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MENTAL HEALTH LITERACY AND HELP-SEEKING BEHAVIOUR AMONG PREGNANT WOMEN IN THE NEW JUABEN MUNICIPALITY, EASTERN REGION

BY

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DECLARATION

I declare that this research is my own original work. I have neither submitted any part nor the whole research to any other University for the award of any degree. I declare that any works created by other persons that I used for this research have been properly cited and duly acknowledged. This research has been conducted under the supervision of Dr. Samuel Adjorlolo and Dr. David Atsu Deegbe of the School of Nursing and Midwifery, University of Ghana.

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ABSTRACT

Background: Mental health literacy (MHL) is a major impediment to receiving mental health care. Little is known about how pregnant women comprehend mental health difficulties during pregnancy, particularly in low and middle-income countries like Ghana and how this influence help-seeking for mental health services.

Aim: The study investigated Mental Health Literacy and Help-Seeking behavior among pregnant women in the New Juaben Municipality to fill the gap mentioned above and contribute to the cross-cultural literature on perinatal mental health.

Method: The study adopted a quantitative cross-sectional design. A total of 195 respondents were selected using simple random sampling. Trained personnel collected the data using a questionnaire adapted from previous research and uploaded on google forms for the data collection. The data were explained using both descriptive and inferential statistics. For processing and analysis, data were entered into the statistical program STATA version 17. To make presenting easier, enormous data sets were condensed into straightforward formats using descriptive statistics. The Fisher exact or Chi-square test was used as applicable to confirm the discrepancy between categorical variables. With the accompanying p-value, this evaluated the association between the dependent and independent variables.

Results: The study found that mental health literacy was generally high (54%) among the respondents. Most pregnant women agreed that the victim of mental health disorder needs close family members/friends at her current stage. More than half (56.4%) of participants provided high knowledge of symptoms and recognition of pathological behaviour. About 40.5% of respondents strongly agreed to depression as a symptom of the described mental disorder. Help-seeking behaviour was determined by the marital status of the pregnant woman, the number of pregnancies and the number of births. Generally, help-seeking behaviour was low (13.6%) among study respondents. It was revealed that pregnant women prefer to consult counsellors, social workers, psychologists and close family members when they encounter mental health challenges. **The study also revealed that generally, there was low mental health literacy and health-seeking.**

Conclusion: Pregnant women were literate on mental health management. Whiles they were more informed about symptoms and recognition of pathological behavior, they were not certain of knowledge on the aetiology of behavior. It was also revealed that pregnant women prefer to consult counselors, social workers, psychologists and close family members when facing mental health/ psychological challenges. The study findings also revealed that pregnant women prefer to seek help from health professionals than religious leaders and herbalists. Pregnant women's knowledge of mental health case management correlated positively with their help-seeking behavior. In other words, an increase in the mental health literacy level among pregnant women in the municipality will significantly increase their behavior of seeking help from health professionals whenever they experience mental health challenges. This will help pregnant women recommend seeking help from health professionals to whoever is experiencing a mental health challenge.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

The study on mental health literacy and help-seeking behaviour among pregnant women in the New Juaben Municipality is summarized in this chapter. It includes an overview of the study's background information, problem statement, purpose, goals, hypothesis, importance and operational definitions of key terminologies. This chapter explains the Mental Health Literacy model and the health belief model which were employed in this study.

1.1 Background

Two of the United Nations (UN) Sustainability Development Goals are Good Health and Well-Being (SDG-3) and Quality Education (SDG-4). Like others, these goals are related and of considerable importance to advance the welfare of people world-wide. Everybody wants and needs access to health facilities and education on how to recognize health and illness in oneself and others.

MH disorders are well-known public health problems worldwide, with an estimated 12.3% of adults particularly pregnant women meeting the set criteria for a mental health illness at some point in their lives (Swami et al., 2020). Mothers may continue to have mental health concerns during pregnancy and postpartum for about up to a year after giving birth (Champion et al., 2017). Past depression, anxiety, bipolar disorder and psychosocial issues which include persistent conflict in a relationship, insufficient social support and ongoing stressful life events, according to Patabendige et al. (2020), are risk factors. According to the international health organization,

World Health Organization (WHO), close to 450 million people have mental illnesses and many more have mental health concerns. Mental illnesses account for 13% of the global disease burden and their prevalence appears to be increasing. Mental illness reduces quality of life, has an impact on socioeconomic development, education and employment and is responsible for 59% of all suicides worldwide (Krantz et al., 2014). Mental health among pregnant women is an issue of public health concern because it affects the health of mothers and their newborns (Krantz et al., 2014).

Studies show that pregnant women suffer from different mental health issues. Depression was stated in a cross-sectional study conducted to determine the prevalence of perinatal depression among working pregnant women to be among 76.1% of study participants (Jihed et al., 2022). Also, according to a Sydney-based study, between 13% and 39% of pregnant women suffer from obsessive compulsive disorder (OCD) with the majority of cases occurring in the second trimester. Viswasam et al., (2019) reported that the prevalence of panic disorder (PD) was higher in the first two trimesters of pregnancy. Furthermore, the prevalence of social anxiety disorder during pregnancy ranged from 2.0% to 6.4%. According to these statistics, anxiety, ranging from excessive worry to panic attacks is common during pregnancy.

Pregnant women's mental health and mental illnesses have an impact on their ability to function and are linked to delayed development of their offspring (Stein et al., 2014). According to current data, depression affects 19.8% of new mothers and 15.6% of pregnant women in poor countries (Dadi et al., 2020; Endomba et al., 2021). Psychological factors such as a known history of mental illness or trauma, sociocultural factors such as a lack of social support, low socioeconomic status, unsuccessful pregnancies and chronic diseases such as HIV infection have all been linked to perinatal depression. Women and their children rely on effective treatment for these diseases (Da

Costa et al., 2018; O'Hara et al., 2014). Appropriate care for prenatal mental diseases is a predictor for the health of women and their children (O'Hara et al., 2014).

Furthermore, studies have shown that depression can last for a long time after a pregnancy (Walker et al., 2017). Poverty, trauma (physical and sexual assault), discrimination and acculturative stress, according to Bee-gates et al. (2014), are all biological risk factors and contextual cultural risk factors for mental health difficulties in pregnant women in low and middle-income countries. Other research has linked prenatal depression to a lack of social support and a history of depression (Magaard et al., 2017; Hamdullahpur et al., 2018; Chung et al., 2020). Untreated common mental illnesses have been linked to a variety of negative outcomes for both mothers and their babies. For newborns, examples include preterm delivery, low birth weight and impaired foetal development (Brittain et al., 2015). Others include delayed physical and cognitive development, as well as emotional and behavioral issues (Jurges et al., 2019).

Researchers have researched on health literacy (HL) for many years because it has been linked to significant health outcomes (Kutcher et al., 2016). Health literacy is defined differently by different people, but it essentially entails accessing, communicating, comprehending and evaluating information about (personal) health in order to improve, maintain and promote health. The World Health Organization (WHO) asserts that health literacy outperforms education, work level, wealth and ethnic or racial group as indicators of health. As a result, multinational agencies and governments have recognized that better HL is associated with decreasing health inequalities, improving health systems and developing better health policies at both the individual and population levels.

Healthcare literacy (HL) gave rise to mental health literacy (MHL) which is why it is important to view it from that angle, according to Hamdullahpur, Jacobs amd Gill (2018). In the beginning, HL was discussed in terms of health care, emphasizing how well individuals could absorb and use medical knowledge, particularly to better understand and follow prescription regimes. The creation of HL was motivated by research linking low functional literacy to a number of detrimental health outcomes (Hickey et al., 2019). The World Health Organization (WHO) revised the definition of HL in 1998 to include "the cognitive and social abilities that define an individual's motivation and ability to get, interpret and apply information in ways that promote and sustain good health". Better understanding of HL has recently expanded into a bigger notion regarded as vital to improving a person's health outcomes, eliminating health inequities among communities and improving the operation and policy formation of the health system(Kutcher et al., 2016).

The evolution of Mental Health Literacy (MHL), which was developed from Health Literacy (HL) are parallel to each other. The earlier definition of MHL was given by Kingston et al., (2014) as "knowledge and attitudes about mental diseases that help detect, manage or prevent any form of mental disorder". Understanding how to achieve and maintain good mental health; comprehending mental disorders and their treatments; lowering stigma associated with mental disorders; improving help-seeking efficacy, knowing when and where to seek help and developing competencies designed to improve one's mental health care and self-management capabilities, as informed by previous definitions of MHL and current definitions (Bjørnsen et al., 2017; Kutcher et al., 2016).

Mental health literacy among gravid women is low in low and middle-income countries resulting in a high prevalence of mental health issues among pregnant women (Kusumawati et al., 2021).

According to studies, 15.6% of pregnant women and 19.8% of new mothers in developing countries suffer from MH issues such as depression (Dadi et al., 2020; Endomba et al., 2021).

Most people, particularly pregnant women face challenges that appear to be beyond their ability to address independently at some point during and after pregnancy. Getting help is one way for many people to start dealing with and resolving these issues. Pregnant women who identified themselves with multiple psychiatric problems and life difficulties are more likely than their non-pregnant counterparts to seek treatment, according to research (Bee-gates et al., 2014). Help-seeking involves a shift from the personal domain where one is aware of one's wants, ideas and feelings to the interpersonal domain where one is willing to discuss and reveal one's needs with others (Nagai, 2015).

In contrast to many chronic diseases where patients place a high value on information obtained from their doctors and parents, patients with low trust in health providers rely on more informal sources for medical information such as friends, family, other parents, the internet and alternative medicine providers, instead of their doctors (Chung et al., 2014). Women are more likely to make poor medical decisions, forgo getting the right medical care or face new decision-making circumstances if they don't believe they have self-efficacy in perinatal HL or don't call health professionals as the final line of defense (Chung et al., 2020)

Research has shown that pregnant women are less likely to seek support for mental health on their own for reasons such as fear of being shamed, embarrassed, socially isolated and stigmatized (Jones, 2019; Redshaw & Henderson, 2016). Other barriers include lack of information about services and access to care, lack of knowledge regarding maternal mental health and preference for informal sources of support (Jones, 2019). The stigmatization of mental health and psychiatric

facilities in Ghana, for instance, is among the incentives pushing individuals to seek mental health support from informal sources, including religious leaders and traditional healers (Badu et al., 2019). Therefore, health professionals have important roles in ameliorating the emotional and mental well-being of pregnant women (Adjorlolo & Aziato, 2020). Indeed, evidence-based clinical and practice guidelines directs health professionals to prioritize and promote the mental health of pregnant women. These professionals are expected to initiate conversations around pregnancy and mental health to enquire about the emotional well-being of pregnant women and offer mental health support including referral services (NICE Antenatal, 2014). Such interactions can lead to a reduction in the stigma associated with perinatal mental health while serving as an avenue to address other common barriers such as lack of knowledge, attitudes and beliefs that affect maternal mental health (Jones, 2019).

Despite the widespread impact of mental health literacy during pregnancy, insufficient attention has been paid to mental health literacy research and health planning in low and middle-income countries resulting in a lack of identification and treatment of mental health disorders (WHO, 2008a), as cited in (Kane et al., 2019). Although the WHO has increased its efforts to meet the unmet needs for mental health disorders in response to their identification and treatment, the treatment gap remains significant.

Pregnant women in Africa are less likely than their Western counterparts to seek help for depression in pregnancy and the early postnatal period, according to clinical and emerging research data from primary care (Ogbo et al., 2019). Unresolved psychological modifications or mental issues can have long-term effects on both the mother and the unborn or newly born infant, so increased awareness of mental health during pregnancy is more important than ever (Patabendige

et al., 2020). Mental health literacy, according to research, is critical for an individual's ability to seek mental health care, particularly for pregnant women (Amoah, 2017).

Available literature indicates that most studies on mental health literacy and help-seeking behaviour among pregnant women are conducted in Western countries (Barnes et al., 2018). This study investigated mental health literacy and help-seeking behaviour among pregnant women in the New Juaben Municipality in the Eastern Region of Ghana.

1.2 Problem Statement

A cursory examination of the extant literature revealed that not much research had been conducted on mental health literacy among pregnant women globally (Sweileh, 2021). Yet, there is a high prevalence rate of mental health issues that occur in the pregnant population (Miles et al., 2020). Pregnancy is often characterized by common psychological disorders (Kingston et al., 2014). Pregnant women experience immense vulnerability associated with mental health issues that could have an impact on their daily lives and range from small concerns like stress and worry to more serious long-term mental health conditions like anxiety and depression (O'Hara, 2014). In contrast, research on help-seeking for health services including mental health expands in high-income and low and middle-income countries (Acharibasam & Wynn, 2018).

Although these studies have yielded useful insight, a noticeable gap in the literature relates to how maternal mental health literacy will impact help-seeking for mental health services. MHL is a dynamic factor suggesting targeted interventions. This means that MHL of pregnant women can be improved with the appropriate interventions including those focusing on education (Solhi et al., 2019). To the extent that MHL will significantly and positively influence help-seeking for mental

health services in the perinatal period (Jung et al., 2017), this will help in reducing the burden of mental health problems during pregnancy and the postnatal period.

Ultimately, this will help achieve the United Nations Sustainable Development Goal 3, good health and well-being. However, as noted previously, there is limited empirical data on MHL and help-seeking in the perinatal period. This gap has contributed to the limited interventions for promoting the mental well-being of pregnant women particularly in Ghana and other low and middle-income countries where the burden of mental problems is reportedly high (Rathod et al., 2017).

Indeed, to the best of the knowledge of the researcher, no study has systematically investigated MHL and health-seeking in the perinatal period in Ghana. The desire to promote maternal well-being as a national strategy by the government of Ghana (Adu et al., 2018) necessitates the investigation of a low-cost and sustainable approach that can support pregnant women in accessing mental health services that are currently being decentralized across health centers in Ghana (Eaton & Ohene, 2015). As noted previously, granted that MHL significantly predict help-seeking for mental health services, interventions targeting MHL could be developed and implemented at primary healthcare settings as part of measures to increase the likelihood of pregnant women utilizing mental health services. Observations reveals that health education is done at antenatal clinics for pregnant women but there is little to no education on mental health to increase the MHL of pregnant women. Consequently, this current study investigated MHL and health-seeking among pregnant women to fill the aforementioned gap and contribute to the cross-cultural literature on perinatal mental health.

1.3 Research questions

1. What is the mental health literacy level among pregnant women on mental health disorders in pregnancy?
2. What is the pregnant woman's help-seeking behaviour for mental health support in the New Juaben Municipality?
3. What is the relationship between mental health literacy and help-seeking behaviour among pregnant women in the New Juaben Municipality?

1.4 Research Objectives

1.4.1 Purpose of the Study

The study's main aim is to assess the level of mental health literacy among pregnant women and their help-seeking behaviour in the New Juaben Municipality of the Eastern region of Ghana.

1.4.2 Specific Objectives

1. To assess the mental health literacy level among pregnant women on mental health disorders in pregnancy.
2. To describe pregnant women's help-seeking behaviour for mental health support in the New Juaben Municipality.
3. To investigate the relationship between mental health literacy and help-seeking behaviour among pregnant women in the New Juaben Municipality.

1.5 Scope of study

This study examined the level of mental health literacy among pregnant women and their help-seeking behaviour in the New Juaben Municipality of the Eastern region of Ghana. Additionally, the maximum time frame for this study was from December 2021 to December 2022. The New Juaben Municipality served as the focus of this study.

1.6 Definition of Variables

In this sample, there are two key variables: mental health literacy and help-seeking behaviour

1.6.1 Operational Definition

Mental Health Literacy (MHL) refers to an individual's health-related skills and knowledge that enable her to interact with the healthcare system on mental health issues. The mental health literacy level of a pregnant woman includes her knowledge of some signs and symptoms of mental health issues, causes and where to seek help.

Help-Seeking Behaviour (HSB): is described as "any action of energetically seeking help from health care providers or trusted people in the community by pregnant women when feeling troubled or encountering stressful health circumstances during pregnancy. The action of seeking help for mental health issues involves the level of mental health literacy on the causes and signs and symptoms of mental health issues.

1.7 Significance of the study

The study's findings could provide more up-to-date information on the level of mental health literacy among a population sample. This is important because more updated data would help to

show how much the general public especially the selected population understands mental health and what services can be given to encourage help-seeking behaviour.

Again, the data collection tools have been particularly created to measure mental health literacy in a number of ways. Understanding how the word influences the trend of seeking assistance, particularly among pregnant women would include determining the link between mental health literacy and help-seeking behaviors.

This research would look at more in-depth aspects of mental health awareness as well as re-examine the link between factors and compare results from other countries. The parallels and contrasts in the findings will allow for more exploratory research into the origins of the disparities.

Furthermore, the information gathered would aid in determining the level of mental health awareness among pregnant women. While a mental health professional's diagnosis is critical in assessing the underlying mental disorder, early detection of symptoms by the person and those around them can help prevent the mental illness from going unnoticed and preventive measures from being taken especially in the early stages to aid the safety of the mother and the baby, creating a healthier environment of more understanding and support.

The results of this study can help policy makers and healthcare professionals establish specialized mental health initiatives for expectant mothers. For instance, healthcare professionals can utilize the data to create interventions that cater to the particular mental health needs of expectant women. The data can be used by policy makers to create measures that assist pregnant women's mental health such as boosting financing for mental health services, lowering stigma and expanding access to services.

Additionally, by supplying a deeper understanding of mental health literacy and help-seeking behaviour of a particular community which might guide future research in other communities, this study can also contribute to the larger field of mental health research.

1.8 Organization of the study

This study is arranged and organized into six chapters. The chapter one introduces the research, identifies the key problem under investigation and asks the relevant research questions. It further states the specific objectives for the research and gives significance for the topic and outlines the delimitations of the research. This chapter was relevant to the study because it puts the study into perspective and helps to check deviations.

The second chapter discusses the literature review and gives an overview of some of the similar works that other researchers have completed. This chapter includes numerous insightful and pertinent philosophical references. Some of the theories that underlie the recent findings are also discussed in this chapter. Additionally, some of the shortcomings of prior studies were highlighted, emphasizing the necessity of looking at current research in this area.

The third chapter covers the methodology of the research. Here, the research's philosophical underpinnings and study design are thoroughly described. The methods used to choose the study subjects and get the data are also covered in this chapter. It also examines the tools, data analysis, and data presentation processes. This chapter also covers ethical issues related to the study.

The fourth chapter includes the findings from the data that will be gathered. When appropriate, supporting graphs will be included with the results in table format. In accordance with the study's goals and the research questions, it delivers the findings.

The fifth chapter discusses the findings from the preceding chapter. It goes through important ideas and makes connections between them and the findings of the study. This chapter also offers a thorough explanation in response to the chosen subject and goals. The chapter also analyzes all conceivable causes for the various connections and the likely covariate relationships. It also exposed the advantages and drawbacks of the current body of research**.**

The last chapter dealt with summary, conclusion and recommendation drawn from the finding. The research findings are summarized below, together with recommendations for future research topics from the perspective of the lead investigator. At the very end of the document are references and an appendix.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

A review of the literature on a research topic helps the researcher become familiar with previous studies and gives the project more direction. This review concentrated on data pertaining to the study's subject. It also pointed out some of the gaps in the body of knowledge concerned with mental health literacy among pregnant women. The review begins with the overview of mental health literacy and the relevant theory underpinning the study. This chapter runs off with discussions of previous research related to the variables under study which together presents the empirical review of the study.

The literature evaluation was conducted considering the specific goals of mental health literacy among pregnant women. Articles from databases including HINARI, CINAHL, PUBMED and Google Scholar were used to compile this review. The literature review has been arranged under the various thematic headings to facilitate reading, which includes an overview of mental health literacy and the relevant theory underpinning the study, theoretical review, conceptual review, empirical review of existing literature and summary/ conclusion. The theoretical review describes important theories related to nutritional practices and workout routines. The conceptual framework demonstrates the approach to the key ideas about the study. The last section is on previous studies done by other researchers on mental health, mental health literacy and help-seeking behaviour.

