UNIVERSITY OF CAPE COAST

LIVED EXPERIENCES AND SUPPORT SYSTEMS FOR MATERNAL NEAR- MISS PATIENTS AT THE CAPE COAST TEACHING HOSPITAL

ATTA YEBOAH-SARPONG

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BY

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This thesis is submitted to the Department of Population and Health of the Faculty of Social Sciences of the College of Humanities and Legal Studies, University of Cape Coast, in Partial Fulfilment of the requirement for the award of Doctor of Philosophy degree in Population and Health

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature ………………………… Date ………………….

Name: Atta Yeboah-Sarpong

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature…………………… Date……………………

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Co-Supervisor's Signature……………………….Date ……………………

Name: Prof. Augustine Tanle

ABSTRACT

Maternal Morbidity (MMb) of which Maternal Near-Miss (MNM) is a major constituent, receives less attention compared with Maternal Mortality (MMt) despite its greater contribution to the global burden of poor maternal health of an estimated 27 million cases annually. The nature of Maternal Near-Miss (MNM) serves as proxy for the study of MMt and thus, for assessing quality maternal health, the experiences of MNM patients give an indication of the support system required to promote healthy life of the women concerned. This study explored the lived experiences and support systems available to MNM patients at the Cape Coast Teaching Hospital (CCTH), as well as experiences of Primary Caregivers (PCGs), perspectives and experiences of Healthcare Workers (HCWs) of MNM Patients, and the support systems available to MNM patients. Using a phenomenological study design, 15 MNM patients, 5 HCWs and 13 PCGs were interviewed using a semi-structured interview guide. Thematic content analysis was done using the Collaizi's seven distinctive steps. The main findings were that MNM patients experienced physical, psychological/emotional, social and financial consequences that disrupted the physical, psychological, social and financial domains of their lives. These were mediated by support from their families, spouses, HCWs/facilities, religious bodies and NGOs. It was observed that the various forms of support provided were not coordinated. Therefore, there is the need for the coordination of stakeholders' support to ensure a quality support system for MNM patients. Results of the study suggest the need to strengthen healthcare activities on MNM and thereby ensure an improvement in support to MNM patients at the facility and community levels.

KEYWORDS

Biographical Disruption

Community Support

Coping Strategies

Experiences of Maternal Near-Miss Patients

Experiences of Healthcare Workers

Experiences of Primary Caregivers

Support System

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DEDICATION

I dedicate this thesis to my wife, Mrs. Rosemond Yeboah-Sarpong, my children; Ayiwa Yeboah-Sarpong, Kwabena Kyei-Sarpong, Nyamewa Yeboah-Sarpong and Nkunim Yeboah-Sarpong.

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LIST OF ACRONYMS

AfDBG	African Development Bank Group
CCNs	Critical Care Nurses
CCTH	Cape Coast Teaching Hospital
GHS	Ghana Health Service
HCWs	Healthcare Workers
LMIC	Lower- and Middle-Income Countries
MNM	Maternal Near-Miss
MMb	Maternal Morbidity
MMt	Maternal Mortality
MMR	Maternal Mortality Ratio
MoH	Ministry of Health
PLTCs	Potentially Life-Threatening Cases
LTCs	Life Threatening Cases
PCGs	Primary Care Givers
SAMM	Severe Acute Maternal Morbidity
SDGs	Sustainable Development Goals
WHO	World Health Organisation

CHAPTER ONE

INTRODUCTION

Background to the Study

Maternal Morbidity and Mortality (MMM) are the key determinants of the overall burden of maternal health in the world. Maternal Mortality Ratio (MMR) which is a measure of maternal mortality has become the benchmark for assessing the level of development between and within countries (Galaa et al., 2016; WHO, 2023). This is because it reflects the capacity of a health system to address complications arising from pregnancy, childbirth and postpartum (WHO, 2015). Hence, both the Millennium and Sustainable Development Goals of the United Nations have considered maternal death reduction as one of the cardinal development targets for countries especially those in the Lower and Middle-Income Countries (LMIC). Maternal morbidity does not attract the same recognition in public health discourse as maternal mortality, although it bears the greater burden of poor maternal health in the world representing a global estimated 27 million cases annually (Lange et al., 2019).

In 2020, the global MMR was 223 per 100,000 live births and about 287,000 women lost their lives equivalent to 800 dying every day and approximately around every two minutes following maternal complications (WHO, et al, 2023). Almost Ninety-nine per cent of the preventable deaths occurred in poor resource areas such as LMICs. Out of this number, sub-Saharan Africa accounted for roughly 70% with their MMR being approximately 545 per 100, 000 live births (WHO et al, 2023). These deaths were directly caused by conditions such as haemorrhage, hypertensive disorders, obstructed labour, abortion and sepsis, and they contribute to 75% of maternal mortality, globally. Indirectly, pre-existing conditions such as HIV, Malaria, tuberculosis, mental disorder and diabetes are responsible for 25% of maternal deaths. The deaths are fueled by maternal age, gravidity, maternal education, referral system, distance and transportation system among others (Bwana et al., 2019). Ghana's MMR remained 310 as of 2017 (Ghana Statistical Service (GSS), 2017).

Globally, between 2000 and 2020, maternal deaths dropped by 34.8%, that is 342 deaths per 100,000 livebirths to 223 deaths per 100,000 live births (Khalil et al, 2023). Though a positive development, maternal death which is the mainstay for assessing the quality of obstetric care is losing its effectiveness due to low death figures especially in high-income regions and the lack of a reliable registration system for maternal deaths in poor resource regions; as many of these deaths are presented late as emergencies to the facilities, leading to isolated auditing with limited information (Bakshi et al., 2016; Pandey et al., 2014).

Concept of Maternal Near-Miss

The concept of Maternal Near-Miss (MNM) or Severe Acute Maternal Morbidity (SAMM) or Severe Maternal Morbidity (SMM) which are used interchangeably for severe life-threatening complications (Furuta et al., 2012) is considered a surrogate for maternal death and a feasible indicator for measuring the quality of maternal health (Liyew et al., 2017). This is because for each maternal death, there are several other women who suffer various forms of complications during pregnancy, delivery or up to 42 days and survived. Another reason is that the similarity in pathological and circumstantial pathways between maternal deaths and MNM is striking (Kalhan et al., 2017; Tura et al., 2019). The two, share common socio-demographic, economic, clinical and hospital-based factors such as maternal age, education, residence, number of pregnancies and deliveries, antenatal visits, pre-existing medical conditions or comorbidities, weight, distance to health facilities, human resource and skills, equipment and drugs, financial position of patients and caesarean section (Liyew et al., 2017; Naderi et al., 2015; Pacheco et al., 2014).

The concept of MNM is carved from the general concept of Near Miss (NM). The NM concept is referred to variously as *close call, close shave, near hit, good catch, near collision, sentinel event and warning event* (Mbuvi et al., 2015; Zhixian 2006). The concept of Near Miss (NM) was borrowed from the vocabulary of the air traffic control service, which describes an accident that nearly occurred but by sheer luck and good judgment, it never happened (Nashef, 2003). It is generally defined as an unplanned event or chain of events that could have caused injury, or damage to property or equipment but was avoided as a result of chance; or a situation that almost happened but the outcome did not result in injury, illness, harm or any negative outcome (Mbuvi et al., 2015). The concept, further elucidated through the Heinrich structure of incidents or safety pyramid (Figure 1), indicates that behind any major accident which may be fatal, there are 300 near-misses or minor incidents and 29 minor injuries which may require first aid (Bitins, et al., 2021; Heinrich, 1931).

Figure 1: Heinrich Structure of Incidents

Source: Bitins et al. (2021)

MNM studies have been used as a surrogate for MM studies in determining quality maternal health overtime but has gained prominence in the past two decades. It is defined by the World Health Organization (WHO) as a woman who, being close to death, survives a complication that occurred during pregnancy, delivery or up to 42 days after the end of her pregnancy (Say et al, 2009). Prior to the WHO's definition of MNM, different criteria had been used to select MNM cases and they were: admission of women to intensive care units during the pregnancy-puerperium cycle; secondly, the occurrence of certain diseases or complications such as pre-eclampsia, eclampsia, haemorrhage, severe sepsis, and uterine rupture; and thirdly evidence of organ dysfunction (Souza at el., 2007). Due to the different identification and complex selection criteria of MNM cases across studies and regions (Chhabra, 2014; Say et al., 2009), the WHO in 2007, set up a technical working team made up of obstetricians, midwives, epidemiologists and public health professionals (WHO, 2011) to develop a maternal death classification system. The system also provided a single definition for MNM as "a woman who nearly died but survived a complication that occurred during pregnancy, childbirth or within 42 days of termination of pregnancy" (Say et al, 2009). The definition provides a standard and identification criterion that ensures that the underlying causes of Maternal Mortality (MM) and MNM are the same, thereby fostering consistency and providing a set of MNM indicators for assessing quality maternal care.

Maternal Near-Miss as an Assessment Tool

MNM is an adjunct for assessing quality maternal care due to the commonality in pathological and circumstantial trajectories, it shares with MMt (Chhabra, 2014). For instance, the clinical conditions responsible for MMt such as hypertension, uterine rupture, sepsis and post-partum haemorrhage equally lead to MNM; and their contributory factors such as referral system, human resource, equipment and poverty are similar. Another reason for its relevance is the high frequent occurrence of MNM compared to MM (Hardee et al., 2012; Tura et al., 2019). Some studies have indicated that MNM is 15 times more frequent than MMt, while others argue that the figure rises to 26 in the poor resource regions (Kahasun &Wako, 2018). MM is thus, considered the tip of the iceberg of the spectrum of adverse maternal outcomes including maternal morbidity and in particular, MNM, which leaves some survivors with life-long disabilities Kalhan et al. (2017). Further, through studies on MNM, women who survive life-threatening maternal conditions are alive to provide lived and a firsthand account of their awful or otherwise experiences, which are often lost under maternal mortality studies despite their usefulness (Chhabra, 2014; Souza et al., 2007). Again, the absence of maternal deaths but rather what are described as “great saves” makes investigations into adverse maternal outcomes, less emotional and threatening to health staff and, ensures an objective approach towards discussing the causes and contributory factors of MNM (Kalhan et al, 2017). Above all, it promotes reformative action to dealing with barriers to quality maternal health care, as it facilitates insight into the perspectives on the experiences and circumstances of women who survived adverse maternal conditions (Abdollarpour et al., 2019).

WHO has provided an identification criterion for MNM cases in a two-stage process. The first step involves the selection of cases through disease and management-based criteria (Herklots et al., 2019). These criteria involve women who develop any of the five Potentially Life-Threatening Complications or Conditions (PLTCs), which are severe postpartum haemorrhage, severe pre-eclampsia, eclampsia, sepsis or severe systemic infection, and ruptured uterus; and whether the women received critical interventions such as blood products, laparotomy including hysterectomy and admission to Intensive Care Unit (ICU). The second step involves the selection of women who experience organ dysfunction or failure based on 25 clinical, laboratory and management markers (Verschueren et al., 2020). The inclusion of PLTC in the selection process is to provide an alternative method of selection for communities and primary health facilities, where the use of organ dysfunction or failure as a basis for selection is not feasible in low-resource settings. Therefore, the application of organ dysfunction or failure criterion may lead to underreporting of MNM cases ((Tuncalp & Souza, 2014b; Witteveen et al., 2017).

Across the globe, the prevalence rate of MNM differs from one region to another. The rate ranges from 0.6% to 14.98% based on disease-specific criterion and 0.04 to 4.54% per the management-based system (Chhabra, 2014). The MNM prevalence rate using both criteria is higher in the low and middle-income countries than in the high-income countries. MNM rates range from

4.93% in Latin America and the Caribbean through 5.07% in Asia to 14.98% in Africa. In contrast, studies from high-income countries (Europe, North America and Australia) reported a MNM rate from 0.79% in Europe to 1.38% in North America. These rates reveal that the MNM prevalence rates in high-income countries were the lowest rates across all the criteria compared with the rates in the low and middle-income countries (Tunçalp et al., 2012).

MNM and Women's Wellbeing

The consequences of MNM on women's well-being are far-reaching as they negatively impact various aspects of their lives including body integrity and functioning. These effects are broadly classified by Carrol et al. (2016), Elmir et al. (2012) and Norhayati et al. (2015) into short and long term, physical, social, emotional, financial and psychological challenges. Some specific impacts of the episode are body impairment, post-traumatic stress, fear and anxiety, sexual dysfunction, isolation, and unemployment (Mbalinda et al., 2015; Nohayati et al., 2017 & Norhayati et al., 2015). Others were fear of "repregnancy" in future, lack of support, panic attacks and flack backs, postpartum depression, fistula and infertility (Abdolapour et al., 2019; Lange et al., 2019). These experiences may lead to disruptions of normal life patterns, and influence perceptions and attitudes of MNM patients on the quality of maternal health and health-seeking behaviour (Norhayati et al., 2017). The incident may also have effects on families and spouses of patients as well as health professionals (Hinton, 2015).

Formal and Informal Caregivers and Support for MNM Patients

Primary or informal caregivers are broadly referred to as members of the closest social relationships including immediate and extended family members such as mothers, siblings, children, spouses, cousins and friends, among others, who, without financial rewards, often provide various assistance to aid family members who have had chronic health conditions (Lambert et al., 2017). Depending on the condition of patients, services such as cooking, washing, and serving guests among others are performed by caregivers (Jarvis et al., 2017). The family plays a critical role in the welfare of MNM patients, hence Donnelly et al., (2015) indicated that in the caregiving of obstetric fistula patients, family support is critical for the reintegration of women into normal life.

These Primary Caregivers (PCGs) have experiences that transcend physical, social, economic and psychological domains and may encompass poor health and quality of life including emotional distress, depression, physical strain, loss of contacts, direct and indirect financial difficulties, stigma and tension among others (Cameron et al., 2016; Godhead & McDonald, 2007; Olagundoye & Alugo, 2018). Despite their immense contribution to the healthcare system, albeit, informally, they are considered hidden patients, less recognized and underappreciated (Kazami et al., 2021; Lambert et al., 2021).

Healthcare Workers (HCWs) who provide formal care to MNM patients include obstetrician gynaecology consultants or specialists, midwives, anesthesiologists/anesthetists, general nurses and critical care nurses. These professionals provide medical care and psycho-social counselling to assist patients to cope and recover to resume a normal life. Their experiences with MNM patients could impact their lives in many ways. In examining the post-traumatic stress experiences of obstetricians and midwives who encountered events in the labour ward, Wahlberg et al. (2017) reported that 84% and 71% respectively developed Partial Post-Traumatic Stress Disorder while 7% and 5% respectively Post-Traumatic Stress.

Social support, as a network-based social phenomenon, provides buffering or cushioning to individuals against the psychological and physical pressures of life (Aslund et al., 2014). Social support such as helping patients to mobilise their psychological resources to deal with their emotional problems; sharing routine duties; providing money and information among others, is necessary to enable them cope with their short, medium and long-term physical, social, economic and psychological experiences. In the view of Nohayati et al, (2017) social support can foster a healthy relationship, better mental health and well-being, reducing stress and mental well-being. Guardino & Schetter (2014) reported in their study that women with better social support and satisfaction from others are less vulnerable to experiencing high anxiety than obstetric women without such social support. Finally, Abdollarpour et al. (2020) indicated that support for MNM patients can reduce their physical, psychological-emotional, social and economic stress and therefore spouses, family members and health staff could be trained to provide needed support to ameliorate the effects of the phenomenon.

MNM and MM are the severe maternal outcomes for assessing the quality of maternal health. MNM studies are recommended as an adjunct for MM studies following the decreasing cases of MM, especially in developed countries. MNM impacts negatively on women with physical, social, economic, emotional and psychological challenges. The PCGs of MNM patients may have experiences that impact their wellbeing. The health professionals who attend to MNM patients have insights into the phenomenon that are noted. To help the MNM patients overcome their experiences and possibly resume normal life, various support systems from PGCs and HCWs are critical.

Statement of the Problem

Ghana's maternal deaths are estimated to be 875 per 100,000 and 838 per 100,000 in 2018 and 2019 respectively (WHO, 2021). Additionally, the 2017 Ghana Maternal Health Survey (GMHS) showed that MMR for the seven years preceding the survey was estimated at 310 maternal deaths per 100,000 live births (GSS et al., 2017).

The incidence ratio of MNM cases is equally high in Ghana and was estimated to be 34.2 cases per 1000 live births and for every maternal death, there are nearly five MNM cases (Oppong et al., 2019). With the high MMR and maternal morbidity cases, Ghana's effort at meeting the SDG 3 target 1 of reducing MMR to less than 70 by 2030 (WHO et al, 2023) is threatened and therefore calls for strategies to address constraints and enhance facilitating factors.

Besides, in Ghana, five studies on MNM have been identified and four out of the number, have generally focused on epidemiological dimensions of MNM. The issues covered in these four studies were the assessment of MNM and quality of care, which among others, revealed the common complications of PLTCs, maternal deaths and near-miss as pre-eclampsia (41.5%), severe PPH (45.7%) and sepsis (45.9%). It also revealed common interventions for severe maternal morbidity as the administration of blood products (57.6%), laparotomy (12.6%) and coagulation or hematologic dysfunction (63.8%) Tuncalp et al.

(2013); the levels of maternal morbidity ranging from no complications (1586), through women with non-life-threatening complications (1205), and PLTCs (516) to MNM (94), and that, all the factors related to PLTCs and MNM were similar Tuncalp et al. (2014). Again, the incidence and factors associated with MNM revealed among others, that MNM and MM ratios were 34.2 (95% CI 30.2-38.1) and 7.4 (95% CI 5.5-9.2) per 1000 live birth, respectively. Also, the causes of MNM identified were hypertensive disorders (Drechsel et al. 2022), pre-eclampsia/eclampsia (41.0%), haemorrhage (12.2%), maternal sepsis (11.16%) and ruptured uterus (4.2%). Maternal fever was identified as the major factor associated with MNM and for every maternal death; there are nearly five MNMs (Oppong et al., 2019).

The only MNM study in Ghana that explored the experiences of women who have suffered severe maternal morbidity was by Tuncalp, et al. (2012a). They identified health problems such as loss of blood, as well as feared or actual loss of life and normality, unhappiness, hopelessness, discouragement and frustration from MNM patients. In addition, the patients spoke of the loss of memories as one of the chain of events leading to the occurrence of the phenomenon. Though the women had some positive impressions about the doctors who treated them, they also raised issues about poor communication, delay in treatment, and payment of extra money for cases covered by the National Health Insurance Scheme (NHIS) (Dalinjong et al., 2018). It appears there is a paucity of information on the broad lived experiences of MNM patients. Gaining insights into the consequences of MNM patients, will provide an opportunity to explore the diverse experiences of affected women with the view to exploring available support systems for their recovery.

The study on the experiences of MNM patients as revealed by Tuncalp et al. (2012a), did not consider the experiences of PCGs of the patients, even though they provide diverse support for persons with serious health conditions (Atobrah., 2012). The PCGs, may out of the service they provide have some experiences which need to be investigated and recognised. These experiences could be multiple and wide ranging depending on their peculiar circumstances. Unfortunately, as “silent patients” they hardly receive attention compared to PCGs of other patients (Lambert et al., 2017).

The experiences of HCWs with MNM patients were also not considered in the study by Tuncalp et al. (2012a), even though the former play important role in the healthcare delivery system for women with severe maternal complications. Studies on perspectives of HCWs on health matters in Ghana have so far been limited to issues such as Adverse Medical Events (Alhassan et al, 2019); quality of care under the National Health Insurance Scheme (Andoh-Adjei, 2018; Duku, et al., 2018); delivery of services to persons living with physical disability in rural areas (Dassah et al., 2019); and self-management of sickle cell disease (Druye, 2018) among others. There are also a few narratives such as access and utilisation on maternal health services in Ghana (Haruna et al., 2019). Further, there are narratives on why pregnant women delay in seeking maternal healthcare during delivery and obstetric complication in rural Ghana (Sumankuuro et al, 2019). The foregoing shows that information on the perspectives of HCWs on their experiences with MNM patients is non-existent in Ghana.

The perspectives of stakeholders of the phenomenon such as MNM patients, PCGs and HCWs on quality of care may have been explored separately as studies on perspectives of stakeholders on quality of care are often limited to inputs from one or at most two stakeholders (Mosadeghrad, 2012). Evidently, studies on quality of care of MNM in Ghana have been limited to the views of MNM patients. The study will, therefore, explore how the three groups to evaluate quality of care of MNM to illustrate the diversity in perspectives on quality issues.

Furthermore, social support such as the provision of physical, emotional and information support serve as a buffer to stressors of life and solutions against various disruptions emanating from experiences of ill-health (Binka et al., 2017; Boatemaa et al., 2020). Even though some support in the form free or subsidised medication is available for HIV and Tuberclosis patients in Ghana, there no clear support for MNM patients. Thus, this study will explore the available support systems to gain insight into the impact of social support for such women to assist them overcome the disruptions to their life trajectories, thereby improve their well-being.

The study thus, explores the experiences of MNM patients, their PCGs, HCWs.

Objectives of the Study

The main objective of the study was to explore the lived experiences and support systems for MNM patients at CCTH. Specifically, the study objectives were to:

1. Explore the categories of lived experiences of MNM patients;
2. Investigate the experiences of PCGs of MNM patients;
3. Appraise the experiences of HCWs with MNM patients;

4. Assess the perspectives of MNM patients, PCGs and HCWs on quality of care; and
5. Assess the support systems available to MNM Patients.

Significance of the Study

The lived experiences of MNM patients in Ghana has not received much attention and, thus, the existing literature on the subject is so far limited to the study by Tuncalp et al. (2012a). This study seeks to consider the physical, social, economic, psychological and emotional experiences of MNM patients and the nuances of each of them. The study seeks further to explore the mechanisms required to address these experiences to help improve maternal health and ultimately help to achieve SDG 3 target 1, which is focused on reducing the global maternal mortality ratio to under 70 per 100,000 live births. The study will, therefore, help generate information to augment the existing literature on the subject and further serve as reference for maternal and child health studies in Ghana.

The study documents the experiences of PCGs of MNM patients which have not been considered in previous studies but whose study seeks to provide information on the roles of stakeholders within the MNM management space and its implications on their lives. The experiences of PCGs in the management of the experiences of MNM patients have not attracted the needed recognition. Hence, recognising their experiences will draw attention to a hitherto forgotten group of persons whose challenges are intrinsically linked with that of MNM patients. Information on the experiences of PCGs' of MNM patients will therefore lay the foundation for further studies in this area.

Further, a study of the experiences of HCWs with MNM provide technical dimension to the discourse of the experiences of MNM patients by exploring case management issues which are relevant for improving maternal health outcomes, thus reducing maternal mortality and morbidity. The study, will also provide useful information that complements the existing information on the experiences of MNM patients.

This study considers quality of care from the perspectives of key stakeholders who are MNM patients (primary clients), PCGs of MNM patients (secondary clients) and HCWs (providers). The study, thus, expands the scope of feedback on quality of care to include stakeholders beyond MNM patients. This approach helps to understand the variations in the assessment of quality of care and the different gaps that need to be addressed to improve the inputs, process and outcome components of the care delivery system to improve maternal health services towards attaining SDG 3.

Ultimately, the study seeks to identify the support systems available to MNM patients to assist them cope with their experiences. The information on the support system to patients will fill the lacuna in literature on the experiences of patients and provides basis for further studies and discussions on the matter. It will also ensure the provision of a well-structured and coordinated support system for patients to help mitigate the negative aspects of MNM patients' experiences.

Organisation of the Study

The study is organised into nine chapters. Chapter One, which presents the introduction of the study covers the background of the study, problem statement, main and specific objectives and the significance of the study.

Chapter Two deals with theoretical perspectives and empirical evidence on MNM. The Third Chapter is devoted to methods of data collection and analysis highlight the research design, research site, study population and sampling, research tools and techniques, data collection procedure, data management and analysis. The Fourth Chapter considers the findings and discussions of objective one, which is to explore the lived experiences of MNM patients. Chapter Five focuses on objective two, which investigates the experiences of the PCGs of MNM patients. Objective three which explores the experiences of HCWs with MNM patients is presented in Chapter Six. Chapter Seven covers objective four which deals with the perspectives of MNM patients, their PCGs and HCWs on quality of care. Finally, Chapter Eight covers the summary of the main findings, conclusions, contribution to knowledge, recommendations and suggestions for further research.

CHAPTER TWO

CONCEPTUAL, THEORETICAL AND EMPIRICAL PERSPECTIVES

Introduction

This chapter examines the conceptual, theoretical and empirical perspectives on MNM and related issues. Conceptual issues considered are the definition, evolution, audit, determinants and identification criteria of Maternal Near-Miss (MNM). The empirical perspectives cover experiences of MNM patients, experiences of PCGs of MNM patients, experiences of HCWs, the perspectives of MNM Patients, PCGs and HCWs on quality of care, and the support system available to MNM patients. Five models are reviewed namely, the Three Delay Model, Concept of Biogeographical Disruption, Social Exchange Theory, Donabedian Quality of Care Model and Buffer Theory of Social support.

Concept of Maternal Near-Miss (MNM)

The concept of MNM or Severe Maternal Morbidity (SMM) is often used interchangeably to refer to a woman who nearly died through complications of pregnancy and delivery up to 42 days after birth but survived by chance or through good medical care (Tuncalp et al., 2012b). While the WHO prefers using MNM (Geller et al., 2018), the Centres for Disease Control and Prevention in the United States and Canadian Perinatal Surveillance System use SMM (England et al., 2020). This definition, which represents the common views of most authors agrees with the WHO's definition which describes MNM as the condition of a woman who nearly died during antepartum, intrapartum and post-partum up to 42 days of termination of pregnancy (Say et al, 2009).

Before the WHO’s consensus definition, three main definitions were used to describe MNM cases. These were the admission of women to the ICU during pregnancy and delivery or after birth (Viggiano et al., 2004); the incidence of some specific conditions such as preeclampsia, eclampsia, uterine rupture (Waterstone et al., 2001) and evidence of organ failure or dysfunction Mantel et al. (1998).

Evolution of MNM

Interest in MNM started when Stones et al. (1991) coined the term “near-miss morbidity” to describe “life-threatening morbidity” from the identification of maternal morbidity cases with some being life-threatening, based on a retrospective analysis of over 2000 pregnancy and delivery cases from the National Health Service Consultant Unit, over six months. The observation in UK and other developed countries led to investigations into “near-miss morbidity” to identify the lapses in obstetric management. This called for the expansion of confidential enquiry to include MNM.

To streamline and harmonise the assessment criteria for MNM, WHO in 2007 constituted a working group made of epidemiologists, obstetricians, midwives, and public health professionals to formulate a standard definition and identification criterion for MNMs to achieve a good balance between the burden of data collected and useful information. The criterion, thus, ensured the selection of only severe cases as MNM (Tuncalp et al, 2012b). WHO, in 2016, published a manual on the promotion of Near Miss Case Review (NMCR) to specifically consider the introduction of reviews of MNM cases at health facilities and in countries aimed at promoting the quality of care of MNM cases.

Criteria for Identification of MNM

Three major identification criteria of MNM cases had been disease-specific, management-based and organ dysfunction or failure until the WHO harmonised them into a two-step criteria system. The first step is the identification of cases by disease-specific and management of cases together which is summed up as PLTCs (Herklots et al., 2019). The second step is the identification of cases of organ dysfunction or failure known as LTCs (Verschueren et al., 2020). Depending on resource availability and the focus of research, any of the identification systems could be used or better still, the two could be used together (Pembe et al., 2019; Tuncalp et al., 2013).

The disease-specific criterion was introduced by Waterstone et al. (2001) and later enhanced by Menezes et al. (2015). WHO's (2011) standard criteria for disease-specific delineate five conditions: severe postpartum haemorrhage, severe preeclampsia, eclampsia, sepsis or severe systematic infection, and ruptured uterus. This criterion lends itself to easy interpretation, as it helps to detect and assess cases and quality of care relating to a specific condition, retrospectively. However, it does not cover all conditions and adequately define and quantify them (Chhabra, 2014).

Management-based criteria for identifying MNM evolved from a list of interventions published by Menezes et al. (2015) for managing MNM cases. These included blood transfusion, hysterectomy, ICU admission and prolonged hospital stay (>7 post-partum days). The WHO's consensus criterion identifies four key interventions: admission to the Intensive Care Unit (ICU), interventional radiology, laparotomy including hysterectomy, and use of blood products (2011). The management-specific criterion is user-friendly but its use is subject to the availability of ICU and probably blood products and skilled personnel as well as indications of hysterectomy (Chhabra, 2014).

Mantel et al. (1998) identified organ dysfunction or failure as basis for identifying MNM cases. The authors identified MNM as a woman who developed a severe organ dysfunction during pregnancy and delivery and could have been fatal but survived. The areas for identifying organ dysfunction were cardiac, vascular, respiratory, renal, liver, metabolic, coagulation and cerebral dysfunction. WHO (2011), confirmed the various organ dysfunctions presented by Mantel et al. (1998) and further added a few more such as coagulation/haematological, hepatic, neurological, and uterine dysfunction. It also added 25 markers comprising clinical signs, laboratory markers and management actions (Tura et al, 2019).

Even though this approach perfectly identifies MNM by ensuring assessment of critically ill patients as well as focusing on severe conditions, it is criticised for depending on the availability of minimum health infrastructure such as laboratories and patient monitoring systems (Chhabra, 2014). Its use may lead to under-reporting of life-threatening cases (Verschueren et al. 2020). Hence, its applicability is limited in poor resource regions such as Ghana.

WHO's uniform criteria introduced in 2009 and further updated in 2011 was to overcome the difficulty in comparing MNM issues between studies, regions and countries (Souza et al. 2012). However, this expectation, according to Mohan & Naik (2020), has not been met due to the regional disparity in resource availability, leading to various modifications of the criteria Nelissen et al. (2013). This has created confusion and undermined the comparability of MNM, locally and internationally. A modified WHO definition of MNM based on resource setting is therefore suggested as a fairer means of achieving comparability between settings (Pembe et al., 2019).

Determinants of Maternal Near-Miss

Determinants of MNM comprise direct factors that lead to obstetric complications such as haemorrhage, hypertensive disorders, sepsis, anaemia and ectopic among others; and indirect factors such as underlying health conditions, sub-optimal health system, poor health-seeking behaviour and social status among others. These factors are similar to those affecting MM (Geleto et al. 2020).

