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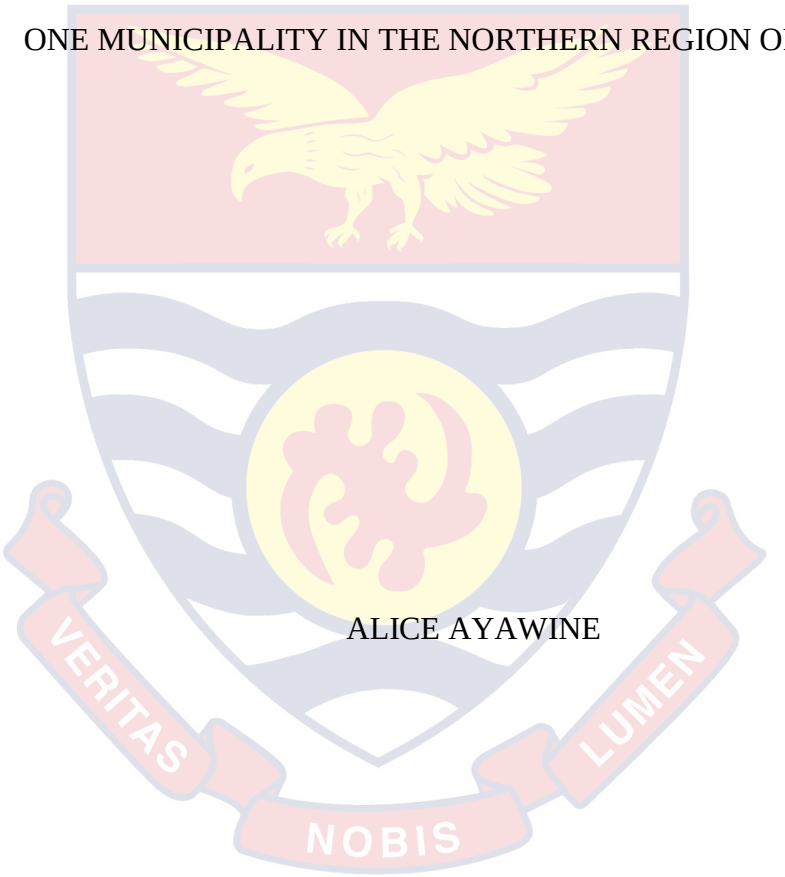
PERCEPTION OF QUALITY OF EMERGENCY OBSTETRIC CARE IN ONE MUNICIPALITY IN THE NORTHERN REGION OF GHANA



ALICE AYAWINE

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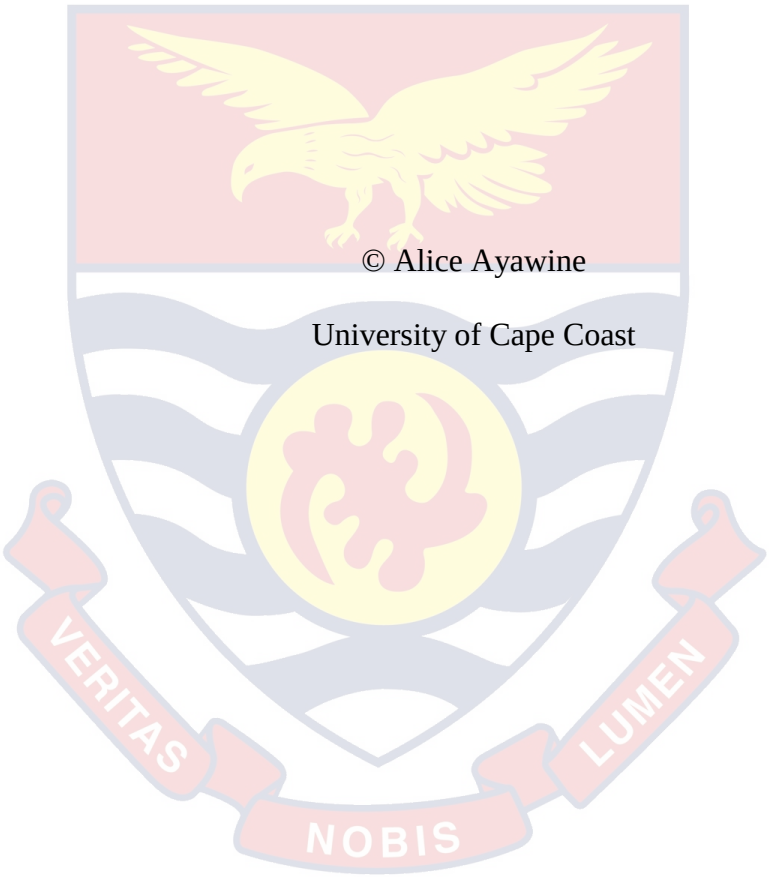