2.1 Overview of Mental Health Literacy and Help-Seeking Behaviour

The World Health Organization (WHO) since its establishment has incorporated mental well-being as one of its core mandates (WHO, 2005) while defining the very term health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 2006). From this definition, three ideas central to the improvement of health follow. First, mental health is an integral part of health. Second, mental health is more than the absence of mental illness, and last but not least, mental health is intimately linked with physical health and behaviour. Thus, defining mental health is significant even if it's not always necessary to attaining its improvement. Variances in values across countries, cultures, classes and genders can appear too great to allow a consensus on a definition (WHO, 2001).

The World Health Organization defines mental health as a state of well-being in which an individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and can make a contribution to his or her community (WHO, 2001). Mental health is important at every stage of life, from childhood and adolescence through adulthood. It includes our psychological, emotional and social well-being. Mental health illnesses affect how we think, feel and act. Mental health also helps determine how we handle stress, relate to others and make choices as individuals (WHO, 2020). Just as physical fitness is a central part of healthy life, good mental health is as important for an individual's well-being and family readiness. Mental health challenges and issues should not be ignored or hidden. There are lots of resources available to help anyone who is struggling with mental health challenges to feel better.

The ability to detect, manage and prevent psychiatric issues based on one's knowledge and beliefs about them is referred to as mental health literacy (Jorm, 2012). This definition includes

recognizing the indicators of psychological issues, knowing their origins and risk factors, attitudes toward mental health and the capacity to acquire both mental health information and professional support among pregnant women. This multifaceted notion gives rise to the assumption that increasing mental health awareness among pregnant women and the general public can lead to early identification and proper treatment of psychiatric disorders (Miles et al., 2020). Due to the high prevalence of mental health issues that occur in the pregnant population (Miles et al., 2020), and because pregnancy is frequently the time of onset for common psychological disorders (Kingston et al., 2014), increasing mental health literacy of pregnant women is crucial.

It is widely assumed that understanding what activities may be undertaken for the prevention, early intervention and treatment of a variety of physical diseases will benefit the general population. Public understanding of mental diseases, on the other hand (mental health literacy) has received significantly less attention. According to surveys in several countries, the public lacks (a) knowledge of how to prevent mental disorders, (b) recognition of when a disorder is developing, (c) knowledge of help-seeking behaviors and treatments available, (d) knowledge of effective self-help strategies for milder problems and (e) first aid skills to support others affected by mental health problems, particularly among pregnant women (Viswasam et al., 2019).

Nonetheless, there is evidence that a number of therapies including community-wide campaigns, educational interventions, Mental Health First Aid training and information portals can increase mental health literacy (Chung et al., 2020). There is also evidence of previous advancements in mental health literacy in some countries. National policy and population monitoring should focus on enhancing community mental health literacy in order to empower the entire community to take action for better mental health (Champion, 2018).

Several studies have been conducted to examine parents' (Lubman et al., 2014), teenagers', the general public and health professionals' mental health literacy (Coles et al., 2016). Coles et al. (2016) measured the mental health literacy skills of 1,104 students in a New York public high school. Participants were shown clinical vignettes of people suffering from social anxiety disorder and sadness. They were invited to read each scenario and answer questions on their understanding of the disease. The researchers discovered that individuals were better at recognizing depression than social anxiety disorder. They also found that female adolescents had better help-seeking attitudes than their male counterparts and both were more likely to recommend help-seeking for depression than social anxiety. Females had higher mental health literacy than males.

Furnham, Annis, and Cleridou (2014) cited in Wei, Church, & Kutcher, (2022) conducted a study of high school and university students in the United Kingdom to investigate if gender had an influence on mental health literacy. The authors reported that female participants had better recognition and labelling of mental disorders than males and females were more likely to suggest professional help-seeking.

2.3 Theoretical Frameworks

This section of the chapter reviews theories which are related to the study. These theories include; The Social Representation Theory, the Baker's Theory, the Theory of Planned Behavior and the Health Belief Model.

2.3.1 The Social Representation Theory

The Social Representation theory suggests that people's understanding and attitudes toward a particular phenomenon are shaped by the socially shared meanings and beliefs that exist in their culture or community (Rateau et al., 2012). This theory can be applied to the understanding of

mental health literacy and help-seeking behavior among pregnant women by suggesting that these behaviors are influenced by the socially shared meanings and beliefs about mental health and help-seeking that exist in their culture or community.

The Social Representation hypothesis holds that people's perceptions of mental illness and help-seeking are influenced by the socially accepted meanings and assumptions that are prevalent in their culture or group. These meanings and attitudes can have either beneficial or negative effects on how individuals view mental health and seeking help (Van Dijk, 2014). For instance, it could be more challenging for pregnant women to comprehend the significance of mental health and to seek treatment if the socially shared meanings and ideas within a culture or society are negative. On the other hand, pregnant women may be more likely to comprehend the significance of mental health and to seek help when necessary if the socially shared meanings and ideas within a culture or group are positive.

According to Thoits, (2013), some pregnant women may be more inclined than others to seek treatment for mental health problems and some cultures or groups may have higher rates of mental health literacy and help-seeking behaviour than others. It also emphasizes the significance of addressing socially prevalent meanings and viewpoints to enhance pregnant women's mental health literacy and help-seeking behavior. Pregnant women's mental health literacy and help-seeking behavior may be promoted by interventions that work to alter the socially accepted meanings and ideas about mental health and help-seeking in a cultural setting, such as awareness and training activities.

The Social Representation theory contends that these behaviors are influenced by the socially shared meanings and beliefs about mental health and help-seeking that exist in their cultural community. This theory explains that it is essential to address sociocultural meanings and ideas to

enhance mental health literacy and help-seeking behavior (Halfacree, 2017) hence cannot be adapted in this study since the focus of this study is not on culture and socially shared meanings and beliefs about mental health and help-seeking

2.3.2 The Baker's Theory

Barker, (2007) developed a schema for analyzing teenage help-seeking behavior that included three components (Loeb et al., 2021). These components include both individual and external elements that are linked to help-seeking behavior. It also contains a section on initiatives and policies aimed at encouraging people to seek treatment. According to Barker, (2007), the individual factors associated with help-seeking behavior include one's personal beliefs about what constitutes a need for help (Bowles and Fallon 1996), internalized gender norms related to help-seeking behavior, perceptions of others and helping institutions as helpful and trustworthy (Newton, 2000), personal coping skills (Blum & Rinehart, 1997), prior experiences with seeking help, self-efficacy and self-agency (Newton 2000), identity and other specific characteristics of the individual (BDHS, 1995) and perceived stigma associated with the need for help (Loeb et al., 2021).

Exogenous elements include concerns about the availability of assistance and the form of social support (Barker, 2007). These factors include the distance to sources of assistance (Barker, 2007), the availability of services, service infrastructure, caseloads, the cost of services and the cost associated with referrals (Newton, 2000), staff receptivity to adolescent needs and staff competence to work with adolescents (Rizzini & Barker, 2001), local values about adult-adolescent interaction (Barkat, Khan, Majid, & Sabina, 2000), community and cultural values about (Barker, 2007).

Barker, (2007) also mentioned measures made to enhance teenage help-seeking behavior in his paradigm. For example, efforts are being undertaken in certain public health settings across the world to make healthcare services more adolescent-friendly (WHO, 1997). Certain public clinic staff members have been trained to manage special teenage issues and peer counselors are being taught to collaborate with their colleagues (GOB, 1998). There have been some information communication and education campaigns (Newton, 2000), parent and community education programs (Finger, 2000), outreach and recruiting activities (King, 1999), new teenage services (GOB, 1998), and networks among formal social supports created (Barker, 2007). The idea primarily focuses on an individual's (adolescent) capacity to receive, comprehend and apply health information; however, it does not take into account the fact that some populations may not have access to healthcare services or information that is suitable or responsive to their cultural contexts and therefore considered not compatible to this study.

2.3.3 The Theory of Planned Behaviour

Ajzen's (1991) Theory of Planned Behavior is a model that may aid in explaining the various psychosocial elements that influence students' intentions to seek mental health care. According to Ajzen's (1991) Theory of Planned Behavior which is an extension of the Theory of Reasoned Action (Fishbein & Ajzen, 1975), a person's attitudes toward a given behaviour, subjective norms in relation to the behavior, and perceived control over the behavior are typically good predictors of the intention to perform behavior cited in (Adams et al., 2022). According to the Theory of Planned Behavior (TPB), an individual's desire to engage in a behavior is what determines their behavior. This intention is impacted by their attitudes about the behavior, their subjective norms and their perception of their level of behavioral control. Using this theory, one may comprehend how pregnant women's views toward mental health and help-seeking, social norms about mental

health and their perception of control over seeking treatment affect those women's intent to seek treatment (Ajzen, 2020).

The Theory of Planned Behaviour seek to be more applicable in anticipating and interpreting actions and help-seeking intentions but not recognition and knowledge of the subject matter which is the focus of this study and therefore not considered. Besides, the theory makes little-to-no provisions for the role of health literacy, including mental health literacy in an attempt to explain help-seeking for mental health services.

2.3.4 The Health Belief Model

A psychological tool called the Health Belief Model aims to predict and explain health behaviours. People's attitudes and beliefs are the main topics. The social psychologists Hochbaum, Rosenstock, and Kegels created the initial version in the 1950s (Kozier et al., 2008) which was then revised in the 1980s (Glanz & Barbara, 2002). According to the Health Belief Model, one's perception of personal threat and belief in the usefulness of a particular behaviour will both influence how likely they are to carry it out (Rosenstock, 2015) in the case of this study, how people will be able to seek help for mental disorders. The perceived threat and net advantages are each represented by one of HBM's four main constructs. The health belief model has six constructs which include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action and self-efficacy. These constructs are explained further as follows:

Perceived Susceptibility: This describes a person's likelihood of developing a condition. A person is less likely to get a specific illness the more they engage in risk-lowering actions. Pregnant women will be more cautious and willing to seek aid if they believe that doing so will safeguard their unborn children from congenital deformities or other ailments. They may seek medical advice

on how to protect themselves from the effects and ailments of mental disorders because they think their current state of mental health can be passed on to their unborn kid. Factors include a person's personal and family history of mental health issues, their experiences with stress or trauma and other influences that may affect how susceptible they consider themselves to a mental health concern.

Perceived Severity: This relates to a person's perception of the gravity of a mental health issue. This requires identifying the relevance of the condition and its potential consequences. If one believes a situation will have serious consequences, they are more likely to take actions that will prevent it from becoming crucial. When it comes to pregnancy, a person's perception of the seriousness of a mental health concern may be influenced by a variety of things including their perceptions of how mental health issues may affect the mother and the unborn child's health and their perceptions of the accessibility and efficacy of mental health treatment. For instance, depending on how severe she anticipates the effects to be, a pregnant woman who notices a change in her mood will seek medical counsel to learn why. Depending on how typical she perceives the situation to be, she might also decide against seeking help.

Perceived Benefit: This conveys a person's assessment of the benefits of engaging in a particular conduct. A person's perception of the advantages of receiving treatment for a mental health issue may be influenced by several variables including their beliefs about the accessibility and efficacy of mental health treatment options and their perceptions of the effects of mental health issues on the health of the mother and unborn child. If a particular behavior is effective, there is a propensity for it to be maintained. Pregnant women may encourage the use of mental health services in both situations because they believe it is advantageous in terms of safety, efficacy, cost, etc.

Additionally, people can pursue it if they believe it will enhance their general well-being in addition to helping their health.

Perceived Barrier: This is a person's perception of the barriers preventing them from obtaining treatment for a mental health issue. In the context of pregnancy, factors such as a person's beliefs about the accessibility and efficacy of mental health treatment, their beliefs about the effect of mental health concerns on the health of the mother and the unborn child and their beliefs about the stigma associated with mental health concerns can all have an impact on how difficult it is for them to seek help for a mental health concern. The most crucial element, perceived barriers, determine whether or not an individual would adopt a new behaviour based on whether the benefits outweigh the disadvantages. One of the personal barriers that women may identify to adopting or seeking mental health care is the fear of injuring the foetus as well as the accessibility, availability and cultural conventions and beliefs.

Cues to action: Refer to external factors that encourage the desired action. These might come in the form of previously supplied or sought-after knowledge such as mental health literacy, reminders from powerful figures, compelling messaging and personal experiences. Notifications to moms, mothers-in-law, peers, easy access to mental health resources and proximity to mental health care providers to expectant women are just a few examples of how this might be done. For instance, it might be safe and even advantageous if a woman knows someone who used services to profit from or find a cure for their mental disease.

Self-efficacy: It is used to describe the level or extent of control that a person has. That is one's belief in their ability to perform successfully. Pregnant women's self-efficacy in seeking mental health is demonstrated by their willingness to take risks and go to a mental health facility. It contends that behaviour can be influenced by an individual's perceived susceptibility to a mental

health threat, their perceived severity of the mental health threat, their perceived benefits of seeking help for the mental health concern and their psychological factor in seeking help. Therefore, initiatives that sought to increase awareness, lessen the stigma attached to mental health issues, increase access to mental health services and training and decrease barriers to such services may be successful in helping mental health literacy and help-seeking behaviour among pregnant women. The Health Belief Model (HBM) is a hypothesis that explains why people choose to engage in or refrain from practices that promote health. According to the HBM, a person's decision to engage in a health-promoting behaviour is dependent on their perception of their vulnerability to a health hazard, the severity of that threat, the advantages of acting to address the threat and the obstacles to acting (Taibah et al., 2020). This study seeks to find the level of mental health literacy and help-seeking behaviour but not just perception of the vulnerability to mental health hazard, severity and advantages of acting.

2.4 Mental Health Literacy Framework

A conceptual framework is the logical orientation and associations of everything that comprises the fundamental assumptions, frameworks, plans, strategies and methods that will be used to carry out the entire research endeavor. Therefore, the conceptual framework includes ideas about choosing the research topic, the problem to be investigated, the questions to be posed, the literature to be reviewed, the theories to be applied, the methodology to be used, the methods, procedures, and tools, the data analysis and interpretation of findings, recommendations and the conclusions to draw (Mensah, Agyemang, Acquah, Babah & Dontoh, 2020).

As a result, the conceptual framework represents how the complete study endeavour makes sense. A conceptual framework is a logical conception that functions as a metacognitive, reflective, and operational component of the entire research process.

The conceptual framework used in this research is based on the mental health literacy framework by Jorm et al., (1997). It is used in assessing an individual's mental health literacy and has three constructs. It asserts that an individual must recognize that there have been changes in his or her health that will necessitate medical care for therapy. Until this realization, such a state appeared to be typical for such a person. Others will recognize the change at this point but will remain in the rejected stage, refusing to acknowledge it as a medical anomaly requiring medical attention. Knowledge is the level at which an individual comprehends the notion of his or her current condition which includes risk factors, causes and where to seek therapy, whether self-treatment or professional treatment. The attitude aspect is where advocacy and promotion of recognition and assistance seeking come into play.

2.4.1 Recognition

Recognition is an act of recognizing or the state of being recognized. This act or state can be in a form of identification of something as having been previously seen, heard, known, etc. The theory of recognition has its philosophical roots in the Hegel.

The recognition theory represents a paradigm change in Frankfurt School critical theory. It relies on Habermas' previous transition from "philosophy of consciousness" to an intersubjective basis for social critique but varies from Habermas' theories of communicative action and discourse ethics. Instead, it emphasizes recognition relations that extend beyond linguistically mediated communication to include affective attitudes as well as a dynamic conception of social struggles

for recognition that makes sense of historical social struggles for equal rights and the recognition of marginalized contributions to socially shared goals (Jütten et al., 2018).

Honneth's recognition theory is based on the normative principles that form identity in social connections. Social interactions influence not just the person but also the normative structures that underpin society. Honneth emphasizes the significance of social ties in the formation and preservation of a person's identity. When he criticizes the formal theory of good in recognition as a defective ideal of self-realization in his criticism of Honneth's discourse on recognition, Nikolas Kompridis misses the point regarding social cohesiveness (Kompridis, 2007) cited in (Thew et al., 2020). It is very important that the health care system helps people to be aware of early signs of mental health problems and enable people to get the timely treatment.(Štimac et al., 2022).

The capacity to notice mental illness without naming the disease may promote help-seeking from peers but the ability to identify the condition as schizophrenia may diminish help-seeking in late adolescence. Improving teenagers' capacity to detect mental illness is typically suggested to increase help-seeking behavior. Despite the availability of effective therapy for a wide range of mental diseases, the treatment and help-seeking gap remains significant. (Roskar et al., 2017).

2.4.2 Knowledge

Knowledge is concerned with learning, keeping and using information to one's advantage (Badran & Khalifa, 2016). The outcome of uncertainty is knowledge theory. Bertrand Russell defined knowledge as "opinion that is consistent with the facts" (1926). Theories of knowledge are those that infer the presence of something with certain qualities from the existence of something with other characteristics. In order to diagnose one's mental health disease, an individual must have one or more of the following types of knowledge: propositional knowledge, skill, moral knowledge, interpersonal knowledge and religious knowledge. When this information is obtained, an

individual will be able to understand the need to act appropriately in response to any changes in your state of mind or other behavioral changes. Knowledge and comprehension of mental health issues are crucial but not sufficient prerequisites for getting treatment. (Roskar et al., 2017). Mental diseases are the least understood of all health issues by the general population. This common unfavorable attitude in the society discourages mentally ill persons from seeking and adhering to therapy.

2.4.3 Attitudes

The attitude of the community toward mental health issues and help-seeking behavior is crucial in developing effective community-based mental health interventions (Tesfaye et al., 2020). Willingness to seek professional assistance for a major emotional problem, as well as feeling comfortable discussing personal issues with specialists were strongly related with future help seeking and treatment usage. It is also critical to address stigmatizing beliefs in order to enhance help-seeking behavior (Roskar et al., 2017). The attitudes toward obtaining professional psychological care scale scores revealed a neutral attitude toward openness to getting treatment for psychological issues and a negative attitude about the value and need of seeking therapy with a negative total score.

The majority of African society's attitude toward mental illness is far from scientific which may have a detrimental impact on treatment seeking and adherence. Effective interventions such as mental health education, mental health professional training and publicizing the use of mental health services are critical, particularly for the at-risk population. (Chen et al., 2020). People frequently seek medical aid after exhausting all other choices and their symptoms have worsened which has a detrimental impact on treatment prognoses (Tesfaye et al., 2020).

Conceptual Framework

The conceptual frameworks used in this research was based on the mental health literacy framework by Jorm et al., (1997) and also on the health belief model. The mental health literacy framework explains mental health literacy based on three constructs which are recognition, knowledge and attitudes. Recognition involves the ability to recognize mental health disorders. The knowledge component is explained as one's information about the risk factors, causes, treatment options and professional help available. Attitudes are behaviors that promote help-seeking.

The health belief model explains health behaviors. A person's perception of mental health disorders and their severity is more likely to inform help-seeking behaviour. In addition, a person's recognition of the benefits of seeking treatment for mental health disorders is likely to influence their health behaviour. Perception of the susceptibility and severity is based on one's knowledge of mental health disorders which in turn informs help seeking.

The conceptual framework explains mental health literacy as recognition of mental health disorders, knowledge of risk factors and this recognition and knowledge of mental disorders inform attitudes which promote help seeking.