The leading cause of MNM is obstetric haemorrhage, followed by hypertensive disorders as indicated by Heikamp et al. (2021) in a systematic study of MNM events in middle-income countries. The claim was similarly reported by Assarag et al. (2015) who indicated that severe haemorrhage (39%) and hypertensive disorders (45%) are the causes of MNM. Other studies, however, show that hypertensive disorders (preeclampsia/eclampsia) are the major cause of MNM. For example, in Northern Brazil, de Lima et al. (2019) indicated that hypertension in pregnancy (67.2%), haemorrhage (42.2%) and maternal sepsis (12.7%) were MNM. This was reinforced by Kumela et al. (2020) who indicated that hypertension in pregnancy (40.9%) and obstetric haemorrhage (39.3%) were the major causes of MNM. In Ghana, preeclampsia/eclampsia (41.0%), haemorrhage (12.2%), maternal sepsis (11.1%) and ruptured uterus (4.2%) have been revealed as the causes of MNM (Oppong et al., 2019). Despite these variations, the studies confirm WHO's prescription of the causes of PLTCs being preeclampsia, eclampsia, haemorrhage, sepsis and uterine rupture.

These conditions are further influenced by factors such as maternal age, pre-existing conditions, gravidity, parity, antenatal visits, unemployment, residence or travel distance to a health facility, marital status and delays. Habte et al. (2021) confirmed that lack of antenatal care, prior caesarean section experience, poor delivery preparedness and reactionary approaches to complications and pre-existing health conditions contribute to MNM. This was corroborated by Assarag, et al. (2015) and Oliveira et al. (2015) who reported that lack of education, poor antenatal attendance and an experience of first delays pose risk to MNM. The issue of age and referral system as other factors affecting MNM are highlighted by Norhayati, et al. (2016) and Oliveira et al. (2014).

Norhayati et al. (2016) indicated that advanced age (35 and above) is a risk factor for MNM. Advanced age seems to be a common predisposition to MNM according to Silva et al. (2018). The authors also agreed with Mekango et al. (2017) that lower age or adolescence is another factor. No formal education/illiteracy or low education earlier introduced as a risk factor is supported by Assarag et al. (2015); Mekango et al. (2017); Uwgu et al. (2020). Other factors are unemployment or low income (Asaye, 2020), 1st delay and administrative and related delays (Dessalegn et al, 2020; Kumela et al., 2020; unbooked cases (Worke et al., 2019); and multigravidity (Kumela et al., 2020). On parity, the findings are diverse. Whilst Alemu et al. (2019) indicate that multipara (more than three) is a risk factor of MNM, a study in India found that half of the respondents were nullipara, and one-third were primipara and second para (Mansuri & Mall, 2019).

These determinants are similar to that of MM and, therefore, support the claim that MM and MNM have the same pathological and circumstantial pathway (Kalhan et al. 2017).

Maternal Near-Miss Audit

Audit generally refers to an assessment of practices and outcomes against established standards. The National Institute of Clinical Excellence (NICE) defines clinical audit as a quality improvement strategy aimed at enhancing the quality of care and outcomes through the application of a systematic review of a particular service against clearly established criteria and programme of change (2002). WHO in 2011, presented a comprehensive set of definitions, processes and indicators for evaluating and establishing quality of care.

Some of the benefits of MNM audit or review are: (i) it deals with the positive factors that save women and the negative factors that require a change towards improvement; (ii) health providers are more comfortable discussing MNM than maternal deaths as assignation of blame is minimal or nil; (iii) the perspective of the woman including her experience of care and related issues are incorporated into the analysis; and (iv) the MNM occurs more frequently than maternal deaths and therefore provides better opportunities for evaluating quality of maternal care (WHO, 2016). The possibility of the audit, for example, drawing on the evidence of affected women, was reiterated by Tura et al. (2019) who indicated that MNM audit provides an opportunity for obtaining opinions and perceptions of MNM patients who are interviewed as part of the auditing. Kalhan et al. (2017) also suggest that the outcome of the audit brings out reliable evidence on the causes of MNMs while ensuring comparison within and between institutions and regions.

Despite these benefits of MNM audit, the exercise is not prioritised in the health facilities in Ghana compared to MM audit, which is mandatory and a principal part of the quality assurance measures required by GHS (Owusu-Sarpong et al., 2017).

Concept of Illness

The concept of illness experience or behaviour first introduced by Henry Sigerist in 1929 provides some philosophical underpinning to the lived experiences of ill persons and the affected family (Kar & Kumar, 2015). Helman (2007) indicated that illness is the lived experience of the patient and family and the meaning the patient, in particular, provides. Larsen (2013) explains that chronic conditions and their subsequent management produce unique experiences for patients and families. Hence, the same condition affecting different patients and families may generate different experiences. This is further elucidated by (Weitz, 1991 & Conrad & Barker, 2010) who indicate that illness is subjective, as it indicates the personal as well as a social understanding of what the affected person considers normal and the issues which go beyond pathology.

It is also a socio-cultural construct influenced by cultural, societal and socially approved norms and values (Skrzypek, 2014). The social construct is further grounded in biographical disruption, which suggests that the meaning of illness and social milieu cannot be separated (Bury, 1982). Its sense of dependency arises from changes in one's biography and how to cope with life. Miller (2002) suggested some interventions meant to reduce dependency and enhance the independence of ill persons. These are modifications to the patient's environment, improvement in clients' insight into the management of the condition, and increase in responsiveness of healthcare providers and other stakeholders to the adverse effects of the condition.

Various aspects of this concept reflect the different dimensions of the study, including the experiences of MNM patients and other stakeholders (PCGs and HCWs) as well as the support system or interventions required to ensure rehabilitation of dysfunctional lives.

Concept of Caregiving

The concept of caregiving is etiologically derived from two old English words "wicim," which means mental suffering, mourning, sorrow, or trouble; and "give" from "eo-, iofan, iaban," which means to bestow gratuitously (Caregiving, 2010). The two meanings are integrated as actions or processes of supporting others in need or trouble. It was first introduced by Bowers (1987) who indicated the five purposes of caregiving as anticipatory, preventive, supervisory, instrumental and protective. The concept has been defined variously by different disciplines such as Nursing, Sociology and Psychiatry based on their respective orientations.

One of the commonest definitions of Caregiving is extending voluntary assistance and support to relatives and acquaintances who have physical, psychological and emotional challenges due to ageing or some chronic health condition (Dreantea, 2007). Another definition indicates that caregiving involves actions an individual undertakes on behalf of another person who is unable to perform that activity by himself/herself for some special reason (Hermanns &Mastel-Smith, 2012).

Apart from professional caregivers who are paid for the services they provide a number of PCGs are into caregiving as a natural consequence of events and are part of the cultural expectation of society. For instance, spouses are expected to assist their partners during ill-health (Erikson et al. 2019). Gender and family ties play a significant role in primary or informal caregiving. Women, more than men, are known to be predominant in family caregiving due to cultural and societal norms and the ability of women to withstand stress (Sharma, 2016). Men's lack of technical knowledge of caregiving makes them less involved in primary caregiving and, therefore, their less prominence in primary caregiving (Allen, 1994). It has also been found that kins are a better match for primary caregivers' characteristics and services provided. According to Allen et al. (2012), non kins are a poorer mismatch for primary caregiving; and friends and neighbours are not likely to assist with daily caregiving.

In a study by Hermanns and Mastel-Smith (2012), it was revealed that caregivers provide various services for their care recipients including bathing, accompanying care recipients to doctor visits, preparing meals, feeding care recipients of special meals, shopping, providing safety, doing household chores (laundry), providing comfort, toileting, transfers and positioning as well as providing advocacy and transport.

Caregivers incur some experiences such as poor mental health, physical symptoms, poorer health-related quality of life, lower life satisfaction and decreased marital satisfaction (Li et al., 2013). Others are feelings of isolation, depression, anxiety and issues of identity (Zanini et al., 2021).

Free Maternal Health Care Policy in Ghana

Free Maternal Health Care Policy (FMHCP) was introduced in Ghana in 2003 by the government to eliminate financial restriction to maternal services, thereby reduce maternal mortality (Abredu et al, 2023). It commenced with four designated deprived regions in Ghana, Central, Northern, Upper West and Upper East regions. The policy was scaled up to cover the remaining six regions in 2005 (Witter et al., 2007). In 2008, FMHCP was integrated into the National Health Insurance Scheme (NHIS) to provide comprehensive maternal services namely six antenatal visits; emergency outpatients visits; free facility delivery including all complicated deliveries and two postnatal visits within six weeks; waives NHIS registration fees and premium.

The policy has chalked some successes such as an increase in skilled attendance from 55% in 2007 to 79% in 2017 (GSS et al, 2018); and improved NHIS enrolment and health services ultilisation (Agbayo, 2020) largely due to the exemption policy.

Despite the successes, the policy is saddled with issues including the persistence of out-of-pocket payments at health facilities for drugs, and services such as laboratory and radiological examinations due in part to delays in NHIS reimbursement to health facilities (Dalinjong, et al., 2017). Other problems such as poor infrastructure, inadequate supplies, and high transportation cost undermine the effectiveness of the policy.

After a decade and half, since the policy was introduced, time is rife for an evaluation to be conducted to identify the weaknesses and addressed them to ensure the attainment of the objectives of the policy.

Empirical Perspectives

Categories of Lived Experiences of MNM Patients

The lived experiences of MNM patients cover the physical, psychological/emotional, social and financial spheres of lives of the women and how they affect their families and the community (Meaney et al., 2016; Herklots et al., 2020).

Physical Experiences of MNM Patients

The physical experiences of MNM patients involve body mutilation, loss of functionality, disruption of body integrity, pain and discomfort, among others (Storeng et al., 2010). MNM further exacerbates the normal cumulative loss of vitality and stamina. The loss of functionality due to the difficulty in breathing, chest pain, lethargy, and excessive swelling of lower limbs are some of the physical experiences faced by MNM patients (Norhayati et al., 2017).

Pain and discomfort were also expressed as part of the physical experiences of women who had MNM (Norhayati et al., 2015). It was observed that women who suffer MNM under emergency circumstances have unpleasant body sensations and discomfort due to the severity of the condition and treatment provided. For example, some unbearable pain accompanied by heartbeat and burning sensations following the use of magnesium sulphate was reported (Silva et al. 2016).

Other forms of physical experiences revealed are tension leading to dizziness which intermittently affects engagement in domestic chores (Storeng et al. 2010); urinary incontinence, hernias, haemorrhoids and breast problems Koblinsky et al. (2012); unconsciousness sequel to excessive bleeding, seizure and sedation (Norhayati et al., 2015); Vaginal bleeding as a physical experience of MNM is reinforced by Assaye, (2020); Kalisa et al., (2016); and flashbacks and nightmares and sleep disturbance (Fenech & Thomson, 2014). A study in Ghana on the experiences of women showed that those who had suffered MNM reported loss of blood (Tuncalp, et al. 2012).

Social Experiences of MNM Patients

Social experiences of MNM relate to issues of resumption of social activities Storeng et al. (2010) and disrupted family relationships (Fenech &Thomson, (2014) following MNM. The strain of family relationship is due to the inability of some women to discharge their routine responsibilities and traditional roles after surviving severe obstetric complications (Storeng et al., 2010). Family rejection and abandonment of some patients after MNM was also reported by the authors. Other dimensions are that the women experienced tension and intense fears while partners and other caregivers endured the inconveniences (Mbalinda et al., 2015).

Further, reproductive disruption or barrenness tend to threaten the healthy relationship between husbands and wives. It may further lead to cessation of upkeep responsibility and the marriage of a second wife, thus leaving the MNM patient whose uterus and child are lost, in pain and unhappiness (Storeng et al., 2010).

Psychological/Mental Health Experiences of MNM Patients

The physical and social vulnerability resulting from obstetric complications may prompt stress and post-partum mental problems which could progress into Post-Traumatic Stress Disorder (PTSD), post-partum depression, anxiety and sexual disorder (Angelini et al., 2018; Hardee et al., 2012). Angelini et al. (2019), Angelini et al. (2018) and Meaney et al. (2016) corroborated that pregnancy and its related complications trigger psychological problems long after delivery. von Rosen et al. (2021) further describe the psychological experiences of MNM patients as being generally poor.

It is further revealed that post-partum MNM experience triggers depression among women (Angelini et al. 2018). Depression is found to be higher (38%) among women living with the impact of near-miss complications, than those with uncomplicated obstetric events. According to Assarag et al. (2015) and Filippi et al. (2018), women who experience severe obstetric complications and perinatal loss have a greater possibility of depression and poor health.

Anxiety levels among MNM patients also increase due to their continuous thoughts and perception of death, as the ordeal reminds them of getting close to death. Studies by Furuta et al. (2014) revealed that women experienced increasing degrees of anxiety and depression, leading to ruminative thoughts, continuous blame of themselves by associating maternal morbidity with a health mistake they did during pregnancy.

Emotional Experiences of MNM Patients

The emotional experiences of MNM patients may include fear, frustration, unhappiness, a sense of hopelessness and incompleteness; feelings of blame, isolation, anxiety, alarm, and discouragement (Noryahati et al., 2017). Some of these experiences are feelings of the transience of life and the inevitability of death**.** In a study conducted in Burkina Faso, women expressed feelings of death as they went through procedures. For some of them, experiencing MNM in sub-Saharan Africa puts the woman's life in danger until 40 days after delivery is over (Storeng et al., 2010).

Nohayati et al. (2017) assigned reasons for the fears of the women as fear of death about themselves and their babies; uncertainty over the peri-natal outcomes especially for pre-term cases; the likelihood of undergoing surgery and life-saving procedures including laparotomy and ICU admission, which might threaten their chances of conceiving in the future. A study in Ghana revealed fear of potential or actual loss of babies and normality, unhappiness, hopelessness, discouragement and frustration as the emotional experiences of MNM patients (Tuncalp et al., 2012a.)

The emotional feelings from the MNM patients were not entirely negative as some of them in the face of having thoughts of death indicated that they were not ready to succumb to it (Noryahati et al., 2017). The experiences also gave opportunities for inner growth and an opportunity for learning and getting closer to God (Furuta et al., 2014; Silva et al., 2016).

Financial/Economic Experiences of MNM Patients

The economic or financial conditions of MNM patients and sometimes their families may involve the loss of job, low income and high hospital bills arising from cost of medicines and treatment due to the disruption to the physical, social and emotional well-being of patients (Storeng et al., 2010). It is also a result of a weak health delivery system and insufficient financial protection for the vulnerable including MNM patients in low and middle-income settings, making expenditures on the management of MNM cases, usually catastrophic (Juma et al., 2021).

At the personal level, MNM patients may incur cost, accumulate debt and lose business capital. von Rosen et al. (2021) and Silva et al. (2016) found that MNM deliveries are more likely at increasing hospital bill than normal deliveries. It was also found that MNM patients suffer temporary or permanent unemployment due to difficulties such as being sick in bed.

The family suffers from the expensive cost of financing some emergency medical procedures of their patients, which could be ten or twenty times higher than the cost of normal deliveries. Von Rosen et al. (2021) indicated that families of MNM patients are likely to pay double the hospital expenditures compared with mothers who did not have such complications. This pressure leads to the selling of personal effects such as bicycles to help balance the family budget. Though the problems are many, some mothers consider their situation as an opportunity to redefine their life courses and reorganise themselves in order to provide for their needs and that of their new babies (Storeng, et al., 2010).

Coping Strategies of MNM Patients

Coping, as originated by Lazarus and Folkman (1984), refers to the responses to stress. Thus, coping strategies are the mechanisms (choices and behaviours) mobilised to deal with internal and external challenges that bring about stress. Patients, depending on their condition, adopt a certain coping strategy. Surgical patients engage in strategies such as conversation with medical staff (Aust et al., 2016); obstetric fistula patients withdraw from the community and enhance their personal hygiene (Mohamed et al. 2018); and infertile male patients cope by adopting problem-solving strategies (Szatmári et al., 2021). On the coping strategies by MNM patients, the majority of the women adopt religious and faith stance which provide them a sense of hope and meaning for fostering a positive view of their challenges. Nohayati et al. (2017)

revealed that between 44% to 90% of women who suffered MNM, relied on religious coping strategies.

Additionally, some MNM patients cope with their financial challenges by delaying treatment in order to defer payment of huge bills until they are solvent. In the rural areas, some women continue their normal economic activities in order to please their husbands and co-wives at the expense of their health (Storeng et al. 2013). Thus, different situations determine the appropriate coping strategies for addressing them.

Experiences of PCGs of MNM Patients

Informal caregiving entails caregiving that is less structured and also caregiving that involves unpaid services (Schulz & Sherwood, 2008). It occurs more within a family setting with the active involvement of parents, grandparents, siblings, children, cousins, spouses, in-laws and other relatives among others (Olagundoye & Alugo, 2018). Family caregivers, especially, assist with household chores, self-care activities, providing emotional and social help, health assistance and activism, among others (Doekhie et al., 2018; Schulz, 2016).

Physical Experiences of PCGs

The physical experiences of PCGs encompass symptoms of distress such as headaches, and joint and muscle pain (Nuhu, et al. 2010). It also includes musculoskeletal injuries such as backache, muscle strain and bruises, especially for caregivers of old and non-ambulatory persons (Schulz & Eden, 2016). Fatigue is another physical experience of caregivers of chronically ill persons (Kang et al. 2020). Additionally, they may have insomnia and altered appetite, among others (Given et al. 2012).

Psychological/Emotional Experiences of PCGs

Given et al. (2012) reported issues such as anxiety, worry and depression among the psychological and emotional experiences of PCGs. Others are a sense of helplessness, guilt, isolation, fear and vulnerability, and less self-satisfaction as well as a feeling of being burdened (Godhead & McDonald, 2007; Mahmoud et al., 2021). In addition, they face stigma and embarrassment (Ae-Ngibise et al., 2015). Due to these experiences, they are sometimes referred to as hidden and forgotten patients (Lambert, et al., 2021; Roche, 2009).

Spouses of MNM patients experience fears and worries, financial loss, death of newborns (stillbirths or neonatal deaths), and loss of time due to the many hours spent in the hospital during the patients' hospitalization (Mbalinda et al., 2015).

Despite the negative emotional and psychological experiences, some positive psychological/emotional experiences are patients having a closer relationship with others such as children and partners, a better appreciation and elucidation of priorities of life, improved faith and empathy and healthier habits on the part of caregivers (Hensler et al., 2013; Willard et al., 2016).

Social Experiences of PCGs

The caregivers' social experiences comprise changes in their relationship with family, spouses, friends and other social networks due to time constraint and reduced strength which may lead to confinement and isolation (Schulz, 2016). The caregivers may also lose contact with others due to their confined role as caregivers for a reasonably long time (Godhead & McDonald., 2007). It affects their social life as the time to go out for interacting with friends is consumed by caring for their patients (Ae-Ngibise et al., 2015). Their experiences are summed up as disempowerment, alienation and solitude (Mbalinda et al., 2015).

Notwithstanding the negative social experiences, the positive social experiences are that a number of PCGs receive appreciation from patients; family bond is strengthened; resilience is built, and a sense of self-esteem, achievement, personal development and mastery is created (Irfan et al., 2017; Schulz, 2016).

Economic/Financial Experiences of PCGs

The economic or financial implications of caregiving as acknowledged by Maresova et al. (2020), manifest in the form of direct costs such as expenditures on medicines and treatment related services and indirect costs such as reduced productivity as a result of a long absence from work (Nortey et al., 2017). Spouses of MNM patients, experience financial losses and disruption to their livelihoods (Mbalinda et al. 2015).

The high expenditures from payment of medical bills, and provision of food and accommodation, among others, compel some caregivers to raise money by selling some personal effects, undertaking menial jobs and depending on remittances from distant relatives to help take care of the sick (Godhead & McDonald, 2007).

Coping Strategies of PCGs

Coping strategies are needed by caregivers for the handling of long-term consequences related to the burden of care (Olagundoye & Alugo, 2018). Some of the coping strategies adopted by patients are having faith in God, receiving support from family and friends, acceptance and encouragement, controlling expenses on some activities and taking some time off (Agyemang-Duah et al., 2020). The religious or spiritual aspect of coping was affirmed by Kyei-Arthur & Cudjoe (2021) who indicated that caregivers relied on spirituality and perseverance to cope with their issues.

Experiences of HCWs with MNM Patients

The narratives of healthcare providers such as doctors (obstetrician gynecologists) midwives, anaesthetists/anaesthesiologists, general nurses and critical nurses provide another perspective to MNM issues including the experiences of patients.

Physically, HCWs experience pain when they cause medical errors. In addition, they suffer burnout spending long hours on patients with obstetric emergencies (Odonkor & Frimpong, 2020). With respect to their mental health, Tracy et al (2020) indicated that health staff usually suffer moral injury, which refers to dealing with grave demands for which you are ill-prepared. This may produce a sense of guilt or shame and progress into depression and other mental conditions. The incidence of SMO could induce some mental condition. According to Wahlberg, et al (2017), 84% and 71% of obstetricians and midwives, respectively reported witnessing at least one severe maternal incident. Whereas 15% of both professionals reported partial PTSD, 7% and 5% of obstetricians and midwives, respectively, met the PTSD criteria. Emotionally, Elmir et al. (2017) in the meta-ethnographic synthesis of nurses' and midwives' experiences of adverse labour and birth events, revealed that whereas some felt traumatised by the experience, others viewed the experience as an opportunity to develop skills for emergency response.

It was observed that despite the traumatic consequences from handling conditions such as COVID-19 or MNM (Tracy et al., 2020), there is currently no practical or evidence-based protocol exists to assist both staff and providers with such needs.

Some positive experiences of HCWs were web portal communication, improved patient engagement and cost-effectiveness (Laukka et al., 2020). It is also observed that HCWs build resilience to provide care amidst the mounting challenges at the height of COVID-19 (Liu et al., 2020).

Social support for providers experiencing adverse effects of formal caregiving from leaders and peers is necessary for lowering job burden and health conditions of providers (Mikkola et al., 2018) and mediating the high burnout among providers (Ruisoto et al., 2021). Listening to music, applying humour, getting support from friends/relatives, burrowing, knowledge sharing and multitasking also help caregivers to cope (Boateng et al., 2021; Bawontuo et al., 2021).

Even though the review shows some of the experiences of HCWs including resource constraints, there is a general paucity of information on the experiences of HCWs with MNM patients in Ghana.

Perspectives of MNM Patients, PCGs and HCWS on Quality of Care

Characteristics of quality of care surmised from a number of studies are availability, accessibility, acceptability, appropriateness, affordability, technical competence, timeliness, privacy, confidentiality, empathy, attentiveness, caring, responsiveness, accountability, accuracy, reliability, comprehensiveness, continuity, equity, environment, amenities and facilities. Others are educational provisions, efficacy, effectiveness, efficiency, provision of safety and security, reduction of mortality and morbidity, improvement in quality of life and patient’s health status, and lastly patient satisfaction (Mosadeghrad, 2012).

Stakeholders of health whose reviews on quality shape health delivery, may have different interests in the various aspects of the quality of care, which reflects in their perspectives, hence, some studies consider multiple perspectives on quality of care to comprehensive feedback (Williams et al, 2015).

Perspectives of MNM patients on quality of care, have been observed to be both positive and negative and relate to factors such as competence, promptness of care, provider and client communication, human resource adequacy and equipment among others (Norhayati et al., 2017). Among the positive remarks concerning quality care are the competent diagnosing of patients and provision of quality care, especially at ICU; provision of prompt care for emergencies; expression of empathy, human resource adequacy, and good transportation system. Stal et al. (2015) also reported that providers such as the midwives and anesthesiologists are friendly, cooperative and empathetic at the labour ward and theatre.

On the negative perception on quality of care, Noryahati et al. (2017) revealed that some women complained about delays, improper diagnoses and poor management of emergencies among others. Similarly, one-third of respondents in a study by Stal et al. (2015) reported the lack of proper care, rudeness and threat from some providers. Further, MNM patients in Tehran indicated that they experienced poor client-professional relationship, including complaints of absence of information about their complications as well as discrimination and mistreatment (Mohammaddi et al., 2017). Other negative perceptions of quality healthcare are medical errors, lack of support/negligence, communication problems and mistrust of the facility (Torkmannejad Sabsevari et al. 2021). These negative issues on quality care bring to fore the subject of conformance of staff to the code of conduct, code of ethics and patients charter of the Ghana Health Service.

The perspective of PCGs on quality of care is influenced by their special role in getting patients to health facilities for admission and treatment. It was observed that spouses of MNM patients, in particular, show a great deal of appreciation to healthcare providers for informing them about their partners' welfare, even though their understanding of some technical issues is problematic (Mbalinda, et al., 2015). On the contrary, some spouses complained about inadequate communication on prognosis of care for their patients. Other issues they complained about are passiveness, pride and unfriendliness of some healthcare providers.

HCWs' perspective on quality of care among others, relate to resource constraints for optimal delivery of obstetric care. Munabi-Babigumira et al. (2017) reported the concerns of Skilled Birth Attendants (SBA) on factors that influence the provision of intrapartum and postpartum care in low and middle-income countries as follows: increased workload, poor supervision; lack of equipment, drugs and other supplies and unavailability of blood among others. The resource constraint was corroborated by healthcare providers' report on the management of Post-Partum Hemorrhage (PPH) which is hampered by irregular supplies, inconsistencies in the availability of blood for transfusion, and ineffective referral system and leadership support, among others (Pembe et al., 2019).

Siaw-Frimpong et al. (2021) revealed that there are 113 adult and 36 pediatric ICU beds for a population of over 30 million in Ghana, that is 1/2 ICU beds per 100,000 persons. They also mentioned the low number of intensivists to man the ICUs. According to Amin et al. (2016), the non-existence of ICU facilities and shortage of essential medicines lead to organ failure and dysfunction causing avoidable disability and deaths. Again, the low numbers of some critical health staff due to disproportionate distribution also hamper effective healthcare delivery (Asamani et al. 2021).

Support Systems Available to MNM Patients

Social support is the extent to which the needs of a person are met by significant others (Kaplan et al. 1977). The importance of support for MNM patients is underscored by Kaye et al. (2014) and Souza et al. (2009) who indicated that support is critical for MNM patients to cope with the physical, social, mental, emotional and economic problems they face.

The support system for MNM patients is described by Abdollahpour et al. (2019) as the various assistance offered by natural sources such as family members, friends, acquaintances and spouses for women suffering from MNM events. Bellhouse et al. (2018) added that spouses of women who suffered miscarriage were the most important source of support. The formal sources of support are health care providers and community organization (Li et al. 2021).

The forms of social support are emotional, physical, instrumental, instructive and evaluative. Emotional support involves care, love and understanding for the plight of the people; Physical support covers routine activities such as preparing meals, ensuring hygiene and cleanliness, and providing financial aid; instrumental support deals with commiserating and understanding, which is perceived in a positive light; evaluative support encompasses the situational analysis and proffering appropriate recommendations, advice, encouragement by health professionals; and informative support is the communication of content and information concerning illness and recovery (King et al. 2006).

Maternal counselling and psycho-support helped to reduce the impact of some of the long-term emotional problems such as anxiety, depression, flashbacks, and isolation among others, which are associated with post-MNM (Abdollahpour et al., 2019). Some areas of counselling and psycho-social support for women with MNM episodes as suggested by Abdollahpour et al. 2019); Cram et al. (2019) are breastfeeding, sexual relations, marital issues and motherhood.

Support for SAMM or MNM patients from family members including spouses is key in promoting coping and recovery to normal life patterns after traumatic experiences. They provide financial, material and emotional support for women with obstetric complications (Mbalinda et al. 2015). Some spouses take some time off their work schedule to provide company to their wives in the house, surgery theatre and wards and even hospital wards; also assist in taking care of the babies (Cram et al., 2019; Herklots et al., 2020)

Mothers who engage the services of midwives to pay regular visits after discharge, and the support from healthcare providers, who communicated clearly what was expected of the patient to enable her cope and recover in time (Hinton et al. (2015) were invaluable.

In a rare case, Mbalinda et al. (2015) reported how some spouses described the contribution of social networks such as the church in providing support to women with MNM experience. In this particular case, they attributed the support from the women group in the church who paid a weekly visit to encourage them.

Even though both the natural and formal sources of caregivers are involved in providing the aforementioned forms of support, it is skewed mainly towards the natural sources. Nonetheless, the formal sources may provide some support to patients such as fee exemption or waiver, and invitation of philanthropists to support distressed patients. It was revealed that there seems to be no specific support system for MNM patients in Ghana.

Theoretical Models

The Three Delay Model

The Three Delay Model propounded by Thaddeus & Maine (1994) establishes three delays accounting for maternal deaths or disability, including MNM due to obstetric complications. It was originally postulated to assess factors responsible for the timeliness of care in low-income settings (Shah et al. 2020).

The 1st delay which occurs at the household or family level concerns delays in seeking care. LA et al. (2011), identified three stages of the delay in seeking care: delay in recognising the problem, making decisions based on prospects of seeking care and lastly departing from home or place of emergency. Socio-economic and demographic factors such as economic status, distance from natal home to facility, educational attainment, women’s independence and recognition of health condition influence the delay. This has been found to contribute to a fair proportion of women reaching hospitals in a poor clinical state (Pacagnella et al. 2012).

The 2nd delay is the delay in reaching the health facility due to community-based factors such as the spread of health facilities, availability and cost of transportation and nature of roads. The residential status of a woman, whether rural or urban is a considered factor in the 2nd delay. Whereas evidence indicates that staying in rural or remote areas contributes to 2nd delays, the urban dwellers, especially the urban poor, are equally at risk due to cost and poverty. The referral system also contributes to this type of delay, as the proximity between referral centres and lower health facilities; and sometimes the number of referrals made before the woman receives the needed care is crucial (Assefa & Berhane, 2020). The 1st and 2nd delays were considered to contribute to a greater proportion of the three delays (Mgawadere et al. 2017).

The 3rd delay entails the time interval between the arrival of women at the facility and the onset of care; availability of human resource and expertise, equipment and essential medicines and consumables/supplies such as blood and blood products (Pacagnella et al. 2014). Any of these three delays can potentially catalyse the occurrence of MM or MNM.

Even though the model was originally postulated to explain mainly the causes of MM, it is also useful in MNM studies as some MNM studies by authors such as Assarag et al. (2015); Benimana et al. (2018); Soma-Pillay & Pattinson, (2016) have relied on the model in making a case for the impact of delays on the occurrence of MNM. The three-delay model is relevant for assessing the respective roles of the household, community and facility in examining the obstetric barriers in low and middle-income countries (Actis et al. 2020). It is also a relevant tool for assessing the obstacles to obstetric care from the demand and providers' side of the pathway (Sk et al, 2019).

The model is, however, criticised for its simplicity, one-dimensionality and sequential structure and, therefore, limited in use for prompting preventive measures towards addressing MM (Actis et al. 2020). The absence of any information on delays in supporting women after hospital care could have contributed to the suggestion for the fourth delay, which is the delay in the community's accountability and responsibility in providing resources and infrastructure for supporting women (McDonald et al. 2018).

