (Zhou et al., 2017). Poor personal hygiene can also lead to infection of the baby during feeding as the baby can ingest microbes from an unclean breast. This can cause infant diarrhoea and result in dehydration of the baby (Berlin & van den Anker, 2013; Winkel & Schaefer, 2014). There is therefore the need for early detection of postpartum depression to avert these negative consequences.

Physically, the mother may cause harm to the baby and some in instances kill the baby (infanticide). The mother may also commit suicide. Suicide has been reported as one of the leading causes of death in postpartum women (Oates, 2003). It has also been found to be the seventh leading cause of maternal death within six months of delivery (1.27/100,000 maternal

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deaths) (Mander & Smith, 2008). Again, early detection and social support could help reduce suicide rates among postpartum depressive women.

Another consequence identified in this study is the lack of bonding between the baby and the mother. Postpartum depressed women tend to neglect or reject the baby and as such are unwilling to bond with the infant. This bonding is essential in the psychological and emotional development of the infant (Bandura, 2004). The lack of bonding has also been found to be correlated to aggressive behavior in childhood and adulthood (Riggs & Riggs, 2010; Yaacob & Siew, 2010). These are believed to have trans-generation consequences as children born to aggressive parents also tend to be aggressive (Cordero et al., 2012; Crombach & Bambony, 2015).

5.5 Limitations

This study was limited to women who had delivered within six weeks and visited the District hospital for postnatal services due to time constraints. However, majority of women in their puerperium visit the District hospital for services as it is the most equipped and largest health facility in the Shai Osudoku District. Future studies should consider conducting a study among women in the communities within the District.

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CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary

This was a qualitative study among postpartum women who came for postnatal services at the Shai Osudoku District Hospital and health workers. Four focus group discussions (N=34) were conducted for postpartum women. In addition, six in-depth interviews were conducted among four midwives and two Medical Officers. All interviews were audio-recorded, transcribed verbatim. The data was analyzed into main and subthemes inductively with the aid NVivo 12 software. The key findings of the study were:

1. Postpartum depression was perceived as common condition among women who have delivered.
2. Postpartum depression is caused by marital problems, unplanned pregnancy, and challenges in care of the baby, sex preferences and health of the women, thinking too much due to financial challenges, pain during labour, and deformities of the new born and spiritual factors.
3. Women with postpartum depression neglect the care of the baby, feel sad and withdrawn and in some instances throw away the baby.
4. Baby born to women with postpartum depression may become malnourished and may die from neglect or be killed by the mother.
5. Health workers do not routinely screen women in their puerperium for postpartum depression despite acknowledging it was becoming a common problem.

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6.2 Conclusion

Postpartum depression is caused by physical, social, psychological and spiritual factors. Despite being a common condition, health workers paid little attention to it as it is either covered as health education topics during antenatal and postnatal period. Women in their puerperium had some general knowledge on postpartum depression but did not know about when the condition starts to develop. Postpartum depression can negatively affect the health of the baby and the mother and have devastating consequences on the life of the mother and baby.

6.3 Recommendations

Based on the findings of the study, the following recommendations are made to:

The Shai Osudoku Health Directorate and service providers

1. Midwives should incorporate health education on postpartum depression into the schedule of health education packages during antenatal and postnatal clinics.
2. Midwives should organize routine screening for postpartum depression for women during puerperium.
3. Women should be assisted by mid wives and doctors during labour, to avoid extreme pain which triggers postpartum depression in some women.
4. Health care staff should teach couples the need for appraisal and emotional support and the importance of encouraging, in order to foster maternal feelings of acceptance and being loved.

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APPENDICES

APPENDIX A: INFORMED CONSENT FORM

School of Public Health, College of Health Sciences – University of Ghana

Tittle of study|: Perceptions of postpartum depression among women in their puerperium in the Shai Osudoku District.

Researchers Name: Ernestina Sam

Researchers phone number: 0244480239

Department: Social and Behavioural Sciences

Background

Dear participant, Ernestina Sam is my name, a student of the School of Public Health, University of Ghana, Legon. I am undertaking a study on Perceptions of postpartum depression among women in their puerperium. The study hopes to explore women‟s perceptions of postpartum depression and to elicit their views on the causes and consequences of the condition in the Shai Osudoku District.

The study will involve 6 Focus Group Discussions and 6 In-depth Interviews with Midwives in 6 facilities in the district, it will help to illuminate participants understanding on the study topic.

This is purely an academic research which forms part of my work for the award of a Master of Public Health degree. I would be very grateful to have you as part of this study.