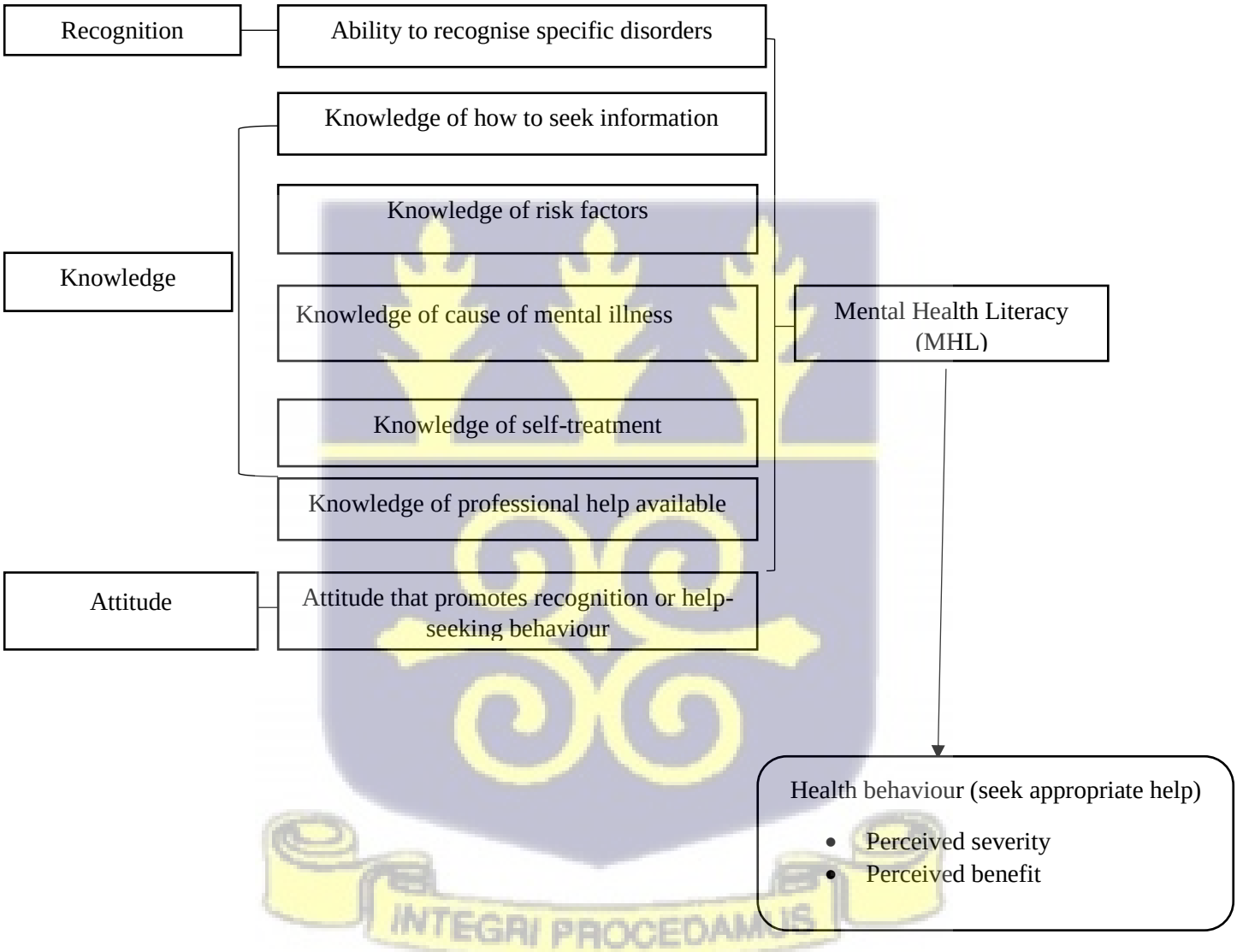

Figure 1 Conceptual Framework

2.5 Empirical Review

This section reviewed literature based on the important subject matters in this study. Previous researches conducted on similar topics were reviewed to better understand the topic, identify gaps and carryout this study to fill those gaps.

2.5.1 Mental Health Literacy Level among Pregnant Women

The term 'mental health literacy', coined by Jorm et al. (1997a), is defined as 'knowledge and beliefs about mental disorders which aid their recognition, management or prevention. Mental health literacy emphasizes the need for the public to acquire knowledge and develop appropriate beliefs about mental health disorders to help suggest or help with effective interventions. It's critical to have adequate access to, comprehension of and use of health information, particularly when it comes to high-risk activities and in precarious circumstances. Pregnancy is one instance of a condition where health behavior becomes especially crucial since at this time, habits have an impact on both the health of the mother and the fetus. Women are exposed to a range of health information throughout pregnancy from many sources. This content includes suggestions for healthy conduct (Song et al., 2012). In addition, women who have acceptable levels of health literacy are more aware of concerns related to their mental health. Written information about prenatal services is more challenging for women with low health literacy to comprehend. These women are therefore less likely to make wise medical decisions (Kilfoyle et al., 2016).

A couple of researches accessing the general HL of pregnant women revealed that general HL among pregnant women was high. A study conducted by Yee, (2014) revealed over 56% of study participants recorded high health literacy. Higher numbers were recorded in different study

settings. A study conducted among Irish pregnant women revealed about 80% of women presenting high health literacy rate (Duggan, 2014). Similarly, Lupatteli, (2014) recorded a literacy level of pregnant women to be 54.5%.

Some reports published on Mental Health Literacy presents results that are quite different from the literature on HL. In a study conducted by Azale (2016), a high number of respondents didn't have knowledge on mental health or had low metal health literacy. Similarly, over 70% of pregnant women recruited in a study by Fonseca, (2015) didn't have knowledge on the mental health disorders they were suffering from. In the same study, over 90% of respondents didn't know the treatment available for their mental disorders.

In addition, a study conducted in South Africa by Spedding, Stein, Naledi & Sorsdahl, (2018) to determine the mental health literacy among some 262 pregnant women attending antenatal service reported that majority of their study participants (77.4%) were not being able to identify signs and symptoms in a vignette used for the study. Also, they reported that more than half of respondent viewed the conditions as a sign of weak character.

Another study conducted by Branquinho, (2019) identified the mental health literacy level of pregnant women using question on symptoms of PPD. It was recorded that 66.7% stated having negative thoughts about their baby as a symptom of PPD which is a fair representation. Also, sleeping and eating problems after giving birth was stated by 81.5% of the study participants. Another symptom explored was difficulty of mothers responding to their baby's needs and about 77.1% of responded mentioned it as a symptom. About 57.3% also mentioned sadness and irritability as another sign of post-partum disorder. This generally shows that respondents in the study had fair MHL.

A study by Smith, (2019) presented lower values on the literacy of pregnant women on the symptoms of PPD. Fatigue or sleep problems were mentioned in addition to lack of bonding with their babies, aggression, social isolation, panic attacks, mood changes, appetite change and others. It was noted that these symptoms mentioned recorded very low percentage of participants who identified them. This percentages range between 6.4% and 37.1% representing low MHL.

Recognition of perinatal mental illness determines the mental health literacy of pregnant women. More than 50% of study participants were able to recognize perinatal illness. This was reported in Thorsteinsson, (2014) and Branquinho, (2019). Contrary, in some others studies which include Highet (2011) and Smith (2019), they recorded that less than 50% of participants were not able to recognize perinatal mental illness.

Several studies have been undertaken to assess the mental health literacy of parents (Lubman et al., 2014), adolescents, the general public, and health professionals (Coles et al., 2016). Moreover, Coles et al. (2016) conducted a study of 1,104 adolescents in a New York public high school to measure their mental health literacy levels. The participants were presented with clinical vignettes of persons with social anxiety disorder and depression. They were asked to read each vignette and respond to questions evaluating their recognition of the disorder. The researchers found that participants were more able to recognize depression than a social anxiety disorder. They also found that female adolescents had better help-seeking attitudes than their male counterparts and both were more likely to recommend help-seeking for depression than social anxiety. Females had higher mental health literacy than males. Furnham & Swami, (2018) conducted a study of high school and university students in the United Kingdom to investigate if gender influenced mental health literacy. The authors reported that female participants had better recognition and labeling of mental disorders than males and females were more likely to suggest professional help-seeking.

Reviews of mental health literacy in sub-Saharan African countries suggest that public knowledge about mental health disorders is generally poor (Atilola et al., 2015). Furnham & Swami, (2018) studied 1,087 members of the public in South Africa to assess their mental health literacy levels. The researchers gave participants vignettes of certain mental disorders with information that satisfied the DSM-IV diagnostic criteria and this was followed by a set of questions on causation and treatment options that required their responses. The authors noted that, in general, participants could not accurately identify a mental disorder in the vignettes and participants attributed the cause of mental disorders more to psychosocial than biomedical causes. Participants were more likely to choose psychotherapy as a source of professional help but less likely to opt for medication as treatment. In addition, stigma was common among participants with strong stigmatizing attitudes towards people with schizophrenia and substance abuse. The authors recommended intensive education for the public about mental disorders which will intend increase MHL.

Atilola, (2015) conducted a systematic review of 19 studies to ascertain the level of mental health literacy in the sub-Saharan African region including Ghana. The majority of these studies used quantitative methods. Most studies reported poor mental health literacy in participants which could be interpreted as poor mental health literacy levels for the region. The review author disagreed with this assertion, arguing that sub-Saharan Africa was multicultural and multi-ethnic and had some culturally-induced methods of explaining mental disorders. He claimed that these methods were not examined rigorously in the reviewed studies that used quantitative methods and this omission may have affected participants' responses adversely. Atilola, (2015) recommended that more research was needed into the various aspects of mental health literacy in the sub-Saharan African region. He also recommended that sociocultural beliefs and practices about mental disorders that were explored qualitatively should be taken into consideration in the design of such

studies. Generally, most studies in sub-Saharan African countries have recommended the need for improvements in mental health literacy to aid public mental health interventions and collaboration between contemporary psychiatric and traditional treatment and care (Ventevogel et al., 2013).

Few studies on mental health literacy have been conducted in Ghana. Read & Doku, (2012) conducted a literature review of research on mental health between 1955 and 2009. They reported research on several topics including schizophrenia, depression, psychological intervention, traditional healers and help-seeking/family response. However, none of these studies focused on mental health literacy. Commenting on research about mental health in Ghana, (Wilson & Somhlaba, 2016) affirmed that some areas had been studied. However, they stated that 'no research directly addressing positive aspects of mental health had been conducted and by inference, this includes mental health literacy. In contrast, Ofori-Atta et al. (2014) claimed that mental health awareness and public education campaigns had taken place over recent years including programs organized during World Mental Health Day and by non-government organizations in mental health for schools, churches and the general public. However, there is a lack of published evaluation reports of these programs. Consequently, specific mental health literacy research needs to be conducted to assess people's knowledge and attitudes toward individuals with mental disorders (Doku et al., 2011).

Mental ill health occurring during pregnancy can result from prior existing medical conditions or can develop as new entities during pregnancy. As they can seriously impact the mother's physical and mental health as well as the fetus's development, timely screening and appropriate treatment are essential to prevent needless suffering and ensure the safe delivery of a full-term baby (van Heyningen et al., 2017). Further studies suggest that ethnic background, religion, educational level and residential location were the few demographic characteristics found to be significantly related

to either the respondents' knowledge or attitude toward mental health issues.

2.5.2 Common Mental Health Disorders in Pregnancy

2.5.2.1 Stress among Pregnant Women

The most common and main mental disorder experienced during pregnancy is stress (Giarratano et al., 2019). Stress is an organism's response to external stimuli. A basic definition of stress is the "process through which external demands tax or surpass the organism's adaptive capability" (Cohen et al., 1995, pp.3) cited in (Eredoro & Egbochuku, 2019). Acute and chronic stress are the two basic forms of stress. Acute stress is short-lived such as tension experienced before or during a job interview or school tests. Chronic stress occurs when the person is exposed to a stressor for an extended period of time with no rapid resolution and no way out or respite. Thus, chronic stress can occur when an individual's total resources are insufficient to alleviate the stressor over an extended period of time. Chronic stress is defined in this study as exposure that continues or occurs for more than three months (Bernell & Howard, 2016). The human brain serves as the primary source of regulation and adaptation to stress. Therefore chronic exposure can have a physiological and psychological effect on a pregnant woman.

The physiological response to stress involves the production of stress hormones (primarily adrenaline and cortisol) and the activation of the nervous system for the "fight or flight" response (Vijayaselvi et al., 2015). This enables the body to respond to the stressor or acute threatening event. After the physiological stress response, the body must recover and retain balance or homeostasis. However, very often, the physiological stress response along with resultant hormonal activation is sustained because exposure has become chronic in nature. In modern society, chronic stress is prevalent and arguably exists to various degrees across the globe within various

populations or groups. For instance, in low and middle-income countries (LMIC) in particular, high levels of poverty, unemployment, rapid unplanned urbanization, inadequate housing and other infrastructure, food insecurity, inadequate healthcare, environmental, social and societal factors can serve as stressors and contribute to chronic stress exposure and a lengthy sustained physiological response (Rook et al., 2013).

The psychological reaction to persistent stress is mostly emotional and behavioural. Chronic stress can affect mood, emotional and psychological states, resulting in mental health problems which can adversely affect a pregnant woman (Marin et al., 2011). These may include social disengagement, feelings of melancholy, furious outbursts, frustrations, reduced emotional control, self-medication and substance misuse (Hofmann, 2014). The physiological response to stress over time augments the psychological response. The presence of stress hormones on a continuous basis may change the form and function of several essential nervous system components that govern human behaviour, mood and emotion. Stress hormones, in particular, may impair the functioning of neurons in the hippocampus (brain region responsible for memory) and the prefrontal cortex (key in attention, problem-solving and judgement). As a consequence, persons who experience chronic stress may as a result, experience confusion, difficulty concentrating, trouble learning new information and/or problems with decision-making.

Chronic stress exposure leads to a number of negative health effects and illnesses over time which can go on after birth. Chronic stress, for example, has been linked to obesity and metabolic syndrome risk factors (Hicken et al., 2014). Posttraumatic stress disorder (PTSD), a type of stress that commonly affects people in post-conflict settings or after traumatic experiences affect pregnant women as well since they are mostly at risk of abuse or unfair treatment from partners and relatives (Atwoli et al., 2015). For vulnerable populations such as pregnant women, chronic

stress exposure is associated with preterm birth (Olson et al., 2016), low birth weight, and epigenetic changes as well as overall frailty of the female reproductive system (Valsamakis et al., 2019).

Pregnancy and delivery are significant events in a person's life. However, pregnancy itself can become a cause of stress leading to "pregnancy-specific stress". Pregnancy-specific stress (PSS) originates from the various changes that a pregnant woman undergoes, anxiety about birthing and the health of the kid (Ibrahim & Lobel, 2020). PSS is defined as "fears about one's baby's health and well-being, the imminent labour, hospital and healthcare experiences (including one's health and survival during pregnancy), birth and postpartum, and parenting or the mother role" (Dunkel Schetter, 2010). PSS has been defined by researchers as pregnancy anxiety, pregnancy-specific discomfort and pregnancy-related stress (Alderdiceetal., 2012). However, all of them are variations on the above operational criteria that define and isolate PSS as a distinct condition.

Fear of childbirth (tokophobia), a subdomain of PSS, in a meta-analysis of studies across 18 countries and over 800,000 pregnant women had an estimated prevalence of about 14% (O'Connell et al., 2017). Tokophobia, as a pregnancy-specific stressor is associated with a wide array of psychological disorders including depression and anxiety (Rouhe et al., 2011). Moreover, other domains of PSS such as fear of changes in the marital/relationship, fear about future mother/child or father/child relationships and ability to care for, nurture and mother the child are associated with low maternal self-efficacy (Byrne et al., 2014), difficulty in transitioning to parenthood (Salomonsson et al., 2013), a significant increase in the length of labor (Adams et al., 2012), greater labor pain (Weng et al., 2016), and a preference for and higher incidence of Caesarean sections (Eide & Dyrstad, 2019; Hellerstein et al., 2016). Likewise, studies across diverse populations using different research designs have identified pregnancy-specific stress as a

risk factor for poor maternal mental health outcomes such as depression and anxiety (Herbison et al., 2017).

2.5.2.2 Depression among Pregnant Women

Chronic stress experienced during pregnancy can lead to depression. Depression is a prominent cause of morbidity in the world affecting about 264 million people (WHO, 2017). Researchers discovered that women are twice as likely as men to experience depression throughout the course of their lives in a Lancet series of publications on the epidemiology of gender disparities in the prevalence and incidence of depression (Kuehner, 2017). Explanatory sociocultural, biochemical and neurohormonal aspects have been postulated as causes for this gender variation in depression rates (Busfield, 2012). Hammen et al. defined depression in women as a direct effect of stress related to limbic system hyperactivity or increased stress reactivity (2009). Depression susceptibility in women was connected to hormonal shifts or surges in this and other studies at different stages across the lifespan such as at puberty (gonadal steroid changes), during pregnancy, the post-partum period and at menopause (Herbison et al., 2017). Stress exposure can have specific effects on emotional responsivity and hormonal regulations leading to an increased vulnerability to depression at certain critical periods such as during pregnancy (Hyer & Neigh, 2019).

Maternal depression could affect household income, productivity, child development and quality of life (Slomian et al., 2019). Pregnant women with depression can produce a high level of stress hormones such as cortisol that can subsequently affect fetal growth and brain development (Wen et al., 2017).

Depression during pregnancy has been reported as a risk factor for low birth weight and preterm births and may also affect the child stress coping ability in later life (Räisänen et al., 2013). In contrast, some other studies have reported a lack of association between antenatal depression and

adverse birth outcomes (Saeed, 2016). Depression manifests in different ways during pregnancy and the postnatal period, which could challenge its identification and treatment. One study reported a triadic pattern of depression during pregnancy including an increase during the first few weeks of pregnancy, a decrease mid-way during the pregnancy and another increase again after the final weeks of pregnancy (Amiel et al., 2017). A number of systematic reviews have been conducted on maternal mental health and its effect on birth outcomes. However, these were not specific to depression, did not focus on low and middle-income countries (where the problem is thought to be high) and did not evaluate if there is any relationship between antenatal depression and risk of adverse birth outcomes Galaye (2016).

2.5.2.3 Anxiety

Obsessive-compulsive disorder (OCD), panic disorder, social anxiety disorder, generalized anxiety disorder (GAD) and various phobias are among the anxiety disorders. Anxiety disorders are the most frequent mental condition, accounting for more than 35% of all cases worldwide (Bandelow et al., 2015). Anxiety disorders are vastly underrecognized, underdiagnosed and undertreated despite the fact that symptoms frequently persist throughout life (Alonso et al., 2004). Global assessments of risk factors of anxiety are genetic, behavioural, environmental and developmental in character. All types of anxiety have been demonstrated to be highly comorbid with depression (Miyazaki, Benson-Martin, Stein, & Hollander, 2016). Many anxiety disorders, including GAD are chronic with numerous remissions, peaks and valleys throughout time and can be triggered by stressful situations (Zincir et al., 2016). The highest point of onset age for many mental health disorders including GAD and the other variations of anxiety is between 15 to 45 years old which is the known range for reproduction for women.

2.5.3 Prevalence of Mental Health Issues in Pregnancy

Pregnancy is a critical period for women because it entails significant physiological and psychological changes. Women intend experience vast range of mental health issues as a result of pregnancy. These mental health issues are reviewed in the paragraphs as follow.

As a consequence of pregnancy, it's unusual for pregnant women to feel anxious about many aspects of their pregnancy. Anxiety, on the other hand, affects some women to the point that it interferes with their everyday life and studies reveal a big proportion of pregnant women have serious mental disease symptoms (Viswasam et al., 2019). Mental health issues are common during pregnancy and despite the increased availability of services and treatment choices, the worldwide burden of poor health and functioning continues to climb (Cantwell, 2021).

Depressive and anxiety disorders afflict 4-10% of the general population at some point in their life with pregnant women having 1.5-2.5 times the typical prevalence. Both bipolar affective disorder and schizophrenia impact around 1% of the world's population (Cantwell, 2021). Although pregnancy reduces self-harm, suicide and psychiatric hospitalization, it does not prevent the development or maintenance of mental illnesses. However, research has indicated that the early postpartum period is particularly hazardous resulting in an increase in admissions for mental disorder treatment (Spedding et al., 2018). While both women with and without a history of mental illness are at risk, women with significant mental diseases are at an exceptionally high risk (Grigoriadis et al., 2013).