Since delays have been identified as one of the contributory factors of MNM by Assarag et al. (2015), the model will help to assess the effectiveness of solutions aimed at addressing the control of the phenomenon as well as the community's involvement in the management of the experiences of MNM patients.

Concept of Biographical Disruption

The concept of biographical disruption by Bury in 1982 (Locock & Ziebland, 2015) relied on Giddens's notion of critical situation and how it disrupts the social structure of life and its consequences on biography (Pranka, 2018). The concept was initially applied to rheumatoid arthritis but has been extended to other conditions such as cancer and hepatitis B among others (Nasr et al., 2016; Tembo, 2017).

The concept describes a significant and sudden occurrence in a person's normal course of life that principally affects the direction and future plans of the individual (Pranka, 2018). Mostly the disruption commences from the very moment the individual or the health system identifies the signs or symptoms of the condition (Binka et al. 2017). It describes the effect of life-threatening chronic health conditions in breaking the social and cultural systems and serving as a turning point in the individual's life. In other words, the routine life at home and work is disturbed by the event (Locock & Ziebland, 2015).

Bury (1982) indicated that the mobilisation of resources in response to the disruption to the normal way of life is embodied in the concept to help deal with physical disabilities and attendant limitations and embarrassment on the family and other social relationships. Thus, patients are required to develop an array of coping strategies through the marshalling of internal resources as well as community networks such as church members and fellow patients (Bury, 1982).

The concept is considered the most important interpretative approach for understanding long-term conditions and presents an alternative model to study the trajectory of long-term ill conditions. It also explains the new experience of chronic disease as a product of the physical burden of the disease within the social context and how it is perceived by both the victim and others (Nasr et al. 2016). It focuses on broad changes in the functional, social relationships, mobilisation and availability of resources for adaptation to enhance resumption to normal life. Further, it can predict the immediate and long-term biographical disruption including how functional and mental health breakdown afflict persons who suffer chronic conditions. It also highlights the need for a multi-disciplinary approach in addressing and alleviating causes as well as prevention of factors that induce long term biographical disruption (Tembo, 2017).

It is however, criticised for being a thoughtless model of the self. Thus, it has been challenged for its over-emphasis on a cognitive view of the self (Reeve, 2010; Williams & Bendelow, 1998). Charmaz (2002) has also critically argued against the over-reliance on the narrative in understanding chronic illness.

Nonetheless, it is relevant for application to MNM studies, especially on the experiences of women who suffer from the condition and how their everyday lives get disrupted due to the consequences of the phenomenon; and the strategies required for addressing them, is apt for ensuring the resumption of normality of life among such women.

Social Exchange Theory

Social exchange theory examines the marital responsibilities of spouses and familial relationships to one another (Miller & Bermudez, 2004). It relies on principles from behavioural psychology, sociology and classical economics to explain the development, maintenance and decay of exchange relationships, particularly within families. The theory draws a balance between the rewards and costs that relationships bring to all parties involved (Lawler, 2001).

Social exchange theory sees human relationships to be formed and consolidated by the use of subjective cost-benefit analysis and evaluation of the alternatives (Nakonezny & Denton, 2008) a situational analysis of the linkage between family, friends and healthcare providers, indicate that the links provide characteristics to intended child care quality and psychological well-being of the mother. When estimating the cost component of social exchange theory, Nakonezny & Denton (2008) opined that families, friends, community and care providers must be prepared for planned and emergency costs associated with the relationship. Both parties in a social exchange take responsibility and also depend on each other.

The literature shows that for families to receive the high rewards minus the costs associated with safe pregnancy and birth outcomes, they must develop solidarity with the pregnant woman (Nakonezny & Denton, 2008). Furthermore, there is much evidence to suggest that relationships between pregnant women and nurses during antenatal care in these locations may also be basically compromised in their own right and also because they are influenced by the complex rural context of marital arrangements and engagements (Moyer et al., 2014; Sumankuuro et al., 2017).

Though this sounds ideal in theory, the value of the theory must be questioned in the sub-Saharan African context. In the traditional communities, especially rural areas, women are married to families and communities, not individuals; their healthcare is, therefore, the responsibility of families and communities (Ganle et al., 2015; Odame, 2014). Thus, the theory is limited in situations where families and communities do not fulfil their responsibilities of caring for the expectant mother for a diverse range of reasons, and may, therefore, derive little reward from the marital union (Nakonezny & Denton, 2008). Social exchange theory also lacks information on the various exchange rules (Cook et al., 2013)

Despite these weaknesses, the theory is relevant for this study as it brings to perspective the costs and benefits of the spousal and familiar relationship and how this affects the understanding of spouses, family members and healthcare providers in offering support for MNM patients to help deal with the various disruptions to their lives, thereby ensure regaining of normality. The cost-benefit analysis in a relationship will also help explain the motivation for formal and informal caregivers, as well as the community, to provide resources for meeting the needs of MNM patients.

Donabedian Quality of Care Model

Quality of care is the degree to which health services for individuals and population increase the likelihood of desired outcomes. Among the indicators of quality are effectiveness, timeliness, accessibility, environment, drugs, workforces and facilities (WHO, 2018; Mosadeghrad, 2012).

Among the many models of measuring quality of care is the Donabedian's quality of care model, which was introduced in 1980s in his book, "An Introduction to quality assurance in Healthcare" (Donabedian, 2002). It consists of three dimensions of health care, namely structure/inputs, process and outcomes in a linear and progressive pattern and a possible causal relationship between them.

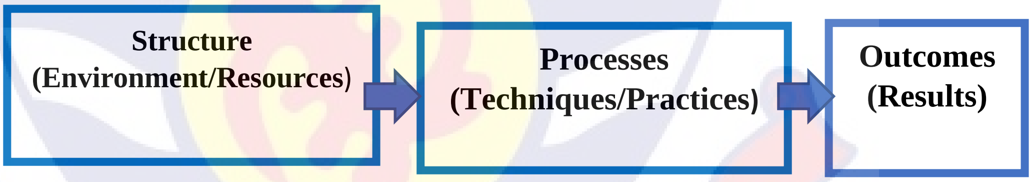

Figure 2: Donabedian's Quality Care Model

Source: Lopoto (2020)

The structure in the model refers to the conditions and facilities with and in which healthcare delivery takes place. Examples of such facilities and conditions are human resource (staff structure and qualification), physical equipment, administrative, and reward system. The process in the model describes the operations of caregiving and utilisation of the structures of healthcare to deliver services and it includes access of patients, investigations, diagnoses, treatments and discharge/referrals through interaction among HCWs, and between HCWs and patients. It is considered as most direct and effective measure of quality of care even though it is more difficult to measure. Outcome which is the last component in the model, is the consequence of the interaction between the structure and process. It can also be construed as the effect of care and may include clinical outcomes such as recovery and restoration of functions, survival, quality of life and satisfaction of service (Donabedian, 1988; 2005).

The model is suitable for application to different situations and has been used in many studies on perception of quality of healthcare (Srivastava, et al, 2015) even though it is only feasible when the assumption of a predetermined relationship between the three aforementioned components is recognised, with the preceding component linearly influencing the succeeding one. For example, structure influences process, and process determines the outcome.

It is however not a straitjacket of a causal relationship between components in the model. For example, the outcome component is not always affected directly by the process. Thus, there could also be a direct link between the structure and outcome. This underscores the arbitrariness of the model. Hence, Williamson modified the model by dividing the process component into two segments, the diagnostic and therapeutic activities/investigations leading to either diagnostic and therapeutic outcomes (Voyce, 2015).

Notwithstanding the weaknesses of the model, it is relevant to the study as it provides the basis for assessing the quality of care for MNM patients at health facilities and how that affect their recovery and resumption to normal life.

Buffer Theory of Social Support

The buffer theory of social support by Alloway and Babington (1987) indicates that social support moderates the effect of psychological dynamics arising from ill-health. The theory explains how social support systems prolong persons' longevity and improve health and wellness. For instance, there is a positive relationship between a strong social support system and treatment outcomes of some chronic conditions (Adam & Koranteng, 2020). It can also buffer against depression, stress and anxiety (Asante, 2012).

Expatiating on the role of social support to the well-being of persons with ill-health, Cohen and Wills (1985) indicated that on one hand, social support impacts on well-being only if the persons are under stress. This is referred to as buffering model because the social support buffers or shields persons from the potentially pathogenic influence of stress events. He argued, however, that social resources have a positive impact on wellbeing, whether or not stress is present.

This support mostly comes in the form of psychological and material resources received from spouses, friends and family members; and those who have such support experience better health than those with less amount of social contacts (Broadhead et al., 1983; Leavy, 1983). Fleming & Baum's (1986) research on the physical and psychological effects have posited that friends and confidants have positive effects on coping abilities for stress and vulnerabilities of a person.

Furthermore, large social network offers persons with regular positive experience and a set of stable and socially accepted roles in the community. Again, social network support could affect physical and psychological health outcomes through emotionally-induced effects on the immune functioning system (Aslund et al. 2014). The support leads to the recognition of self-worth and, therefore, the integration of social work may help one to avoid negative experiences such as economic and legal problems. It is also identified as one of the facilitating factors for assisting individuals to either return to their previous way of life or come to terms with their current conditions (King et al. 2006).

The theory is critiqued because the meaning of buffering is not clear and its role in social support is inconsistent, which might be due to differences in methodologies of the various studies (Alloway & Babington, 1987).

However, the relevance of the theory suggests the capacity of social support to ameliorate the consequences of MNM on patients. It also expains the role of significant others such as PCGs and HCWs who serve as agents of social support to help with the recovery process of patients.

Considering the multifaceted nature of the scope of the study despite its single focus, the study is driven by these five theoretical models: the three-delay model, concept of biographical disruption, social exchange theory, quality of care model and buffer theory of social support. Notwithstanding the shortcomings of the theories, they explain the disruptive effect of experiences of MNM to patients, PCGs and to some extent the HCWs, and the effect of support to patients by PCGs, HCWs and significant others based on the social contract between them.

Discussion and Conclusions

The chapter reviewed conceptual, empirical and theoretical models as well as empirical evidence relating to the experiences of MNM patients and their PCGs, experiences of HCWs, perspectives of MNM patients, their PCGs and HCWs, and the support systems available to MNM patients.

The lived experiences of women who have suffered MNM is traced from the direct (pre-eclampsia, eclampsia, post-partum haemorrhage, maternal sepsis and uterine rupture) and indirect (lack of antenatal care, low education, maternal age, employment status, gravidity, parity, marital status, residence, previous caesarean section and referral system) factors. However, the issue is better illuminated by the concept of illness (Helman, 2007; Skrzpek, 2014). The concept explains how a health condition such as MNM directly affects women, their families and the community. This imposes an obligation on family members including spouses of patients, healthcare providers and the community to adjust their social and economic systems to help improve the wellbeing of such women. The study, therefore, assesses the effects of MNM on women and how it affects the experiences of their PCGs as well as the experiences of HCWs with MNM patients.

The empirical review showed that the experiences of MNM patients, PCGs and HCWs are diverse and could be categorised into physical, social, economic, psychological and emotional (Juma et al., 2021; Norhayati et al., 2017; von Rosen et al., 2021; Storeng et al., 2010 & Tuncalp et al., 2012b). These experiences may cause various forms of disruption such as physical, emotional, psychological, social and economic/financial (Bury, 1982) to the lives of patients as well as PCGs which may require adjustment through the adoption of various coping strategies including leveraging on the available support systems to mitigate the effects of the phenomenon (Kaye et al., 2014; Souza et al., 2009). The study will, therefore, explore how the biography of

MNM patients and PCGs are disrupted by the phenomenon and how it affects the experiences of their PCGs as well as the HCWs who are for the patients.

In contrast to the negative experiences and their disruptive effects, Henesler et al. (2013) and Willard et al. (2016) showed that there are some positive experiences of caregiving such as building a better bond with patients, improved faith and consciousness of priorities among others. The sense of responsibility of PCGs explains their commitment to supporting and creating a buffer for their patients (Alloway & Babington, 1987). The important roles PCGs perform in the management of the experiences of MNM patients, is what this study seeks to explore in the Ghanaian context to ascertain any similarities and differences with studies in other contexts.

Additionally, factors such as resource constraints at the workplace as well as social contract between HCWs and patients will be further investigated to help understand the Ghanaian perspective on the subject (Albei-ty et al., 2020; Emir et al., 2017; Odonkor & Frimpong, 2020; Tracy et al., 2020; Walberg et al., 2017).

The perspectives of stakeholders (MNM patients, PCGs and HCWs) on quality of care can reveal the roles of recipients and providers of care as evaluators of quality care from different standpoints across the three measures of Donabedian model of care.

CHAPTER THREE

METHODS OF DATA COLLECTION AND ANALYSIS

The chapter provides a description of the research paradigm and study design, the study area, the target population and respondents, sampling procedure, sources of data, and data collection instruments and procedures. Other issues considered were the procedure used in the recruitment and training of field assistants, the piloting process, the fieldwork activities and data processing and management. The chapter ends with a summary.

Research Philosophy

The study used an interpretivist philosophy to understand the subjective experiences of MNM patients. The philosophy, which emphasises analysis of issues within the social context and subjective interpretation of responses of respondents (Bhattacherjee, 2012), was appropriate for exploring the diversity of experiences of women from the different socio-cultural milieu. Though the subjective nature of the paradigm lends itself to bias and limited generalisation of the findings, the application of the tenets of trustworthiness in the data collection and analysis helps to ensure an appreciable level of validity

Research Design

Phenomenological study design is an attempt to understand people's perceptions, perspectives and understanding of a particular phenomenon. It was adopted above other interpretivist designs such as ethnographic, grounded theory and case studies as it has the capacity to provide understanding on the personal experiences of people (Peat, et al., 2019; Smith & Osborn, 2015) as well as reveal and highlight the implications of rare phenomenon such as MNM (Zimmermann, 2017). It is flexible and gives more room during an interview to explore the nuances of the experiences of other people (Jacobs & Furgerson, 2012; Miles et al., 2014). However, this design has some weaknesses, such as bias (Creswell, 2014); time-consuming and labour-dependent (Creswell, 2014) and immense data collection whose management could be a challenge (Patton, 2002). These weaknesses are mediated with triangulation and application of the tenets of trustworthiness for bias; a month was used for the interviews by a research team of three and through outsourcing of transcription, the exercise was completed within a reasonable period. The design was therefore employed to obtain data from persons with similar experiences and explore how they experienced the same condition.

The qualitative approach using mostly face-to-face interview with a semi-structured interview guide ensured the collection of vital information that addresses the objectives. The interview process enhanced personal contact and helped to obtain some details of the interaction while the face-to-face helped to pick the non-verbal cues. It was however, time-consuming and some respondents dropped out in the course of the interviews. These were accounted for by having a three-member team and tasks assigned according to the strengths of team members, while where possible replacement of dropouts was done from the list provided by the facility.

The choice of the philosophy, design and approach was inspired by similar MNM studies by Abdollahpour et al. (2020) and Norhayati et al (2017).

Study Area

The study was conducted at the Cape Coast Teaching Hospital (CCTH) in the Central Region of Ghana. CCTH is one of the five Teaching Hospitals under the Ministry of Health and currently has a bed capacity of 400. It was established in August, 1998 as the Central Regional Hospital and became a Teaching Hospital on 21st March, 2014 following the establishment of the University of Cape Coast School of Medical Sciences (UCCSMS). It is located at Northern part of Cape Coast and shares boundaries with Abura, Pedu Estate and 4th Ridge, Nkanfoa, and Abura and Pedu Estate at the north, south, east and west, respectively.

It serves as the lead referral facility for the Central and Western regions and deals with complicated and rare maternal phenomenon such as MNM. In 2021, the percentage of maternal admission due to external referrals increased from 21.20% in 2020 to 23% in 2021. From 2017 to 2021, the Facility had pregnancy-related complications as the topmost cause of admissions. In 2021, it constituted 4.1% of the total admissions (CCTH Annual Performance Report, 2021). CCTH also recorded 28, 26 and 32 maternal deaths in 2019, 2020 and 2021, respectively. The 2021 figure accounted for 40.5% of the total facility-based maternal deaths (79) in the Central Region for the same period (DHIMS 2, 2021). The 2021 and 2020 CCTH Annual Performance Reports cites hypertensive disorders (40.6%), and haemorrhage (46.2%) and hypertensive disorders (26.9%) as the leading causes of institutional maternal mortality (CCTH Annual Performance Reports, 2021 and 2020).

Besides, the facility has a number of qualified and experienced healthcare providers such as consultants, senior specialists, specialists, medical officers, midwives, anaesthetists and critical care nurses (Tables 1&2). Their role in the management of MNM cases in the facility makes them suitable for providing responses to questions on MNM issues including their views on the experiences of MNM patients.

Above all, the facility was selected for the study because it coincided with COVID-19 pandemic, when movement from one place to another was limited. Thus, the pandemic, and CCTH's geographical proximity informed the choice.

Table 1: Number and Category of Staff at CCTH

CATEGORY OF STAFF	2021	%
Doctors	299	14.7
Radiographers	6	0.3
Professional / Enrolled Nurses	855	42.1
Midwives	199	9.8
Pharmacist & Pharm Tech	47	2.3
Accountants & Finance Officers	27	1.3
Laboratory & Lab Tech	46	2.3
Health Services Administrators	13	0.6
Optometrists	6	0.3
Other GOG Pay Roll Staff	486	23.9
CCTH Pay Roll Staff	49	2.4
TOTAL STAFF	**2,033**	**100.00%**

Source: CCTH Annual Performance Report, (2021)

Table 2: Number of Key Consultants/Specialists

CADRE	NUMBER	%
Obstetrician Gynaecologist	8	16.3
Ophthalmologist	3	6.1
Internal Medicine specialist	6	12.2
Trauma Orthopaedic specialist	4	8.2
Urologist	2	4.1
General and other Surgeon	20	40.8
Radiologist	3	6.1
Doctor Anaesthetist	1	2.0
Maxillofacial	2	4.1
Grand Total	**48**	**100**

Source: CCTH Annual Performance Report (2021)

Study Population

The study population consisted of women who had experienced MNM from December 2019 to December, 2020 at CCTH per the WHO's identification criteria (Say et al, 2009) and their PCGs, and HCWs such as Obstetrician Gynaecologists and Midwives who have had experiences with the management of MNM cases.

Inclusion Criteria

The inclusion criteria for enrolment as respondents of the study entailed: (i) women who as a result of pregnancy or delivery up to 42 days, experienced any of the five PLTC: (a) pre-eclampsia, eclampsia, sepsis, post-partum haemorrhage and uterine rupture; (b) women who as a result of pregnancy or delivery up to 42 days received interventions such as blood transfusion, laparotomy and ICU admission (WHO checklist; Appendix A). All these women with one or more of the above-mentioned experiences should have also been on admission or discharged within the last 12 months preceding the study.

Others were the PCGs who had been with MNM patients within the last 12 months of the occurrence of the event; and HCWs (Obstetrician Gynaecologists, Midwives, General Nurses, Anaesthetists and Critical Care Nurses) who have had experiences with MNM patients were included.

Exclusion Criteria

The exclusion criteria covered women who were pregnant or delivered up to 42 days and did not suffer any of these PLTCs; pre-eclampsia, eclampsia, sepsis, post-partum haemorrhage and uterine rupture. Also excluded were pregnant or postpartum mothers for up to 42 days who did not receive any intervention such as blood transfusion, laparotomy and ICU admission. Further excluded, were pregnant or postpartum mothers up 42 days who may have experienced any organ dysfunction such as cardiovascular, renal, hepatic, respiratory, coagulation, neurologic and uterine organ failures. Above all, all those who may have one or more of the above experiences but have been discharged from the facility for more than 12 months prior to the conduct of the study were excluded.

Non-caregivers, irrespective of their family relations with the patient, were not enrolled. Also, PCGs who had not stayed continuously with MNM patients within 12 months prior to the commencement of data collection were excluded. HCWs who are not obstetrician gynaecologists, midwives, general nurses, anaesthetists, and critical care nurses and those who did not have experiences with MNM patients were excluded.

Sample and Sampling Procedure

Purposive sampling method was adopted to recruit three categories of respondents for the study. These were MNM patients, PCGs of the selected MNM patients and HCWs. The recommended sample size for phenomenological study by Creswell (1998) and Morse (1994) and the concept of saturation by Morse (2015) influenced the sample size for MNM patients who were the main focus of the study. Based on Creswell's (1998) and Morse's (1994) recommendations that a sample size ranging from five to twenty-five and at least six, respectively, is considered appropriate for phenomenological studies; and considering the fact that the phenomenon is rare as evidenced by the occurrence of only 32 institutional maternal deaths at a teaching hospital such as CCTH in 2021, a total of 35 respondents were selected with the break down as follows: 15 MNM patients, 15 PCGs, and five HCWs.

The selection of the MNM patients was from the list of women who met the WHO eligibility selection criteria for experiencing MNM, following pregnancy and delivery up to 42 days, and who had been discharged from the hospital within 12 months prior to the commencement of data collection. A Biostatistician at the Biostatistics Office of CCTH using the WHO eligibility criteria for MNM cases, queried the hospital's electronic system and selected the 91 cases. The list containing their particulars such as age, occupation, contact, and condition was provided to the team.

The team interviewed up to the 15th respondent since their responses were not exactly the same. However, at the end of the 15th respondent, the data obtained was adequate to answer the research questions and, relying on the principle of saturation, the interview was discontinued.

For each of the selected MNM patients, one PCG was selected. The MNM patients identified their PCGs for the team and this led to the recruitment of 15 PCGs, which was also supported by Creswell's (1998) recommendation on sample size for phenomenological study and the principle of saturation. The 15 PCGs ensured parity in the number of MNM patients and PCGs. However, two of the selected PCGs did not avail themselves for the interview either face-to-face or via telephone conversation.

Five HCWs, one from each of the professional groupings namely, Obstetrics Gynaecology, Midwifery, General Nursing and Anaesthesia and Critical Care Nursing were selected as key informants. These selected groups were known to be directly involved in MNM issues in the facility. The selection was based on leadership, seniority, experience and willingness to participate. With the assistance of a Health Service Administrator at the facility, either the head or deputy head of the Directorate or Unit of the aforementioned areas was selected. Their selection, however, was independent of the enrolled MNM patients from the Facility.

Sources of Data

The data sources were primary and secondary. The primary data sources were as follows: information on lived experiences of the MNM patients and the support systems available to them; the experiences of PCGs in supporting MNM patients and the kind of support they offered; experiences of HCWs with MNM patients and related issues and perspectives of MNM patients, PCGs and HCWs on quality of care. The secondary data, collected from CCTH annual performance report of 2021 and electronic hospital attendance records, were information on staff, disease profile and MMt cases in the facility.

Data Collection Instruments

The data collection instrument used for the study was a semi-structured interview guide. Each set of questions was tailored for the respondents. The interview guides for each of group of respondents were as follows:

Interview guide for MNM Patients: The guide had themes on the background information of MNM patients, experiences at the health facility, experiences (physical, psychological/emotional, social and financial) following MNM event, coping strategies, forms and sources of support systems if any, and expectations from family, HCWs and community members (Appendix B).

Interview guide for PCGs: The guide covered the following themes: background information of PCGs, their experiences at the health facility, knowledge of the experiences of the MNM patients, forms of care given to MNM patients, and their own experiences (physical, psychological/emotional, social and financial), coping strategies, and support systems available to PCGs (Appendix C).

Interview guide for HCWs: The themes of this guide were the background information of HCWs, knowledge of the nature and management of MNM cases, experiences with MNM patients, their experiences from the management of MNM cases, challenges of handling MNM cases, nature of support services provided by health facility and others and expectations of support system from PCGs and community members for MNM patients (Appendix D).

The background information of respondents helped the researcher to understand the influence of socio-demographic characteristics of respondents on their experiences and the responses they provided. The questions on the perspectives on quality of health maternal health services in the facility helped the researcher to determine the quality status of MNM care in the facility.

Questions on the experiences of MNM patients, their PCGs and HCWs, provided information on their respective experiences and how that impacted their socio-economic wellbeing. The information on the coping strategies gave insights on how the groups coped with their experiences. Questions on the role of the community in the management of the experiences of MNM patients helped to ascertain the role the community could play in providing support to the MNM patient. In all cases, the support systems provided to MNM patients were elicited.

Training of Research Assistants and Pre-testing of Instruments

Given the sensitivity of the issue under investigation, two female Research Assistants (RAs) with some experience in motherhood were recruited. They were trained for three days from Monday, 21st to Wednesday, 23rd December, 2020. On the first day (21st December, 2020), the training was devoted to learning about the objectives of the study and explanation of conceptual issues such as the definition of MNM, WHO identification criteria of MNM, and the support systems for chronically ill patients; experiences of PCGs and HCWs. The training for the second day (22nd December, 2020) focused on the instruments, interviewing skills, matters of confidentiality and consent. The final day (23rd December, 2020) was used to do a simulation exercise to ensure that the RAs had a good understanding of MNM information and related issues for effective data collection.

A pretest of the study instruments was carried out at Effia Nkwanta Regional Hospital from Monday 4th to Friday, 8th January 2021. The Effia Nkwanta Regional Hospital was selected for the pretest on the basis that it shared common characteristics with the study area (CCTH), including playing the role of a major referral facility for the Western Region and having a number of qualified health staff to attend to maternal health issues including MNM cases. In the pretest, data were collected from three MNM patients, three PCGs, and a HCW. While four days were used in collecting data on both MNM patients and their PCGs, a day was spent on the HCW.

The pretest of the instruments helped to test the suitability of the items for eliciting the required responses. The pretest, thus, led to changes such as the removal of ambiguous and repeated items; reducing the length of the consent form to make it brief and straightforward. These changes helped to produce a better instrument for the fieldwork.

The pre-testing was conducted by two RAs under the supervision of the Principal Investigator.

Data Collection Procedures

The data collection spanned four weeks from 11th January to 5th February 2021, with each interview lasting for 45 minutes. The data collection was guided by the COVID-19 protocols to ensure the safety of the research team as well as respondents. The protocols of social distancing of the one-metre interval between the interviewers and respondents, wearing of face masks by both the interviewers and respondents in the case of direct interviews, and handwashing and sanitising at the entry and exit points of interview venues, were strictly observed. At the facility, the team observed all the COVID-19 protocols. In order to reduce the direct contact with respondents, two PCGs who were unavailable but were ready to participate in the research were interviewed on telephone. Finally, the team provided risk communication on COVID-19 to sensitise respondents on the need to observe the protocols to keep themselves and their families safe.

The team called the respondents on the eve of the meeting day to confirm their commitment to the interview appointment date. As much as possible, the arrangements were done such that both the MNM patients and their PCGs were available at the same place but were interviewed at different times.

The data collection was conducted in phases, starting with the MNM patients and their PCGs and followed by interviews with HCWs. The ward-in-charge of the Obstetrics and Gynaecology Ward of CCTH introduced the team and the purpose of the research to the selected MNM patients. One week was used to schedule the respondents and their PCGs for the meetings. The week after the scheduling, the research team conducted interviews with two MNM patients and their PCGs for each day. On a few occasions, the respondents rescheduled the meeting time but, in all, two weeks were used to interview both 15 MNM patients and their PCGs who were available. In a few cases where the PCGs were not present but were, however, ready to participate in the interview, their inputs were taken via telephone conversation.

Before any of the interview, respondents were offered a face mask and sensitised about COVID-19 and the need for everybody including the interviewees to be protected. The interviewer, then presented the consent form which was read by the respondents themselves. Sometimes, the interviewer had to read to the respondent the content of the information depending on the circumstance. The consent forms (see appendix E) which had been designed in a simple English language was explained to respondents and issues such as the purpose(s) of the study and the reason why the respondent had been selected; a description of data collection procedures which included nature of questions to be asked, duration and venue of the interview, availability of opportunities for seeking of clarification on questions posed, anticipated risk or discomfort and expected benefits to the respondents or others, assurance of confidentiality of elicited information, the voluntariness of participation, and thus the right of refusal to participate or discontinue participation were highlighted. Clarification was given where respondents required further understanding. When consent was obtained for the interview to proceed with the signing of the form by respondents, we commenced the interview.

In view of the emotional nature of probing into somewhat unpleasant experiences of MNM patients, a referral form (see appendix F) was designed for psychological counselling for respondents who might break down in the course of an interview. In addition, a professional counsellor at the UCC Hospital agreed to stand by and assist with any referral from the field for counselling. However, no such incident happened.

Relying on the interview guide, the interviewer then posed question by question to the respondent to obtain in-depth understanding of their experiences from the point of view of each of the respondent. In so doing, the interviewer allowed the respondent the freedom to express her experiences albeit subjectively. Where the respondents were not forthcoming with the required answers, sometimes because they did not understand the question in the first instance, the question was rephrased with examples for their better understanding. After every interview, the interviewer reminded the respondent that if the need arose for him/her to be re-interviewed on information that might have been skipped during the earlier interview, we would revisit. In all, each interview with a respondent lasted 45 minutes.

The MNM patients introduced their PCGs to the team. The same procedure was followed in respect of the COVID-19 protocol, the use of the consent form and reminding respondents of a revisit if necessary. Whilst interviews with the MNM patients and PCGs were ongoing, an arrangement was made with one of the Health Services Administrators in the facility to obtain permission for an interview opportunity with the HCWs (obstetrician gynaecologist, midwife, general nurse, anaesthetist and critical care nurse). Upon satisfactory responses, which indicated their readiness for the interview, interview schedules were arranged with each of them. The Principal Investigator handled these interviews which were held in the offices or sidewards of the respondents.

All the conversations were audio-taped with the consent of the interviewees; and were transcribed later for data analysis.

Challenges Encountered during the Data Collection

Firstly, the selection of some ineligible women by the Biostatistician, who assisted with the retrieval of patients who met the WHO criteria. There were a few women who were diagnosed as preeclampsia but upon interaction with them, it was found that they only had abnormal blood pressure but indicators such as proteinuria and administration of magnesium sulphate were absent. Such women were dropped and replaced with another patient from the list.

The second challenge was the refusal of some respondents to participate after initially agreeing to participate after the introduction of the team by a staff of CCTH to them. For such respondents, we explained the essence of the study and reassured them that it was only an academic exercise. Almost all of them rescinded their decision and reaffirmed their decision to participate. My ability to locate discharged patients in and around Cape Coast, with some living far from Cape Coast posed some temporal challenges. But where it was inconvenient for the researcher to travel, a telephone conversation was used. Two of the PCGs who were not available agreed to be spoken to via phone.

Further, others kept changing the meeting schedules due to some emergencies that arose just before the team proceeded to the venue for the meeting. For such respondents, the interviews were rescheduled to new dates which were mutually convenient for the two parties.