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Procedure

We will be conducting focus group discussions with women who have delivered within six weeks to find out their perceptions of postpartum depression, as well as interview some midwives to find out their views on the topic.

You have been selected to be part of the study and we would be grateful to know your opinion on the subject. There are no right or wrong answers. Your assistance in providing responses to the questions will help us better understand the perceptions of postpartum depression. To help me remember all that you say, I would with your permission, tape record the interview. I also have an assistant with me to take notes as the discussions go on. All that you say would be kept confidential and nothing you say would be traced back to you. Your names will not appear in any reporting of this study. The interview will last between forty five minutes and an hour. You are free to opt out at any stage of the discussion and there will be no consequences to you.

Risks and Benefits

The study will not cause any discomfort to participants. If you suffer any emotional pain from answering any of the questions, you will be referred to a psychologist for the needed care. It is hoped that results obtained from this study will be used by policy makers and health providers to improve maternal service delivery.

Right to refuse

Participation in this study is voluntary and participants can choose not to answer any particular question or all questions. You are at liberty to withdraw from the study at any time. However, it is encouraged that you participate since your opinion is important in determining the outcome of the study.

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Anonymity and Confidentiality

I would like to assure you that whatever information provided will be handled with strict confidentiality and will be used purely for the research purposes. Your data will not be shared with anybody who is not part of the research team. Your identity will not be disclosed in the material that is published.

Before Consenting

Do you have any questions that you wish to ask? If you have questions later, or anything you wish to seek clarification regarding the research, you may contact the principal investigator Ernestina Sam on 0244480239 or Hannah Frimpong, GHS ERC Administrator on **0243235221** or **0507041223**.

Consent

I……………………………………., declare that the purpose of the study has been thoroughly explained to me in English language and Twi and I have understood. I hereby agree to answer the questions.

Signature…………………. **Date**………/………/…… **Thumb print**…………………….…..

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Interviewer's Statement

I, the undersigned, have explained this consent form to the subject in the English or Twi language that he/she understands the purpose of the study, procedures to be followed as well as risks and benefits involved. The subject has freely agreed to participate in the study.

Interviewer's signature…………………………

Date………/………/…….. **Address**……………………………………………..…………

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APPENDIX B: Focus Group Discussion Guide For Women in their puerperium.

FGD facilitator…………………………..… **FGD Note taker**……………………………………...

Date………/………/…… **No. of participants**……………………**Time**……………………

Facility………………………………………………….

Identify respondent according to selection criteria, Introduction and Purpose. Introduce topic (length of FGD approx. 45minutes, confidentiality, and informed consent)

Demographic Characteristics of participant

Age……. **Occupation**………………… **Education**……………………

Marital status…………… **No. of children**……… **Religion**……………………

PERCEPTIONS OF POSTPARTUM DEPRESSION

1. Are there any problems that women experience after child birth?
2. Tell me some of these problems that you know of? Probe further
3. Do you know of a condition where there is extreme sadness and tiredness which continuous after child birth?
    a. Can you describe what happens?
    b. Is there a name for this condition?
    c. Tell me how you call it?

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CAUSES OF POSTPARTUM DEPRESSION

Tell us what you think causes this condition?

KNOWLEDGE ON THE CONSEQUENCES OF POSTPARTUM DEPRESSION

1. What are your thoughts about the effects on the health of the mother?
2. Tell me about some of these effects?
3. How about the effect on the child?
4. What can happen to a child whose mother has this condition?
5. What should a woman with this condition do?
6. Do you think is a problem that needs professional care at a health facility?

THANK YOU

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APPENDIX C: In Depth Interview Guide for Health Provider

Code of respondent………… **Profession**…………………… **Gender**………….

No. of years of practice……… **Name of health facility**………..……………..…

Subdistrict…………… **Date of interview**………/…..…/………

PERCEPTION ON POSTPARTUM DEPRESSION

1. What kinds of problems can a woman have after she gives birth?
2. a. Do you know of a condition where there is extreme sadness and tiredness after child birth?

   b. Which period do women develop this condition?

   c. Have you encountered a woman with this condition before?

   d. Can you describe what happens when the woman develops this condition?

CAUSES OF POSTPARTUM DEPRESSION

1. Which factors do you think contribute to the development of this condition?

KNOWLEDGE ON THE CONSEQUENCES OF POSTPARTUM DEPRESSION

1 .Do you think this condition has effects on the mother‟s health?

2. What effects does this condition have on the mother?
3. What are some of the effects on the child?
4. What will you do if you encounter a woman with this condition?