A systematic review report from Australia found that 20% of women with pre-existing bipolar affective disorder experienced a severe postnatal mental illness globally (Viswasam *et al.*, 2019). The survey also stated that postpartum risk remains elevated albeit at a reduced level for a wide

range of mental problems for at least another 2 years following birth. According to a European study, less than half of pregnant women have enough mental health literacy (Zibellini et al., 2021). Similar results have also been noted in Latin American (Bee-gates et al., 2014), Canada (Champion *et al*., 2017) and Australia (Miles et al., 2020).

A systematic review of 15 studies on the prevalence of mental health disorders among pregnant women in Asia, the United States of America, Canada, Iran, Sri Lanka, and China found that the prevalence of mental health disorders in Asian countries ranged from 3.8 to 17.5%, with the lowest prevalence in Iran (3.8%) and the highest in Sri Lanka (17.5%). The incidence in western nations ranged from 23.9 to 72% with the lowest in the United States (23.9%) and the greatest in Canada (72%). However, in two Chinese investigations, the prevalence ranged from 3.09% to 29.6% (Rahimi et al., 2020). Anxiety and sadness were among the mental health issues experienced by pregnant women in most nations.

In Africa, the frequency of mental health issues among pregnant women is similar. Mental health illnesses were found to be prevalent in 76.7% of pregnant women attending prenatal clinics in Tanzania, according to a cross-sectional research (Mahenge et al., 2015). Similar finding was reported in South Africa indicating the prevalence rate to be 23% among pregnant women with any mental disorder conditions (van Heyningen et al., 2017). In Ghana, the situation is similar, with a prevalence rate of 18.5% among pregnant women according to research on psychosis risk. Anxiety and depression are two of the mental health issue symptoms identified in the study (Al et al., 2022).

2.5.4 Mental Help-Seeking Behaviour of Pregnant Women

The theories of reasoned action (Ajzen & Fishbein 1989) and planned behavior (Ajzen, 1991) describe how one's views about a certain conduct impact one's intention to behave that way. As a result, cultural norms, environmental conditions and personal qualities frequently influence opinions.

Furthermore, research has revealed that levels of help-seeking are affected by demographic factors (Harris et al., 2021). Gender is one such aspect that influences help-seeking. For example, differences in psychological help-seeking appear to exist between males and females with females having more positive help-seeking attitudes in general and being more likely to seek counseling services than others (Haris et al., 2021).

According to research, ethnic and racial minorities underutilize help-seeking institutions due to differences in cultural perspectives and levels of acculturation. A study on help-seeking attitudes and psychological symptoms of African college students in the United States for example, found that acculturation level was a good predictor of favorable attitudes toward help-seeking. Results showed that students with high levels of acculturation reported more positive attitudes toward seeking professional psychological help than those with lower levels. In a study examining the relationship between psychological distress, acculturation and help-seeking attitudes among people of African descent, the findings indicated that an increase in psychological distress harmed attitudes toward seeking professional psychological services (Gorenko et al., 2021)

Furthermore, low levels of acculturation were associated with negative attitudes toward help-seeking (Lopez, 2019). Lopez (2019) has suggested that ethnic minorities often attempt to solve problems by seeking help from informal networks of support, such as friends, family, and preachers or spiritual healers. Tanhan and Strack, (2020) observed that students tended to seek

support from religious organizations before obtaining professional psychiatric aid in their research of differences in help-seeking behavior among White and Black college students. Furthermore, ethnic minorities are more likely to seek professional psychiatric care only after their symptoms worsen (Ballesteros & Tran, 2020).

Time of illness, age, religious background, educational background, disease intensity and family position, among other factors, influence health-seeking behaviour in a community or place of residence (Omotoso 2010). Dana et al., (2021) concluded that religious views were highly associated with beliefs about mental illness. A large body of research examines disparities in utilization and attitudes toward mental health care among various ethnic-racial and religious populations. In Ghana, a few research studies have looked at the association between religiosity and the result of health-seeking beliefs. A prayer group member sees disease as having both spiritual and physical causes, motivating them to seek both biological and spiritual care (Okyerefo, 2019). This is because members of the prayer group believed that hospital help with physical diseases but saw spiritual diseases as requiring spiritual solutions. Moreover, marital status and religious affiliations were found to have influence and determine different ways by which individuals access health behaviour.

In Cambodia, when a patient and caregiver decide to seek therapy for psychotic symptoms, traditional and religious medicine are the first avenues to mental healthcare (Xavier 2008).

This demonstrates that seeking therapy from prayer camps, herbal medicine and spiritual therapies did not differ based on the respondents' religious affiliations. This was due to serious worries about confidentiality and a lack of faith in service providers. Religious leaders have been regarded as an essential source of assistance for those suffering from mental illnesses (Youssef et al., 2019).

Help-seeking of women in Australia as reported in a study suggests most women will prefer seeking help for their mental health with the immediate people around them. This study reported some of this people to be their families and their friends (Smith, Gemmill & Milgrom, 2019). In addition to the informal sources mentioned by participants, they reported some formal sources which are also accessed for mental health care. This source includes gynecologists and psychiatrists. Comparatively, Azale, (2016), reported in his that about 82.5% of study participants will be preferred to talk about their mental health issues to their partners as well as about 75.5% to their family members and only 49.4% mentioned health provider.

Health seeking behavior particularly in mental health is mostly determined by the self-efficacy of the patient (Chudzicka-Czupała, 2020) this can be transformed into the confidence the patient has in the person they are consulting. An internet-based survey conducted among Spanish-speaking perinatal women revealed that more than 60% of their respondents will talk to the closest people around them which included families and friends concerning mental health issues. Only 24% of study group reported to contact professional help when they face mental health issues (Barrera, 2015). Contrary to what Barrera reported, Mirsalimi, (2020) identified a lesser number (27.2%) to seek-help from families and friends.

Moreover, patient's intention to seek-help was identified in some studies as perceived need for treatment. About 71% of respondents were reported by Azale (2016) as believing the need to seek treatment during episodes of mental disorder. Also, a high number of respondents were reported to have interest in professional mental health services as reported in Goodman's study (2013). For a person to seek help he or she must first have the intention and willingness to do so. Fonseca (2015) reported that less than 40% of the participants in her study were willing to seek professional help for issues relating to psychology.

A person's willingness to be treated goes with their desired methods of treatment which can determine where and how they seek-help. Ride, (2016) reported the treatment type that different categories of women will prefer. She reported that women who are pregnant prefer individual counselling on mental health issues, breastfeeding women will opt for meditation and yoga where as other women will prefer combined counselling and medication. In the same study it was recorded that some 83.6% of respondents will prefer to wait and heal naturally. Some few other treatment methods were mentioned which includes family support (Thorsteinsson, 2014), individual therapy (Wenz, 2018) and in-person support group. Some barriers such as stigma, embarrassment, a preference for self-reliance, poor mental health literacy and poor awareness of existing services were seen to affect help-seeking (Almanasef, 2020).

Mental Health Seeking is predicted by different sociodemographic factors such as older age, female sex and lack of a current partner (Mackenzie et al., 2019). The gap between intention and behavior is well known (Sheeran, 2016) and observable in a study, in which 84.7% of the persons with mental health problems stated an intention to seek professional help for a serious mental problem, but only 19.9% sought help. In line with previous findings (Batterham et al., 2019), women had a higher intention to seek help; yet, a sex effect on help-seeking for mental health problems could not be detected albeit frequent reports of more help-seeking for mental health problems in women (Bundesamt, 2020; Batterham, 2014) and the significant positive correlation between female sex and help-seeking for mental health problems. This indicates that the frequently reported sex effect on help-seeking for mental health problems may rather be mediated by other factors such as anticipated stigma about help-seeking which was less severe in females.

2.5.5 Relationship between Mental Health Literacy and Health-Seeking Behaviour among Pregnant Women

Some pregnant women feel guilty and delay seeking care for perinatal problems despite knowing how to do so (Rahimi et al., 2020). Researchers in the United States discovered that first-time mothers who were younger and less educated sought treatment for depression and anxiety at a lower rate than women who were older and more educated and had previously given birth, based on data from three states' Pregnancy Risk Assessment Monitoring System (PRAMS) (Sword et al., 2008).

Some women are afraid to seek treatment because they blame their postpartum depression on their social environment (e.g., challenges of motherhood and financial problems). Depression is viewed as a normal response to stress rather than as a sickness in such instances, and women do not feel health professionals have a role. There is a lot of data relating low mental health literacy among pregnant women to higher mortality and poor self-care all around the world (Zibellini et al., 2021). This affects not just a person's health but also their use of health services, illness burden and healthcare expenditures; increase healthcare costs by 3–5% annually (Walker et al., 2011). While there may be numerous hurdles to women getting care for post-partum depression (PPD), additional data on the demographic features of those who seek help and those who do not are needed.

Researchers have found that various factors affect help-seeking. Subjective needs are one of the most significant variables that influence help-seeking. People seek help to solve their problems; hence, awareness of subjective needs significantly affects the decision of whether or not to seek help (Nagai, 2015). Numerous studies have consistently reported a positive relationship between subjective needs and help-seeking. Some people may also seek assistance from mental health

specialists like psychiatrists or clinical psychologists. Subjective needs are also positively associated with attitudes toward obtaining professional psychiatric care, according to researchers (Komiya et al., 2000) and the likelihood of seeking professional psychological help among pregnant women. According to the literature, help-seeking is positively related to subjective needs and social support, and negatively related to depressive symptoms (Nagai, 2015).

Odufuwa et al. (2022) did a study on the factors of postpartum women's mental healthcare-seeking behavior in Nigeria. According to the findings of the study, depression affects 20.8% of postpartum women. Also, only 39.5% of depressive women sought treatment, 22.3% of non-sufferers did as well. This demonstrated that both patients and non-patients sought mental health care.

Also, a higher incidence of postpartum depression among the sufferers increased the likelihood of seeking mental healthcare. Age, family history of postpartum depression and having the desired gender of child were determinants of mental help-seeking behaviour. Among the sufferers of postpartum depression who failed to seek care, a low perceived need for mental healthcare, the perception that the depressive symptoms will go on their own as well as fear of being stigmatized as a "weak mother" were reasons for not seeking mental healthcare. Thus, to promote mental healthcare, the non-cost factors like availability and accessibility to a mental healthcare facility should be addressed. To achieve this, mental healthcare sensitization programs should be integrated into maternal healthcare at all levels and mothers attending antenatal clinics should be routinely screened for early symptoms of depression in the postpartum period.

Daehn et al. (2022) studied perinatal mental health literacy among pregnant women. It was discovered that both perinatal mothers and the general public could not recognize PMHP and identify important symptoms. Perinatal women reported several institutional and personal difficulties to receive care for PMHP and preferred seeking support from informal sources. The

general population has stigmatizing opinions toward PMHP. It was indicated that educational campaigns and treatments to enhance perinatal MHL in perinatal women are required.

Wael et al. (2021) conducted a study on mental health literacy and help-seeking behaviors among undergraduate pharmacy students in Saudi Arabia. The study revealed that mental health literacy in the current study (M=112.53) was found to be lower than that reported in international research using the MHLS. Students with no history of mental health issues scored significantly higher in help-seeking behaviors from informal sources (M=23.65, SD=±6.88) than those with a previous history (M=19.03, SD=±7.58), F (1, 269) =11.76, p=0.001. The study revealed a significant positive correlation between mental health literacy and help-seeking behaviors r (271) = 0.26, p<0.01. The study concluded that there is a positive correlation between mental health literacy and help-seeking behaviors. Implementing appropriate interventions could be a key priority in improving the mental health literacy and help-seeking behavior of students.

Samar and Perveen (2021) conducted a study to identify the level of mental health literacy among undergraduate students to explore the relationship between mental health literacy and help-seeking behavior among UPSI students and to identify the significant difference in mental health literacy scores for students who have encountered people with mental health disorders. Results revealed a mean score of the MHLS obtained from the sample (M=117.97, SD=±14.62). This score is lower as compared to previous studies using the same scale. The Pearson correlation between mental health literacy and help-seeking behavior showed a negative, weak correlation (r = -0.139) which is in contrast with the previous studies using the same scale.

Brahim et al. (2019) conducted a study that investigated the influence of depression literacy, mental illness belief and stigma influence help-seeking among secondary school and university students of low socioeconomic status of the Bottom 40% (B40) with earnings of RM3, 900 a month

or less in Malaysia. Correlation analysis among the variables of depression literacy, general help-seeking attitude, self-stigma of seeking help, negative belief toward mental illness and age with the mental help-seeking attitude, only self-stigma on help-seeking, general help-seeking attitude and age showed a significant relationship with help-seeking attitude whereas depression literacy yielded a very low correlation. The low correlation between help-seeking and depression literacy could be attributed to the low socio-economic status of respondents which could be a determinant among pregnant women as well.

Arthur (2018) conducted a study on the evaluation of a mental health literacy program on a community leader's knowledge and attitude toward people with mental disorders in Ghana. The principal findings of the study indicated that the program was somewhat effective in improving participants' knowledge about and attitudes toward people with mental disorders. Overall, both clusters demonstrated an increase in their mean scores at follow-up; however, the intervention cluster demonstrated a greater improvement than the control cluster. Apart from the community mental health ideology outcome measure which had a medium and statistically significant difference between the two groups in changes over the two-time points, all other outcome measures had small differences which were not statistically significant.

A study on depression literacy conducted by Thai and Nguyen (2018) revealed that 32% of the respondents used an accurate label of depression through the vignette and from the sample, 82.1% would seek help. This study, however, is descriptive and only reported the percentage without identifying the relationship between depression literacy and help-seeking behavior. Yu et al. (2015) in the study to determine the predictors of help-seeking intention through multivariate analysis revealed that mental health knowledge is one of the predictors of help-seeking intention.

The kind of treatment used by pregnant women was seen to be related to their knowledge on mental disorders such that seeking help from spiritual origin and religious advisors are popular among pregnant women who possess low knowledge on mental health (Spedding et al., 2018). In a study conducted by Azale, (2016), a high number of respondents don't have knowledge on mental health or have low metal health literacy. They therefore believed that their mental health problem would get better by itself.

In another study, a high percentage of participants during an episode of mental health disorder confirmed they don't know what they were feeling which proves a low literacy rate. In addition to that, about 83% of respondents in this study didn't seek-help. They believed the disorder will pass by itself (Barrera, 2015). This is a clear indication of literacy influencing help-seeking. Over 70% of pregnant women didn't seek help because they do not know if their problem is a reason to ask for help and also more than 90% couldn't seek help because they do not know what the best treatment option were (Fonseca, 2015).

In a study to determine the MHL of undergraduate students in a pharmacy school, the researcher reported a significant association between mental health literacy and health seeking behavior. Such that students with higher mental health literacy were seen to be more likely to seek care when faced with mental health challenges. In the same study, low mental health literacy was seen as a barrier to help-seeking (Almanasef, 2020).

Gorczynski et al. (2017) conducted a study on mental health literacy to examine whether it predicts help-seeking behavior and better mental health outcome among United Kingdom (UK) students. Results showed that mental health literacy is positively correlated with attitude toward seeking help but not significantly for better mental health well-being.

2.6 Conclusion/Summary

It was determined that there is a need for educational campaigns and treatments to improve MHL in perinatal mothers.

It should be noted that the MHL components can be used in place of those in the aforementioned theory and model. Finding a way to measure MHL, on the other hand, will be important in determining the amount of mental health understanding as the theory only serves as a guideline. This will be useful in adjusting mental health interventions and reviewing the resources that might support or promote getting treatment. The method used to gauge mental health literacy ranges from a qualitative approach using vignettes and interviews to a quantitative one using questionnaires and surveys which is another concern raised by the research review. To make it easier for participants to respond, this study will adopt the quantitative survey method utilizing a customized MHLS.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The research design is the overarching strategy for discovering the answers to the research questions and addressing numerous issues that may call into doubt the value of the study's supporting data. The methodology for the investigation is presented in this section. The methods include the research design, the study setting, study population, sample size, sampling technique, validity and reliability, data collection plan, data analysis and ethical considerations.

3.1 Study Design

This study used descriptive cross-sectional study design in assessing mental health literacy among pregnant women and their help-seeking behaviour in the New Juaben Municipality of the Eastern region of Ghana.

The study provided quantitative data on pregnant women's mental health literacy and help-seeking behaviour in the study area. It entailed gathering, analysing and interpreting data from a study at a single point in time of which this study used a period of a month. The choice of the study design for this research is relatively easy to conduct, that is interviewing respondents without any invasive methods. Also, it takes less time which is much more appropriate due to time constraints for this study and is relatively economical although it could suffer from responder bias, recall bias and interviewer bias. Study participant selected for this study were asked series of questions designed to answer study objectives. Data was collected in a period of two weeks as a result of the design used.

3.2 Study Area/Setting

New Juaben south is one of the Eastern Regional municipalities and has an estimated total population of 156,879 with eighty-five (85) communities. It covers a land size of 159 square kilometres representing approximately 0.6% of the total surface area of the Eastern region.

The Municipality shares boundaries with New Juaben North Municipal to the north, Akwapim North Municipal to the south, Yilo Krobo district to the East and Suhum Municipal to the West. It lies between longitude 1030^{O} W and 0030^{O} East and latitude 60^{O} and 70^{O} North.

The Eastern regional hospital, Koforidua commonly referred to as "Central Hospital" is a proposed teaching hospital for the eastern region of Ghana. It was established in 1926 and it is a secondary level referral facility for the entire eastern region and doubles as the Municipal Hospital for the New Juaben North and South Municipalities with over 180,000 inhabitants. The hospital has a 24 hour OPD and Emergency service in addition to its clinical department such as Obstetrics and Gynecology, Internal medicine, Surgical and other specialist unit numbering over 15 different departments. It has an estimated bed capacity of 360.