Data Management, Processing and Analysis

As a phenomenological study, thematic content analysis using Collaizi's seven distinctive steps for analysis was adopted to purposively achieve rigour. It also ensured a description of the phenomenon under study with the involvement of respondents who created the data. These steps were familiarisation, identifying significant statements, formulating meanings, clustering themes, developing an exhaustive description, producing fundamental structure, and seeking verification of the fundamental structure (Morrow et al., 2015). The process was organised as follows:

1. Familiarisation of data: The familiarisation of the data commenced with listening to the tape recordings of all 33 respondents. After the first round of listening, which was purposely to get a general idea from each category of respondents, the tape recordings of the 15 MNM patients, 13 PCGs and five HCWs were transcribed verbatim, After the preliminary round of transcribing, the tape recording was replayed with the aim of filling in the gaps identified. The transcribed information was then read and re-read to get a sense of the data.
2. Identifying Significant Statements: Statements that were relevant and fell directly under the phenomenon being studied were identified. These

statements were recorded on special sheets with their pages and line numbers recorded.

3. Formulating Meanings: Meanings related to the phenomenon were made after careful scrutiny of significant statements already recorded on a special sheet.
4. Clustering of Themes: Meanings from the statements were sorted into categories, a cluster of main themes and sub-themes. In doing that, the existing theory was bracketed to prevent extenuating influences on the sorting of the meanings.
5. Developing a description of the phenomenon: The themes generated were integrated into a comprehensive description of the phenomenon.
6. Producing fundamental structure: The full information was compressed into short sentences that capture the key components making up the structure of the phenomenon.
7. Seeking verification of the fundamental structure: The final structure was compared with the initial transcripts and in some cases, the respondents were contacted to help validate the sentences attributed to them.

Data Rigour

To support the rigour of the study, Guba and Lincoln's (1994) five criteria of trustworthiness; (a) credibility, (b) dependability, (c) confirmability, (d) transferability, and (e) authenticity were followed. Trustworthiness in qualitative research is described by Sandelowki (1993) as an issue of persuading reviewers that the practices adopted in undertaking the research are visible and auditable. The following explanation sheds more light on the observance of rigour in the data processing and analysis, thereby ensuring validity and reliability of the process.

Credibility or confidence in the truth of the findings is achieved when respondents' responses to researchers' questions establish the reality of the study outcome (Guba & Lincoln (1989). Triangulation was, therefore, employed as common questions on similar themes such as the experiences of MNM patients and the support system available to them, were posed to MNM patients, PCGs, and HCWs.

Tobin & Begley (2004) indicate that dependability is achieved when the research process is logical, traceable and well-recorded. This ensures that another researcher relying on the same data within a similar context could arrive at the same or comparable conclusions (Koch, 1994). This was achieved by stating clearly the data collection processes such as sampling, data collection procedures, observance of ethical issues, data analysis according to the work plan, and logging of challenges and solutions employed.

Transferability which addresses the issue of external validity in qualitative research and the possibility of generalisation of findings to different contexts (Shenton, 2004) was achieved with the description and discussion of responses of respondents within the context of CCTH (study site) and inclusion and exclusion criteria of respondents.

Confirmability is achieved when credibility, dependability and transferability of the rigour are achieved (Guba & Lincoln, 1989). The study relied on the data collected from MNM patients, PCGs, and HCWs to generate findings, interpret and draw conclusions. A clear relationship between the data, findings and conclusions which mirror the study objectives and data collection processes was established.

Authenticity as one of the indicators of trustworthiness demonstrates the relevance of the research findings to key stakeholders in MNM issues (Johnson S., & Rasulova S., (2017). I, therefore, identified relevant stakeholders for directing the recommendations of the study. They include the MNM patients, Midwives and Management of CCTH and the community.

Member Checking

To further ensure trustworthiness of the results, member checking was conducted to obtain some clarification or additional information from some respondents to validate the data collected. The Principal Researcher approached some respondents to confirm or seek clarification on the information they had earlier provided.

Data Storage

Hard copies of the raw data in the form of interview transcripts have been stored in a cabinet in the researcher's office for five years after which they would be discarded. The soft copy in the form of recordings as well as transcripts have been uploaded to the researcher’s google drive and protected by a password known only to the Principal Investigator.

The processed data as part of the final work has been shared with the various Ethical Review Committees or Boards as well as the UCC Repository. Further articles from the thesis will be published and some interactions held with stakeholders.

Ethical Considerations

Research involving interactions with human beings brings to fore the issue of ethics with the aim of protecting the dignity of respondents and preserving their fundamental human rights thereby reducing to the barest minimum any harm likely to be incurred by them. To this end, approval for data collection was sought from the Ethical Review Boards/Committees of the University of Cape Coast Institutional Review Board (IRB){(UCCIRB/ CHLS/2020/43)- Appendix G}, the Ethical Review Committees of CCTH (CCTHER C/EC/2020/067-Appendix H) and the Ghana Health Service (GHS-ERC001/10/20-Appendix I). Based on their approvals and some reviews of the initial document, training, pretesting and fieldwork were conducted.

Conclusion

Based on the objectives, the study adopted an interpretive phenomenology design and used a qualitative exploratory approach. The Cape Coast Teaching Hospital was the study area with fifteen (15) MNM patients, thirteen (13) PCGs, and five (5) HCWs, who were sampled purposively based on the inclusion and exclusion criteria. Using a semi-structured interview guide, in-depth face-to-face interviews were conducted for not more than 45 minutes. The consent of the respondents was sought before interviews. Ethical clearance was obtained from the Ethical Review Committees of GHS, UCC and CCTH. Thematic content analysis using Colaizzi's seven distinctive steps for analysis were adopted while Guba & Lincoln’s five criteria of trustworthiness were applied to ensure rigour. Data storage and management principles were adhered to.

CHAPTER FOUR

LIVED EXPERIENCES OF MATERNAL NEAR MISS PATIENTS

Introduction

The lived experiences of MNM patients focus on the physical, psychological, emotional, social, and economic/financial consequences that women endure, following the occurrence of the phenomenon. The reflections on their experiences and the support system available to them were also considered.

For purposes of anonymity, respondents were given an identification number as follows: Respondent (1), Respondent (2), Respondent (3), Respondent (4), Respondent (5), Respondent (6), Respondent (7), Respondent (8), Respondent (9), Respondent (10), Respondent (11), Respondent (12), Respondent (13), Respondent (14) and Respondent (15).

Socio-Demographic Characteristics of Respondents

Table 3 shows selected socio-demographic background of respondents and their reported MNM conditions. From the table, more than half of the respondents were aged 20-29 years, one each being less than 20 years and more than 40 years. More than half of them were multipara, one-third were primipara and only one respondent was nulliparous. More than one-third had basic education, one-third had post-secondary education and below one-third had secondary education. More than three-quarters of the respondents were employed with the majority being traders in the informal sector, the remaining were either students or unemployed. More than half of the respondents were married. About two-thirds had developed pre-eclampsia and eclampsia, less than a quarter developed postpartum haemorrhage and one respondent developed uterine rupture.

Table 3: Summary of Socio-Demographic Characteristics of Respondents

Respondent Identification Number	Age	Number of Children	Highest Educational Level	Marital Status	Occupation	Condition/ Morbidity
Respondent 1	32	2	Basic level	Married	Trader	Postpartum hemorrhage
Respondent 2	27	5	Basic level	Married	Trader	Postpartum haemorrhage
Respondent 3	26	2	Secondary Level	Married	Unemployed	Eclampsia
Respondent 4	27	1	Secondary level	Unmarried	Trader	Uterine rupture
Respondent 5	16	0	Basic Level	Unmarried	Student	Eclampsia
Respondent 6	27	2	Secondary level	Married	Trader	Eclampsia
Respondent 7	26	1	Post-Secondary	Married	Teacher	Preeclampsia
Respondent 8	30	1	Basic level	Married	Trader	Preeclampsia
Respondent 9	30	2	Secondary level	Married	Trader	Preeclampsia
Respondent10	29	2	Post-Secondary	Married	Sales Executive	Preeclampsia
Respondent11	32	6	Basic level	Married	Cleaner	Preeclampsia
Respondent12	43	3	Post-Secondary	Married	Banker	Preeclampsia
Respondent13	28	4	Basic level	Married	Trader	Preeclampsia
Respondent14	24	1	Post-Secondary level	Married	Student Nurse	Preeclampsia
Respondent15	24	1	Post-Secondary level	Married	Trader	Preeclampsia

Source: Field Data (2021)

The experiences of women who were interviewed were classified into themes and sub-themes based on the literature (Table 4). These are physical experiences (Bleeding/discharges, lethargy and loss of stamina, swelling of limbs, disruption of bodily integrity and body mutilation, pain and discomfort, tension and dizziness, loss of functionality, unconsciousness, seizures and sedation, urinary incontinence, breast problems, and hernias; social experiences

(Disrupted family relationship, family rejection and abandonment, and marital challenge); psychological experience (Post-Traumatic Stress Disorder, anxiety and depression emotional); emotional experience (Fear of adverse outcomes, frustration/worry, unhappiness, a sense of hopelessness and loss of completeness, feelings of blame, isolation, discouragement, resilience and opportunity for inner growth); and economic/financial (Loss of job or working capital, low income, high cost of medicine and treatment, accumulation of debt and selling of personal effects).

The review also revealed the coping strategies of the women as a conversation with medical staff, withdrawal from the community and enhancement of personal hygiene, problem-solving strategies, religiosity/ spirituality, delayed treatment against financial stress, and resilience. These themes and sub-themes informed the generation of five themes and nineteen sub-themes from the analysis of the field data as summarised in Table 4.

Table 4: Themes and Sub-Themes of Lived Experiences of MNM Patients

Themes	Sub-themes
Physical Experiences	i. Discharges/bleeding ii. Lethargy and loss of stamina iii. Disruption of bodily integrity iv. Pain and discomfort v. Heightened Pressure
Emotional/Psychological Experiences	i. Fear of adverse outcome ii. Doubt iii. Frustration/Worry iv. Anxiety
Economic/Financial Experiences	i. High cost of medicine and treatment ii. Low income iii. Loss of Job iv. Accumulation of debt
Reflections on Experiences	i. Preparedness towards financial and medical emergencies. ii. Improved religiosity and faith in God iii. Self-regulation of activities and time iv. Depending on support from spouse and family members

Source: Field Data (2021)

Physical Experiences

Physical experiences were the most common provided by respondents. Thus, 11 out of the 15 respondents, mentioned some physical experiences resulting from MNM. The experiences were discharges/bleeding, lethargy and loss of stamina, swelling of limbs, disruption of bodily integrity and body mutilation, pain and discomfort, increase in Blood Pressure (BP) and other health problems such as allergies. Pain and discomfort were the leading responses, followed by discharges/bleeding, lethargy and loss of stamina, swelling of limbs, disruption of bodily integrity and body mutilation and heightened pressure.

Discharges/Bleeding

Vaginal discharges during pregnancy and after delivery is a normal experience with women, whether an ordinary case or MNM case. However, complications associated with MNM may exacerbate the flow. Five respondents reported bleeding and further indicated that there was blood in their urine and vaginal fluid. In the case of one respondent, the incident prompted her to request for hospital care as she anticipated that any further delay could lead to some other complications that might have rather dire maternal or neonatal consequences. She reported as follows:

> *I saw blood in my urine, so I told my mother that she should let us go to the hospital because my time was due* (**Respondent 3, 26- year-old patient)**

Discharge of fluid was also reported by a respondent who indicated she had the discharge throughout one particular night. Due to the heavy flow, she was sent to a clinic, and later transferred to a hospital for admission before being finally referred to CCTH for further attention. This was where she was diagnosed with uterine rupture. She put it this way:

> *I started discharging fluid one night, although my time was not due for delivery. So, my parents took me to the clinic. At the clinic, because the health officers could not handle my situation due to the heavy flow of fluid (liquor), I was sent to a hospital at Mankessim, where I was admitted for four days. I was later on referred to CCTH to deliver, and have the baby in an incubator* (**Respondent 4, 27-year-old patient)**

The onset of labour but delayed delivery caused the uterus to rupture. The referral to CCTH, ensured a surgical intervention to save mother and baby.

Bleeding was reported by two respondents who had the experience at different stages of their pregnancy, one before delivery and the other after delivery. In the first case, she was transported to the emergency ward of the CCTH, where she was admitted for MNM. She indicated that:

> *It happened on Saturday morning, I saw blood coming and I was rushed to the emergency and they transferred me to the labour ward later* **(Respondent 12, 43-year-old patient)**

According to another respondent, a second case of bleeding led to a total blackout and this occurred after birth. She indicated as follows:

> *After delivery, I started bleeding. I was given an infusion, and later I was asked to go to the ward but I fell and further collapsed as soon as I got up. I did not see anything again. I later found myself on admission and was diagnosed of post-partum haemorrhage* **(Respondent 2, 27-year-old patient**)

Lethargy and loss of Stamina

Exhaustion, a feeling of lethargy and loss of stamina are characteristics of pregnancy and perhaps delivery among women (Mortazavi et al, 2019). A near-miss condition might create some residual problems such as high blood pressure which may lead to tiredness. Two respondents indicated that they became lethargic and lost stamina after engaging in a little physical activity including walking.

One respondent indicated that she suffered fatigue as she lost stamina at performing any little physical activity, including walking and talking until she was diagnosed of preeclampsia later at the hospital. She remarked as follows:

> *What I realised was that I became tired after performing a little activity. Even walking and talking was difficult for me because I become tired so easily. The little thing I do, I become tired until I visited the hospital where I was diagnosed of preeclampsia and offered medication* **(Respondent 11, 32- years-old patient)**

In the case of another respondent, the condition affected her ability to perform basic physical activities such as sweeping, walking and bathing. She indicated that she even had to rely on the husband for bathing and explained as follows:

> *My lack of strength made me seek medical care and that was where I got to know that I had developed preeclampsia, which was responsible for that. Due to the condition, I was not strong enough to undertake some normal duties. My husband even had to help me with my bathing* (**Respondent 10, 29-years-old patient)**

Thus, MNM reduces the physical capability of affected women.

Disruption of Bodily Integrity

Weight gain is also associated with pregnancy and Chang et al. (2017) indicate that majority of mothers age 15-24 gain excess weight during pregnancy. Three respondents reported varying experiences.

The first respondent reported that she had an unusual increase in weight due to the sudden swollen face and feet. This led to pains, sleeplessness, headaches and vomiting. She indicated that:

> *I realised I was gaining unusual weight even though at the hospital, I was told it was okay. However, about two to three weeks to the end of the second trimester, my weight became worse, my face and feet were swollen and were sometimes very painful."* **(Respondent 10, 29-year-old patient)**

The second respondent who was diagnosed with pre-eclampsia recollected her experience as follows:

> *I was experiencing swelling legs that is why I went to the hospital. But when I went, I was diagnosed with pre-eclampsia and I was admitted and also managed.* (**Respondent 14, 24-year-old patient)**

A third respondent reported that due to the pregnancy and delivery complications, as well as the attendant procedures, she realised a disfiguration of her body. She experienced increase in body weight. She reported thus;

> *Due to the abnormal increase in my weight following the pregnancy and the complications, it affected the size of my stomach as it became very big and people thought I was obese*

> *because I was eating too much and this seriously affected my self-esteem in public.* (**Respondent 5, 16-year-old patient)**

This situation amounts to disruption of the body integrity of the woman, thereby creating of low self-confidence and marital instability for her.

Pain and Discomfort

Pain and discomfort were other physical experiences presented by six of the respondents. Labour and other complications may induce pain and discomfort; among them were headaches and bodily pains. For example, prolonged labour and the associated pains for one respondent made her request a caesarean section though she was advised against the procedure. She reported the case as follows:

> *The delivery of the baby delayed and I was in a lot of pain. At a point, my husband and I requested that I should be operated on but the Doctor advised that the operation will not be helpful. I was, therefore, managed through vaginal delivery after which I experienced some bleeding but it was arrested by the staff (***Respondent 1, 32-year-old patient)**

The second respondent's experience of the pain was not labour related but was from a severe headache which is a characteristic of eclampsia the night of the episode. She recounted her experience as follows:

> *But one night, my head was aching so severely that I could not sleep the whole night. I decided to go to the hospital in the morning. When I got to the hospital, I explained to the nurse that my head was aching throughout the night (***Respondent 6, 27-year-old patient)**

Another respondent indicated that she experienced pain during pregnancy and checks at the hospital revealed that she had high level of protein and reported as follows:

I was having a complication with the upper part of my tummy when I was pregnant. I was experiencing pains and whenever I go to an antenatal clinic, I was told my protein was high and was diagnosed of preeclampsia (**Respondent 12, 43-year-old patient**)

Among the treatment procedures/protocols for MNM cases is intravenous medication of magnesium sulphate through the muscle (injections). According to one respondent, the injections caused her much pain and she indicated as follows:

> *I received a lot of injections for the treatment of my condition. Due to the pain, I cried a lot but since that was only solution to my health problem I had to endure.* (**Respondent 9, 30-year-old patient)**

Another respondent who was undergoing treatment for preeclampsia and therefore received intravenous medication (injections) reacted to the injection and experienced pain as a result. She narrated her experience below:

> *Following the treatment (intravenous medication) at the hospital, my system reacted to the medication and I felt a lot of pains but now it is normal.* (**Respondent 13, 28-year-old patient**)

Some of the discomforts some MNM patients experienced included chills. A respondent who had post-partum haemorrhage reported of having chills after the incident and she narrated as below:

> *I felt very weak and sometimes I felt some kind of chills which was explained to me as normal and usually referred to as post-partum chills.* **(Respondent 2, 27-year-old patient**)

Heightened Pressure

Women with hypertension during pregnancy are often diagnosed with either preeclampsia or eclampsia. Two respondents cited a rise in their blood pressure, hence some other complications. A respondent indicated she was informed for the first time of having extremely high pressure during one of the regular antenatal visits. She narrated as follows:

> *During one of my antenatal visits, the doctor told me my BP was extremely high, so I was given some drugs to help control it. Because the situation grew worse, I was admitted at the Hospital during one of the reviews.* *(***Respondent 9, 30-year-old patient)**

Another respondent also had an increase in blood pressure but she experienced it after delivery. Complicated pregnancy and delivery may induce adverse BP for the woman concerned. She also reported that her baby's temperature was also affected. She reported as follows:

> *After delivery, when my BP was checked, it was realised that it had shot up and the baby's temperature too was high. Hence, I was given medication and monitored for some time before I was discharged. I am still managing the delivery induced BP at home* (**Respondent 12, 43-year-old patient)**

These physical experiences in one way or the other caused disruption to the physical biography of affected women.

Other Physical Health Problems

The treatment administered to MNM patients could create some other physical health problems such as allergies from the use of certain medications or treatments leading to some residual problems for patients. A respondent explained her experience as follows:

> *I realised that my left eye was blur and it took some time before it became normal. It temporarily affected my ability to perform basic household activities* (**Respondent 9, 30-year-old patient)**

These afore-stated experiences have shown the disruptive effect of MNM on the physical biography of the women concerned.

Emotional and Psychological Experiences

The emotional and psychological problems faced by MNM patients are influenced largely by changes in the body as well as the hormonal system of patients. The adjustment needed to cope with these changes may create some emotional and psychological challenges. Eight respondents indicated diverse emotional/psychological experiences namely, fear of adverse outcomes, unbelief, worry/frustration and anxiety.

Fear of Adverse Outcome

Uncertainty over the outcome of a medical or surgical procedure for MNM cases may induce fear in a patient. One respondent who reported fear indicated that her fear was about the uncertain outcome of an impending surgical intervention to manage my preclampsia. She illustrated this as follows;

> *When the doctor came, he said to me that I had to be operated on due to the preeclampsia. I was afraid of the consequences of the surgery and, therefore, cried because I was apprehensive of the outcome of the surgery which had been necessitated by preeclampsia* (**Respondent 15, 24-year-old patient)**

Doubt

Another respondent's emotional/psychological experience was doubt, which might have been caused by some unapparent circumstance. She narrated her experience as follows:

> *I did not understand how such a thing could happen to me to that extent considering how well I have taken care of myself. However, it was explained to me that this medical condition could arise from varied* factors. (**Respondent 15, 24-year-old patient**)

This may have provided some comfort for her, nonetheless it disrupted her emotional wellbeing.

Frustration/Worry

Those who reported frustration/worry were concern about the uncertainty of their safety and that of their babies. Their concerns were about the possible loss of life of both mother and child. A respondent was worried that her present condition could precipitate the loss of her baby. The frustration/worry was heightened given that she had ever suffered a similar fate of losing a baby before. She stated it thus:

> *With this situation, I was a bit worried because I had lost my baby before* (**Respondent 9, 30-year-old patient)**

Another respondent's frustration/worry was due to the frightening information she received from providers about her extreme high BP and the poor movement of the foetus. She reported that:

> *The nurse then checked my BP and indicated that my BP was high and she had to check the baby's movement. So, when she checked with the machine, she said the baby was not making any movement. Upon hearing this, I felt very bad.* (**Respondent 6, 27-year-old patient**)

This shows how MNM affecting mothers could also affect their babies.

The third respondent just like the others was told that she had been diagnosed with pre-eclampsia with a possible adverse effect on the performance of some vital activities. She thus, felt that the condition will have dire consequences on her ability to perform certain tasks. This she indicated as follows:

> *I was worried about my swollen feet and when I was diagnosed with pre-eclampsia that was a very difficult moment for me.* **(Respondent 14, 24-year-old patient)**

Another cause of worry for MNM patients was the possible disruption to their normal functional capabilities and render them dependent on others for activities that hitherto they could have done by themselves. A respondent was worried that the condition will have adverse impact on her functional capabilities as follows:

> *I was worried because previously I was doing everything for myself but now, I have to rely on others for basic activities* **(Respondent 9, 30-year-old patient)**

Anxiety

Anxiety among MNM patients may be caused by factors such as stress, physical changes, long duration of the effects of the condition and whether or not one would be able to resume a normal life. Respondent s' anxiety was due to the following: uncertainty over the outcome of the event and associated problems, and the fear of the outcome of an invasive procedure that may compromise the safety of the baby.

The first-time experience of an unknown condition such as post-partum haemorrhage could cause anxiety. This was expressed as follows:

> *I became restless because it had not happened to me before. I did not experience this with my first, second and third deliveries. So, I was scared with the fourth when I experienced the post- partum haemorrhage. I was anxious about my safety and survival of the baby* (**Respondent 2, 27-year-old patient**)

Another patient indicated as,

> *I had difficulty concentrating when I was diagnosed of eclampsia. I had not experienced this before. I also had not done an abortion before. So, it was difficult for me to understand since I had been fine.* (**Respondent 6, 27-year-old patient**)

Despite a previous experience of a procedure at the operation theatre, the unpredictability of the outcome of such procedures led to some anxious moments in some cases. One illustrated her experience as follows:

> *Even though, I have been to the operation theatre a number of times. I was on the edge when the anaesthesia administered did not work as it should and they had to give a second dose.*
>
> **(Respondent 11, 32-year-old patient)**

Anxiety was partly related to perceived lack of connection between the lifestyle of a patient and a health condition the patient was experiencing. Thus, the respondents thought that they had led a decent lifestyle with no record of abortion, and therefore the conditions were expected as follows:

> *I had not experienced that before and I have never done an abortion before so it was difficult for me to understand since I had been fine*
>
> **(Respondents 6, 27-year-old patient)**

These emotional/psychological experiences-imposed disruptions to the emotional/psychological wellbeing of patient

Economic/Financial Experience

MNM patients may incur some costs on medicines, consultation, surgical interventions, and diagnostic procedures including laboratory tests and x-ray. Ten respondents confirmed the various economic/financial problems experienced due to MNM. Nine respondents also indicated that they experienced some personal financial experiences such as high bills due to the long stay at the hospital and the purchase of medicines, loss of job, low income and accumulation of debt.

High Cost of Medicine and Treatment

A respondent indicated that they had to pay between GH₵5,000 to GH₵7,000.00 at the hospital due to the condition. She felt that the monies paid by the husband was total drain on the finances of the family. She narrated as below:

> *Financially, it was difficult. When I was visiting the facility, I did not know something like this would happen. My husband has wasted a lot of money on my care. It is really a lot of money.* (**Respondent 15, 24-year-old patient)**

A respondent reported that they had to settle the high hospital bill even though the income of the spouse was meagre and he had also temporarily been out of job due to COVID-19. She explained as follows:

> *The little that we had is what we spent at the hospital. My husband too is a teacher in a private school but because of the COVID 19, he was at home and was not receiving any salary* (**Respondent 6, 27-year-old patient)**

The length of time one spends at the hospital usually determines the hospital bill. A respondent who stayed for weeks at the hospital reported that they had to pay more. She stated as follows:

> *Concerning finances, it was not easy. Because I was admitted for three weeks and so by the time I was discharged, we had incurred over GH₵6000.00* (**Respondent 6, 27-year-old patient**)

The cost of drugs, consumables and food served as well as the long stay at the hospital contributed to the high bills paid at the facility as illustrated by another respondent:

> *As for now, everything is money. I had to take my drug from the Pharmacy but they said they did not have some of the drugs. So, I had to buy them from town. Even infusion I did not get at*

> *the maternity. And for those they had, they were not covered by health insurance, therefore I had to pay because there was nothing I could do. Even the food, whether you eat or not you had to pay twenty cedis* (**Respondent 10, 29-year-old patient)**

Low Income

Deciding to settle for a less strenuous economic activity due to MNM might reduce one's income. A respondent indicated that she had to settle for a less rewarding means of livelihood due to her condition. This was illustrated as follows:

> *I have not started my usual trading. For now, it is pure water that I sell in front of the house. Because I was advised not to get involved in strenuous activities, I don't want to do anything that might cause a problem for me.* (**Respondent 3, 26-year-old patient)**

The lack of honest people to temporarily manage the business of MNM patients who had to take some rest from their usual work, also led to financial problems. A respondent who had to hire a temporary attendant to assist her with the business due to the ill-health, indicated that she recorded low earnings and illustrated as follows*:*

> *My work was affected. Although my husband found someone to be preparing the porridge and selling for me, the person was not bringing any good income, so I had to stop her from selling* (**Respondent 1, 32-year-old patient)**

Loss of Job

The loss of energy and stamina of patients due to MNM event, for example, hampered the ability of some patients to continue engaging in physically demanding jobs such as commercial washing of people's cloth in their houses which hitherto served as their source of income. She illustrated this as follows:

> *Financially it was difficult because at first, I could go to people's houses to wash for them so that I will be paid. But because of the situation, I cannot do that work again. Any little thing then I become tired* (**Respondent 11, 32-year-old patient)**

Another respondent indicated how the condition had deprived her of engaging in her normal trading activities, hence she had to be supported financially by her husband. This was explained as follows:

> *Because of the situation, I was unable to trade, which affected my finances. Financially, it is my husband who has been supporting me and thus, making me a burden* (***Respondent*** **13, 28-year-old patient**)

Accumulation of Debt

The financial stress on the patient and her family led to the contraction of loan by some couples to offset their bills. Moreover, the debt had to be serviced which affected their financial wellbeing. She indicated this as follows:

> *Everything about the situation was money. With the financial issues, we went through a lot and it was very difficult. We paid the bills ourselves and my husband had to go for a loan for which we are still servicing the debt* (**Respondent 9, 30-year-old patient)**

The economic experiences caused disruption to the economic wellbeing of patients.

Reflections on Experiences

The experiences led to some patients reflecting on their lives. These were the need to (a) prepare for emergencies (b) become sensitive to signs about body (c) strengthen faith in God (d) self- regulation of activities and (e) reliance on support from others.

A respondent who realised through the process of care, the inevitability of emergencies and how important it is for one to set aside some money for such purposes, narrated as follows:

> *I will say it has taught me to always plan for emergencies because I wanted us to use the money for our building before school resumes but my husband advised against that. He indicated that he was waiting for me to deliver before the money was used for the building. So, if we had used the money for the building, it would have been very difficult as the hospital would not have provided drugs if we had not made without payment.* (**Respondent 1, 32-year-old patient)**

MNM experience led to the realisation by some pregnant women to look out for some alarming signs that may require urgent medical attention. A respondent indicated how the incident caused her to be sensitive to maternal issues. The respondent narrated as follows:

> *I have learnt that I have to be careful in life and always be on the lookout for signals that require urgent medical attention so that this situation would not happen again.* **(Respondent 5, 16-year-old patient)**

The experiences of the phenomenon also made some patients to be more religious than they were before the experience. For some, it strengthened their faith as some resorted to the reading of the Bible, listening to music and praying.

> *It made me draw closer to God because if it was not God, I would have died.* (**Respondent 6, 27-year-old patient)**
>
> *I read the bible, prayed and also listened to songs* (**Respondent 10, 29-year-old patient)**

Some respondents cited self-regulation as a means for coping with their challenges. These self-regulatory measures were taken by some respondents to prevent them from putting unnecessary pressure on their already vulnerable system. Thus, a respondent narrated her reflection as follows:

> *I try to do what I am supposed to do but if I am doing it and I feel tired, then I stop there and then.* (**Respondent 11, 32-year-old patient)**
>
> *I was told not to be involved in any strenuous activity because of the situation and that helped me to bear with the condition.* (**Respondent 9, 30-year-old patient)**

Some respondents relied on having enough rest through sleeping as one of the ways that supported them to endure their challenges.

> *When I sleep for a while, I become better.* **(Respondent 2, 27-year -old patient**).

Having a regular medical screening or check-up to help identify any dangers that might require attention was the approach used by some respondents. A respondent who might have had a problem with her BP regularly checked her BP in the mornings and evenings.

> *"I also checked my PB in the morning and the evening every day. I go to a pharmacist in the area to check it every morning and evening."* (**Respondent 9, 30-year-old patient)**

Another group of respondents relied on support from others such as relatives, friends and pharmacies to manage themselves. For example, a respondent reluctantly had to engage somebody to fetch her water since she had no other option. She narrated this as follows:

> *I had to depend on someone to even fetch water to the bathroom for me. But that is what has happened and I had to accept it like that.* (**Respondent 9, 30 years old patient)**

Others also relied on relatives and friends for the various kinds of help to make life bearable. This was explained as follows:

> *My relatives and some of my friends were coming around to help* (**Respondent 10, 29 years old)**

The occurrence of MNM and the attendant disruptions to the physical, economic and emotional/psychological spheres of their lives made patients to learn valuable lessons including adoption of some coping mechanisms.

Support System for MNM Patients

The sources and nature of support available to MNM patients encompass persons and institutions that provide support to MNM patients and the nature of such support to help understand the existing framework support.

Sources of Support for MNM Patients

The MNM patients identified family members (siblings, spouses, mothers and mothers-in-law), institutional support (formal and informal arrangements) and community (religious organisations/churches and NGOs) as sources of support

Support from Family Members

Family members including spouses were identified as one of the main sources of support for MNM patients due to their familial relations. The friends of spouses of MNM patients were also mentioned as being helpful. One patient reported that her spouse and his associates were provided support.

> *My husband was my major source of support. Also, my husband's friends were good to me. They were always around to assist me and they didn't make me feel lonely. They also donated some money* **(Respondent 10, 29-years-old patient)**

Mothers, based on their experience in pregnancy and childbearing, provided support. Three respondents indicated that their mothers provided some support to them in the performance of some household chores and the provision of financial and material support.

> *My mother was around to help me with cooking and washing of clothes* (**Respondent 5, 16 years old patient**)
>
> *My mother is the one who supported by providing some of the things I would have bought and sometimes she gives me money.* **(Respondent 6, 27-year-old patient)**
>
> *My mother was here,* so *they were the ones who were doing everything but she left after one month.* **(Respondent 10, 29-year-old patient)**

Mothers-in-law of MNM patients also based on their experience in motherhood just like mothers of patients also provided some support to MNM patients. One patient indicated that her mother-in-law provided her with some financial support.

My mother-in-law offered some financial assistance. (***Respondent*** **11, 32-year-old patient)**

Siblings were also mentioned as other persons who provided support to MNM patients. Siblings such as brothers, sisters or cousins extended support to their MNM patients. One patient indicated that her siblings supported her financially.

> *Financially, my siblings and a woman behind our house supported us* **(Respondent 5, 16-year-old patient)**

Community Support (Religious Organisations/Churches and NGOs)

Religious organisations such as churches as well as NGOs were identified as another source of support to MNM patients. Some patients reported that the leaders and members of Churches provided support as part of their welfare activities. This was reported as follows:

> *My Pastor and my Church members made some contributions to support me* **(Respondent 11, 32 years old patient)**

> *A few of my Church members visited and advised me not to despair but to remain hopeful for a speedy recovery.*
> (**Respondent 10, 29-year-old patient)**

> *My church elder came to visit me at the hospital and prayed with me for strength and comfort (***Respondent 9, 30-year-old patient)**

Nature of Support to MNM Patients

The support offered to patients by the family and community was largely physical (provision of finance and food, blood donation and gifts including soap), followed by emotional/instrumental (companionships, visitations, encouragement and prayers).

Physical Support

Physical support which includes financial help was presented by some respondents as a major form of support available to MNM patients. For example, a patient borrowed money from some family members to support herself, while another patient obtained financial support from the mother, respectively indicated as follows:

> *I borrowed money from some family members when I was going to the hospital* (**Respondent 4, 27-year-old patient)**
>
> *My mother is the one who supported me by providing some of the things I would have bought and sometimes she gives me money* **(Respondent 6, 27-year-old patient)**

Another patient indicated that she had financial support from her husband and mother, which she narrated thus,

> *My husband and mother supported me financially* **(Respondent 2, 27-year-old patient)**

Furthermore, it was observed by a patient that her siblings and a neighbour were financially supportive. She intimated;

> *Financially, my siblings and a woman behind our house supported us*. (**Respondent 5, 16-year-old patient**)

Apart from the financial support, MNM patients also received gifts of all kinds as part of the physical support for their upkeep during their ailing period. One patient mentioned some gifts she received after delivery as follows:

> *Culturally, one receives gift following delivery and I, therefore, received some gifts such as soap and others* (**Respondent 9, 30-year-old)**

Another form of physical support mentioned was a blood donation to some patients who needed to be transfused as part of their treatment. One PCG expressed how he supported his wife by organising some donors to provide for the wife.

> *When there was the need for ten units of blood, I organised people to help with the donation of the blood* **(Spouse of Respondent 11)**

Emotional Support

Emotional support in the form of providing company, encouragement, offering prayers and paying visits to MNM patients were mentioned by respondents.

Prayers from leaders of Religious Organisations (Churches) and some individuals were recognised as a form of emotional support that brought comfort to some patients; thus, MNM patients found the gesture laudable.

> *I received prayer support during the visit of my church elder* **(Respondent 9, 30-year-old patient)**

Making errands for patients amounted to emotional/instructional support as they relieved them of the burden of undertaking some tasks by themselves.

> *I make errands for her at the facility ensuring that the medicines and information needed by the nurses are provided.* **(Sister of Respondent 5)**

The physical and emotional support to patients provided a buffer, which helped ameliorate the adverse effects of the phenomenon on patients.

Discussion and Conclusions

The maternal age of more than half of the respondents was within the 20s, however, one respondent each was 16 and 43 years. Additionally, most respondents had pre-tertiary education and engaged mainly in informal employment (petty trading). Thus, women below 20 years and above 40 years, with low level of education and income are recognised as high-risk group (Geze Tenaw et al., 2021, Asaye et al., 2020; Silva et al., 2018; Mekango et al., 2017). The risk group needs to be targeted for education on prevention and management of MNM.

The lived experiences of MNM patients were physical, psychological emotional, and financial. The physical experiences of MNM patients including discharges/bleeding (Tuncalp et al. (2012a) was dominant among the experiences that caused physical disruptions to the biography of normal patterns of life of patients, thus agreeing with the concept of biographical disruption (Locock & Ziebland, 2015). The fact that almost all of the respondents did not have clues as to what they were experiencing, raises the question of the low level of knowledge on MNM among women, hence, their poor health seeking behaviour leading to unnecessary delays. The need for an intensive health education on pregnancy and birth preparedness both at the facility and community levels is apt.

The economic/financial experiences of MNM patients (von Rosen et al. 2021) was the second most prevalent experience among the patients. Hospital bills, ranging from Gh₵5000.00 to Gh₵7000.00 for the management of an episode was beyond the means of most respondents given that majority of them were petty traders and might have lost the jobs or had a drop in their incomes (Juma et al., 2021 and von Rosen et al, 2021). These expenditures further expose some of the challenges associated with free maternal health policy introduced under the NHIS in 2008 (Abredu et al, 2023) to reduce the financial burden of pregnant women in Ghana. These experiences of loss of income and debt accumulation caused financial disruption (Locock & Ziebland, 2015) to the lives of MNM patients and their families. The need to strengthen the NHIS to cover these cases will relieve women with such conditions and improve maternal health.

The emotional/psychological experiences of MNM patients (Noyahati et al. 2017; Storeng et al., 2010; and Tuncalp et al., 2012a) were the least among the lived experiences and was mainly influenced by patients' inadequate knowledge and experience of the prognosis of the cases and their accompanying treatment (Furuta et al., 2014 and Nohayati et al., 2017). This experience also caused emotional/psychological disruption to the patients making them mentally stressed and disturbed. Psychological counselling, including resilient skills as an intervention is required to restore the emotional stability of these patients.

The reflections of some respondents on their experiences led to some positive outcomes such as consciousness of preparation for emergencies (medical and financial), awareness and sensitivity to their body and strengthening religious belief (Storeng, et al., 2010 and Noyahati et al., 2017), self-regulatory measures and reliance on others for support (Aust et al., 2016, Mbalinda et al., 2015). Though MNM experiences are debilitating and disruptive, using the appropriate lessons from their experiences and taking pre-emptive measures to help mediate the internal and external challenges of the phenomenon is worth considering.

The fact that some patients experienced the three broad consequences of MNM, shows the inter-related and multifactorial nature of the experiences. For example, physical experiences tend to generate financial and emotional experiences (Larsen, 2013). Therefore, using a multifaceted approach including a variety of support system to deal with the experiences of MNM is critical.

The physical, financial, emotional and information support to MNM patients were from family members including their spouses and the community served as a buffer to the dire effects of MNM as aligning with buffer theory of social support (Alloway and Babington, 1987). The involvement of males in maternal health services is significant as it conforms to GHS promotion of male participation of maternal services. The community support, however appeared limited to the church and NGOs, leaving out the media, traditional authorities, district, municipal and metropolitan assemblies.

MNM Patients' low level of knowledge and prior experience which contributed to their poor health seeking behaviour including delays in seeking care at referral facilities could be addressed through education at the facility and community levels. The need for multifaceted interventions to mitigate the negative effects of these experiences and restore normalcy to the lives of affected women is necessary. The various forms of support provided by the family including spouses, and the community could be strengthened as they are sensitised on vulnerabilities of MNM patients.

CHAPTER FIVE

EXPERIENCES OF PRIMARY CAREGIVERS OF MATERNAL NEAR-MISS PATIENTS

Introduction

Primary Caregivers (PCGs) of MNM patients are often family members and acquaintances such as parents, grandparents, siblings, children, cousins, spouses, in-laws and other relatives (Olagundoye & Alugo, 2018). Their experiences with MNM patients emanate from the variety of care (physical, psychological/emotional, financial and information) they provide to their wards and how that affect their physical, economic, social and psychological/ emotional wellbeing.

Nature of Care PCGs Provide to MNM Patients

Caregiving by spouses, family relatives and acquaintances generally range from the performance of household tasks, through self-care and mobility to supervision. Most of the respondents indicated that the care they provided to their patients were mainly physical/practical (financial and household chores a), emotional/instrumental (companionship, errands and encouragement) and informative (assisting with information) (Table 5).

Table 5: Nature of Care, Actors and Roles by PCGs of MNM Patients

Nature of Caregiving	Actors	Roles Performed
Physical/Practical	Sisters, Mothers, Spouses, Mothers-in-law	i. Performing of household chores (cooking, lifting items such as bucket of water), and bathing of babies.
Financial	Spouse, Mother, Sister	ii. Financial Support (Paying for medicines and treatment)
Emotional/Instrumental	Mother-in-law Spouse	Providing company, encouragement and assurance
	Sister	Making errands
Information	Mother	Maternal Counselling

Source: Field Data (2021)

Physical/Practical Care

The physical/practical care encompassed various household chores performed by caregivers to ensure the needed healthy and safe environment for the quality of care of patients. Eight respondents indicated that these were cooking, cleaning, washing and performing other routine activities such as fetching of water and bathing of babies.

Some PCGs reported the performance of general household chores to support MNM patients and thus, facilitate their recuperation, one mother reported that as follows:

> *As a young lady, she could not do much for herself and had to be assisted with her household duties until such a time she would be able to do a lot more on her own* **(Mother of Respondent 3)**

One spouse reported that he provided food for his wife while on admission and continued even after her discharge. He also lifted some heavy objects such as a bucket of water when she wanted to bath. This was done by the husband in order to prevent her from performing strenuous activities that could put a further strain on her condition. He indicated as follows:

> *After her Caesarean Section, I was cooking for her, even when she was at the hospital, I was the one cooking for her and when she came from the hospital. At home, I have to make sure that she does not lift anything heavy and so whenever she is going to take her bath whether it is in the morning or evening, I make sure I have fetched her water and taken it to the bathroom for her* **(Spouse of Respondent 9)**

Some Spouses, Sisters and Mother-in-laws similarly reported performing household chores such as cooking and washing as narrated below:

> *I have been helping her with cooking and washing* **(Sister of Respondent 5)**

> I was cooking for her, even though it was not for a long time **(Mother-in-law of Respondent 11)**

> *In addition, I sent food and other things that she needed to make her comfortable, which was really helpful* (**Spouse of Respondent 1**)

Some PCGs also assisted their patients with their personal hygienic needs including bathing them as long as their condition lingered. Both a spouse and mother engaged in this work and, thus, expressed it as follows:

> *I bathe her and wash her dirty linens* **(Spouse of Respondent 14)**
>
> *Bathing was a problem for her, therefore; I had to assist her to take her bath. I did this awhile before allowing her to continue when her condition started improving* **(Mother of Respondent 9)**

Financial Support

PCGs also provided financial support to lessen the financial burden of patients. PCGs such as relatives and spouses of MNM patients bear the financial responsibility of paying for the medical bills of their relations or wives who had suffered MNM as explained below:

> *I spent a lot of money at the Hospital at Mankesim and the story was the same at CCTH to help save my sister* **(Sister of Respondent 4)**

Some relatives of MNM patients who were overburdened with the cost of care to their patients were able to team up with the spouses of the patients to financially support them. It was illustrated as follows:

> *The financial demands were huge but we needed to support her to save the situation. It even resulted in borrowing money, a debt I am still paying for. I am working to clear that debt. Her husband is also paying part of the debt* **(Mother of Respondent 6)**

Emotional Care

Emotional care which involves showing empathy, understanding, assurance and encouragement to affected women was reported to have been provided by some PCGs. One PCG illustrated this as follows:

> *I was reassuring her and encouraging her to enable her cope with the situation* (**Mother-in-law of Respondent 11**)

Some PCGs provided company to their patients to help them overcome isolation and depression that affected some MNM patients. Some spouses indicated they engaged the patient in conversation to reduce her stress.

> *I was always talking with her so that she does not think about the situation too much and this made her feel better* **(Spouse of Respondent 2)**

> *We stayed around, conversed and encouraged her whenever we paid her a visit* **(Spouse of Respondent 9)**

Some PCG's also run errands for MNM patients during their hospitalisation. This was done to ensure that some needs of MNM patients were sorted out. One PCG expressed it this way:

> *I was taking care of her so that whatever the doctor or the nurses would request, I would do it for her* **(Sister of Respondent 4)**

This might have placed extra burden on the time and finances of the sister.

Providing Information

Some MNM patients may require information on their conditions to enable them adjust and adopt appropriate measures required for the resumption of their normal ways of life. PCGs especially older women who have years of experience of motherhood including the management of obstetric complications, engage younger mothers on issues of obstetrics complications as illustrated below.

> *I use my leisure time to discuss some topical issues to allay her fears about pregnancy-related challenges and its implications on her current condition* **(Mother of Respondent 6)**

Effects of Caregiving to MNM Patients on PCGs of MNM

Effects of caregiving to MNM patients on PCGs vary depending on the severity and duration of patients' condition, and the attitudes of PCGs towards the care recipients. The effects observed by respondents were broadly psychological/emotional, financial and reflections arising from their experiences. Specific effects are classified as psychological (anxiety, sadness and restlessness), financial (selling of personal effects, drain of family financial resources and reduced productive hours) and reflections (having a sense of hope, developed trust in God, improved attitude towards domestic emergencies, sensitivity to obstetric emergencies and ability to encourage others) (See Table 6).

Table 6: Effects of Caregiving to MNM Patients on PCGS

Main Effects of Caregiving	Specific Effects of Caregiving on PCGS
Psychological/emotional	i. Anxiety ii. Sadness iii.Restlessness
Financial	i Sale of some personal effects ii. Drain of family financial resources iii.Reduced productive hours.
Reflections on their Experiences	i.Sense of Courage ii. Developed trust in God iii.Improved in attitude towards domestic duties. iv.Sensitivity to obstetric emergencies v.Ability to encourage others with similar problems

Source: Field Data (2021)

Psychological/Emotional Effects of Caregiving

Reported psychological/emotional effects on PCGs were anxiety, sadness and sleeplessness resulting from the effect of caring for their MNM patients.

Anxiety

PCGSs' role of managing several tasks and responding to a number of issues confronting the patients could cause them some anxiety. The reasons for anxiety however differ. Some PCGs reported that some MNM cases and their attendant consequences on the patient induced fear and caused them anxiety. Thus;

> *The seriousness of her condition made me anxious and frightened* **(Mother of Respondent 4)**

Some PCGs were anxious when their patients had protracted delivery of babies amidst lack of information on the reason for the complication. He illustrated as follows:

> *I was worried, so I went to ask her whether she had offended anyone or have had an exchange of words with somebody or someone might have cursed her that is why she can't give birth.* **(Spouse of Respondent 1)**

Other PCGs' sense of empathy for their loved ones, who had experienced MNM became a source of stress and anxiety to them.

> *My sister went through pain upon pain following the incident and I was affected by her discomfort. Thinking about how best to help her get some relief stressed me up and made me anxious* **(Sister of Respondent 5)**

Sadness

Some PCGs were affected by the conditions of their patients leading to sadness. The enormity of the task of caring for MNM patients whose conditions were hardly expected overwhelmed some of the PCGs. One mother-in law also reported that:

I was sad because she had not experienced something like this nature before and handling it was difficult. **(Mother-in-law of Respondent 11)**

There was anxiety over the pains patients had to endure and the uncertainty over the length of stay at the hospital. The pain of the patients also affected the mood of some the PCGs. This was reported as follows by one spouse:

> *I was sad and couldn't even eat properly as I saw her going through this unfortunate problem and not knowing how long she would have to be hospitalised.* **(Spouse of Respondent 1)**

Restlessness

Caregiving imposed stress on some of the caregivers who developed restlessness partly due to change in their environment, adjustment to their schedules such as intermittent time of waking up to attend to the needs of the patient.

Some PCGs reported sleeplessness which was as a result of keeping awake wondering what was happening to their wives in the hospital. One PCGs indicated this as follows:

> *Emotionally, it was not easy because when she was at the hospital, I could not sleep. I will be in the room the whole night and would not be able to sleep because I have to know what is happening. What even made it serious was that the very day she was operated on, I called her phone several times and no one answered and so I was scared and I did not know what to do until the next day the nurses called that everything was fine* (**Spouse of Respondent 15)**

Economic/Financial Effects of Caregiving

Respondents expressed some economic/financial impact arising from caregiving. First, the financing of the treatment of patients constituted a drain on the finances of the family. This was partly due to high cost of medicine payment for services, feeding and transportation. Caregiving for a patient also affected productive hours for work and in some cases PCGs had to sell personal effects to raise funds.

Drain of Family Financial Resources

According to some PCGs, the cost of medication and treatment at facilities following MNM of patients drained them and at a point they had to contract a loan. One of them reported as follows:

> *We spent some amount of money at the Hospital at Mankesim and at Cape Coast too. This drained me so much at a point, I had to contract a little loan to help the situation.* **(Sister of Respondent 4)**

Another respondent indicated that besides the cost of medicines and treatment, payment for delivery as well as ensuring the survivor of the baby, was a stressful experience and it was illustrated by him as follows:

> *Financially, it was not easy at all. The last day before her delivery, when I checked, I had spent almost 2000 Ghana Cedis. Also, when the child was admitted to NICU, I had to pay for several lab tests.* **(Spouse of Respondent 9)**

Reduced Productive Hours

Respondents' role as caregivers of MNM patients could lead to absenteeism and lack of concentration at work. Some PCGs indicated that the caregiving role caused them to either attend work late or were forced to leave work early to attend to their MNM patients. In some cases, they were not able to attend work at all. One PCGs said,

> *At the hospital, I had to be moving between the pharmacy and laboratory. This disturbed me a lot because even when I go to work, I had to ask for permission and rush to the*

> *hospital. So, even at a point, I had to take leave* **(Mother-in-law of Respondent 13)**

Some PCGs lost productive hours mostly before they proceeded to work in the morning in their bid to see to the needs of their patients. One PCG indicated that she saw the MNM mother and her baby every morning. She indicated as follows:

> *I am always late at work because I have to attend to her and her baby and make sure everything is okay before I go to work* **(Sister of Respondent 5)**

Sale of Some Personal Effects

Some PCGs reported that they intermittently sold their personal effects to raise additional money to fund the medical care of their patients. A respondent asserted as follows;

> *Financially, sometimes I had to sell some of my gadgets to raise money to take care of her because all my attention was to support her to improve for the better* **(Spouse of Respondent 6)**

These financial problems contributed to the disruption of the finances of some PCGs, which could affect their effective caregiving to the patients.

PCGs' Reflections on their Experiences

Reflections of some PCGs on their experiences revealed some outcomes such as exhibition of a sense of courage, developing hope in God, an improved attitude towards domestic duties, sensitivity to emergencies and the ability to encourage others with similar problems (See Table 7).

Sense of Courage

Some PCGs indicated that their experience of taking care of MNM patients made them develop new attitudes such as courage to face challenges and being hopeful. A respondent whose relative had to undergo a procedure reported that she developed a new sense of hopefulness and felt that the sister would be safe at the end of the day. She indicated as follows:

> *I had courage when I was told she would be operated upon because I had the belief that the operation would be successful.* **(Sister of Respondent 4)**

Other PCGs who had to provide caregiving especially for those for whom this was their first-time experience, indicated that they had to accept and discharge their responsibilities imposed on them. One PCG indicated as follows:

> *I have not assisted anyone like this but I had the courage that everything was going to be fine.* **(Sister of Respondent 5)**

Developed Trust in God

Some PCGs stated that their experiences made them develop faith and trust in God as a means to receive divine support for the recovery of the patient, hence they resorted to prayers to God for his help. One PCG illustrated his reflection as follows:

> *We were all praying that everything would be fine because anything could happen. I was hoping that God will do and by his grace, he has done it* **(Sister of Respondent 4)**

Some PCGs reported that they survived the difficulties of caring for their spouses as they gathered some strength and developed hope in God through the prayers offered by their spiritual fathers as well as the sheer grace of God. Some of them having been traumatised by the condition of their patients regained their strength through the prayers and the grace of God. They illustrated as follows:

> *It was not my strength but God's grace through the prayers by my spiritual fathers* (**Spouse of Respondent 15)**
>
> *I would say it is by the grace of God and our hope in God has kept us going* **(Mother-in-law of Respondent 11)**

Improved Attitude Towards Domestic Duties

The experience of some PCGs affected their orientation towards domestic duties, especially the spouses. For example, one PCG who had to assist his MNM patient with childcare indicated as follows:

> *At first, I could not hold a month-old baby because I thought I was squeezing the baby but because of this situation, I had to learn how to do it because at times my wife needed to rest. I have even learnt how to change diapers because she went through a lot and I had to help her. I have learnt how to change the clothes of a baby. I was a good husband but I would say if it was at 20% because of this experience, it has increased to 70%.* **(Spouse of Respondent 15)**

This demonstrates how some men could adjust and play some female dominated roles when their spouses have maternal issues.

Sensitivity to Obstetric Emergencies

The experiences of some PCGs have made them develop a sense of emergency response to obstetric emergencies. One PCG observed that she had learnt from her experience that early reporting of a condition is useful for saving mothers and babies as indicated below:

> *I have learnt that something like this you don't waste time at home so that things don't get out of hands. You go to the hospital as soon as possible so that they attend to it so that you secure your child.* **(Sister of Respondent 4)**

Encouraging Others with Similar Issues

The experience of caring for MNM patients and how it was handled has enabled some PCGs to develop the capability and confidence to encourage colleague women who might find themselves in similar situations. This was narrated as follows:

> *I have rather learnt to encourage others in that situation* **(Mother-in-law of Respondent 11)**

Reliance on Social Networks

Some PCGs reported that they obtained support from members of their social networks such as friends, relatives/siblings, church and neighbours. PCGs who were financially distressed fell on friends for support to help them sort out their financial problems. Some PCGs indicated how friends cushioned them.

> *I had to seek help from some of my friends because, at certain times, the family was broke. So, I had to go to some of them for financial support* **(Spouse of Respondent 10)**

> *A friend at work supported me with 300 Ghana Cedis when he heard about what was going on* **(Spouse of Respondent 13)**

It was also observed that siblings of PCGs provided them support during the difficult period of caregiving. This was indicated as follows:

> *My elder brother helped me a bit, some of my colleague teachers also helped* **(Sister of Respondent 4)**
>
> *Her younger sister and the husband were here to support* (**Sister of Respondent 12**)

Some PCGs had support from some community members who empathised with them with words of comfort and also showed understanding. Thus;

> *Within the community, some members visited us. For instance, as soon as they saw me around, they would pass by and ask how my wife was doing. It was good because we are not from this community* **(Spouse of Respondent 14)**.

It was also reported that the church assisted PCGs with various forms of support to help reduce the burden on the caregiver.

> *When she delivered the Church brought her some gifts.* **(Mother-in-law of Respondent 11)**

Friends and family members were the dominant social network for PCGs, followed by the community.

Discussion and Conclusions

The four forms of care provided were physical/practical, financial, emotional and information (King et al. 2006) and they were based on the needs of the patients, the capacity of the PCGs and in the spirit of the social exchange theory (Miller & Bermudez, 2004).

The major form of care provided by the PCGs was physical/practical care and was dominated by the performance of household chores such as cooking, fetching of water to the bathroom, washing of clothing and bathing (Hermanns &Master-Smith, 2012; Schulz, 2016). Due to the importance of the physical care to the wellbeing of patients, all PCGs (sisters, mothers, spouses and mothers-in-law) were involved. The foregoing confirms the disruptive effect of MNM to the physical biography of patients as espoused by Bury (1982). However, the problems were mediated by family members who felt obligated to discharge their responsibilities towards their ailing confirming therefore, the theory of social exchange (Miller & Bermudez, 2004)

However, female PCGs, more than male PCGs, were involved in providing the physical and other forms of care, as traditionally females have been in caregiving (Sharma, 2016). The few males among the PCGs who provided physical care, were involved in household chores such as food preparation and personal care including bathing of patients, which were previously performed by females (Atta-Konadu et al. 2011; Rusell, 2007). Male PCGs' involvement in activities such as bathing wives show the growing involvement of males in household chores.

Emotional care (assurance, company and making errands) was the second important form of care provided by PCGs to their patients and was directed at addressing the psychological/emotional needs of MNM patients such as isolation, loneliness, anxiety and worrying among others (Noryahati et al., 2017; Hardee et al., 2012 & Angelini et al., 2018). Due to the significance of this care, almost all PCGs were involved and they performed this function based on their experiences in pregnancy and related issues (mothers-in-law) and their closeness to the patients (spouses).

Providing information to MNM patients involved only mothers who drew on their experiences in maternal care and provided practical information to allay the fears and anxieties of patients through counselling on psycho-social support for young mothers (Abdollahpour et al. 2019). These three forms of care constituted a support to the MNM patients in mitigating the disruption to the physical, financial and emotional spheres of MNM patients.

The PCGs experienced psychological/emotional consequences themselves such as anxiety, sadness and restlessness (Godhead & McDonald (2007). These experiences affected all the categories of PCGs (mothers, mothers-in-law, siblings and spouses), making the description of PCGs as "silent ill persons" (Roche, 2009; Lambert, et al., 2021) apt. Thus, they caused psychological/emotional disruption to the PCGs. The unpreparedness of some PCGs to the responsibilities of caregiving as well as the negative effects of the task may have accounted for psychological and emotional problems, hence, the need for education on caregiving practices and support for PCGs for the management of the physical and emotional problems.

Financially, the PCGs (spouses, sisters, and mothers-in-law) suffered some financial losses through the disposal of personal effects; drain of family financial resources through payment for high cost of medicines and treatment for patients (von Rosen et al. (2021) and Silva et al. (2016) and loss of productive working hours. Spouses appeared more vulnerable in this instance, given the high expectation for husbands to assist their wives financially with maternal related costs (Mbalinda et al., 2015). This eventually disrupted the financial life of PCGs. Improving the effectiveness of the NHIS system with respect to maternal health will address the disruptions.

PCGs' reflections on their experiences and the positive outcomes generated such as having a sense of courage, developed hope in God, improved attitude towards domestic duties, reorientation towards obstetric emergencies, the ability to encourage others with similar situation, and reliance on social network (Ifan et al., 2017; Schulz, 2016). The developed hope in God borders on the role of organised religion as a major social source of emotional support. The positive outcomes generated from the reflections could serve as incentives to sustain their morale in caregiving and support to MNM patients (Alloway & Babington 1987) as well as coping mechanisms against the negative experiences of the caregiving.

PCGs as providers of care to MNM patients contribute to the support system required by patients as a buffer against the debilitating effects of MNM on their physical, financial and psychological/emotional wellbeing. Male PCGs' contribution to caregiving was significant given that in recent times the role of men in maternal health services has become necessary. Due to the impact of caregiving, PCGs suffered psychological and financial disruptions to their biographies. Nonetheless, they garnered some positive effects from their experiences, thus serving as reward for caregiving. However, PCGs are not recognised as contributors to provide support for MNM patients as the case of conditions such as HIV/AID and tuberculosis, hence they are not supported to enable them discharge their duties effectively, which might negatively affect the recovery process of MNM patients.

CHAPTER SIX

EXPERIENCES OF HEALTHCARE WORKERS WITH MNM PATIENTS

Introduction

HCWs are major stakeholders in the management of MNM cases and their experiences with MNM patients provide another window for understanding some aspects of MNM in the care continuum.

This chapter focuses on selected HCWs who have had experiences dealing with MNM patients. The selected HCWs are Obstetrician Gynaecologists, Anaesthetists, Midwives, General and Critical Care Nurses drawn from the Obstetrics and Gynaecology, Anaesthesia, Midwifery, General Nursing, and Critical Care Nursing departments of CCTH. Their experiences include the management of MNM cases, their reactions to the outcome of cases, their observations of the experiences of MNM patients and resource constraints. As lead stakeholders in the management of MNM cases, their views on MNM issues including the experiences with MNM patients and the support system available to them, may be different from the perspectives other stakeholders such as MNM patients and PCGs may provide.

Table 7 provides a summary of the thematic areas from the responses of HCWs, which are organised into five broad categories namely, commonly reported MNM cases, poor management outcomes, HCWs observations on experiences of MNM patients, reflections on operational issues and support available to MNM patients.

Table 7: Summary of Themes and Sub-themes of HCWs' Experiences with MNM Patients

Themes	Sub-themes
Commonly Reported MNM Cases	i. Eclampsia ii. Pre-eclampsia iii.Post-partum Haemorrhage
Some Reasons for Poor Management Outcomes	i.Late detection and reporting of cases ii.Poor attendance to ANC iii. Inability to procure medicines/services
HCWs' Observations on the Experiences of MNM Patients	a. HCWs' observations on experiences of MNM patients at the facility i. Medical Problems: Kidney dysfunction and urinary fistula ii. Psychological Issues: Psychosis iii.Family inability to financially and physically support patients b. HCWs' observations on MNM on experiences of MNM patients outside the facility i.Social Problems: Rejection and marital disruptions ii. Economic/Financial: Loss of jobs
Reflections on Operational Issues	i. Reactions to Case Management Outcomes (happiness and mental stress) ii.Coping Strategies (shift system and self-regulation of stress iii. Support for HCWs (availability of support and lack of support)
Support Available to MNM Patients	i. Sources of Support: Family, Institutional (formal and informal) and community (Religious organisations/ NGOs) ii.Nature of Support: Physical, emotional/ psychological and information

Source: Field Data (2021)

Commonly Reported MNM Cases

According to HCWs, the most common cases of MNM reported at their facilities were preeclampsia, eclampsia, post-partum haemorrhage and maternal sepsis. Eclampsia, which is one of the maternal-related hypertensive disorders, was rated highest among cases seen at the facility just as the records obtained from the facility (Table 3) indicated as well as the reporting from HCWs interviewed.