The eastern regional hospital has been chosen for this study because all other health facility within the municipality only manage mental health patient on OPD basis without admission and refer to the Eastern Regional Hospital cases which require special attention and assistance such as pregnant women with mental health challenges. This therefore was deemed appropriate as a center for the research study to be carried out considering the target population (pregnant women)

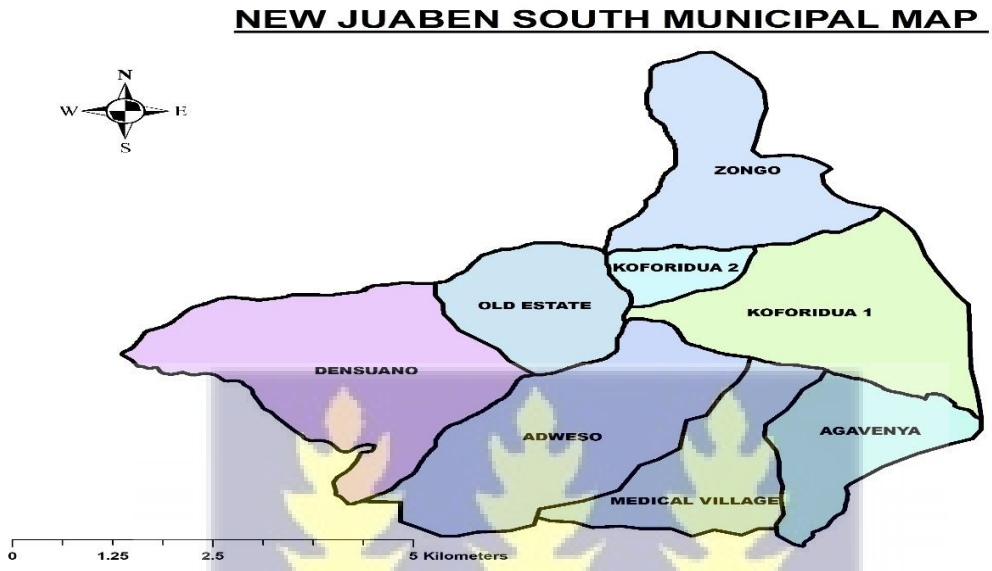

Figure 3. 1 New Juaben Municipal Map

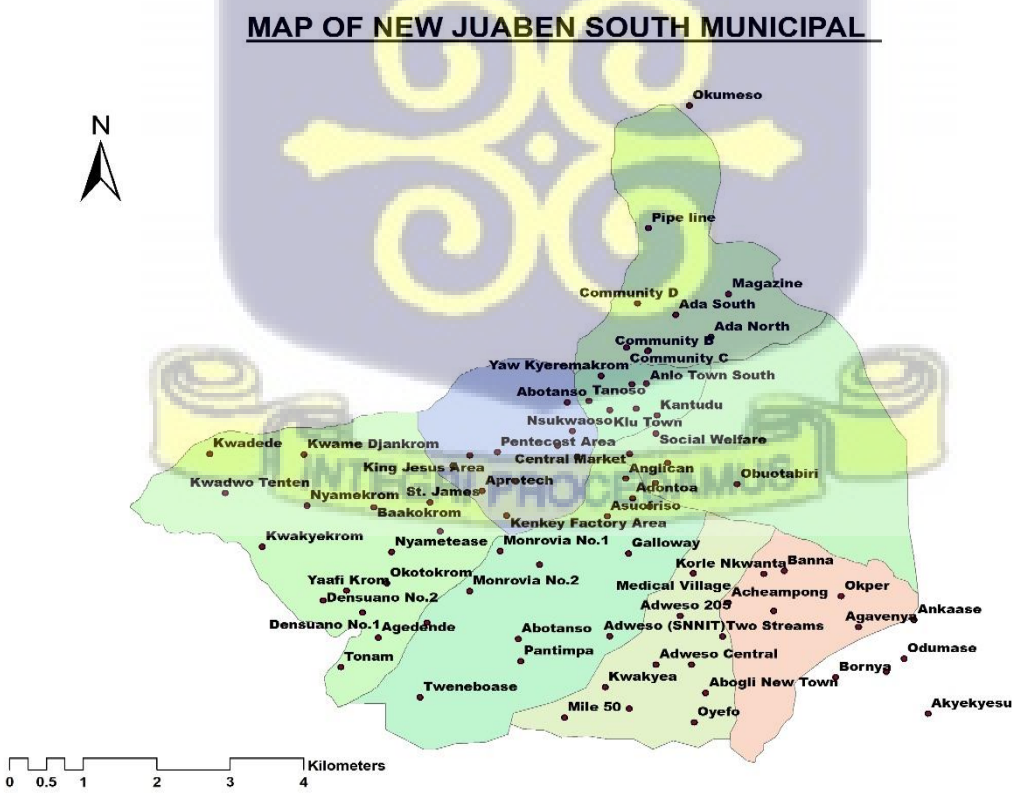

Figure 3. 2 NJM Map with Surrounding Communities

3.3 Study Population

Pregnant women attending Antenatal Clinic at Eastern Regional Hospital

3.4 Exclusion & Inclusion Criteria

3.4.1 Inclusion Criteria

i. Pregnant women aged from 18 years to 49 years
ii. Pregnant women who are willing to participate in the study.

3.4.2 Exclusion Criteria

i. Pregnant women in critical health condition
ii. Pregnant women in labour
iii. Hearing impaired pregnant women

3.5 Sample Size Determination

A total of 195 pregnant women were included in the study. The sample size was determined by the use of prevalence of 15.3% in a previous study (Jha et al., 2021) to estimate for this study using a 95% Confidence Interval (CI) and 5% margin of error.

The sample size was calculated using Cochran's single population proportion formula.

Based on the above assumptions, the sample size will be calculated as follows:

Sample size $(n) = \frac{N*X}{(X+N-1)}$

While N = Total Population and

$$X = \frac{Z^2 * P(1-P)}{e^2}$$

Where;

Z = 1.96 (for 95% confidence interval)

P = 15.3%, (Jha et al., 2021)

e = 5% margin of error

Substituting the values into the formula;

$$x = \frac{1.96^2 (0.153) (1-0.153)}{(0.05)^2}$$

x = 199

Therefore,

$$\text{Sample size } (n) = \frac{5000 * 199}{(199 + 5000 - 1)}$$

$$(n) = 191$$

As a result, a sample of 191 was required. With a 10% non-response rate, the sample size was increased to 210 pregnant women for the study.

3.6 Sampling Technique

Pregnant women attending Antenatal Clinics at Eastern Regional Hospital from April to May 2022 were selected. Study participants were selected using simple random sampling techniques whereby yes and no were written on a strip of paper and then the strips of paper were folded in a box. A total of 210 "Yes" and a number of "No" were written on the strips of paper and put in the box. The box was thoroughly shaken and one strip of paper was randomly pick to select the study participants. Pregnant women who hand-pick yes during their visit to the antenatal clinic within the period were selected. A total of 210 pregnant women had the chance to participate in the study.

3.7 Study Measures

The data collection tool (questionnaire) was adapted from previous research. It consists of four sections, comprising Socio-demographic characteristics of respondents, Mental health literacy and help-seeking behaviour variables and relationship between mental health literacy and help seeking behaviour. The mental health literacy and help-seeking behaviour sections of the questionnaire was adapted from the Mental health literacy scale (Spedding et al., 2018). This self-report test evaluates a person's understanding and opinions regarding mental illnesses and available treatments and the general help-seeking questionnaire (GHSQ), it evaluates a person's perceptions of the obstacles and enablers to getting treatment, as well as their plans as used in other studies as well (Gorczynski et al., 2017; Hammer & Spider, 2018; Wilson et al., 2005). This study adapted the questionnaire and modified it as a vignette for contextual data collection.

Three sections were created from the mental health literacy questionnaire adapted from Spedding et al., (2018). These sections were labelled as Perception of symptoms & recognition of pathological behaviour, Knowledge of Aetiology of \behaviour, Knowledge on Treatment of symptoms of which each was administered with a vignette to the pregnant woman. Participants were asked to provide the best response that describes what is portrayed in the vignette. They were also asked about the aetiology and appropriate treatment in each case after which they complete two scales (Spedding et al., 2018). The first was a five-point rating scale for mental health literacy, with items addressing general perceptions of the symptoms and assessing participants' capacity to recognize abnormal behaviors. A three-point rating scale that asked participants to answer a series of questions on the causes of symptoms (25 items) and their treatments (23 items) was then presented. This section of the questionnaire adapted all items from Spedding et al., (2018).

Also, the help-seeking behavior questionnaire used in this study was adapted from GHSQ (Gorczynski et al., 2017). Three questions were asked and measure on a scale of 1 to 5. Where 1 "Most Unlikely" 2 "Unlikely" 3 "Neutral" 4 "likely" and 5 "Most likely". The GHSQ has been shown to be significantly correlated to seeking access to counselling.

3.8 Data Collection Procedure

Data collection was conducted using a structured pre-tested questionnaire uploaded on mobile tablets with the use of google form; an online mobile data collection system. Data collectors were trained on the use of this mobile data collection system.

As a result of the COVID-19 pandemic, which may expose respondents to the virus, data collectors adhered to wearing of nose mask, ensuring of physical distance and regular hand washing and observed strict COVID-19 protocols to safeguard respondent's safety.

The trained data collectors were able to translate from English to local dialect (Twi) as the most spoken and well-understood language using the mobile tablet with the uploaded structured questionnaire form on the google form. The data was collected at the Antenatal clinic, after the respondents have been attended to by health care provider (Doctors and Midwives) and other clinical staff. The researcher conducted daily data validation to determine whether the information gathered during data collection was complete and accurate; this was done by checking questions which was not marked as required, typo errors and missing values.

3.9 Data Analysis

Data analysis procedures are statistical strategies for examining, reducing, and interpreting numerical data collected in a study (Grove, 2015). The data analysis process begins with data management. Data management is crucial since it guarantees that the data obtained is of high

quality, reliable and statistically sound (Krishnankutty et al., 2012). A code book was created in advance outlining how each piece of data would be coded according to guidelines outlined in the various scales which constituted the research questionnaire. Data were collected using google forms on electronic tablets and data were extracted as string variables in an excel spread sheet. By looking for blank cells in the excel sheet's columns, the accuracy of the data was verified. All data collected were complete without any missing data and all data were included in the analysis. Considering the vulnerable nature of the sample, the researcher and his assistants recruited to assist in the data collection ensured that the data collection process was not rushed and adequate time was committed to the process to ensure high quality data. Data in the excel spread sheet were converted to numerical data according to the predetermined codes before being transported for analysis. The data were explained using both descriptive and inferential statistics. For processing and analysis, data were entered into the statistical program STATA version 17.0. To make presenting easier, enormous data sets were condensed into straightforward formats using descriptive statistics. Frequencies and percentages were used to analyze the background characteristics of the respondents. Using metrics of central tendency, frequency, percentages, and measures of variance helped to explain basic characteristics of the data. Results are shown in tables and categorical variables which were expressed as frequency and percentage. The Fisher exact or Chi-square test were used, as applicable, to confirm the discrepancy between categorical variables. With the accompanying p-value, this was evaluated with the association between the dependent and independent variables.

Based on rating scale optimization, responses to statements were collapsed to three categories; “Agree”, “Neutral”, and “Disagree” collapsing the positive responses “Strongly agree” and “Agree” into one category is logical and does not create an artificial new category. Likewise,

merging negative responses “Strongly disagree” and “Disagree” demonstrates the strength of these responses, compared to neutral and positive responses. This was done to be able to generate composite variables to test for associations.

Variables used to measure MHL literacy include knowledge of symptoms and recognition of pathological behaviour, Knowledge of aetiology of behaviour and knowledge on treatment of symptoms. Likert scale was used to determine the knowledge on symptoms and recognition of pathological behaviour. The results of the scale were presented in frequencies and percentages. Respondent’s knowledge of aetiology was determined with options that include “Yes”, “No” and “Maybe” which were presented as frequencies and percentages. Responses for knowledge on treatment and symptoms include if treatment option is “Helpful”, “Harmful” and “Neither”. Results were reported in frequencies and percentages to determine the percentage of respondents that are literate on each treatment option. Composite variable for overall knowledge of symptoms and recognition of pathological behaviour, Knowledge of aetiology of behaviour and knowledge on treatment of symptoms was generated to identify the overall knowledge on each aspect of MHL measured in this study. The MHL of respondents was generated as a composite variable of all the items used to measure knowledge of symptoms and recognition of pathological behaviour, Knowledge of aetiology of behaviour and knowledge on treatment of symptoms.

A five point Likert scale was used to determine the health seeking behaviour of respondents. The option were classified as “Most unlikely”, “Unlikely”, “Neutral” and “Most Likely”. Results were presented as frequencies and percentages. The options were coded 1 to 4 based on the most likely to seek help. A composite variable was generated to determine the overall health seeking behaviour.

Additionally, a univariate and multivariate logistic regression were conducted to assess the strength of association which were reported as the crude odds ratio and adjusted odds ratio. Independent variables significant in univariate analysis ($p< 0.05$) were entered into the multivariate binary logistic regression model to test the association of covariates with the outcome variable. Association was declared at a p value < 0.05, and at a confidence interval of 95%.

3.10 Data Quality Management

A pre-test was conducted on 20 pregnant women attending Antenatal at the St. Joseph's hospital for precision and consistency. The tools were pre-tested to help ensure that it is properly organized to determine the study objectives. It helped to evaluate the accuracy of the content and note any shortcomings.

3.11 Data Handling

To make sure that all pertinent questions are addressed, questionnaires collected from the field were evaluated. The gathered information was cleaned, coded, entered into Epi info version 7 for analysis, then exported to STATA version 17 software. Non-response and incomplete entries were excluded. Data was only accessible to the principal researcher and the data analyst. All data collected were handled with the utmost confidentiality.

3.12 Ethical Consideration

Ethical approval was obtained from the Ghana Health Service Ethics and Review Committee before commencing data collection. A Study proposal was also submitted to the Ghana Health Service's Ethics and Review Committee.

Ethics Review Committee reviewed and gave clearance before the commencement of data collection. Permission to conduct the data collection locally was obtained from the Eastern Regional Hospital. Before commencing the data collection, written consent was obtained from all the individual respondents after explaining the purpose of the study, risk/discomfort, benefits to the subject, confidentiality of records, right to refuse participation and termination participation in the study at any time. Informed consent was signed after the explanation and participants who couldn't sign were allowed to thumb print. Participants were allowed to choose witnesses when they saw the need to do so before consent. Signature or thumbprint of the witnesses were also taken as part consenting.

Confidentiality of participant was ensured. This was done by not including any information that will make respondents be identified by their responses. Responses were coded with numbers and no name was associated with any response. Data collected has been stores securely to prevent access by an authorized people.

Also, privacy was ensured during data collection. Respondents were allowed to choose a place where they felt comfortable to express themselves. Locations for interview was free from secondary party interference.

There was minimal psychological risk or discomfort. Contact details of a mental health expert was provided to participant who felt affected by the study or need mental health support. There was no direct benefit for client for participating in this study but findings will be made available for policy making.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter present an in-depth analysis of data collected on the field. The findings are presented under the study objective as follows: demographic and socio-economic characteristics; mental health literacy level among pregnant women; pregnant women's help-seeking behaviour for mental health support; relationship between mental health literacy and help-seeking behaviour among pregnant women.

4.1 Demographic Characteristics

Table 4.1 summarizes the socio demographic characteristics of study participants. From the results 195 responses were valid for the analysis representing 92.9% response rate. High number of respondent 80 (41.0%) fall within the age range of 25 to 30 years as at the time of the data collection. Some 23 (11.8%), 42 (21.5%) and 50 (25.7%) aged 18 to 24 years, 31 to 34 years and 35 years and above respectively. Over 49% of respondents completed at least primary education and over 38% completed secondary education. It was recorded that 119 (61%) of pregnant women were married. Christianity was the most dominant religious practice in the study area (82.6%). A total of 113 (58.0%) of study participants had 1 to 2 pregnancies earlier as well as 92 (47.2%) had 1 to 2 births earlier before the current one. It was also recorded that 111 (56.9%) of respondents were in their third trimester, 56 (28.7%) of the respondents were in their second trimester, and 28 (14.4%) of the respondents were in their first trimester.

Table 4. 1 Demographic Characteristics of Pregnant Women

VARIABLE	FREQUENCY	PERCENTAGE
Age		
18-24	23	11.8
25-30	80	41.0
31-34	42	21.5
35 and above	50	25.7
Level of Education		
No/Low Education	102	52.3
Secondary	75	38.5
Tertiary	18	9.2
Marital status		
Single	44	22.6
Married	119	61.0
Other	32	16.4
Religion		
Christian	161	82.6
Other	34	17.4
Gravida (Number of pregnancies)		
0	4	2.1
1 – 2	113	58.0
3 – 4	62	31.8
5 +	16	8.2
Parity (Number of births)		
0	73	37.4
1 – 2	92	47.2
3 – 4	25	12.8
5 +	5	2.6
Duration of the pregnancy		
1st trimester	28	14.4
2nd trimester	56	28.7
3rd trimester	111	56.9

4.2 Mental Health Literacy of Respondents

Table 4.2 presents an aspect of participants' mental health literacy by measuring the knowledge of pregnant women on symptoms and recognition of pathological behavior using a preamble. Questions were asked in relation to the preamble and measure using a Likert-scale. The mean value of responses is represented as strongly disagree (1-1.8), disagree (1.8-2.6), neither agree nor disagree (2.6-3.4), agree (3.5-4.2) and strongly agree (4.3-5). Some 28.2% of respondents neither disagreed nor agreed that Patricia's behavior was normal. It was also recorded that 22.6% of respondents neither agreed nor disagreed that the behavior of the client was a normal behavior of a pregnant woman. It was also recorded that 21% of respondent neither agreed nor disagreed that her behavior was of a weak character. Moreover some 20.5% neither agreed nor disagreed that her behavior was of mental illness. About 11.3% of respondents disagreed that her behavior was due to general medical problem. Participants neither agreed nor disagreed if her behavior was due to depression. Overall knowledge on symptoms and recognition on pathological behavior was recorded as high (56.4%) as presented in Fig 4.1.

Also in table 4.3, the knowledge was assessed based on etiology of behavior. About 78% believed her problem could be due to problem with partner and family relationships. Some 63% said work difficulty has a nothing to do with it while 50.8% mentioned stress. It was also recorded that about 64.6% disagree that her problem could be due to brain disease as well as 127 (65.1%) disagree with hereditary or genetic factor. About 41.5% disagreed with lack of willpower and 45% disagree with broken homes. Some 61% of respondents said it is the will of God while 67.7% said it is not because of witchcraft. About 54.9% believes it is not because of being a victim of violence but they believed thinking too much (67.2%), lack of support (59.5%), 114(58.5%) were mentioned as a cause. Finally, 51.8% were not sure if it could be due to unplanned pregnancy. Fig 4.2 presents

the overall knowledge level on aetiology of behavior and only 44.1% of respondents recorded high knowledge level.

Table 4.4 presents mental health literacy by measuring knowledge on treatment of symptoms. It was recorded that 96.4% of respondents know visiting counsellors as a way of treating mental health symptoms. Some 89.7% and 91.3% mentioned psychologists and close families respectively as a helpful source of treatment. Moreover, as high as 67.2% and 62.6% mentioned more outing and psychotherapy as methods of treatment. Some 67.7% mentioned spiritual and religious healers as a helpful way of treating symptoms. As represented in Fig. 4.3, only 44.6% of respondents recorded high knowledge on treatment of symptoms.

Overall Mental health literacy was determined using the median split of the composite knowledge variable shows that majority (58.0%) of respondents expressed low mental health literacy on mental health compare to 42.0% that showed high literacy level (Fig 4.4). In table 4.5, It was recorded that educational level of respondents, religion, number of pregnancies and duration of pregnancy are significantly associated with literacy level such with $p<0.05$. Literacy level was generally low across the educational levels with those who had no/low education scoring 52.0% for literacy, 61.3% and 77.8% for those who completed secondary and tertiary education respectively ($p=0.019$). Also, though those who belonged to the dominant religion expressed low literacy level (62.1%), about 61.8% of those who practiced other religions recorded high knowledge level ($p=0.013$). The results also showed that number of pregnancy influences literacy level ($p=0.003$). Only those who had one to two pregnancies before expressed high literacy level (51.3%) on mental health. Also, 64% of those who are in their 2nd trimester expressed high literacy on mental health ($p<0.001$).