> *The often-reported cases are hypertensive disorders (preeclampsia and eclampsia) which are seen almost on weekly basis.* (**HCW 1)**
>
> *In my view, eclampsia is commonly reported and they are seen many times within a year* **(HCW 2)**
>
> *Most of the reported cases are eclampsia patients who develop complications after delivery and some are even treated at ICU and are made to undergo dialysis due to kidney failure* **(HCW 3)**
>
> *I think eclampsia is in the lead and often reported during the high delivery months (March-May) in the year* **(HCW 4)**

The other reported MNM cases at the facility, according to some of the HCWs, were post-partum haemorrhage and sepsis as they are barely seen in the facility compared with hypertensive disorders. One HCW reported;

> *Reported post-partum haemorrhage cases are not as many as hypertensive related cases (preeclampsia and eclampsia)* **(HCW 1)**

> *Apart from eclampsia and preeclampsia, sepsis is also reported at the facility but the number of cases is fewer than the former* **(HCW 4)**

This is a reflection of the dominance of preeclampsia and eclampsia in the MNM cases presented at the facility (Table 3)

Some Reasons for Observed Poor Management Outcomes

Some HCWs attributed some observed factors leading to life threatening MNM cases or MMt such as late detection and reporting of complications, poor attendance to ANC, and financial difficulties of patients.

Late Detection and Reporting of Cases

Some patients mostly are unable to anticipate the severity of their MNM conditions early enough for appropriate intervention to be made. This delay may lead to avoidable complications. Among the factors are delays in reaching referral hospitals for care due to the time spent seeking care at lower-level health facilities. One HCW indicated that some patients report to the facility late after spending their time moving from one lower-level health facility to another. This was expressed as follows:

> *A good number of the patients do not recognise the problem very early and when they do, the decision to get to the hospital becomes a problem. Sometimes, the means to get to the hospital, as well as the referral from the CHPS compound to the hospital, causes so much delay leading to further complication.* **(HCW 1)**

The late reporting by patients was reiterated by another HCW who averred that the patients report late after visiting low resourced health facilities until their health deteriorates and would need ICU services. Thus, it was expressed as follows:

> *The patients do not report early enough. Some of them also visit our sister hospitals where the management of cases starts. Referral for ICU care is only made to CCTH when it becomes critical* **(HCW 2)**

Over dependence of some patients on their spouses for financial assistance in accessing healthcare was noted to be a contributory factor to the delays. Also, poor knowledge of the complexity of maternal issues usually due to low level of education, might have contributed to late reporting. Such patients according to one HCW, usually rely on their husbands to financially assist them to access care, hence delay(s) in getting to the Teaching Hospital.

> *One thing I have noted is that those coming from the peripherals, delay in visiting the hospital due to financial problems. Some of them are unable to attend the hospital for emergency care in the absence of their husbands. So sometimes by the time the husbands arrive home for decisions to be taken the worse would have occurred (***HCW 4)**

Poor Attendance to Antenatal Clinic (ANC)

Some pregnant women fail to attend ANC at least eight or more times before delivery as required by the WHO. The poor attendance to ANC, therefore, denies HCWs the opportunity to detect issues early enough for redress. Thus, the poor attendance to ANC may account for some of the problems observed at the facility. One HCW expressed her experience as follows:

> *When I looked into the ANC attendance book of some patients, I found no ANC attendance in some of them. So, I had the impression that if they had reported to the ANC of the health facilities in their neighbourhood, their issues would have been detected for management before any complication sets in. (***HCW 2)**

Inability to Pay for Medicines and Services

The HCWs observed that occasionally, there were patients who were unable to finance certain treatment such as dialysis and prescribed medicines which are not covered by the National Health Insurance Scheme (NHIS). This was presented as follows;

> *Sometimes the patients do not have the money to buy their medicines or undergo the necessary procedures especially with dialysis leading to fatality* (**HCW 5)**

Hence, such patients are denied care and that causes some avoidable deaths.

HCWs' Observations of the Experiences of MNM Patients

HCWs' observations about the experiences of MNM patients in the facility bordered on their physical, psychological, social and financial matters and these can be categorised into those within and outside the facility.

HCWs' facility-based observations were kidney dysfunction, urinary fistula, psychosis among patients, and financial handicap of patients and their families who support the care. Their observations of the experiences of MNM patients outside the facility were rejection, spousal conflict, and failure of the family of MNM patients to honour their responsibilities towards patients.

HCWs' Observations on Conditions at the Facility

The HCWs observed two key physical experiences of MNM patients at the facility and these were kidney dysfunction and urinary fistula. Kidney dysfunction in pregnant women is the inability of the diseased kidney to filter waste, while urinary fistula caused by surgery is the passage of urine and stool through irregular opening in the urinary tract. According to one HCW, MNM could lead to end stage kidney problems which are managed through dialysis. She narrated as follows:

> *Physically, some patients experience complications, which become acute and chronic, leading to their management through dialysis* (**HCW 5)**

Another HCW reported urinary fistula as another example of physical problems some MNM patients experience, which adversely affect their well-being. One HCW indicated as follows:

> *Again, due to the complications of delivery as a MNM, some patients end up with urinary fistula* **(HCW 1)**

According to some HCWs, some MNM patients experience psychological issues such as depression, anxiety, insomnia and post-traumatic stress due to the traumatic nature of the condition. One HCW, who gave an account of her experience with a MNM patient, who had psychological problems indicated that the patient developed psychosis while at the Ward and this led her to have physical altercations with others in the facility.

> *She developed psychosis and she sometimes prevents people from entering the ward. One time she did that and it turned into a fight between her and one individual and she fell and hit her*

> *head against an object and had a cut which had to be stitched* **(HCW 4)**

She was therefore referred to the Psychiatric hospital for further assessment and management. This experience caused psychological disruption to the patient's life.

Apart from the physical and psychological experiences, some family members including spouses were not able to honour their responsibilities such as providing financial and physical support for the patients due to financial difficulties. One HCW narrated as follows:

> *For some of the patients, their husbands leave them and abscond as some find the ICU expenses too high for them to handle.* **(HCW 5)**

It was also observed that some accompanying family members of patients to the facility were not physically strong enough to run expected errands. One HCW reported that sometimes, some patients are accompanied by old ladies to the hospital who are unable to undertake errands.

> *Sometimes we record poor outcome because some patients visit the facility without the support of 'proper' relatives. For instance, some may come with old ladies who are usually not strong enough to run errands when that becomes necessary* **(HCW 3)**

The cost of medicines and procedures in the management of MNM cases will usually require some financial support from the family members of the patients. However, the poor financial background of some family members makes it difficult for them to provide the necessary support. According to one HCW,

> *Some of the family members who accompany have financial challenges and are not financially resourced to assist with payments required for the management of cases* **(HCW 1)**

HCWs' Observations on Conditions Outside the Facility

Some HCWs observed social and economic challenges of MNM patients outside the facility (after discharge) as rejection, spousal conflict, and the failure of the family of MNM patients to honour their responsibilities.

Some HCWs observed that some MNM patients who had developed urinary fistula or lost their babies were rejected by family members when they returned home from the hospital, as their conditions were considered abnormal. Thus, in some communities, the situation led to isolation of patients who are denied the support needed. A HCW reported this as follows;

> *A lot of our people have certain perceptions about this condition and attribute it to the devil. So, when patients return home, some of them are attacked and rejected because they think the patient has committed a sin leading to those misfortunes. Thus, instead of sympathizing and supporting them, they are rather castigated against* **(HCW 1)**

Another social problem of MNM patients that HCWs reported was marital disruption due to some husbands becoming disinterested in their wives who had suffered conditions and had developed issues such as urinary fistula. In some cases, the disaffection leads to divorce. This was illustrated as follows:

> *Some of the MNM patients become unattractive to their husbands, therefore, they eventually suffer divorce due to urinary fistula.* (**HCW 1**)

Another observation of HCWs outside the health facility was the loss of jobs by MNM patients due to long absence from work. Some of the MNM patients who are self-employed lose their working capital. This assertion is supported by a HCW as follows:

> *Some patients are not able to continue their work because they lose their capital during the time of receiving care"* **(HCW 4)**

HCWs' Reflections of Operational Issues

HCWs also provided reflections on operational issues and their reactions to case management outcomes (happiness and mental stress), their coping strategies and the availability or otherwise of support for HCWs.

Happiness

Some HCWs' reported that they always become happy when they were able to save lives of MNM patients whose presentation at the facility were poor. Thus, one HCW indicated as follows:

> *Because sometimes a person comes in and you thought that the person would die but someway somehow the person survives, you become very excited and you want to pat your back* **(HCW 1)**

Conversely, some HCWs reported that they suffer psychological stress whenever they fail to save a life or successfully manage cases. Two HCWs narratives indicated their anguish for not being able to manage some cases as expected due to some resource constraints, thus:

> *Your aim as a health professional is to save lives and when you are not able to do what you are expected to do, you see that you go home and you are not able to even sleep. You take*

> *food but you cannot eat. I experienced something like that about five years ago; they had brought a pre-eclampsia patient from one of the sister hospitals very late. We struggled to keep her alive but we were unsuccessful* **(HCW 3)**

Others expressed how bad they felt and stressed, whenever they failed to address simple cases, some of which led to deaths. Their discomfort how the absence of required resources constrained them from accomplishing their duties is narrated below;

> *In some cases, you feel very bad and stressed for not been able to deal with simple cases of MNM some of which become fatal just because resources required were not readily available* **(HCW 1)**

Coping Strategies

According to the HCWs, they relied on organisational and personal strategies to cope with their challenges. They mentioned shift system and teamwork as the organisational strategies, which helped providers to have some respite and also support each other in managing MNM cases.

The shift system is a means of ensuring a 24-hour uninterrupted service while not overburdening staff to keep the system running. For example, at the ICU, where patients receive close monitoring by HCWs, the three-shift system, allow HCWs who are exhausted to have a break. Thus, one HCW indicated that the shift system is used to manage staffing problems.

> *We cannot say that the numbers are not there so we will abandon the work. So, what we do is that we are shared for the different shifts. Some come in the morning, some in the*

> *afternoon, and others at night. This enables us to have some rest in between the prescribed working hours* **(HCW 2)**

Others mentioned teamwork as an organisational strategy of managing the stress at the workplace. Teamwork enabled the work to be shared and in cases where some HCWs were absent, others replaced them. One HCW indicated as follows;

> Teamwork *also allows us to have replacement for stressed absentee staff whenever that becomes necessary* (**HCW 2)**

Some HCWs mentioned personal strategies such as self-regulation as a means of managing the stress experienced at the workplace. The HCWs mentioned bathing, resting and going to bed after work as ways of rejuvenating oneself. This was expressed as follows:

> *We manage our own stress in our own way. Sometimes when you get home you just have to bathe and go to bed without even eating but the next day you feel refreshed to go back to work* **(HCW 3)**

The training HCWs received while in school appears to have equipped them for dealing with various forms of stress at the workplace. One HCW mentioned that they are able to manage their stress at the workplace since their training in school equipped them with some orientation such as regular personal physical exercise, creating time for rest and getting in touch with friends. This was indicated as follows;

> *The good thing is that because of our training, sometimes you are taught certain things such as regular personal physical exercise, resting and staying in touch with friends and family to manage the various stresses.* **(HCW 1)**

Support System for HCWs

Support for HCWs is to enable them better manage their experiences at work. These were counselling and psychological services. Some HCWs reported that counselling and psychological services are provided at the Psychological and Counselling Units at the facility. One HCW indicated as follows:

> *"Here, we have the Psychological Therapy and Counselling Units, where staff could visit and share their problems with the officers and they will be of help."* **(HCW 5)**

Despite the availability of these services, not all HCWs utilise them as required. This may be due to confidentiality concerns on the part of HCWs and lack of confidence in the ability of the system to meet their needs.

Although we have a Psychologist, we do not go there for psychosocial support **(HCW 3**)

Some HCWs considered relationship between superiors and direct reports as not supportive enough. One HCW, mentioned that instead of the support/encouragement required from superiors, they criticise them without recognising some past positive achievements. He explained as follows:

> *The truth is that nobody cares about the health providers. Most of the time you are left on your own and sometimes you are 'crucified' by your own colleagues. They will forget about all the sacrifices and efforts and hit on only the areas you did not do right. Meanwhile, you might be working without the necessary resources needed* **(HCW 1)**

Support Available to MNM Patients

The disruptions to the biography of MNM patients following the occurrence of MNM require that they obtain some support to mitigate the effects of the phenomenon. HCWs' account of the support available to MNM patients centred on the sources and forms of the support received by the patients.

Sources and Nature of Support

Sources of support available to MNM patients were identified by HCWs as family members, institutional (formal and informal) and Community (Religious Organisations/Churches and NGOs). Thus, these sources, extended to patients, various forms of support categorised into physical, emotional and information/educative to help mitigate their challenges.

Family Members

HCWs indicated that family members of MNM patients were one of the sources of support to MNM patients. They indicated that mothers of MNM patients provided support to the patients as they are usually helpful to their daughters in maternal matters. One HCW reported;

> *Most often their mothers are around to assist them with their feeding* **(HCW 2)**

Institutional (Formal and Informal)

HCWs also indicated that health facilities which host patients during treatment for MNM cases were identified as another source of support to MNM patients through the provision of formal and informal support. Formally, health facilities through the Counselling and Psychological, and Social Welfare Units provide support. One HCW indicated that Psychologists and Psychiatrists offered some support.

> *Psychologists in the Psychology and Counselling Units of the facility assisted patients with their needs* **(HCW 1)**

Informally, HCWs serve as a source of support through voluntary contributions of money assist needy patients as indicated below;

> *We from time to time assist patients in our own small way to ease their problems* **(HCW 2)**

Community (Organisations-NGOs/Churches)

HCWs reported that the community made of Religious Organisations mainly Churches and NGOs were another source of support to MNM patients. The Churches usually support members with both spiritual and physical issues while NGOs based on their areas of interest, offer support to patients. This was illustrated as follows:

> *I know of one patient that the Church came to support while in another case one NGO provided support. I have however forgotten the name of the NGO* (**HCW 3)**
>
> *That is why the Churches and NGOs have also taken upon themselves to assist such patients.* **(HCW 1)**

HCWs indicated that forms of support provided to patients were physical, emotional and information/educative**.**

Physical Support

It was reported that health facilities and some HCWs provided physical, and financial (formal and informal) support to patients. The formal support provided were the deferment of payment for medicines and treatment by patients during emergencies, and waiver of fees for patients who are unable to make payment after treatment. Health facilities as a policy on emergency care, usually commence treatment of patients in critical conditions prior to any payments. This is usually done to stabilise patients before cost of care is recovered later. This was described by some HCWs as follows:

> *Some of them, the management of their cases require that some drugs which are not covered by the Health Insurance Scheme are purchased. Even for the dialysis, there is a specific amount that they need to pay as deposit before the start of the dialysis. Occasionally, the hospital commences treatment before an arrangement for payment for the service and or consumables is made* **(HCW 3)**

Health facilities through their Social Welfare Units assist destitutes and other patients who are incapable of settling their bills by waiving their debts. One HCW indicated that the Social Welfare Unit is contacted for support when the patient's family cannot be traced after treatment or when the patient cannot pay for the bill as indicated;

> *Sometimes too their families leave them and we coordinate with the Social Welfare Unit to get some family or community to take care of them* (**HCW 4**)
>
> *The Social Welfare Unit is always on stand-by to assist the need arises. When the amount involved is too high, we involve the Social Welfare Unit* (**HCW 2**)

In cases where it is apparent that patients were unable to pay for the services rendered and their continuous stay in the facility may cause further accumulation of bills, the Social Welfare Unit together with the Facility Management waives the bill to allow for the discharge of patients concerned. A HCW presented this as follows;

> *The hospital sometimes waves off bill of patients who are unable to pay for their treatment to facilitate their discharge.* (**HCW 5)**

Informally, health facilities and HCWs provide financial and material support and this is done through voluntary cash contribution from staff, obtaining supplies (medicines) from other patients on admission, and soliciting support from some public institutions. Some HCWs reported that they financially support disadvantaged patients by making voluntary financial contribution (Silver Collection) to support patients who are in dire financial need. One HCW explained this as follows:

> *"Sometimes when a patient is brought to the facility and we realise that the patient needs the service but she is unable to afford it, and that could lead to some fatal consequences, we contribute money to take care of them.* (**HCW 2)**

It was reported that some patients who had challenges getting supplies such as medicines and blood among others, were assisted by some resourced in-patients in the ward through the facilitation of HCWs. Some HCWs indicated that they sometimes plead with some in-patients who had some medicines or supplies to spare, to donate them to support distressed patients. She explained as follows:

> *We went to the extent of asking other patients who had things such as extra drugs and therefore are not readily needed for those who are in need but could not afford (***HCW 3)**
>
> *Even if the patient did not have money to buy a drug or blood that was needed, we used the ones meant for other patients but*

are not critically needed. We later find ways of paying for them.

(HCW 2)

Some HCWs indicated that they sometimes contact some socially responsive organisations to assist some patients, financially. A HCW reported thus:

> *Sometimes we get other institutions such as Vodafone to come in to help them. Vodafone one time paid for the discharge of one of our patients who had been admitted at the Surgical Unit"* (**HCW 5)**

It was also reported by some HCWs that some patients receive financial support during festive periods from the Community especially some NGOs, which do that as part of their activities. A HCW reported that as follows;

> *Last Christmas one NGO donated money and some items to MNM patients in its catchment area. Even there was a woman who has been discharged but could not pay her bill, she assisted her* ***(HCW 1)***

Emotional/Psychological Support

The second form of support available to MNM patients as reported by HCWs was emotional/psychological support. Some HCWs indicated the emotional support available to the patients were counselling/psychological support, and the offering of prayers.

Some HCWs mentioned counselling/psychological and psychiatry support as emotional support offered by health facilities. They observed that the Psychologists at the facility provided psychological counselling through the Psychology and Counselling Units. One HCW provided the following information:

> *Psychologists are available to counsel patients and social workers are also available to trace the family members of patients when the need arises* **(HCW 1)**

It was also observed by HCWs that patients who experienced acute mental health problems were referred to visiting Psychiatrists who were usually invited from the Specialist Hospitals to assist. This was illustrated by one HCW as follows:

> *In some instances, where we feel the psychological effect is so high, we bring in the Psychiatrist to help* **(HCW 1)**

Another form of emotional support extended to MNM patients was the visiting of patients as well as the prayers they offered during such visits. The visits and attendant prayers provided comfort and encouragement to the patients. One HCW indicated as follows;

> *The family and associates come to visit them and pray for them to show concern and encourage and comfort them* **(HCW 5)**

Information Support

Some entities that provide support to MNM patients exhibited that they offered advice and counselling to equip them with coping and recovery skills such as exercises and joining social clubs. Some HCWs reported that an NGO Officer attending to MNM patients calls patients to provide guidance and counselling. It was illustrated as follows:

> *I know of one NGO led by a woman at Assin Foso, who is using her social media handles (WhatsApp platform and a Facebook page) to educate people who have gone through*

> *such experiences with the assistance of some health care providers on the platform.* **(HCW 1)**
>
> *Apart from the social media, she makes personal calls to the patients to guide and counsel them.* **(HCW 1)**

Discussion and Conclusions

Preeclampsia and eclampsia emerged as the leading MNM conditions based on the account of the HCWs as well as the profile of MNM patients obtained from the facility (Table 3). This finding reflects the situation in Ghana as reported by Oppong et al. (2019) and Tuncalp et al. (2013). Thus, the other MNM conditions such as post-partum haemorrhage, sepsis and uterine rupture were rarely reported by patients at the facility. The high cases of hypertensive disorders in pregnancy and delivery leading to MNM cause physical, social, economic/psychological and financial disruptions to patients (Locock & Ziebland, 2015).

Poor maternal outcomes such as MMt or MNM attributable to late reporting and detection of cases, poor ANC attendance and poor financial state of patients and family expose the personal role of patients in achieving quality maternal health. The poor referral system accounts for the late reporting of cases at CCTH due to ineffective communication between the lower and higher levels of health facilities. The delays at the community level affect the response of referral health facilities to meet the needs of patients and ensure quality care. Thus, patients, their families especially spouses and lower health facilities have the responsibility to ensure that cases are timely reported. These instances clearly reflected the issues as propounded by Thaddeus and Maine (1994) in their Three Delay Model. They asserted that various delays on the parts of the family, community and experts of health facilities could potentially catalyse the occurrence of MM or MNM.

Non adherence to WHO's requirement for pregnant women to make at least eight or more ANC visits before delivery by some women poses a challenge to quality healthcare. Such visits aid the detection of issues such as nutritional problems and protein and BP levels of pregnant women. Making the required ANC visits has the potential to markedly reducing perinatal deaths. Lack of adequate education on the subject, long distance between patients' natal homes and health facilities and financial barriers could account for the problem. However, if indicators such as; effectiveness, timeliness, accessibility, drugs, facilities and workforces for quality care as stipulated by WHO (2018) are not considered, the afore-stated issues may not be realised

The inability of some patients and their families to fund prescribed medicines and treatment including dialysis coupled with limited coverage of NHIS for medicines and treatment undermine maternal healthcare delivery. Due to the inconveniences, some family members including spouses abscond from the facility leaving their wives to their fate when they realise the financial commitments for managing their patients. For example, the demand for high and upfront payment for ICU services at CCTH is usually beyond the means of some MNM patients and their families including spouses. Thus, the social exchange theory propounds that human relationships ought to be formed and consolidated as a way to help.

Thus, even though the social exchange theory expects families to respond to patients' needs, the lack of financial adequacy of the former becomes a barrier, forcing some family members to neglect their obligations. NHIS which was instituted more than two decades in the country to address the financial inequalities in the health services, has been bedevilled with inefficiencies including non-coverage of essential services such as ICU admission. Thus, financially disadvantaged patients are denied the opportunity to access critical care services at the only ICU serving the Central and Western regions of Ghana.

HCWs' observation of social experiences of patients is a significant addition to the physical, psychological and financial experiences indicated by the patients. This was also highlighted by the buffer theory of social support by Alloway and Babington (1987), which explains that social support systems prolong person's longevity, improve health and wellness. These social experiences including the rejection of some patients by their families for developing some physical challenges such as urinary fistula demonstrate the poor appreciation of the consequences of MNM on patients and the role of the family to assist with the recovery of patients and resumption of normal activities.

Some physical and psychological experiences of patients such as kidney dysfunction leading to dialysis, urinary fistula and psychosis (Fenech & Thomson, (2014); Norhayati et al. (2015); Storeng et al. (2010) and their economic and social costs to society, highlight the need for preventive healthcare measures against the incidence of MNM as well as interventions for addressing the physical, financial, social and psychological disruptions of the phenomenon to functionality of affected women.

The support for HCWs in respect of their experiences with MNM patients is largely limited to staff ability to visit the Psychological Therapy and Counselling Units at the Facility for care, designed for both staff and patients. The absence of special care for staff to meet their special needs, indicates a lack of recognition of the physical and psychological experiences, as well as the need to institute some deliberate measures to support and serve as buffer (Alloway and Babington (1987) that will enable them cope with their challenges (Tracy et al. (2020). Thus, failure to provide the needed support will dampen the morale of HCWs and subsequently affect their responsibility towards patients. This explains the happiness expressed by some HCWs when they were able to save an otherwise bad situation (Liu et al. (2020) and Laukka et al. (2020) and the mental strain when the unfortunate happens underscore the determination of staff to uphold their oaths of saving lives. The manual delivery of some services such as bathing, lifting of patients and providing bedpans which ultimately led to fatigue and burnt outs (Walberg et al. 2017) could be responsible for physical strain some HCWs experience.

Coping mechanisms for HCWs to manage their experiences through institutional (shift system and teamwork) and personal (bathing, taking rest and regular personal physical exercises) avenues appear to be a viable means of providing some respite to HCWs. Examining the effectiveness of these mechanisms with the aim of expanding the scope of support to patients (Boateng et al. (2021) and Bawontuo et al. (2021) maybe critical.

The institutional (facility), personal (HCWs) and community support for patients should be examined to determine their impact on patients and sustainability. For instance, the effectiveness of the Social Welfare Unit depends on the availability of funds mobilised from the general public and policy guidelines to prevent its abuse by some patients. Again, continuity of counselling and psychological services at the community level is necessary to ensure that this critical intervention for dealing with mental health issues is integrated into maternal health services in Ghana.

NGOs as agencies in the Community have been partners of MoH and GHS by providing services such as donation of logistics and educational materials to disadvantaged communities. Thus, NGOs providing education and information to build the capacity of MNM patients to manage their experiences is in the right direction and perhaps should be intensified to improve MNM services.

These array of support to MNM patients identified by HCWs are not coordinated into a support system involving the family, HCWs/facility and community. This may hamper efforts aimed at addressing the needs of patients and ensuring a better monitoring and appraisal for the support for MNM patients. Thus, considering the social exchange theory (2004), buffer theory of social support (1987) and the Donabedian quality of care model (2002), various supports to MNM patients as indicated by HCWs could be duly coordinated into a robust support system.

MNM cases reported at CCTH were mainly Potentially Life-Threatening Cases (PLTCs) even though WHO indicates MNM cases are both PLTCs and Life-Threatening Cases (LTCs). Poor ANC attendance, late reporting of cases and poor financial condition of patients lead to poor maternal outcomes, hence, undermining quality maternal health services and further slowing down efforts to attain SDG 3.1. The deficiencies in NHIS implementation including the exclusion of some conditions, medicines and treatment has contributed to poor maternal outcomes such as MNM. Stigmatising MNM patients and further rejecting them by families undermine efforts aimed at achieving quality health at both facility and community levels. The inadequate support for HCWs, who suffer physical strain and mental stress might impact negatively on their morale and effectiveness. The institutional coping system such as shift system and teamwork, and personal or self-regulatory activities though provide some respite to HCWs, they are not intentionally provided to address the growing stress of HCWs. The family, community and HCWs' support to MNM patients shows diversity in the sources of support and are not coordinated towards achieving desired goals.

CHAPTER SEVEN

PERSPECTIVES OF MNM PATIENTS, PRIMARY CAREGIVERS AND HEALTHCARE WORKERS ON QUALITY OF CARE

Introduction

The perspectives of stakeholders in healthcare such as clients, providers and regulators on quality of care are necessary as their feedback shape the healthcare delivery system. Stakeholders of MNM in this study are MNM patients (clients), their PCGs (informal caregivers) and HCWs (formal caregivers) and that their perspectives on quality of care provide feedback for improving health delivery.

Quality of healthcare, among others, consists of a continuum of structure, process and outcome (Donabedian, 2005). Each component of the model is influenced by characteristics such as appropriateness, affordability, technical competence, timeliness, privacy, confidentiality, empathy, attentiveness, caring, responsiveness, accountability, reliability, comprehensiveness, equity, environment, amenities and facilities. Others are efficacy, effectiveness, efficiency, ensuring safety and security, reduction of mortality and morbidity, improvement in quality of life and patient's health status as well as patients' satisfaction (Mosadegrad, 2012). Thus, the structure considers the setting and resources for providing care and it includes facilities, equipment, number and qualification of staff. The process focuses on actions involved in giving and receiving care such as patient-doctor engagement, doctor-patient communication and information. Outcome of the model is measured by the rate of recovery, length of hospital stay, cost and satisfaction.

Stakeholders (MNM patients, PCGs and HCWs) have peculiar interest in different aspects of the quality of care, and therefore, for a comprehensive assessment, some studies consider multiple perspectives on quality of care (Williams et al, 2015). Feedback from patients on quality may provide vital information on aspects of service delivery (Tuncalp et al. 2012a).

PCGs of MNM patients' assessment of quality care is also relevant due to their status as relations and advocates of patients and in their interactions with the healthcare system (Lungu et al., 2018). Finally, HCWs, who are the formal providers of care, base their views on technical knowledge and the expectations of their clients as well as the regulatory bodies such as GHS, MoH, Ghana Medical and Nurse and Midwifery Councils (Farr, & Cressey (2015).

Perspectives of MNM Patients on Quality of Care

MNM patients' perspective on quality of care received at CCTH centred around soft skills such as empathy, caring, communication, human relations, communication and attentiveness as well as technical skills. Their views were both positive and negative reflecting a balanced view of their level of satisfaction with the services received. Almost all the respondents (11) expressed positive views on the quality of care based on empathy, caring, technical competence and commitment while the few negatives were related to inattentiveness, miscommunication and poor human relations.

Empathy

Some MNM patients indicated that the HCWs provided emotional support to patients through effective listening and understanding. One patient indicated as follows:

> *The care was good and fine, and staff had empathy. They took very good care of me* (**Respondent 4, 27-year-old patient**)

Caring

Providers are expected to show kindness and go out of their way to render services to patients to facilitate their recovery. Thus, the provision of food to a patient was considered as a good gesture and was therefore an act of caring. She remarked as follows:

> *They took very good care of me. We were even given food until the time we left* (**Respondent 4, 27-year-old patient**)

For the youngest patient among the respondents, caring meant the absence of any maltreatment by providers and also the show of friendliness by the nurses in particular.

> *At the hospital, there were no nurses who mistreated patients. The nurses were good and friendly.* (**Respondent 5, 16-year-old patient)**

Some patients reported on the quality of care received from the different teams from the shift system. For example, one patient mentioned that the nurses on morning shift took better care of her compared to the nurses who were on the afternoon and night shifts. She narrated as follows:

> *The morning shift nurses who took care of me attended to me very well especially after I had delivered. However, because I had to wait for the Doctor to examine the baby, I stayed till the evening without any food as the nurses who came later on were not that caring.* **(Respondent 8, 30-year-old patient)**

Finally, the responses on caring were rounded up with a rating of providers' work by a patient who considered the care as very high. She also singled out midwives for the special role played in the delivery of good service.

> *For the caring, I must say they did their best. If I am to rate them, I will give them about 80% or 90%. The midwife did very well.* (**Respondent 12, 43-year-old patient)**

Some providers were reported to be slow in responding to the needs of patients and were labelled as lacking concern for patients. Some patients indicated that some of the nurses delayed in responding to requests. One patient narrated as follows:

> *My sister who was with me had gone to the house to prepare me food. Meanwhile I needed water to drink. But since none of the nurses who came up to check up on me in the evening were readily helpful, I had to call a passer-by to get me the water.* (**Respondent 8, 30-year-old patient)**

Technical Competence

Technical competence in terms of the application of appropriate knowledge and skills to achieve desired results in a clinical setting was cited by some respondents as one of the attributes of quality care. Some patients indicated that the providers at CCTH were technically competent and this was described as the prompt attention provided upon reaching the facility and the appropriate discharge of their responsibility during emergency. A respondent narrated as follows;

> *I can say that they work well because when I was brought in, they stood by me, gave me the necessary attention and*

> *performed their work as they are supposed to* **(Respondent 6, 27-year-old-patient)**

Another respondent described the technical competence of providers (nurses) as when providers follow a care plan including administering prescribed medicines to patients and checking up. Thus;

> *They work very well. In the morning they would ask me how I was doing and will give me my medicines. Later in the day, they would come to check how I was doing* **(Respondent 5, 16-year-old patient)**

Another respondent indicated that for HCWs not to have caused any harm to patients amidst treatment constituted technical competence. This was expressed by a patient as follows:

> *I would say that the staff performed their work to the best of their abilities and none of them did anything to harm me* (**Respondent 13, 28-year-old patient**)

From the perspective of another patient on technical competence, it relates to staff successfully performing procedures on her at the theatre and regularly checking up on her thereafter.