Table 4. 2 Mental Health Literacy: Knowledge of symptoms & recognition of pathological behaviour

VARIABLE	STRONGLY AGREE (%)	AGREE (%)	Neither Agree or Disagree (%)	Disagree (%)	Strongly disagree (%)	Mean	SD
Patricia's behavior is a normal response	60(30.8)	1(0.5)	55(28.2)	58(29.7)	21(10.8)	3.12	1.40
Patricia's behavior is a normal response for someone who is pregnant / just had a baby	72(36.9)	7(3.6)	44(22.6)	60(30.8)	12(6.2)	3.34	1.40
Patricia's behavior is typical of a weak character	31(15.9)	23(11.8)	42(21.5)	54(27.7)	45(23.1)	2.70	1.28
Patricia's behavior is typical of a mental illness	25(12.8)	22(11.3)	66(33.9)	40(20.5)	42(21.5)	2.73	1.28
Patricia's behavior could be because of a general medical problem Cancer/diabetes	2(1.0)	18(9.2)	88(45.1)	10(5.1)	77(39.5)	2.27	1.11
Is Patricia's behavior likely to be depression?	79(40.5)	4(2.1)	26(13.3)	71(36.4)	15(7.7)	3.31	1.49

Table 4. 3 Mental Health Literacy: Knowledge of aetiology of behaviour

VARIABLE	YES (%)	MAYBE (%)	NO (%)
Problems with her partner or family relationships	152(78.0)	24(12.3)	19(9.7)
Work difficulties	18(9.2)	53(27.2)	124(63.6)
Stress	99(50.8)	61(31.3)	61(31.3)
Brain disease	24(12.3)	45(23.1)	126(64.6)
Heredity / genetic factors	14(7.2)	54(27.7)	127(65.1)
Lack of willpower	48(24.6)	66(33.9)	81(41.5)
Expecting too much of herself	62(31.8)	60(30.8)	60(30.8)
Growing up in a broken home	35(18.1)	71(36.8)	87(45.1)
Lack of parental affection	47(24.1)	89(45.6)	59(30.3)
Overprotective parents	24(12.3)	80(41.0)	91(46.7)
Loss of traditional values in society	38(19.5)	76(39.0)	81(41.5)
Decay of natural ways of life (modern lifestyle)	45(23.1)	76(39.0)	74(37.9)
Exploitation of people in industrial society	25(12.8)	96(49.2)	74(38.0)
Will of God	15(7.7)	60(30.8)	120(61.5)
Witchcraft, possession by evil spirits	8(4.1)	55(28.2)	132(67.7)
Being the victim of violence	29(14.9)	59(30.3)	107(54.9)
Bad luck	36(18.5)	65(33.3)	94(48.2)
Thinking too much	131(67.2)	34(17.4)	30(15.4)
Lack of support	116(59.5)	51(26.2)	28(14.4)
Being pregnant	114(58.5)	47(24.1)	34(17.4)
Poverty	74(38.0)	79(40.5)	42(21.5)
Unplanned pregnancy	36(18.5)	101(51.8)	58(29.7)
Wrong / bad attitude	30(15.4)	92(47.2)	73(37.4)

Table 4. 4 Mental Health Literacy: Knowledge on Treatment of symptoms

VARIABLE	HELPFUL	HARMFUL	NEITHER
Counsellor	188(96.4)	-	7(3.6)
Social worker	144(73.9)	8(4.1)	43(22.1)
Telephone counselling	96(49.2)	31(15.9)	68(34.9)
Psychologist	175(89.7)	4(2.1)	16(8.2)
Close family and friends	178(91.3)	3(1.5)	14(7.2)
Naturopath	877(44.6)	16(8.2)	92(47.2)
Vitamins	73(37.4)	59(30.3)	63(32.3)
Antidepressant	52(26.7)	100(51.3)	43(22.1)
Antipsychotics	33(16.9)	97(49.7)	65(33.3)
Tranquillizers	28(14.4)	101(51.8)	66(33.9)
Physical activity	140(71.8)	10(5.1)	45(23.1)
More outing	131(67.2)	6(3.1)	58(29.7)
Psychotherapy	122(62.6)	11(5.6)	62(31.8)
Hypnosis	36(18.5)	39(20.0)	120(61.5)
Psychiatric ward (in hospital, clinic, etc.)	48(24.6)	60(30.8)	87(44.6)
Electro-convulsive therapy (shock therapy)	17(8.7)	113(58.0)	65(33.3)
Traditional Healer	12(6.2)	84(43.1)	99(50.8)
Spiritual & Religious Advisor (Pastor, Imam)	132(67.7)	16(8.2)	47(24.1)

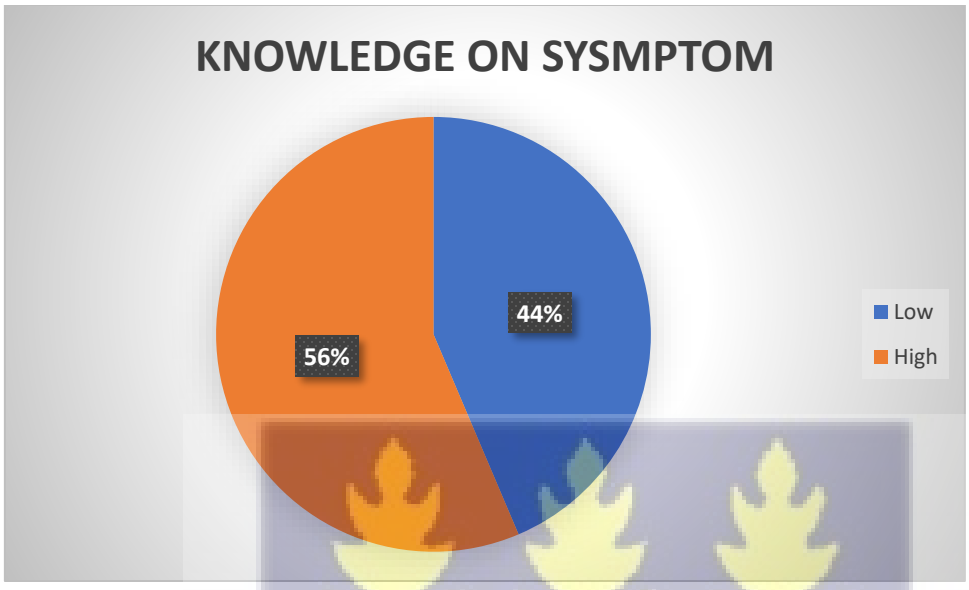

Fig 4.1 Knowledge on symptom

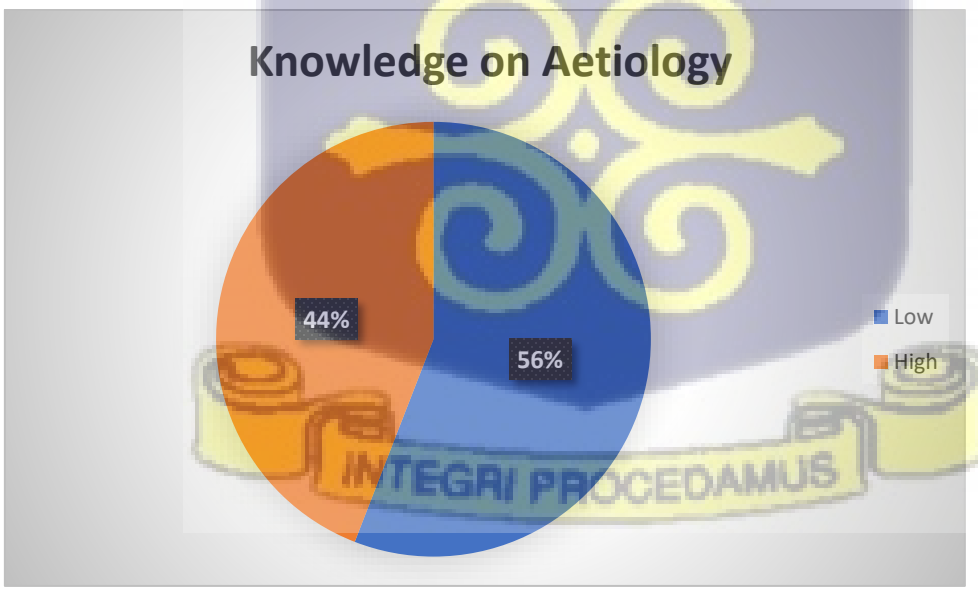

Fig 4.2 Knowledge on Aetiology

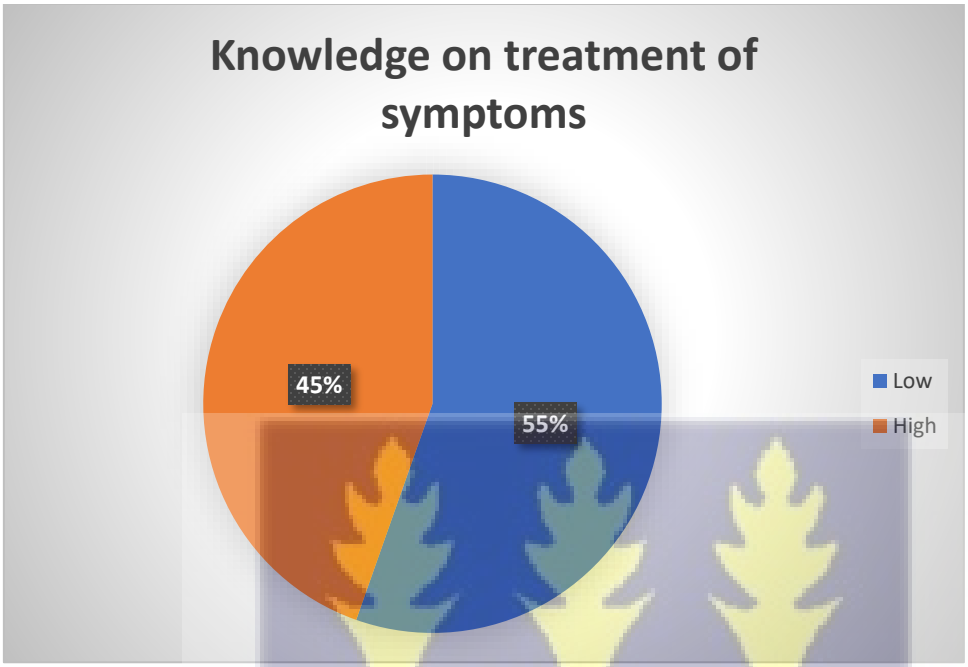

Fig 4.3 Knowledge on treatment of symptoms

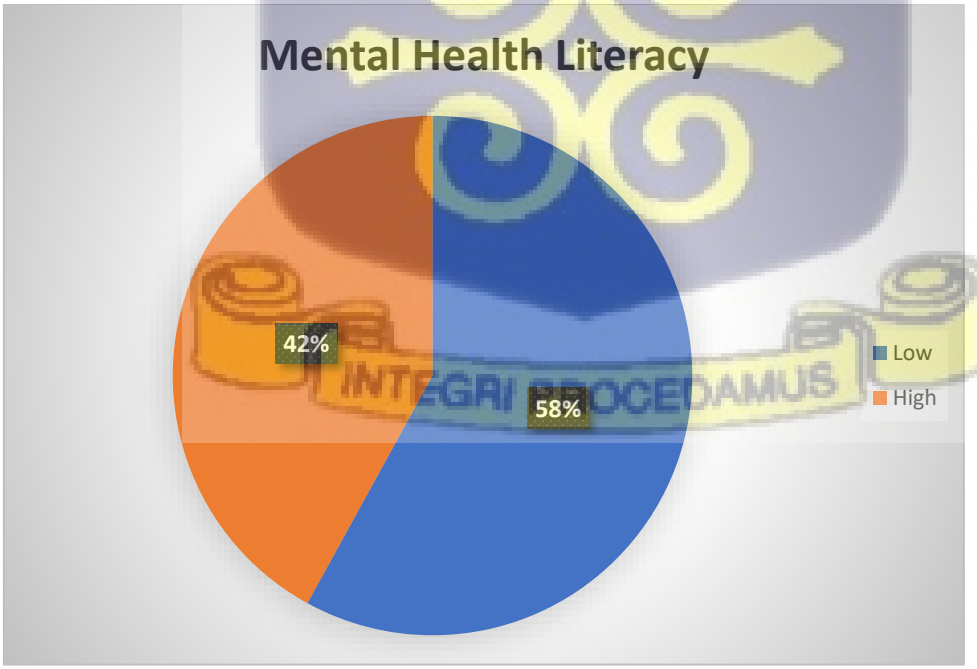

Fig 4.4 Mental Health Literacy

Table 4. 5 Association Between Mental health literacy and Socio Demographic Characteristics

VARIABLE	LITERACY LEVEL		χ^2 (P-VALUE)
	LOW	HIGH	
Age			7.006 (0.072)
18-24	13(56.5)	10(43.5)	
25-30	38(47.5)	42(52.5)	
31-34	29(69.0)	13(31.0)	
35 and above	33(66.0)	17(34.0)	
Level of Education			9.74**(0.019)**
No/Low	53(52)	49(48.0)	
Secondary	46(61.3)	29(38.7)	
Tertiary	14(77.8)	4(22.2)	
Marital status			0.89(0.640)
Single	23(52.3)	21(47.7)	
Married	70(58.8)	49(41.2)	
Other	20(62.5)	12(37.5)	
Religion			6.57**(0.013)**
Christian	100(62.1)	61(37.9)	
Other	13(38.2)	21(61.8)	
Husband/Caregiver educational level			1.91(0.590)
No formal education	10(58.8)	7(41.2)	
Primary	18(66.7)	9(33.3)	
Secondary	32(61.5)	20(38.5)	
Tertiary	53(53.5)	46(46.5)	
Gravida (Number of pregnancies)			13.72(**0.003**)
0	4(100.0)	-	
1 – 2	55(48.7)	58(51.3)	
3 – 4	40(64.5)	22(35.5)	
5 +	14(87.5)	2(12.5)	
Parity (Number of births)			3.99(0.263)
0	40(54.8)	33(45.2)	
1 – 2	54(58.7)	38(41.3)	
3 – 4	14(56.0)	11(44.0)	
5 +	5(100.0)	-	

Duration of the pregnancy			16.2**(<0.001)**
1st trimester	20(71.4)	8(28.6)	
2nd trimester	20(35.7)	36(64.3)	
3rd trimester	73(65.8)	38(34.2)	

Chi-square test, P<0.05

4.3 Help-Seeking Behaviour

In accessing the help-seeking behaviour of respondents, it was recorded that, over half of respondents are not ready to seek care from a mental health professional. Similarly, over 50% will not plan to seek help from a mental health professional. The composite variable for Health seeking behavior represented in fig 4.5 shows only 20% of respondents have good health seeking behavior.

Table 4. 6 Help-Seeking Behaviour

Variable	Most Unlikely	Unlikely	Neutral	Likely	Most Likely
Would you intend to seek help from a mental health professional?	83(42.6)	64(32.8)	13(6.7)	15(7.7)	20(10.3)
I would plan to seek help from mental health professional	69(36.9)	74(37.9)	14(7.2)	13(6.7)	22(11.3)

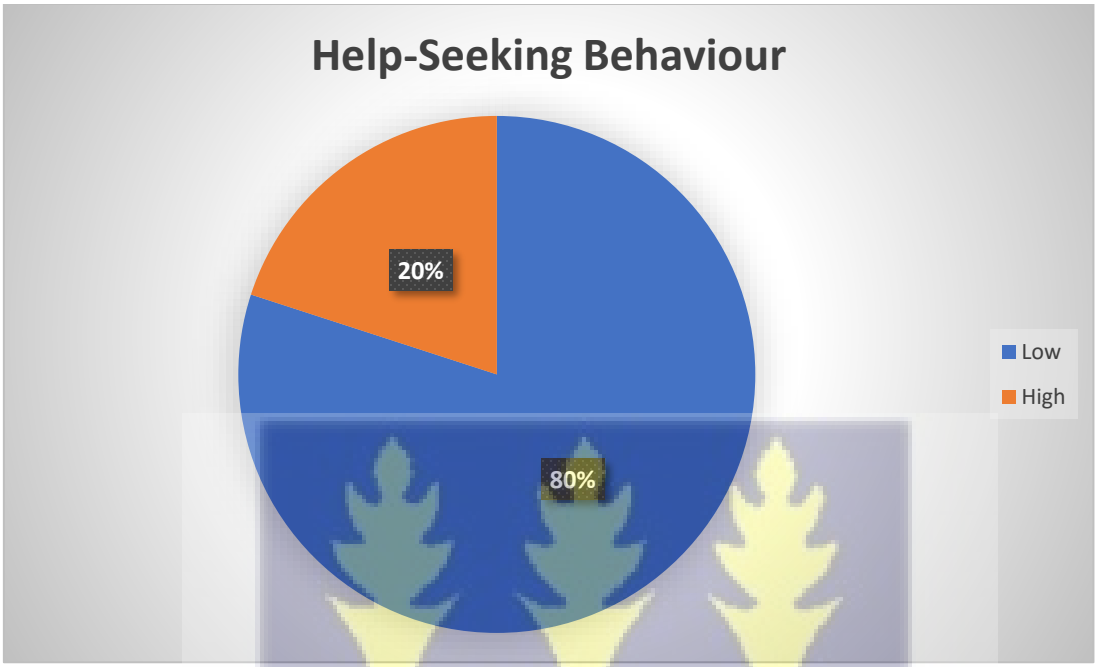

Fig 4.5 Help-Seeking Behaviour

4.4 Associations of help-seeking Behaviour with Socio-demographics

In the bivariate analysis Marital status showed a significant association with help-seeking behaviour (p=0.05). It was noted that about 13.6% of single pregnant women have good help-seeking behaviour as well as 17.7% of married women and 34.4% of other marital status such as cohabitation, widowed and divorced. In addition, number of pregnancies was significantly associated with help-seeking behavior (p=0.005) which could be due to previous experiences of pregnant women. About 43% of those who had five or more pregnancies have good help-seeking behaviour. Number of previous births was also significantly associated with help-seeking behaviour (p=0.05). Those who had five or more previous births recorded high health seeking behavior (60.0%).

This study recorded no significant relationship between Mental Health Literacy and Help-seeking behavior (p =0.55). But it was recorded that 82.3% of respondents who had low mental health

literacy level also had poor help-seeking behavior and 17.7% of those who had low literacy level had good help seeking behavior. Moreover 78.1% of those who had high literacy had poor help-seeking behavior and 21.9% of those who had high literacy had good help-seeking behavior.

4.5 Logistic Regression of Mental Health Literacy as Predictors of Help-Seeking Behaviour

From the linear logistic regression, it was noted that those belonging to other marital statuses are 3.3 times more likely to seek care compared to those who are single (COR=3.3, 95%CI=1.1-10.3). Also, those who had about three to four pregnancies been 11% less likely to seek health compared to those who had no previous pregnancies (COR=0.11, 95%CI=1.4-63.8). It was also recorded that those who had five or more births are 9.5 times more likely to seek health to compared to those who had no births (COR=9.5, 95%CI=1.4-63.8).

In the multi variate analysis, number of pregnancies and number of births showed no influence on health seeking behavior. It was noted that those who has between three to four pregnancies in the past were 10 times less likely to seek care compared to those who have never been pregnant adjusted to other variables (AOR=0.1, 95%CI%=0.01-0.6). in addition, those who have one to two previous births are about five times more likely to seek health compared to those who never had a child adjusted to other variables (AOR=5.1, 95%CI=1.6-16.1).

Table 4. 7 Association of help-seeking behaviour with Socio-demographics and Mental health literacy

VARIABLE	HELP-SEEKING BAHAVIOUR		CHI-SQUARE (P-VALUE)
	POOR	GOOD	
Age			5.06(0.167)
18-24	21(91.3)	2(8.7)	
25-30	62(77.5)	18(22.5)	
31-34	37(88.1)	5(11.9)	
35 and above	37(74.0)	13(26.0)	
Level of Education			1.31(0.727)
No/Low	83(81.4)	19(18.6)	
Secondary	60(80.0)	15(20.0)	
Tertiary	14(77.8)	4(22.2)	
Marital status			5.74(0.050)
Single	38(86.4)	6(13.6)	
Married	98(82.4)	21(17.7)	
Other	21(65.6)	11(34.4)	
Religion			0.09(0.766)
Christian	129(80.1)	32(19.9)	
Other	28(82.4)	6(17.7)	
Husband educational level			3.73(0.292)
No formal education	13(76.5)	4(23.5)	
Primary	25(92.6)	2(7.4)	
Secondary	43(82.7)	9(17.3)	
Tertiary	76(76.8)	23(23.2)	
Gravida (Number of pregnancies)			13.0(0.005)
0	4(100.0)	-	
1 – 2	87(77.0)	26(23.0)	
3 – 4	57(91.9)	5(8.1)	
5 +	9(56.3)	7(43.8)	
Parity (Number of births)			7.64(0.050)
0	63(86.3)	10(13.7)	
1 – 2	71(77.2)	21(22.8)	
3 – 4	21(84.0)	4(16.0)	

5 +	2(40.0)	3(60.0)	
Duration of the pregnancy			0.06(0.972)
1st trimester	23(82.1)	5(17.9)	
2nd trimester	45(80.4)	11(19.6)	
3rd trimester	89(80.2)	22(19.8)	
Mental Health literacy			0.55(0.456)
Low	93(82.3)	20(17.7)	
High	64(78.1)	18(21.9)	

Table 4.8 Logistic regression analysis of help-seeking behaviour

VARIABLE	COR (95%CI) P-VALUE	AOR (95%CI) P-VALUE
Marital status		
Single	Ref	
Married		
Other	3.3(1.1-10.3)0.037	
Gravida (Number of pregnancies)		
0	Ref	Ref
1 – 2		
3 – 4	0.11(0.03-0.43)0.001	0.1(0.01-0.6)0.021
5 +		
Parity (Number of births)		
0	Ref	Ref
1 – 2		5.1(1.6-16.1)0.005
3 – 4		
5 +	9.5(1.4-63.8)0.021	

CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter presents the discussion of findings of the study. The study's main aim was to assess the level of mental health literacy among pregnant women and their help-seeking behaviour in the New Juaben Municipality of the Eastern region of Ghana. This chapter expands upon the findings of the study in regard to the research objectives: To assess the mental health literacy level among pregnant women on mental health disorders; to describe pregnant women's help-seeking behaviour for mental health support in New Juaben Municipality and investigate the relationship between mental health literacy and help-seeking behaviour among pregnant women in the New Juaben Municipality.

5.1 The Mental Health Literacy Level among Pregnant Women

This study examined mental health literacy in three aspects which includes knowledge on symptoms, knowledge on aetiology and knowledge on treatment of symptoms.

One of the major findings of this study that accounted for pregnant women literacy was perception of symptoms and recognition of pathological behavior. This indicator was assessing their understanding on mentally ill person behavior towards her partner. Mental health literacy (MHL) as defined by Hamdullahpur et al., (2018) as a notion that emerged from the realm of health literacy (HL) and must be understood in that context of health care, concentrating on people's capacity to grasp and apply medical knowledge, notably to better understand and adhere to drug regimens. This is consistent with the findings of the study where mental health literacy was determined to be

generally high (54%). Most pregnant women did agree that Patricia needed close family member/friends at her current stage. Respondent did agree also that Patricia was depressed and did not need antibiotics and antipsychotics because it will be harmful to her. This finding was contrary to a study conducted by (Quynh et al., 2020) among undergraduate student in Vietnam, which concluded that undergraduate student in Vietnam need more education about mental health literacy but According to the (Bjørnsen et al., 2017) developers' preliminary cut-off, about 30% of participants showed insufficient positive MHL of which such training should focus on symptoms of depression, appropriate help seeking intentions and first-aid support.

The extant literature suggests that MHL remains at a relatively low level in most developing nations including those in west Africa (Furnham & Swami, 2018). Although Goldney(2021) suggests that the general public have poor MHL, some recent evidence indicates that in developed countries, there have been improvement among pregnant women in recognizing symptoms of mental health disorders. In Africa, mentally ill patients are often blamed for bringing on their illness. In contrast, others may see mentally ill people as victims of unfortunate fate, religious and moral transgression or even witchcraft (Rijal, 2018).

Integrating these findings in the conceptual model reveals that there is low recognition of mental health disorder among study participants. This low recognition of specific disorder is expected to influence the knowledge and attitude of respondents towards help seeking. The other findings on knowledge determinants are discussed in the subsections below.

5.1.1 Knowledge on Symptoms and Pathological Behaviour

This study has several instructive findings. First, more than half (56.4%) of participants provided high knowledge on symptoms and recognition of pathological behavior. This was echoed in

responses to the questionnaires where the respondents identified the symptoms and pathological behavior described in the vignettes as characteristic of mental disorders. Second, the most widely held explanation for symptoms was depression. Where 40.5% of respondents strongly agree to depression as one symptom of the described metal disorder.

The high recognition rates found in this study are similar to those found in other South African studies of mental health literacy among the general population (Spedding et al., 2018). This is consistent with findings from international studies conducted with women in the perinatal period that women often have difficulty identifying symptoms of mental disorders during pregnancy (Howard & Khalifeh, 2020). The high number of women who associated the symptoms of ante- and postnatal depression with a "normal response" suggest that, for pregnant women at least, the signs and symptoms of this mood disorder are frequently distinguishable from other typical behaviors and experiences associated with pregnancy. This appears to be supported by this study's finding that the most frequently identified cause of mental disorders during the perinatal period are factors directly related to pregnancy (or motherhood) itself, (Howard & Khalifeh, 2020)

5.1.2 Knowledge on Aetiology of Mental Health Disorder

As in other studies, 'stress' was the most widely supposed cause of mental disorders (Talevi et al., 2020). However, unlike other studies, this study found that intrapsychic factors in general (such as overthinking, lack of support and problems from family and partner) were most frequently thought of as causing mental disorders. While intrapsychic factors are also highly ranked as causes, Efrati, Gerber, & Tolmacz, (2019) suggest that this subtle difference might allude to disparities in the perceptions of pathogenesis where endogenous factors are more likely to be ascribed to perinatal mental disorders than to non-perinatal mental disorders. This suggests that perinatal women might

be more likely to be held accountable for their symptoms while symptoms among non-perinatal populations are attributed to external circumstances. This has important implications for the particular emphases that psycho-education programs for perinatal women might need to employ in order to promote mental health literacy among women during this time.

5.1.3 Knowledge on Treatment of Symptoms

Where treatment is concerned, similarities to other studies included the preference for professional psychological services and lifestyle and self-help options such as talking to friends but less confidence in medication (Pasterfield et al., 2019). The perception of religious or spiritual advice being helpful approximated the perceived benefit of consulting a psychologist or social worker. This finding might point to another potential point of intervention where religious and spiritual leaders might be trained to deliver mental health interventions that complement their work and roles in communities. As in other studies, medication and medical treatments were more widely endorsed for treating schizophrenia while psychotherapy was not (Chi & Gold, 2020). It is possible that the uncommon and overtly unusual symptoms of mental health disorders might more easily be accepted as consistent with the experience of being pregnant

5.2 Help-Seeking Behaviour of Pregnant Women

Help-seeking behavior was determined by the marital status of pregnant woman, number of pregnancies and number of births. Generally, help-seeking behavior was low among study respondents.

At the individual level, married and single pregnant women usually avoid health facilities for mental healthcare and this could be due to the low knowledge level on treatment of symptoms and

low perceived severity of mental health issues. Therefore, there is no need to receive mental healthcare and other medical supports. Across the low and middle-income country settings, there is still a big concern over how pregnant mothers seek care for mental health problems. As evidence suggests, only 13.6% of women have sought help for their depressive symptoms (Fonseca & Canavarro, 2017). other studies found that most respondents seek healthcare from traditional birth attendants (TBA) and Non-Formal Practitioner during the delivery period though they do not have any knowledge or training regarding maternal mental health. This can be related to the lack of perceived benefit of mental health among pregnant women. In many other pieces of literature that delivery usually takes place at home and is attended by TBA, mental health wasn't a priority (Choudhury & Ahmed, 2011) cited in (Baki et al., 2020) `

5.3 Treatment Seeking Behaviour and Mental Health Literacy

Literature shows that some of the symptoms of mental disorder are indistinguishable for many participants from the physical and emotional experiences associated with pregnancy. This explains that the medicalization of common mental disorders is not widely accepted, with the consequent risk that many women who have a mental disorder may go undiagnosed and untreated. Furthermore, it is known that models of mental disorders are complex, diverse and exist within particular socio-cultural contexts (Atilola, 2015). It is important to bear in mind that the disorders portrayed in the vignettes refer to definitions of mental disorders, and do not account for alternative conceptualizations of mental disorders; their causes, or their treatments. Perhaps most importantly, the lack of mental literacy of psychiatric nomenclature evidenced in this study did not predict inappropriate help-seeking behaviors. Despite the signs and symptoms described in the vignettes not being associated with mental disorders, professional psychological and counselling services

were still perceived to be the most beneficial interventions. Though, mental health literacy and help seeking behavior were not determined to be associated in this study.

A previous study conducted on depression literacy is conducted by Thai and Nguyen (2018) revealed that 32% of the respondents used accurate label of depression through the vignette and from the sample, 82.1% person would seek help. This study, however, is descriptive in nature which only reported the percentage without identifying the relationship between depression literacy and help-seeking behavior. But Yu Yu et al. (2015) in the study did further analysis to determine the predictors of help-seeking intention through multivariate analysis and revealed that mental health knowledge is one of the predictors for help seeking intention which doesn't correspond to the reports of the current study. This difference in report could be due to difference in study setting and varying level of health service provision.

In a study conducted by Zibellini et al., (2021), they stated that some women are afraid to seek treatment because they blame their postpartum depression on their social environment (e.g., challenges of motherhood and financial problems). Depression is viewed as a normal response to stress rather than as a sickness in such instances and women do not feel health professionals have a role. They also stated that there is a lot of literature relating low mental health literacy among pregnant women to higher mortality and poor self-care all around the world. Low mental health literacy affects not just a person's health but also their use of health services, illness burden, and healthcare expenditures; low levels increase healthcare costs by 3–5% annually (Walker *et al.*, 2011).

In a related study, subjective needs were assessed as the influencer of help seeking. Nagai (2015), stated that subjective needs are one of the most significant variables that influence help-seeking, such that people seek help to solve their problems. He further explained that, awareness of

subjective needs significantly affects the decision of whether or not to seek help. Just as Nagai reported other studies also reported a positive relationship between subjective needs and help-seeking. Some people may also seek assistance from mental health specialists like psychiatrists or clinical psychologists. Subjective needs are also positively associated to attitudes toward obtaining professional psychiatric care. He further stated, help-seeking is positively related to subjective needs and social support, and negatively related to depressive symptoms.

This current study didn't record a significant association between help-seeking behavior and mental health literacy. Contrary, Gorczynski, Sims-schouten, Hill and Wilson (2017) conducted a study on mental health literacy to examine whether it predicts help seeking behavior and better mental health outcome among United Kingdom (UK) students. Results showed that mental health literacy is positively correlated with attitude for seeking help but not significantly for better mental health well-being. The study conducted by Gorczynski et al., (2017) established the conceptual framework for this study but findings from this study didn't establish any relation between MHL and HSB.

CHAPTER SIX

SUMMARY, LIMITATION, RECOMMENDATION, AND CONCLUSION

6.0 Introduction

This chapter consists of the summary of this research work, implications, limitations, conclusion and recommendations based on the findings from the previous chapter of the study.

6.1 Summary

The study investigated mental health literacy and help-seeking behaviour among pregnant women in the New Juaben Municipality. The objectives of the study were to assess the mental health literacy level among pregnant women with mental health disorders in pregnancy, to describe pregnant women's help-seeking behaviour for mental health support and to investigate the relationship between mental health literacy and help-seeking behavior among pregnant women in the New Juaben Municipality. A cross-sectional study design was adopted to achieve the objectives of the study. One hundred and ninety-five pregnant women were recruited at the Antenatal Clinic at the Eastern Regional Hospital, Koforidua for the study. Close-ended Questionnaires were used for the data collection after respondents gave their consent. All these were done after ethical approval was obtained and anonymity and confidentiality were assured. Study questions were deployed on google forms data collection. Pretesting and data collection were done in a three-week period. The data collected was downloaded from the Google form after **the three weeks period in excel format**. The data were imported into STATA version 17.0 for descriptive and inferential statistical analysis.

To assess the mental health literacy level of respondents, questions were asked based on a vignette grouped in three sections (knowledge on symptoms, aetiology, and treatment of symptoms). It was recorded that respondents had high knowledge on the symptoms of mental disorders such that they recorded 56% from knowledge on symptoms. Unlike knowledge on symptoms, knowledge on aetiology was low and recorded to be 44% among the pregnant woman. This means though they knew the symptoms, they appeared to have limited knowledge on the causes. Also, their knowledge on the treatment of symptoms was low as it recorded 45%.

A composite variable consisting of all knowledge questions was generated to assess knowledge or literacy level of pregnancy women. Literacy level was recorded as 42% showing the low rate of mental health literacy among pregnant women.

Mental help-seeking behavior among the respondents shows that most of the pregnant women were less likely to visit their health professional for management of Mental Health issues (80%). Also, no significant association was recorded between mental health literacy and help-seeking behavior.

6.2 Limitations of the Study

1. Participants' recruitment from a single geographic location may have limited the study's findings making it unlikely that the study will apply to all pregnant women in Ghana.
2. With regard to temporality, this cross-sectional study can only help test for associations and thus generate causal hypotheses but cannot prove causality because temporality is a vital criterion.
3. Pregnant mothers below age 18, pregnant women in an emergency and pregnant women at the point of delivery were exempted from the study hence the findings did not include their assessment.

6.3 Recommendations

The following suggestions are offered to Ghanaian health stakeholders in light of the study's findings.

6.3.1 The Ministry of Health

The Ministry of Health should:

1. Create a policy requiring all antenatal care services to include routine screening for mother's mental health status/ issues.
2. Create procedures for referring expectant mothers who have mental health issues to see specialists.
3. As part of the creation of an all-inclusive program for dealing with mental health crises, novel techniques for offering psychological assistance to pregnant women during medical emergencies should be adopted.

6.3.2 The Eastern Regional Hospital

1. Routinely screen all pregnant mothers for mental health problems throughout the period of pregnancy to identify pregnant mothers at risk of developing mental health problems
2. Organize continuous professional training for nurses and midwives, especially on understanding, screening, and referral of maternal mental health problems
3. Improve the literacy rate of pregnant women (women as a whole) and intensify activities to improve mental help-seeking behaviour among pregnant women and people living within the New Juaben Municipality.
4. Encourage relatives of pregnant mothers to provide emotional support throughout pregnancy.

5. During antenatal clinic health talks, there should be ample time to discuss mental health and for pregnant women to offer their perspectives on topics so that these health professionals may dispel their doubts, perceptions, and misconceptions concerning mental health.
6. Promote understanding of the strategies to treat cases of mental illness and other ailments, fun clubs, and other social organizations may be created in schools, churches, and the community.

6.3.3 Nursing and Midwifery Council

1. The Nursing and Midwifery Council of Ghana should emphasize the evaluation and management skills of mental health issues in the antenatal stage while revising its curriculum for nurses and midwives.
2. The Nursing and Midwifery Council should create context-specific, culturally sensitive evaluation methods for gauging psychological issues in the antenatal stage in collaboration with other stakeholders.

6.3.4 Nurse Researchers

1. Nurse researchers should provide the effectiveness of future interventions that could be enhanced by using specific health promotion models to guide their development.
2. Future researchers may consider investigating factors that promote mental health literacy since this study's findings have shown a strong connection between mental health literacy and help-seeking behaviour.
3. Educators should consider the strengths and weaknesses of current mental health literacy programs to inform decisions regarding possible implementation

6.4 Conclusion

In conclusion, pregnant women were literate on mental health management. Whiles they were more informed about symptoms and recognition of pathological behavior, they were not certain of knowledge on the aetiology of behavior. It was also revealed that pregnant women preferred to consult counselors, social workers, psychologists and close family members when facing mental health/ psychological challenges. The study findings also revealed that pregnant women prefer to seek help from health professionals than religious and herbalists. Pregnant women's knowledge of mental health case management correlates positively with their help-seeking behavior. In other words, an increase in the mental health literacy level among pregnant women in the municipality will significantly increase their behavior of seeking for help from health professionals whenever they experience mental health challenges. This in other words will help pregnant women recommend seeking help from the health professionals to whoever is experiencing mental health challenge.

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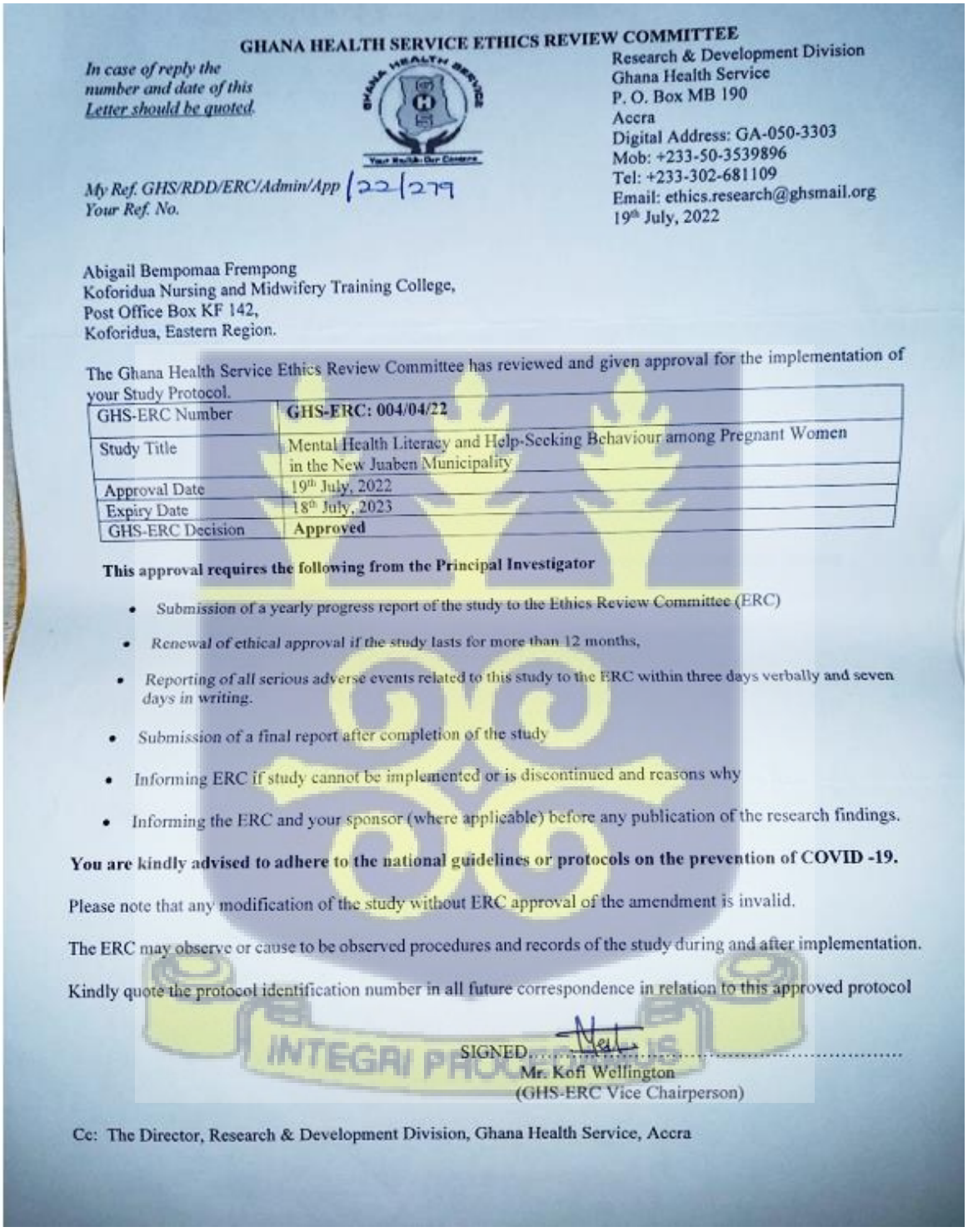
APPENDICES

APPENDIX A: ETHICAL CLEARANCE



GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Digital Address: GA-050-3303
Mob: +233-50-3539896
Tel: +233-302-681109
Email: ethics.research@ghsmail.org

My Ref. GHS/RDD/ERC/Admin/App 22/279
Your Ref. No.

19th July, 2022

Abigail Bempomaa Frempong
Koforidua Nursing and Midwifery Training College,
Post Office Box KF 142,
Koforidua, Eastern Region.

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	**GHS-ERC: 004/04/22**
Study Title	Mental Health Literacy and Help-Seeking Behaviour among Pregnant Women in the New Juaben Municipality
Approval Date	19th July, 2022
Expiry Date	18th July, 2023
GHS-ERC Decision	**Approved**

This approval requires the following from the Principal Investigator

- Submission of a yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.