> *At the theatre too, the providers did everything as expected of them and brought me back to the ward. During the recovery period, the doctor was around most of the time to enquire about my wellbeing.* (**Respondent 11, 32-year-old patient)**

Staff at some units in the facility were commended for their technical competence. For example, some of the patients singled out the staff of the Delivery Suite who were commended for their competence.

> *"The providers did very well, especially those at the Delivery Suite. I highly commend them for their professional service."* (**Respondent 10, 29-year-old patient)**

Human Relations

A good human relation is described as the friendliness of providers in the course of giving of care. Thus, a patient described the friendliness of the doctors and nurses who attended to her needs including regular check-ups as follows:

> *The doctor and nurses who attended to me were friendly with the people. There was one doctor who will always made me feel at home whenever he came to check up on me* *(***Respondent 1, 32-year-old patient)**

Some patients, however, reported disrespectful behaviour from some providers such as treating their PCGs, including mothers, with disdain as a form of poor quality of care. One patient whose mother was disrespected indicated her disapproval as follows:

> *My mother complained that some of the nurses disrespected her as they disrespectfully spoke to her when she tried explaining some issues to them* **(Respondent 5, 16-year-old patient)**

Commitment

Commitment involving dedication to duty and making the necessary sacrifices is required for meeting the needs of patients. Thus, commitment was described by a patient as the sacrifices providers make in the interest of their patient. A respondent defined commitment of some providers as deciding to stay on and take care of patients beyond shift time. One patient pointed out that;

> *The nurses and doctors who attended to me were very committed. At one time, a doctor whose closing time was up decided to stay on and provide me the necessary service.* **(Respondent 7, 26-year-old patient)**

Notwithstanding the above-presented positive comments on quality of care, some patients made some negative comments such as inattentiveness, poor communication and disrespect.

Inattentiveness

Some patients considered lack of attention and concentration by some HCWs, which led to some negligence as an example of poor-quality care. For instance, one patient complained that a nurse had forgotten to administer the prescribed medicine to her at a scheduled time and it had to take a student doctor to realise the problem and quickly rectify it. She explained it as follows:

> *It was at the Obstetrics & Gynaecology Ward where an induction was performed. They were not checking on me well as they were busy with other things and even forgot to put a particular medicine under my tongue. So, it was when the student doctor came to check up on me that it was*

> *realised that they had forgotten to administer the medicine* **(Respondent 10, 29-year-old patient)**

Miscommunication

Quality communication and information flow engender trust and allow exchange of ideas between patients and providers. The communication is described as poor when providers withhold vital information needed to put patients at ease. Poor communication from a HCW was narrated by one patient who had a disagreement with a nurse over the whereabouts of her baby after delivery.

> *After delivery, my baby was not brought to me immediately though other women received their babies. When I enquired, I was told my baby was at the NICU. I became anxious when for almost the whole day I had not been updated on the state of my baby. Out of desperation, I eventually went to NICU to check up on the baby but the nurse in charge got angry with me for informing her before proceeding to NICU and that was quite unfortunate.* **(Respondent 9, 30-year-old patient)**

The foregoing indicates that patients were generally pleased with the quality of care as providers showed empathy, care, technical competence, good human relations and commitment. However, some had concerns with miscommunication, disrespectful behaviour and inattentiveness on the part of some staff.

Beyond the patients, PCGs being indirect clients of the facility, also provided some perspectives on quality of care for MNM patients

Perspectives of PCGS on Quality of Care

Quality of care from the perspective of PCGs is also important for attaining comprehensive feedback on service delivery. Thus, Mosadeghrad (2012) in considering the perspectives of stakeholders on quality of care considered the relatives of patients. PCGs evaluation of quality of care is based on some indicators such as promptness of care, communication between providers and clients, competence of providers and cost of care among others (Kwame & Petrucka, 2021).

Respondents' evaluation on quality of care was both positive and negative and centred on the processes of care such as communication, human relations, promptness of care, competence, effectiveness and respect.

Communication

Communication is expected to ensure cordial and fruitful exchanges between providers and clients to enhance health services. Some PCGs described the communication as good when providers interacted politely with PCGs of patients. One PCG applauded the politeness in communication of some HCWs. This was indicated as follows:

> *Oh, they did well a lot. They communicated with us politely to both patients and PCGs* **(Sister of Respondent 12)**

Some PCGs, however, had concerns about the communication from the HCWs as in one case a request for blood donation to support a patient was made rather too late. This was indicated as follows:

> *I will say that at the hospital everything was okay. But the problem we had was when they were going to operate on my wife, they requested for blood very late, just when she was*

> *about to be sent to the theatre, after I had already made all payments.* **(Spouse of Respondent 11)**

Human Relations

The human relations between HCWs and PCGs of patients is expected to be warm, friendly and cooperative. Thus, some PCGs considered the human relations of HCWs as good when the latter showed some flexibility on the visiting protocols of patients on admission. The decision by HCWs to assist a visiting PCG when the visiting time had elapsed was appreciated by one PCG.

> *One thing that I experienced was that even though they followed strictly the prescribed visiting hours, some of nurses too were very kind such that sometimes when the visiting time had elapsed, they will assist me by taking whatever thing I brought and hand it over to my wife* **(Spouse of Respondent 9)**

Providers' kindness and dedication to duty for the benefit of their patients were considered by some respondents as a mark of good human relations. For example, one PCG was pleased with a provider who stayed awake throughout the night during her shift and reported as follows:

> *Some of them are very good although I don't know them by name, I can identify them by face. Some of them stayed with my wife throughout the night* **(Spouse of Respondent 15)**

Clients expect that providers will show decorum and courtesy to them and their relations in their interactions to ensure provision of care. Some patients expressed their pleasure for the positive treatment received from providers. An example, was a mother-in-law who indicated that,

> *The doctors and nurses treated us very well* **(Mother-in-law of Respondent 11)**

Promptness of care

Timely response from HCWs in addressing the emergency needs of patients was considered as a good quality care by some PCGs. A PCG who witnessed how providers rushed her sister to the theatre when it was realised that the foetus was in distress, acknowledged the prompt response as follows:

> *When we got to the hospital, they immediately checked and said, the breath of the baby was down so they had to rush her to the theatre while we were asked to buy the necessary medication and other things she needed. So, I will say they were prompt with their work* **(Sister of Respondent 4)**

Effectiveness

Providers discharging their responsibilities to bring out the desired outcomes is described as effectiveness. Some patients were pleased with the various interventions by HCWs to ensure that the overall needs of patients were met and thus one of them indicated as follows:

> *Everything was fine, the health officers did everything fine to make my patient well. The only thing I did was to run errands to get her medicines* **(Mother-in-law of Respondent 11)**

Some PCGs averred that quality of care provided was good given the communication, good human relations, promptness of care and effectiveness demonstrated by some HCWs.

Perspectives of HCWs on Quality of Care

Health providers see health quality as an aspect of service that bring them satisfaction, best possible outcomes and meets the requirements of regulators (Mosadegrad, 2012). Providers of health services are therefore interested in issues such as resources (human, amenities/facilities, equipment, supplies and administrative processes) that ensure the attainment of desired health outcomes.

Management of MNM Cases

Evaluation of quality of care including clinical management of cases is certified by HCWs based on their knowledge of the Standard Operating Procedures (SOPs) of the regulatory agencies such as Ghana Medical and Dental Council, Nursing and Midwifery Council and the Allied Health Professions Councils of Ghana. The SOPs include assessment of pain and management of patients. The HCWs were generally pleased with the outcomes though with some variations in their responses.

Some HCWs who were pleased with the outcome of MNM management of cases at the facility described the management of MNM cases as follows:

> *To a large extent, the MNM cases reported to the facility had been well managed* **(HCW 1)**
>
> *Yes, we (HCWs) have been able to handle well the MNM cases brought to the facility* (**HCW 2)**

Other HCWs indicated that the management of MNM cases was successful despite the challenges they faced such as late reporting of cases and unavailability of blood. For example, some HCWs indicated that they saved some MNM patients who were brought in and required blood transfusion but there was no blood and therefore arrangements were quickly made to obtain supplies from other sister facilities or appropriate blood donors.

> *It is not that I am praising our workers but we do our best. Even if we do not have blood, we call the University of Cape Coast Hospital or we find people who can donate quickly in order to save the person's life.* **(HCW 2)**

Some HCWs indicated they saved MNM patients who were brought to the facility late after attempts had been made to seek care from some lower healthcare facilities.

> *You know, this is a referral hospital and so sometimes they are referred from other places where they start the management. So, depending on the state patients are brought in we are able to do our best* **(HCW 2**)

Other patients who were presented to the facility in a very poor state, HCWs successfully managed by them. This was reported as follows;

> *We are managing them very well because sometimes when you look at the condition of the patient and how we are able to successfully manage them, it means we are doing well"* **(HCW 3)**

Despite the general positive feedback on the outcome of case management by HCWs, some MNM patients reportedly had mixed reactions on the outcomes. Patients who had positive outcomes expressed their appreciation while those who had some losses expressed disappointment and bitterness.

Some HCWs indicated that some patients were appreciative of the care they received as they expressed their pleasure of being alive despite the discomforts they had to endure. One HCW indicated that a number of patients after receiving treatment and recovery expressed gratitude. The HCW indicated as follows;

> *Often times, when patients come out of the situation, a good number of them are very grateful to staff and also for being alive* **(HCW 1)**

Contrary to the appreciative stance by some patients, others who ended up losing their children or having some disability expressed their disappointment and bitterness. Thus,

> *Those who suffered some form of disability or complication become bitter and make us feel bad for our decisions. Sometimes some of them will push you to the corner telling you that you should have even let them to die to save them from enduring this experience* (**HCW 1**)

Availability of Resources

HCWs' efficiency and effectiveness in the delivery of services to MNM patients are influenced by the availability of resources such as facilities, staffing, equipment, supplies/logistics and, supervision/leadership among others.

Some HCWs reported that they had adequate number of staff, however, the number of some critical staff was poor; there was erratic supply of blood, there was also inadequate space and low number of beds at the ICU, ageing hospital equipment, and irregular availability of very Senior Officers.

Number and Mix of Staff

Adequacy of HCWs as well as their right mix is necessary for effective management of MNM cases due to its delicate nature. Some HCWs indicated that staffing was generally adequate as their number, as a whole, was enough.

> *I will say the staffing is adequate. We have enough nurses and other category of staff* (**HCW 3**)
>
> *The number of staff and their expertise is not a problem* **(HCW 1)**

However, concerning the right mix of staff, some HCWs reportedly indicated that they had challenge with the number of some staff especially Critical Care Nurses (CCNs) and Anaesthetists. CCNs at the time were two while anaesthetists were 14. This was illustrated as follows:

> *The number of CCNs for example is low; I think we will need about 10 or more* **(HCW 5)**
>
> *The problem is the low number of Anaesthetists in the facility. In my opinion, between 22-25 should have been sufficient* **(HCW 1)**

Moreover, the irregular availability of very Senior Officers such as Consultants and Specialists who are expected to provide direction to non-specialists such as General Practitioners and also to administer expert care at certain times poses a challenge to quality care. One HCW indicated they sometimes miss the inputs of Senior Most Officers in the delivery of care.

> *Sometimes at a point where help is needed, the Senior-Most person (Consultant/Specialist) might not be on the ground so some decisions that should have been taken earlier might be missed*. **(HCW 1)**

Supplies

Blood supply problem is reported as one of the challenges that hampered healthcare delivery for MNM patients at the facility. Blood shortage in the facility occurs when the appropriate blood type is unavailable and when there are no ready donors to assist. One HCW reported that,

> *We have challenges getting blood for patients because the desired blood group may not be available at the blood bank and that makes it difficult when managing such cases. Sometimes too patients do not bring donors. Further, it is difficult to find their blood type for patients with the negative blood groups. So, we go to either the University of Cape Coast or Abura Dunkwa Hospital for assistance"* **(HCW 4**)

Space and Beds

ICU service is necessary for managing patients who develop MNM-related organ dysfunction or failure. Adequacy of space and beds are among the critical factors required for proper functioning of the Unit. It was, however, reported that the ICU ward at CCTH is small and the beds are just five in number. Again, the ICU is used for all cases including obstetric gynaecological cases. This was illustrated as follows:

> *Our ICU has only five beds and therefore the capacity for facility to admit more than five patients with critical needs requiring admission is limited; thus, making the Unit always full. So, when it happens like that the patient would have to go to another facility or probably hold on until a patient is discharged from the ICU* **(HCW 5)**

> *Our ICU space is limited and it serves all ICU cases. I wish it could be expanded so that the obstetrics and gynaecology*

> *cases would have a separate ICU unit from that of the main ICU* **(HCW 1)**

The inadequacy of these facilities limits the ability of the Hospital to support more patients in need of critical care.

Ageing Equipment

Modern equipment for laboratory, radiological and anaesthetic investigation and assessments are critical for diagnosis and treatment. However, some HCWs reported that the equipment were ageing and required replacement. This was reported as follows;

> *In terms of the equipment, the ones we are working with at the Laboratory, Radiology and Anaesthesia Units are ageing and that affects accurate investigations. I wish they are changed* **(HCW 1)**

With the exception of case management, HCWs view on quality of care based on inputs such as inadequacy of some critical staff, supplies, space and leadership/supervision was poor.

Discussion and Conclusions

The perspectives of MNM patients, their PCGs and HCWs on quality of care for MNM cases at CCTH, show some pluralism as well as commonality in the views of stakeholders on the subject. The three key stakeholders unanimously indicated that the quality of care was generally good, despite some variations in their areas of concentration. Notwithstanding the general impression of good quality care by the stakeholders, they had some concerns in some aspects of the care. While the patients and PCGs focused on the process component of quality-of-care model, HCWs considered the structure and outcome of the model (Donabedian, 2005). These are illustrated in table 8 below.

Table 8: Perspectives of MNM Patients, PCGs and HCWs on Quality of Care based on Donabedian's Model of Quality of Care

Perspectives	Structure	Process	Outcome
MNM patients on quality of care		i. Empathy ii. Caring iii. Technical competence iv. Human relations v. Commitment. vi. Inattention vii.Miscommunication	
Perspectives of PCGS on Quality of Care		i. Communication ii.Human relations iii.Promptness of care iv. Effectiveness	
Perspectives of HCWS on Quality of Care	i.Adequate number of staff ii.Right Mix of Staff iii.Inadequate Supplies iv.Poor Space v.Ageing Equipment vi. Irregular availability of Senior Officers at critical times		i. Successful Management of cases ii. Mixed reactions of patients

Source: Field Data (2021)

MNM patients and their PCGs' perspectives highlighted common areas of quality of care such as caring, technical competence, human relations, and communication (Noryahati et al., 2017; Mohammeddi et al., 2017; Stal et al., 2015). However, unique to patients and PCGs were empathy, commitment and inattentiveness, and effectiveness and promptness, respectively. Patients and PCGs were positive with empathy, caring, technical competence, human relations, commitment, promptness of care and effectiveness. They, however, had concerns with communication, attentiveness and human relations of health providers (Stal et al., 2015; Torkmannejad Sabsevari et al., 2021).

HCWs perspective on quality of care, unlike MNM patients and their PCGs, focused on the structure and outcome components of quality of healthcare model, which may have been motivated by their interest in the efficacy of services provided and the resources required to achieve that. Thus, they stressed on case management outcomes and availability of resources such as the number and mix of staff, ICU space and beds, supplies, equipment and supervision/leadership. For example, with a blood bank capacity of 400 pints and a daily consumption of 30 pints, the facility occasionally recorded a shortfall either in volume or the blood type required. This challenge to them undermined strategies aimed at improving maternal health in health facilities in the country. Strengthening existing blood management protocols in the facilities, is therefore important for the management of blood supplies.

The shortfall in the number of some specialised HCWs such as anaesthetists and CCNS (Asamani et al., 2021 & Siaw-Frimpong et al., 2021) was considered an obstacle to optimal obstetric care at health facilities in the country. The inadequacy of ICU beds (Siaw-Frimpong et al. 2021) at the facility also undermines efforts to effectively manage critical MNM cases such as organ failure or dysfunction and thereby reduce MMt and attain SDG, 3.1. (UN, 2015) and further limit studies into LTCs. Hence, efforts should be made to address the inadequate ICU space.

Furthermore, the ageing laboratory, radiology and anaesthetic equipment were considered as affecting diagnostic investigations for medical and surgical decisions. The high capital outlay for replacing medical equipment by MoH/GHS and the facility, might be the reason for the poor rate of replacement of equipment and its dire effect on investigations.

The irregular availability of Consultants/Specialists to give directions and take critical decisions at referral health facilities such as the CCTH could be disturbing. Thus, in some situations, Junior Medical Officers are allowed to play sensitive roles to the detriment of the health of patients and a breach of the GHS protocol on specialist care.

The areas of concern expressed by patients, PCGs and HCWs reflect the poor quality of maternal health in low-income settings including Ghana (Van den Broek et al., 2009). Some of the concerns such as communication and human relations, constitute breaches of the Code of Ethics, Code of Conduct and Patients Charter of the GHS, and thus, raise the question of staff awareness and conformance to these regulatory policies. Resource constraint which is quite common with most public health facilities in resource-poor regions (Moyer et al., 2014) reflects the challenges with infrastructure and equipment in healthcare delivery systems in Africa (AfDBG, 2022).

The perspectives of stakeholders on quality of healthcare reflect their respective interests as MNM patients and their PCGs who are direct and indirect clients focused on processes of component of care while HCWs, the providers, considered structure (inputs) and outcomes components of quality of care. The perspectives of PCGs indicate the role of significant others in client satisfaction survey. Further, the capacity of HCWs to successfully manage cases despite resource constraints show the resourcefulness of Ghanaian HCW. Also, the poor remarks on quality of care by stakeholders is an afront to quality assurance protocols and thereby contribute to sub-optimal service delivery.

Positive feedback on quality of care for MNM cases from majority of stakeholders should prompt the strengthening of gains so far made by the facility by improving case management and supervision of staff to help reduce or eliminate the few complaints.

CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter focuses on the summary of major findings, conclusions, recommendations and suggested areas for further study. The main aim of the study was to explore the lived experiences and the support systems available to MNM patients. The other issues investigated were the experiences of PCGs of MNM patients, the experiences of HCWs with MNM patients, and the perspectives of MNM patients, PCGs and HCWs on quality of care.

The study used an interpretivist paradigm with a phenomenological design to collect data with a semi-structured interview guide through an in-depth interview of fifteen (15) MNM patients, 13 (thirteen) PCGs and five (5) HCWs, who were purposively sampled. The data was analysed manually using Collaizzi's seven distinctive steps for analysis of qualitative data while Guba and Lincoln's five criteria of trustworthiness were applied to ensure rigour. Data storage and management principles were adhered to. In addition, the theoretical models applied were the three-delay model, concept of biogeographical disruption, social exchange theory, quality of care model and buffer theory of social support.

Summary of Main Findings of the Study

This section presents the summary of the main findings of the study guided by the set objectives. The main objective of the study was to explore the lived experiences and support system available to MNM patients. The specific objectives were to: (i) explore the categories of lived experiences of MNM patients; (ii) investigate the experiences of PCGs in supporting MNM patients; (iii) appraise the experiences of HCWs with MNM patients; (iv) assess the perspectives of MNM patients, PCGs and HCWs on quality of care; and (v) assess the support system available to MNM patients.

Categories of Lived Experiences of MNM Patients

The lived experiences of MNM identified were physical, psychological/emotional, financial and social consequences (Noyahati, et al. (2017); Storeng et al. (2010) and von Rosen et al. (2021). These experiences inflicted physical, emotional/psychological, financial and social disruptions (Bury, 1982) to the routine activities in aforementioned domains of their life. The various disruptions confirm Larsen's (2013) concept of illness and also aligns with the concept of biographical disruption, which indicate that the experiences of ill-health extend beyond pathology to disrupting the normality of the socio-economic wellbeing of patients. Further, patients' poor health seeking behaviours such as delays in seeking medical care give credence to the effect of three delay model on maternal outcomes. The MNM patients however, mentioned self-regulation, rest, regular check-up and reliance on the family (Nohayati et al., 2017; Szatmári et al., 2020) as their coping strategies.

Experiences of PCGs in Supporting MNM Patients

PCGs of MNM patients experienced psychological/emotional and financial consequences (Given et al, 2012; Maresova et al, 2020) arising from the provision of physical, financial, psychological/emotional and information to patients. The provision of these forms of care was inspired by the social exchange theory (Miller & Bermudez, 2004) which shows how responsibilities of spouses and familial relationship imposes some obligation on family members to support their ailing patients. Their experiences caused disruptions (Bury, 1982) to their normal life trajectories, thus, compromising their psychological/ emotional and economic/financial lives. These disruptions confirm the concept of biographical disruptions by Bury (1982). PCGs mentioned support from social network such as family, friends and church members as a means of coping (Agyemang-Duah et al; 2020; Kyei-Arthur & Cudjoe, 2020). Some positive reflections on their experiences, may serve as an incentive for sustained caregiving. Also, male (spouses) involvement in caregiving to MNM patients brings to the fore the relevance of male participation in maternal services, thus, providing room for further investigation. Finally, there is no recognition and formal support for PCGs to enable them effectively provide the care required to facilitate the recovery of their patients.

Experiences of HCWs with MNM Patients

Experiences of HCWs with MNM patients indicated that PLTCs such as hypertensive disorders (preeclampsia and eclampsia) and post-partum haemorrhage (Heikamp et al, 2021; Kumela et al, 2020; Lima et al. 2019) were the leading causes of MNM reported at CCTH. Despite some resource constraints and unfavourable conditions, HCWs had the capacity to manage MNM cases through the appropriate coping strategies such as the shift system, self-regulation activities such as bathing and resting, and physical exercise. While the theory of social exchange (Miller & Bermudez, 2004) explains HCWs' motivation to assist patients to recover due to social contract between them and the buffer theory of social support (Alloway & Babington, 1987) elucidate how support from HCWs buffers patients against consequences of MNM. However, for the poor maternal outcomes such as MMt, both patients and PCGs attributed them to patients' low ANC attendance and financial difficulties leading to delays in reporting cases and ultimately delay in case management at the facility, thus confirming the effect of the three-delay model by Thaddeus &Maine (1994). In addition, some resource constraints such as personnel, supplies and equipment (Munabi-Babigumira et al, 2017) also affected the delivery of service. Though, the resource constraints coupled with patients' poor health seeking behaviour, affected HCWs physically and psychologically, there were concerns about the provision and ultilisation of the existing support system to improve the coping of the various forms of stress facing HCWs.

Perspectives of MNM, PCGs and HCWs on Quality of Care

Quality of care from the perspectives of MNM patients, their PCGs and HCWs were generally commendable and conforms to the quality-of-care model (Donabedian, 2005). Thus, the foci of MNM patients and PCGs were different from HCWs. While MNM patients and PCGs focused on the process of care such as empathy, caring, technical competence, human relations, commitment, promptness of care and effectiveness; HCWs' focused on the structure and outcome of care (Mosadegrad, 2012) such as management outcomes and availability of resources namely, number and mix of staff, ICU space and beds, supplies, equipment and supervision/leadership (Munabi-Babigumira et al, 2017). The issues of quality of care raised by MNM patients and PCGs expose the poor conformance of some HCWs to the Patients Charter and Code of Ethics of the GHS/MoH. It also suggests low investment in health infrastructure, supplies and equipment as well as the ineffective operations of the NHIS, are causing slow pace of achieving the SDG 3.

Support System Available to MNM Patients

The support provided to MNM patients served as a buffer against the disruptive effects of MNM as it lessened their discomfort and or gave them hope for recovery (Alloway & Babington, 1987). The support to MNM patients emanated from the families, including spouses (Herklots et al, 2020; Hilton, et al, 2015) of MNM patients, community (Churches and NGOs) and HCWs/health facility and they were physical, financial, emotional and provision of information (Kings et al., 2006). The support from spouses (Bellhouse et al, 2018) is significant, considering the fact that male involvement in maternal health has become critical in recent times. The community support was inadequate as it was limited to Churches and NGOs. The various forms of support lacked coordination for effective assessment for the development of a support system as there is no central body responsible for that.

Conclusions

Physical, emotional/psychological, financial and social experiences of MNM patients result in disruptions to their physical, emotional/psychological, financial and social wellbeing. The support patients received from their PCGs, HCWs and Community as well as some coping strategies they adopted; helped them to cope and overcome the various disruptions. Multifaceted interventions are required to deal with the diverse experiences of MNM patients.

PCGs are identified as a major source of support to MNM patients to overcome the various disruptions to their biographies. Nonetheless, PCGs suffer psychological/emotional and economic/financial problems emanating from caregiving to MNM patients. They are however not recognised as part of the MNM management system. They are also not supported to help them improve their effectiveness in caregiving to their MNM patients.

HCWs experiences with MNM patients revealed that PLTCs reported by patients were successively managed despite the poor circumstances which some patients they were presented. HCWs' observations about the experiences of MNM patients covered the facility and community levels and confirmed the views of MNM patients and their PCGs on the experiences of the former. HCWs are however saddled with some operational challenges whose redress would improve their performance and well-being.

MNM patients, their PCGs and HCWs' perspectives on quality of care to patients at CCTH provide a holistic report on quality of care and was noted to be generally good. The few complaints of poor communication and human relations from stakeholders need to be addressed to improve customer care in health facilities.

The support for MNM patients emanated from family, HCWs and Community (Church and NGOs) to meet the patients' physical, financial and emotional needs. The support to the patients is not coordinated into a system for an effective assessment for improvement. Similar support should be extended to PCGs and HCWs to improve their wellbeing.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are proposed to ensure prevention of MNM as well as the effective management of experiences of MNM patients, their PCGs and HCWs. They are also to improve quality of care for MNM patients and help coordinate and strengthen the support systems available to MNM patients. The recommendations are categorised into facility-based, community-based and policy-based.

A. Facility-Based Recommendations

The following facility-based recommendations are proffered to address MNM issues at the facility level. Management of the Facility should:

Collaborate with local authorities to eliminate all forms of delay, especially the 3rd delay. Thus, all resources such as expertise (personnel and experts), blood supply, medicines, equipment and financial arrangements should be available and conditioned to respond to the needs of women who suffer MNM and report to the facility.

Recruit adequate number of CCNs (more than 10) and anaesthetists (more than 22), and further improve the supervision by specialists and consultants to help improve the effectiveness of HCWs in the management of MNM cases.

Further strengthen the health delivery system by improving the blood supply system and also ensure the development of a robust equipment replacement plan that guarantees the use of modern medical and diagnostic equipment for efficient diagnoses and care.

Improve the provider-client relationship by organising customer care workshops for HCWs in areas such as communication, human relations and general comportment.

Help remove unnecessary delays associated with the referral system by monitoring the implementation of existing referral protocols to remove the bottlenecks hampering effective referrals from lower facilities to the referral health facilities.

Provide psycho-social support such as training on resilience to equip providers to deal with their experiences such as exhaustion and psychological problems. This will help strengthen HCWs' physical and emotional/

psychological wellbeing against work-related challenges emanating from the management of MNM.

B. Community-Based Recommendations

The following community-based recommendations are designed to address MNM issues at the community level:

First, CHOs' should work with community leaders to eliminate community-based delays (1st and 2nd delays), which are the delays in taking decision to seek for care and accessing health services. Women, should therefore, be empowered to take appropriate decisions on accessing healthcare within a reasonable geographical distance and by an acceptable means of transport. This will ensure early detection of obstetric problems for early management to improve obstetric outcomes.

Secondly, CHOs should encourage maternal health-oriented NGOs to use innovative avenues such as social media platforms to convey tailored-made messages for addressing the problems of MNM patients. CHOs should also encourage the NGOs to provide material and financial support to financially-challenged patients.

Third, O&G Directorates/Units through the Management of health facilities should recommend to appropriate political authorities in the social protection space in Ghana, to extend some financial support to MNM patients and PCGs of MNM patients to reduce their financial hardships.

Fourth, Public Health Units of health facilities should identify PCGs of MNM patients and help them to improve their skills in the provision of support for their patients. They should also be made to understand the effect of their responsibilities on the wellbeing of patients as underpinned by the social exchange theory and buffer theory of social support.

C. Policy-Related Recommendations

The following policy-based recommendations are proffered to ensure the formulation of policy guidelines for addressing some MNM issues:

First, health facilities should recognise PCGs of MNM patients as important stakeholders in the management of the experiences of patients at institutional and community levels and arrange for them, the necessary physical, financial, psychological and social support.

Second, Management of health facilities should encourage informal support systems such as seeking support for the financially challenged patients from other patients, philanthropists and occasionally, through "silver collection" when the need arises.

Third, Management of health facilities should advocate for the coordination of support from families, PCGs and HCWs/facilities for effective monitoring and appraisal.

Contributions to Knowledge

This study explored the experiences and support systems for MNM patients at CCTH and made the following contributions to knowledge:

Out of the five studies identified on MNM in Ghana, four of the studies explored the epidemiological dimensions of MNM while only one (Tuncalp et al. (2012a) explored the specific experiences of MNM women. Information from this study, highlighted the broad dimensions (physical, social, psychological/ emotional and financial) of MNM patients' experiences in healthcare management in Ghana.

The only study on the experiences of women who suffered MNM in Ghana (Tuncalp et al. (2012a) did not consider the experiences of PCGs of MNM patients. The inclusion of the experiences of PCGs of MNM patients in this study and the attendant information generated contributes to the existing body of knowledge on the role of PCGs on healthcare in Ghana.

Further, the study provides information on the experiences of HCWs with MNM patients, which was not explored in the study by Tuncalp et al. (2012a). Thus, it establishes the role of HCWs in the provision of formal care to MNM patients and thereby expands the frontiers of MNM studies in Ghana.

Two of the studies on MNM patients in Ghana (Tuncalp et al. (2012a) & Tuncalp et al. (2013) considered quality of care from the perspectives of MNM patients only. This study, however, assessed quality of care to MNM patients from the perspectives of three key stakeholders of MNM (MNM patients, their PCGs and HCWs) to achieve a holistic assessment of quality of care.