You are kindly advised to adhere to the national guidelines or protocols on the prevention of COVID -19.

Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....
Mr. Kofi Wellington
(GHS-ERC Vice Chairperson)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra

APPENDIX B: APPROVAL LETTER FROM EASTERN REGIONAL HOSPITAL, KOFORIDUA

In case of reply the number and the date of this letter should be quoted

My Ref. No GHS/ ERHK /GF/ 037

Your Ref. No .....

EASTERN REGIONAL HOSPITAL
P.O. BOX 201
KOFORIDUA, E/R.
GHANA – WEST AFRICA.

TEL. # 03420- 23011
FAX # 03420- 25294
Website:www.erhk.org
Email:info@erhk.org/
eastern.rh@ghs.gov.gh

26TH AUGUST, 2022

THE SCHOOL ADMINISTRATOR
SCHOOL OF NURSING AND MIDWIFERY
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA

APPROVAL TO CONDUCT RESEARCH AT THE EASTERN REGIOAL HOSPITAL, KOFORIDUA

Your letter dated 25TH March, 2022 in respect to the above subject matter refers.

This is to inform you that approval has been given to Abigail Bempomaa Frempong an M.Phil. Nursing student at the School of Nursing and Midwifery, University of Ghana, Legon to conduct a research at the Eastern Regional Hospital, Koforidua on the Topic **"Mental Health Literacy and Help-seeking Behaviour Among Pregnant Women in the new juaben Municipality."**

She is therefore requested to submit copies of the research report to the office of the Medical Director upon completion of the study or research.

Thank you.

MRS. MARY AMPONSAH-KWATIAH
HEAD OF ADMINISTRATION

APPENDIX C: INTRODUCTORY LETTERS

UNIVERSITY OF GHANA
DEPARTMENT OF ADULT HEALTH
SCHOOL OF NURSING

10876296

25th March,2022

Ref. No.:.....

The Chairperson
Ghana Health Service Ethics Review Committee
Accra.

Dear Sir/Madam,

LETTER OF SUPPORT – ETHICAL CLEARANCE

This letter is to support the application for ethical clearance of **Abigail Bempomaa Frempong**, an MPhil Nursing student in the Department of Mental Health at the School of Nursing and Midwifery, University of Ghana, Legon.

The Scientific Review Committee of the School has approved the thesis topic **"Mental Health Literacy and Help-seeking Behaviour Among Pregnant Women in the New Juaben Municipality."**

As part of the School's requirement, the student is required to obtain ethical clearance before embarking on data collection.

I hope that the Committee will consider the proposal and grant her ethical clearance to enable her undertake the study.

Thank you.

Yours faithfully,

Dr. Samuel Adjorlolo
Supervisor

COLLEGE OF HEALTH SCIENCES
• P. O. Box LG 43, Legon, Accra, Ghana. • **Telephone:** +233 (0) 302 513 250 / 0289 531 213
• **Email:** adulthealth.son@chs.ug.edu.gh • **Website:** www.nursing.chs.ug.edu.gh

UNIVERSITY OF GHANA
DEPARTMENT OF ADULT HEALTH
SCHOOL OF NURSING

10876296

Ref. No.:.....

25th March, 2022

The Medical Director
Eastern Regional Hospital
Koforidua
Eastern Region

Dear Sir/Madam,

PERMISSION FOR RESEARCH STUDY

I write to introduce to you **Abigail Bempomaa Frempong** an M.Phil. Nursing student in the Department of Mental Health at the School of Nursing and Midwifery, University of Ghana, Legon.

As part of the requirements of the M.Phil. programme, the student is to undertake a research study and she intends to use your institution as a study site for the research.

The title of her research **"Mental Health Literacy and Help-seeking Behaviour Among Pregnant Women in the New Juaben Municipality."**

I write to seek your permission to enable her undertake this necessary assignment.

Thank you.

Yours faithfully,

Dr. Samuel Adjorlolo
Supervisor

COLLEGE OF HEALTH SCIENCES
• P. O. Box LG 43, Legon, Accra, Ghana. • **Telephone:** +233 (0) 302 513 250 / 0289 531 213
• **Email:** adulthealth.son@chs.ug.edu.gh • **Website:** www.nursing.chs.ug.edu.gh

APPENDIX D: PARTICIPANT INFORMATION SHEET

PARTICIPANT INFORMATION SHEET

Title of study: Mental Health Literacy and Help-Seeking Behaviour among Pregnant Women

Principal Investigator: Abigail Bempomaa Frempong (MPhil Nursing Student)

Address: School of Nursing and Midwifery, University of Ghana, P. O Box LG 84, Accra

Email: abfrempong@st.ug.edu.gh Tel: +23324771011

Introduction

My name is Frempong Abigail Bempomaa, a Master of Philosophy in nursing student at the School of Nursing and Midwifery, University of Ghana, Legon. I would like to request your participation in my study on the topic "Mental Health Literacy and Help-Seeking Behaviour among Pregnant Women in the New Juaben Municipality". This information leaflet is to let you fully understand what this study is about to help you make an informed decision whether to take part or not.

Background and purpose

Pregnancy is widely regarded as a stressful life experience for women since it necessitates their adjustment to a variety of psychological and physiological changes. The pregnancy stage is frequently the time of onset for common psychological disorders. Pregnant women experience immense vulnerability associated with mental health issues that could have an impact on their daily lives and range from small concerns like stress and worry to more serious long-term mental health conditions like anxiety and depression. Literature has confirmed a high prevalence rate of mental health issues that occur in the pregnant women population yet cursory examination of the extent of the literature revealed that not much research had been conducted on mental health literacy among pregnant women globally. In contrast, research on help-seeking for health services, including mental health, expands in high-income and low and middle-income countries. Although these studies have yielded useful insight, a noticeable gap in the literature relates to how maternal mental health literacy will impact help-seeking for mental health services especially in the

pregnant women population or prenatal period and this will help in reducing the burden of mental health problems during the pregnancy and postnatal period. Ultimately, this will help achieve the United Nations Sustainable Development goal 3, good health and well-being. However, as noted previously, there is limited empirical data on the mental health literacy and help-seeking in the perinatal period. This gap has contributed to the limited interventions for promoting the mental well-being of pregnant women, particularly in Ghana and other low and middle-income countries where the burden of mental problems is reportedly high.

What is the nature of this study?

This research seeks to describe the relationship between mental health literacy and help-seeking behaviour among pregnant women. I would like to know how you diagnose your worries, fears, anxieties, stress, and other psychological related issues which can impact negatively on your health during the prenatal periods and that of the baby yet unborn. Also, I would like to know some of the interventions you seek when you experience any psychological distress during this prenatal period not forgetting the resources you possess and whom to contact for support being family, friends, partner or health professionals and how that have affected your wellbeing in your current state.

This will help me to understand the relationship between mental health literacy and help-seeking behaviour among pregnant women and will provide evidence for the formulation of specific interventions to improve maternal mental health services in general and especially during the prenatal period.

This study involves the use of structured questionnaire to elicit information from pregnant women receiving antenatal care services at the Eastern Regional hospital in the New Juaben Municipality of the Eastern Region.

The duration of this research is expected to last about five months.

What do I have to do in this study?

If you accept to partake in the study you will be asked to sign an informed consent form. This will serve as proof of your consent to take part in the study and permission for me to use the information provided. As a safety precaution, you will be required to follow COVID-19 protocols during my interactions with you. Before the administration of the questionnaire, you will be given a nose mask to wear and a sanitizer to sanitize your hands before and after you sign the consent forms. If you agree, the questionnaire will be administered and your responses noted. If you don't agree, then the questionnaire will not be administered.

Both of us will maintain a personal distance of at least 1 meter during the interview. I will ask questions about your age, religion, marital status, educational level, number of children, and employment status, to know a little about yourself. After that I will ask questions about mental health literacy in relation to pregnancy. Other questions to answer are about your behavior in seeking help and the support that is available to you.

Answering the questionnaire will last about 45 minutes. In the course of answering the questionnaire, if you feel uncomfortable about answering any question, you are at liberty to leave it. If you have the urge to cough while answering a question, you are advised to do so with your elbow covering your nose and mouth.

What are the conditions that qualify me for the study?

You have to be pregnant and receiving antenatal services at the Eastern Regional Hospital, Koforidua and you have to have consented to take part in the study.

What are the risks of taking part in the study?

You may feel sad or upset when answering some of the questions. If this becomes serious, you will be referred to an experienced clinical psychologist who will discuss your concerns with you and reassure you about the challenges associated with pregnancy. The clinical psychologist is Miss Akosua Osie Bonsu and you may reach her on phone number 0244014348. Secondly, due to the COVID-19 pandemic, you may be exposed to the virus. You are however assured of strict COVID-19 protocols to ensure your safety.

What are the benefits of participating in this study?

You may not benefit directly from this study, however, indirectly your participation in this study will provide information that will inform the planning of interventions specific to improving maternal mental health services especially during the prenatal period.

What rights do you have as a participant in this study?

Participation in this study is left to your discretion and is entirely voluntary. You have the right to withdraw from the study at any time and it will not affect your relationship with the researcher. You also have the right to prevent me from using the information gathered even after the data collection. Your personal information and identity will remain anonymous in this study and will not be shared with anyone.

Is there reimbursement for taking part in the study?

You will receive no payment to take part and you will not be paid for taking part in this study.

How will confidentiality be maintained?

All information obtained from you will be labeled in a way to prevent you from being identified. All information obtained from you will be kept confidential without disclosing any

clue about you, mentioning your name or any identifying information about you to anyone else.

Conflict of interest

There are not conflicts of interest of this study. Data generated from the study will be owned by the researcher. The data will be kept for two years if published and six years if not published, after this period, it will be destroyed.

Outcome and feedback

At the end of the study, the results will be published in a scientific journal. Information that identifies you as a participant in the study will not be in the journal. A summary of the results will be provided to you as feedback after analysis of the data collected.

Contact Persons for Further Clarifications and Questions

Abigail Bempomaa Frempong (Student/Principal Investigator)

Contact: 23324771011 /Email: abfrempong@st.ug.edu.gh

Dr. Samuel Adjorlolo (Supervisor)

Contact: +233204197158 / Email: sadjorlolo@ug.edu.gh

For Ethical Issues and Right to Participate, Contact

Ethical Review Committee

Ghana Health Service

Email: ethics.research@ghsmail.org

APPENDIX E: CONSENT FORMS

CONSENT FORM

STUDY TITLE: MENTAL HEALTH LITERACY AND HELP-SEEKING BEHAVIOUR AMONG PREGNANT WOMEN IN THE NEW JUABEN MUNICIPALITY

PARTICIPANTS' STATEMENT

I acknowledge that I have read or have had the purpose and contents of the Participants' Information Sheet read and all questions satisfactorily explained to me in a language I understand (English [ ], Twi [ ], other [ ] specify ……). I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed this form.

I voluntarily agree to be part of this research.

Name oe initials of Participant…….. ID Code ……..

Participants' Signature ……...OR Thumb Print……

Date:……

INTERPRETERS' STATEMENT

I interpreted the purpose and contents of the Participants' Information Sheet to the forenamed participant to the best of my ability in the (English, Twi, Other(Specify)…….) language to her proper understanding.

All questions, appropriate clarifications sort by the participant and answers were also duly interpreted to his/her satisfaction.

Name of Interpreter……

Signature of Interpreter…….. OR Thumb Print …….....

Date:……

Contact Details

STATEMENT OF WITNESS

I was present when the purpose and contents of the Participant Information Sheet was read and explained satisfactorily to the participant in the language he/she understood (…English/other)

I confirm that she was given the opportunity to ask questions/seek clarifications and same were duly answered to her satisfaction before voluntarily agreeing to be part of the research.

Name:……

Signature…….. OR Thumb Print ……

Date:……

INVESTIGATOR STATEMENT AND SIGNATURE

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant have been addressed.

Researcher's name…….

Signature …….

Date…….

APPENDIX F: RESEARCH QUESTIONAIRE

APPENDIX F: RESEARCH QUESTIONNIRE

Questionnaire Guide on "MENTAL HEALTH LITERACY AND HELP-SEEKING BEHAVIOUR AMONG PREGNANT WOMEN IN NEW JUABEN MUNICIPALITY".

My name is Frempong Abigail Bempomaa, a final year MPhil Nursing student of the School of Nursing and Midwifery, University of Ghana. This questionnaire forms part of the study on the topic "Mental Health Literacy and Help-Seeking Behavior among Pregnant Women in the New Juaben Municipality". As a pregnant woman your responses to this questionnaire will contribute to drawing a meaningful conclusion for this study. Your candid responses would be much appreciated. You may however, decide to withdraw from participating in the research at any point in time.

All information given will be kept strictly confidential and used for ONLY academic purposes.

Please tick ( ) in the boxes provided for each question and give answers where due.

S/N.	Questions	Response options
1.	Age of respondents (years)	[1] 18-30
		[2] 31-40
		[3] 40 and above
2.	The educational level of respondent	[1] No Education
		[2] Basic Education
		[3] Secondary
		[4] Tertiarry

3.	Marital Status of respondent	[1] Single
		[2] Married
		[3] Divorced
		[4] Cohabitation
		[5] Widowed
4.	Religion of respondent	[1] Christian
		[2] Islam
		[3] Traditionalist
		[4] Others(specify)……
6.	Husband education level	[1] No Education
		[2] Basic Education
		[3] Secondary
		[4] Tertiarry
7.	Gravida (Number of pregnancies) of respondent	[1] 0
		[2] 1 - 2
		[3] 3 - 4
		[4] 5 +
8.	Parity (Number of births) of respondent	[1] 0
		[2] 1 - 2
		[3] 3 - 4
		[4] 5 +
9.	Duration of the pregnancy	[1] 1st trimester
		[2] 2nd trimester

		[3] 3rd trimester

VIGNETTE 1: Major Depressive Disorder (Antenatal)

Section B: Mental Health Literacy: Perception of symptoms & recognition of pathological behaviour						
The interviewer will read a **case study** with you. Please indicate on the scale below, **your view** of Patricia's behaviour as described in the case study. Please respond to **each statement** by **checking** the box that most closely represents your view**.**						
No	Question	Strongly agree	Agree	Neither Agree or Disagree	Disagree	Strongly disagree
1	Patricia's behaviour is a normal response	[__]	[__]	[__]	[__]	[__]
2	Patricia's behaviour is a normal response for someone who	[__]	[__]	[__]	[__]	[__]

	is pregnant / just had a baby					
3	Patricia's behaviour is typical of a weak character	[__]	[__]	[__]	[__]	[__]
4	Patricia's behaviour is typical of a mental illness	[__]	[__]	[__]	[__]	[__]
5	Patricia's behaviour could be because of a general medical problem eg. Cancer/diabetes	[__]	[__]	[__]	[__]	[__]
6	Is Patricia's behaviour likely to be depression?	[__]	[__]	[__]	[__]	[__]

Section B: Mental Health Literacy: Knowledge of Aetiology of behaviour				
Please indicate on the scale below your view of the possible **cause** of Patricia's behaviour as described in the **case study**. Please respond to **each statement** by **checking** the box most closely representing your view.				
No.	Question: Patricia's behaviour could be due to:	Yes	Maybe	No
1	Problems with her partner or family relationships	[__]	[__]	[__]
2	Work difficulties	[__]	[__]	[__]
3	Stress	[__]	[__]	[__]
4	Brain disease (eg: Chemical imbalance)	[__]	[__]	[__]
5	Heredity / genetic factors	[__]	[__]	[__]
7	Lack of willpower	[__]	[__]	[__]
8	Expecting too much of herself	[__]	[__]	[__]
10	Growing up in a broken home	[__]	[__]	[__]
11	Lack of parental affection	[__]	[__]	[__]
12	Overprotective parents	[__]	[__]	[__]
13	Loss of traditional values in society	[__]	[__]	[__]
14	Decay of natural ways of life (modern lifestyle)	[__]	[__]	[__]
15	Exploitation of people in industrial society	[__]	[__]	[__]
16	Will of God	[__]	[__]	[__]
17	Witchcraft, possession by evil spirits	[__]	[__]	[__]
18	Being the victim of violence	[__]	[__]	[__]

19	Bad luck	[__]	[__]	[__]
20	Thinking too much	[__]	[__]	[__]
21	Lack of support	[__]	[__]	[__]
22	Being pregnant	[__]	[__]	[__]
23	Poverty	[__]	[__]	[__]
24	Unplanned pregnancy	[__]	[__]	[__]
25	Wrong / bad attitude	[__]	[__]	[__]

Section B: Mental Health Literacy: Knowledge on Treatment of symptoms				
There are a range of different people, medicines and interventions that could possibly **help Patricia**. For each of the following **treatment strategies**, please indicate if you think they will be helpful, harmful, or neither, for Patricia. Please respond to **each statement** by **checking** the box most closely representing your view				
No.	Question	Helpful	Harmful	Neither
1	Counsellor	[__]	[__]	[__]
2	Social worker	[__]	[__]	[__]
3	Telephone counselling	[__]	[__]	[__]
4	Psychiatrist	[__]	[__]	[__]
5	Psychologist	[__]	[__]	[__]
6	Close family	[__]	[__]	[__]
7	Close friends	[__]	[__]	[__]
8	Naturopath	[__]	[__]	[__]
9	Pain relievers	[__]	[__]	[__]
10	Vitamins	[__]	[__]	[__]
11	Antidepressant	[__]	[__]	[__]
12	Antibiotics	[__]	[__]	[__]
13	Sleeping pills	[__]	[__]	[__]
14	Antipsychotics	[__]	[__]	[__]
15	Tranquillisers	[__]	[__]	[__]
16	Physical activity	[__]	[__]	[__]
17	More outing	[__]	[__]	[__]

18	Psychotherapy	[__]	[__]	[__]
19	Hypnosis	[__]	[__]	[__]
20	Psychiatric ward (in hospital, clinic, etc.)	[__]	[__]	[__]
21	Electro-convulsive therapy (shock therapy)	[__]	[__]	[__]
22	Traditional Healer	[__]	[__]	[__]
23	Spiritual & Religious Advisor (Pastor, Imam)	[__]	[__]	[__]

MENTAL HELP SEEKING INTENTION SCALE (MHSIS)

Instructions; For the purpose of this survey, "mental health professionals" includes psychologist, psychiatrists, Clinical social workers, Counsellors. Likewise, "mental health concerns' include issues ranging from personal difficulties (e.g., loss of loved one) to mental illness (e.g., anxiety depression). Please mark the box that best represent your opinion

1. On a scale of 1 to 5 if I had a mental health concern, would you intend to seek help from a mental health professional?

a. 1 Most Likely
b. 2 Likely
c. 3 Neutral
d. 4 Unlikely
e. 5 Most Unlikely

2. If I had a mental health concern, I would plan to seek help from mental health professional

a. 1 Most Likely
b. 2 Likely
c. 3 Neutral
d. Unlikely
e. Most Unlikely

3. If I had a mental health concern, I would plan to seek help from a mental health professional for solution

a. 1 Most Likely
b. 2 Likely
c. Neutral
d. Unlikely

e. Most Unlikely

STATEMENT TO COMPLY WITH ETHICAL PRINCIPLES

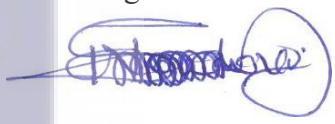
I ABIGAIL BEMPOMAA FREMPONG The Principal Investigator (PI) of this study and on behalf of my collaborators, write to state that we will comply with all ethical principles and guidelines throughout the conduct of this study.

I shall conduct the study in accordance with the approved protocol.

NAME OF PI ….. ABIGAIL BEMPOMAA FREMPONG Signature:

DATE (dd-mm-yyyy)…… 25/03/2022……..

NAME OF SUPERVISOR…… DR. SAMUEL ADJOLOLO Signature:



DATE (dd-mm-yyyy)…… 25/03/2022……..