The study assessed and provides information on the support system available to MNM patients to address the limited literature on support system to MNM patients. Though, in Ghana, there are some studies on support to patients of dementia, HIV/AIDs and mental health, this study appears to be the first attempt to produce an information on support system available to MNM patients to help them recover and resume their normal lives.

This study shown the usefulness of models such as biographical disruption, social exchange and buffer social support to assess the experiences of MNM patients as well as the support system available to help mitigate the consequences of the phenomenon on patients. It thus, gives room for the application of these models in related studies.

Methodologically, the study applied phenomenological design to guide the conduct of interviews to elicit indepth information on the experiences of MNM patients. This provides an example of how the phenomenological design could be applied to similar studies on lived experiences in Ghana. In practice, the findings of the study have highlighted the need to attach importance to MNM audit in our health facilities since the practice is seen as the surest way to assess quality of maternal care with the aim to improve maternal care and ultimately attain the SDG 3.1 by 2030.

Limitations of the Study

The major limitation of the study is that the investigation was confined to one health institution, CCTH and therefore the results could not be generalised to the rest of the country. The study population was entirely PLTCs as due to the challenges with ascertaining the identification of patients with LTCs. thus, limiting the opportunity for investigation of experiences of patients with LTCs. Again, the calibre of PCGs could not be controlled, hence not enough number of spouses were available for enquiry into the role of males in maternal health management. Further, respondents especially MNM patients' low level of awareness of community involvement in maternal issues constricted information on community participation.

Suggestions for Further Research

The study had some limitations and, therefore, further research is recommended.

For a better appreciation of the scale of the lived experiences of MNM patients in the country, a nationwide study involving a mix of well-resourced and less-resourced health facilities could be explored. It will, thus, provide the opportunity to test the validity of the WHO's criteria for assessing MNM across centres with resource differences.

Since the research focused on MNM patients with PLTCs, the study was unable to uncover the experiences of patients with LTCs. The experiences of

MNM with LTCs might be different from those who had PLTCs. Hence, the need to explore the experiences of women with LTCs.

Spouses as PCGs selected for the study were few compared to other PCGs. For an extensive study on the role of spouses in the management of MNM, a study on the experiences of spouses of MNM patients could be useful as it may bring to light issues of male involvement in obstetric care in the country.

Given that community involvement in healthcare delivery is a commendable approach for Primary Health Care services, a full-scale study on community involvement in MNM issues would help explore the untapped resources in the community for supporting MNM patients.

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APPENDIX A

WHO CHECKLIST

Maternal Near-Miss Tool

APPENDIX B

INTERVIEW GUIDE FOR MATERNAL NEAR MISS (MNM) PATIENTS

- Could you tell me something little about yourself?
- May I know what led to your decision to seek care at the hospital?
- If you were admitted following the hospital visit, could you describe your stay in the hospital to me?

  (Probe: Duration and why that length of time)
- Please share with me your MNM event.

  (Probe: What happened? How did it happen? What were some of the initial remedies or efforts that were made)?
- What were your experiences at the hospital?

  (Probe: Competence and promptness of care; relationship and communication between providers and clients and availability of physical and human resources)

  MNM patients are likely to experience the following: **Physical, Social, Psychological, Economic and Emotional challenges/problems.**
- Please what are your personal experiences with MNM? Physical, social, psychological, economic and emotional problems/disruptions
- Please, may I know how long you have had these experiences?

  Please, tell me how the MNM experiences have caused changes in your everyday life?

  (Probe: Physical disruption, Psychological disruption, Social disruption, Economic disruption, and Emotional disruption)
- What changes if any, have you observed about social interactions, movements, job and finances?

- In what ways have you coped with changes in your social interactions? And what do you think about the outcome?
- In what ways have you coped with the changes in your movements around and what do you think about the outcome?
- In what ways have coped with changes in your job and what do you think about the outcome?
- In what ways have you coped with the changes in the finances and what do you think about the outcome?
- In what ways have you coped with changes in your finances and what do you think about the outcome?
- May I know how you have managed or coped with these disruptions/changes?
- How do you see the quality of health services in the hospital since the event?

  (Probe: Service delivery/timely attention? Output of health staff? Availability of medicines? Etc)
- In all these, what were some of the assistance or support you received to help you overcome the various disruptions/changes you faced in your daily life?

  (Probe: Financial, counselling, prayers, employment, de-stigmatization etc)
- Please, may I know where these supports specifically came from?

  (Probe: i) Family? ii) HCWs iii) Community? others?)
- What was the type of encounter with the family and how helpful or otherwise was the nature of encounter?

- What was the type of encounter with HCWs and how helpful or otherwise was the encounter?
- What was the type of encounter with community members and how helpful or otherwise was the encounter?
- What were your expectations from the family?
- What were expectations with the health professionals?
- What were expectations with the community members?
- In what way do consider your expectations to have been met from the family?
- In what way do consider your expectations to have been met from HCWs?
- In what way do you consider your expectations to have been met by community members?

APPENDIX C

INTERVIEW GUIDE FOR PRIMARY CAREGIVERS (PCGs) OF MATERNAL NEAR MISS (MNM) PATIENTS

- Could you please tell me something little about yourself especially your relationship with the MNM patient?
- How long have you been providing care for the patient?
- What were experiences with the hospital she attended for care?

  (Probe: Competence and promptness of care; relationship and communication between providers and clients and availability of physical and human resources)
- What is your view about her condition?
- In your view, what are some of the challenges your patient has been facing since her suffering from MNM?
- What exactly do you do for the patient as a way of providing care for her on daily basis?

  Probe: Personal care (bathing, toileting, grooming), food preparation, errands, emotional support, general care).
- Now, may I know what have been your personal experiences as a caregiver in providing care for the MMN patient?
- If any, what changes have you experienced physically?
- How have you coped with these changes and what do you think about the outcome?

  (Probe: Psychological, Social, Economic, Emotional Dimensions)
- If any, what changes have you experienced psychologically?
- How have coped with these changes and what do you think about the outcome?

- If any, what are the changes you have experienced emotionally?
- What do you think about the outcome?
- If any, what are the changes you have experienced financially?
- What do you think about the outcome?
- If any, what are the changes you have experienced socially?
- What do you think about the outcome?
- In your opinion, which of the experiences affect you most?
- In what ways have your experiences affected your role as PCG?
- What are your needs as a PCG?
- What are the opportunities of sharing your challenges as a caregiver in order to get support?
- What kind of support have you been receiving to help you overcome your challenges?
- Based on your experiences, what do you think are the support systems you may need to help you overcome your experiences and improve your caregiving?

  Probe: (Information on MNM, quality health service, financial aid)
- Can you tell me any specific support you have been giving to the MNM patient?
- Please, apart from the support you give, what are the other support systems the MNM patient has benefited from?

(Probe: Health System/Health Staff? Community/Community members?)

- What are the nature of support you expect from HCWs for MNM patients?

- What are the nature of support you expect from community members for MNM patients?

APPENDIX D

INTERVIEW GUIDE FOR HEALTHCARE WORKERS (HCWs)

- Please, tell me something little about yourself?
- How often do you come across cases of MNM?
- Describe the nature of MNM cases you receive or manage here

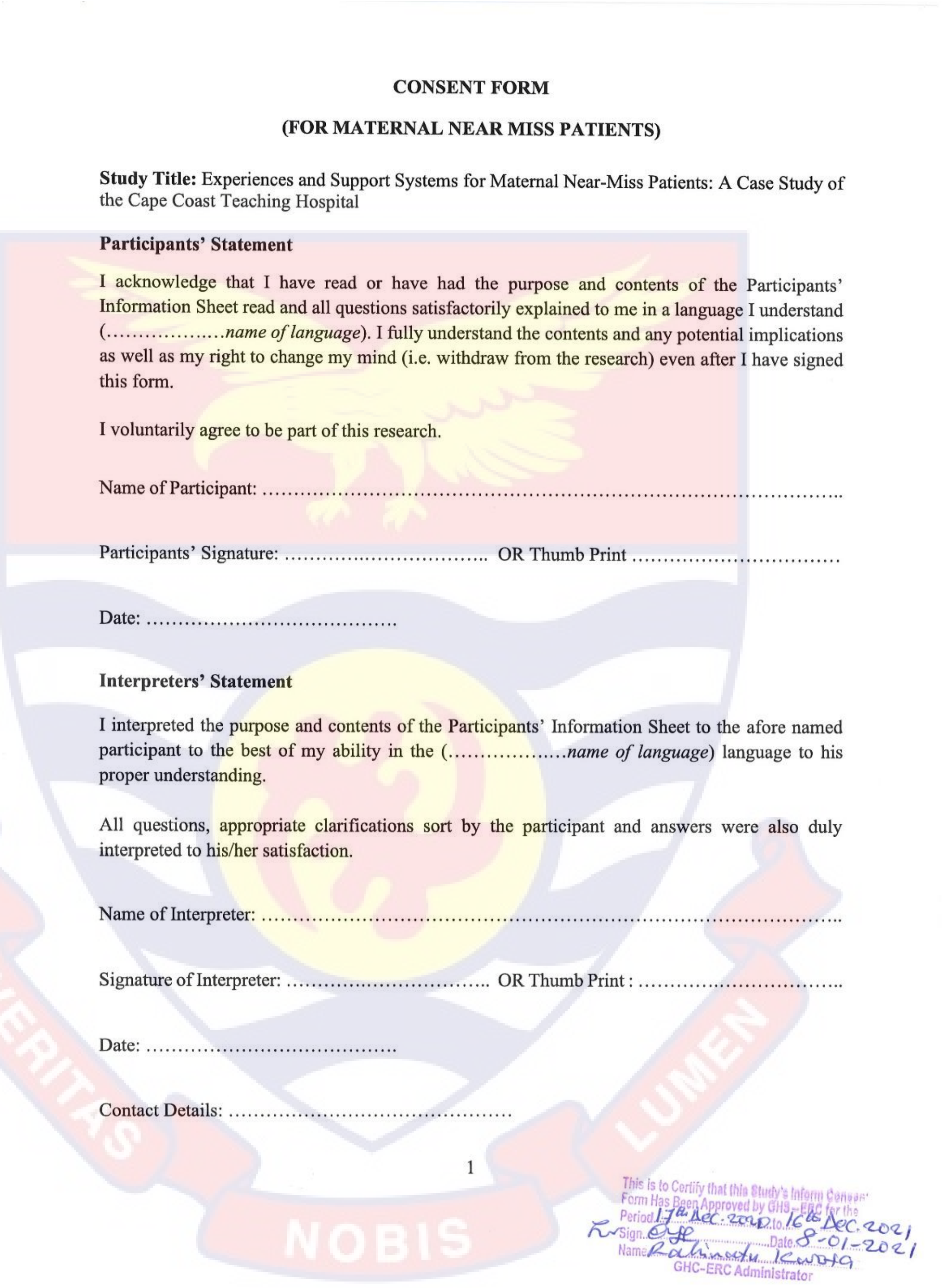
  (Probe: Disease based, intervention or organ failure)
- How well has the management of SAMM or MNM cases helped to reduce maternal deaths in the hospital?
- Please what are your personal experiences with MNM patients? **(Probe: Physical, social, psychological, economic and emotional problems/disruptions)**
- How different are these experiences with that of the MNM patients?
- And how have the experiences affected your perception about MNM event?
- How have the experiences affected your attitude toward MNM event?
- How have these experiences impacted on your expertise in the handling of maternal cases?
- How have the MNM cases affected your experiences and management of MNM cases?
- Please, how well or otherwise have HCWs responded to MNM cases in the hospital?
- As part of your experiences, under what circumstances do you think some maternal deaths could have been avoided if the MNM cases had been better handled?
- In which ways are HCWs in the hospital prepared to handle MNM cases?

- What are the challenges that militate against your efforts at optimal maternal care?

  (Probe: Inadequate expertise, number of staff, delayed reporting, delayed investigations, financial problems, etc.)
- How have you been coping with your diverse experiences as you provide care for MNM patients?
- Could you share with me the experiences of the MNM patients both in the facility and if possible, outside? **(Probe further based on information provided)**
- MNM patients are likely to have these challenges/problems: (**Physical, Social, Psychological, Economic and Emotional Dimensions).**
- How would classify the MNM cases you see?
- In your opinion, how do these experiences affect their everyday activities?
- What is the social support you/the facility providing to help them deal with their experiences?
- The support services for MNM patients may come from PCGs, community members) and others (if any).
- Apart from the support the patient receives from the facility, may I know the other support systems available to MNM patients.
- What have heard about the support system PCGs/community members /others offer?
- What have seen concerning the support PCGs/community members/others offer?
- What do you expect the facility/PCGs/community members/others to be providing as a support?

APPENDIX E

CONSENT FORMS



CONSENT FORM

(FOR MATERNAL NEAR MISS PATIENTS)

Study Title: Experiences and Support Systems for Maternal Near-Miss Patients: A Case Study of the Cape Coast Teaching Hospital

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 (…………….…*name of language*). 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 of Participant: ……………………………………………………………………………..

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

Date: …………………………………

Interpreters' Statement

I interpreted the purpose and contents of the Participants' Information Sheet to the afore named participant to the best of my ability in the (…………….…*name of language*) language to his 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: ………………………………………

1

This is to Certify that this Study's Inform Consent
Form Has Been Approved by GHS – ERC for the
Period 17th Dec. 2020 to 16th Dec. 2021
Sign. ……………… Date 8-01-2021
Name Rahinatu Kwofa
GHC-ERC Administrator

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 (……………….…*name of language*)

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

Name: ………………………………………………………………………………..

Signature: …………….…………….. OR Thumb Print : …………..………………..

Date:……………………………

Investigator Statement and Signature

Brief statement or declaration that investigator has given enough information to participants to make informed decisions.

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:…………………………

This is to Certify that this Study's Inform Consear
Form Has Been Approved by GHS - ERC for the
Period 17th Dec 2020 to 16th Dec 2021
Fr Sign OH Date 8-07-2021
Name Rahinatu Kwota
GHC-ERC Administrator

CONSENT FORM

(FOR PRIMARY CAREGIVERS OF MATERNAL NEAR MISS PATIENTS)

Study Title: Experiences and Support Systems for Maternal Near-Miss Patients: A Case Study of the Cape Coast Teaching Hospital

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 (……………..…*name of language*). 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 of Participant: ……………………………………………………………………………..

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

Date: ………………………………….

Interpreters' Statement

I interpreted the purpose and contents of the Participants' Information Sheet to the afore named participant to the best of my ability in the (……………..…*name of language*) language to his 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: ………………………………………

This is to Certify that this Study's Inform Consen
Form Has Been Approved by GHS – ERC for the
Period 17th Dec-2020 to 16th Dec. 2021
For Sign. Date 8-07-2021
Name Rahinatu Kwofa
GHC-ERC Administrator

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 she understood (……………..…*name of language*)

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

Brief statement or declaration that investigator has given enough information to participants to make informed decisions.

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:…………………………

This is to Certify that this Study's Inform Consen
Form Has Been Approved by GHS--ERC for the
Period 17th Dec. 2020 to 16th Dec. 2021
Sign....................Date 8-07-2021
Name Rahmata Kwota
GHC-ERC Administrator

CONSENT FORM

(FOR HEALTH PROFESSIONALS)

Study Title: Experiences and Support Systems for Maternal Near-Miss Patients: A Case Study of the Cape Coast Teaching Hospital

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 (…………….…*name of language*). 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 of Participant: ……………………………………………………………………………………..

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

Date: …………………………………….

Interpreters' Statement

I interpreted the purpose and contents of the Participants' Information Sheet to the afore named participant to the best of my ability in the (…………….…*name of language*) language to his 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: ………………………………………..

This is to Certify that this Study's Inform Consent Form Has Been Approved by GHS - ERC for the Period 17th Dec 2020 to 16th Dec. 2021
Sign………………………Date 8-07-2021
Name Rahinatu Kwota
GHC-ERC Administrator

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 (……………..…*name of language*)

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

Name: ……………………………………………………………………………………..

Signature: ……………..……………….. OR Thumb Print : ……………..……………..

Date:……………………………

Investigator Statement and Signature

Brief statement or declaration that investigator has given enough information to participants to make informed decisions.

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:…………………………

This is to Certify that this Study's Inform Consent Form Has Been Approved by GHS–ERC for the
Period 17th Dec 2020 to 16th Dec 2021
Sign. ……… Date 8-07-2021
Name Rahinatu Kwota
GHC-ERC Administrator

APPENDIX F

REFERRAL FORM

UNIVERSITY OF CAPE COAST
COLLEGE OF HUMANITIES AND LEGAL STUDIES
FACULTY OF SOCIAL SCIENCE
DEPARTMENT OF POPULATION AND HEALTH

PHD STUDY ON EXPERIENCES AND SUPPPORT SYSTEMS FOR MATERNAL NEAR MISS PATIENTS AT THE CAPE COAST TEACHING HOSPITAL

To: Counsellor **Date**:…………..

UCC Hospital

From: Principal Investigator

ID of Patient:

Dear Madam,

Per the understanding reached with you, I refer the bearer of this note, a respondent in an ongoing research for the necessary assistance.

Patient History……………………………………………………………..…

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

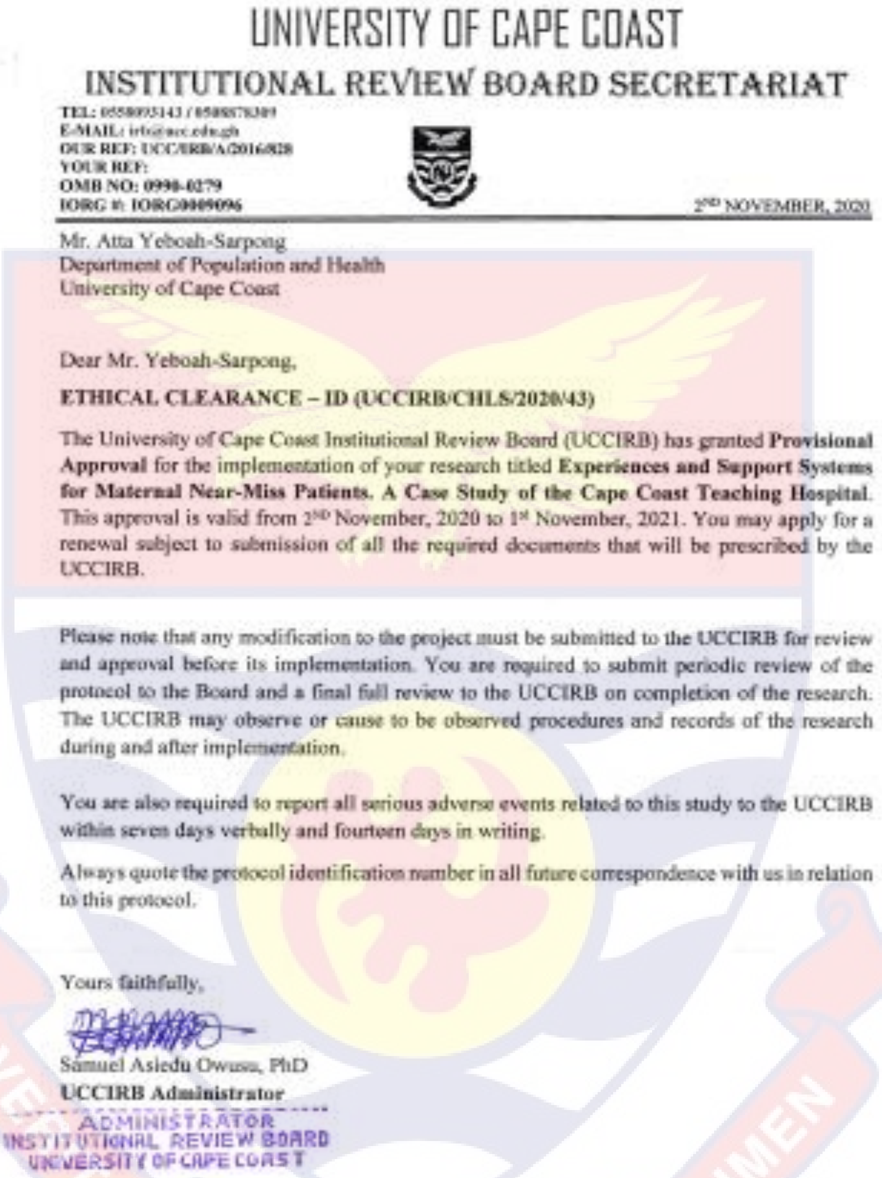
Thank you.

…………………………..

Principal Investigator

APPENDIX G

ETHICAL CLEARANCE



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OUR REF: UCC/IRB/A/2016/828
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0009096

2ND NOVEMBER, 2020

Mr. Atta Yeboah-Sarpong
Department of Population and Health
University of Cape Coast

Dear Mr. Yeboah-Sarpong,

ETHICAL CLEARANCE – ID (UCCIRB/CHLS/2020/43)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for the implementation of your research titled **Experiences and Support Systems for Maternal Near-Miss Patients. A Case Study of the Cape Coast Teaching Hospital.** This approval is valid from 2ND November, 2020 to 1st November, 2021. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

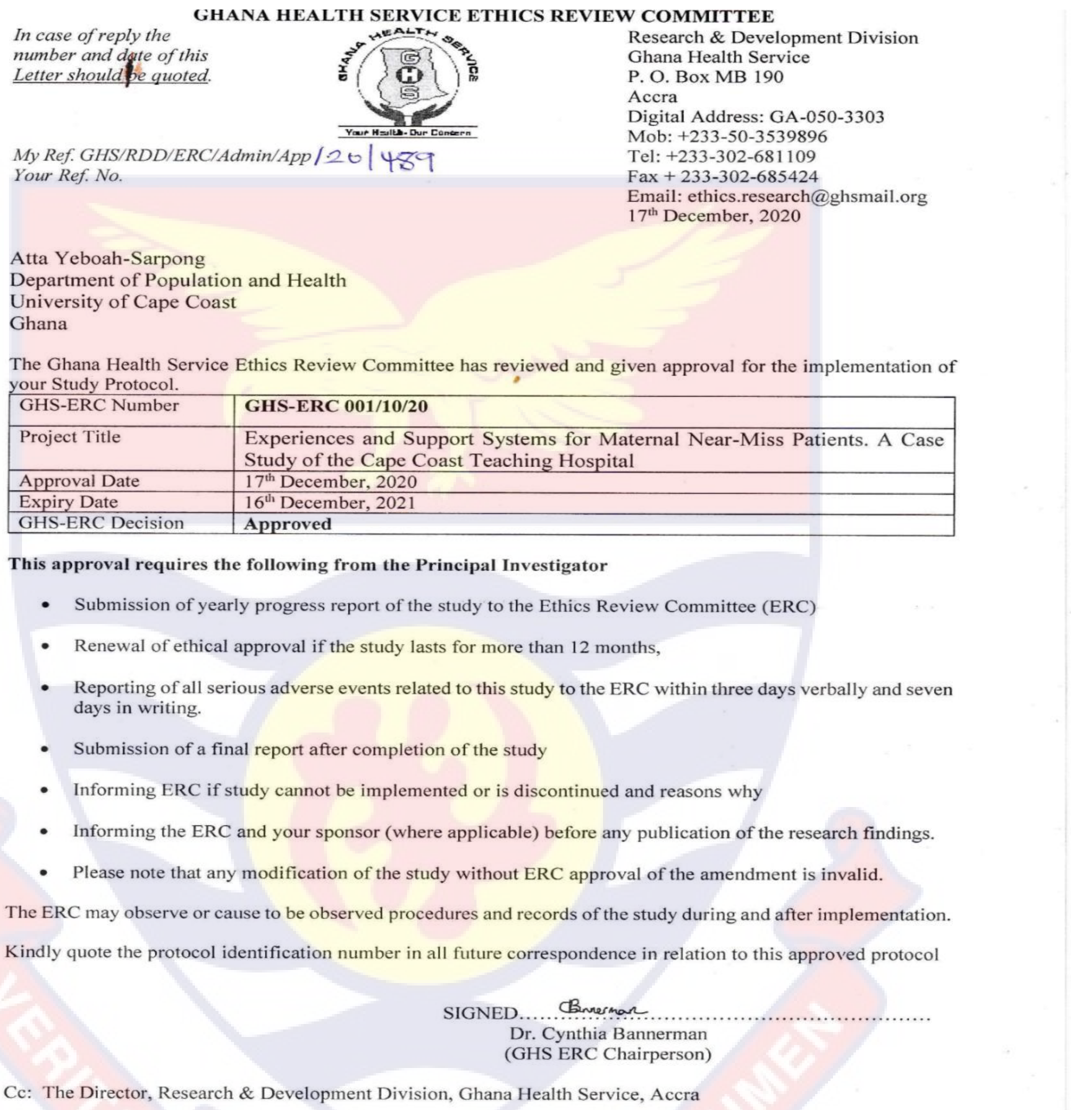
Yours faithfully,

Samuel Asiedu Owusu, PhD
UCCIRB Administrator

ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST

APPENDIX H

ETHICS REVIEW COMMITTEE



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
Fax + 233-302-685424
Email: ethics.research@ghsmail.org

My Ref. GHS/RDD/ERC/Admin/App /20/489
Your Ref. No.

17th December, 2020

Atta Yeboah-Sarpong
Department of Population and Health
University of Cape Coast
Ghana

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

GHS-ERC Number	**GHS-ERC 001/10/20**
Project Title	Experiences and Support Systems for Maternal Near-Miss Patients. A Case Study of the Cape Coast Teaching Hospital
Approval Date	17th December, 2020
Expiry Date	16th December, 2021
GHS-ERC Decision	**Approved**

This approval requires the following from the Principal Investigator

- Submission of 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.
- 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.

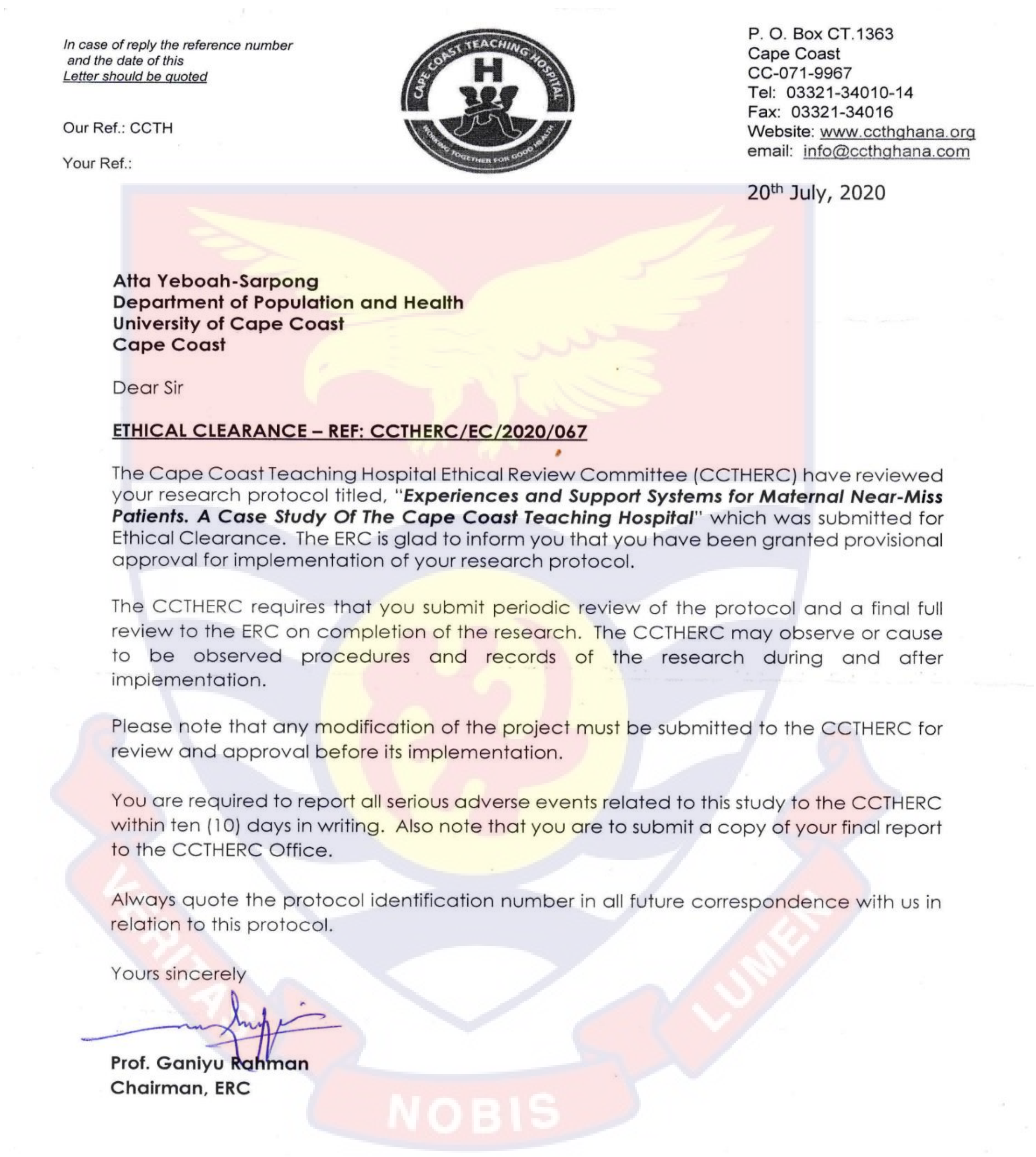
Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED……………………………………………
Dr. Cynthia Bannerman
(GHS ERC Chairperson)

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

APPENDIX I

ETHICAL CLEARNACE



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

Our Ref.: CCTH

Your Ref.:

P. O. Box CT.1363
Cape Coast
CC-071-9967
Tel: 03321-34010-14
Fax: 03321-34016
Website: www.ccthghana.org
email: info@ccthghana.com

20th July, 2020

Atta Yeboah-Sarpong
Department of Population and Health
University of Cape Coast
Cape Coast

Dear Sir

ETHICAL CLEARANCE – REF: CCTHERC/EC/2020/067

The Cape Coast Teaching Hospital Ethical Review Committee (CCTHERC) have reviewed your research protocol titled, "***Experiences and Support Systems for Maternal Near-Miss Patients. A Case Study Of The Cape Coast Teaching Hospital***" which was submitted for Ethical Clearance. The ERC is glad to inform you that you have been granted provisional approval for implementation of your research protocol.

The CCTHERC requires that you submit periodic review of the protocol and a final full review to the ERC on completion of the research. The CCTHERC may observe or cause to be observed procedures and records of the research during and after implementation.

Please note that any modification of the project must be submitted to the CCTHERC for review and approval before its implementation.

You are required to report all serious adverse events related to this study to the CCTHERC within ten (10) days in writing. Also note that you are to submit a copy of your final report to the CCTHERC Office.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours sincerely

Prof. Ganiyu Rahman
Chairman, ERC