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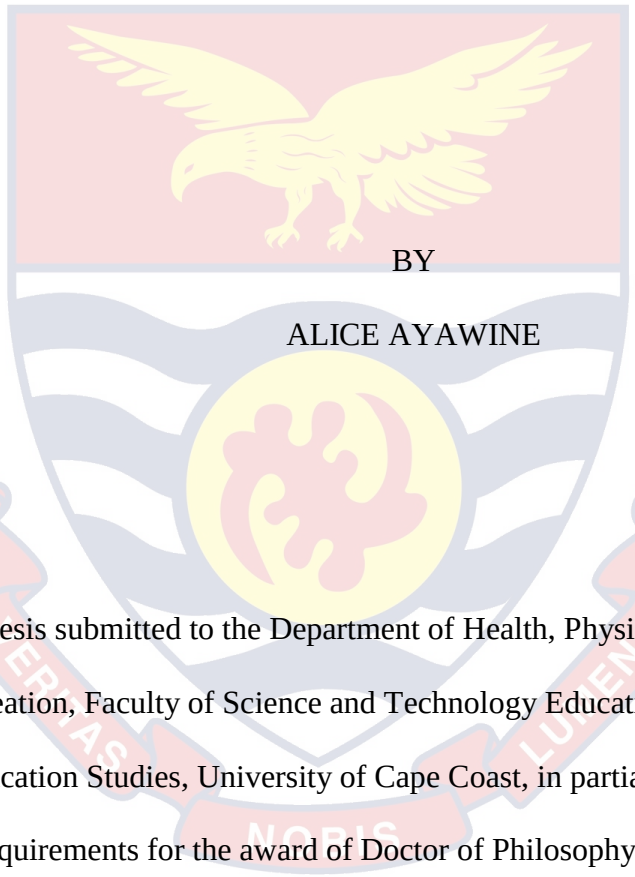

BY

ALICE AYAWINE

Thesis submitted to the Department of Health, Physical Education and Recreation, Faculty of Science and Technology Education of the College of Education Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Doctor of Philosophy degree in Health Promotion (Maternal and Child Health)

OCTOBER 2020

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: Alice Ayawine

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……

Name: Prof. Joseph Kwame Mintah

Co-Supervisor's Signature…… Date……..

Name: Dr. Thomas Hormenu

ABSTRACT

Although emergency obstetric care (EmOC) has contributed to significant reductions in maternal mortality rates worldwide, a greater number of women in sub-Saharan Africa continue to die from pregnancy related complications. In this study, attempt was made to identify factors responsible for this trend by exploring the perception of quality of EmOC in selected health facilities in one municipality in Northern Ghana. A qualitative case study approach was employed to draw evidence from observation, focus group discussion and in-depth face-to-face interviews among health care providers, clients and community members. The findings highlight absence of basic facilities and sub-standard care in the only health facility that provided EmOC services in the municipality. Inadequate supply of obstetric drugs and equipment, provider inefficiency and motivation as well as low female autonomy contributed in diverse ways to the outcome of care. Also, stakeholder perception of quality of EmOC unveiled contextual, interpersonal and clinical dimensions. These findings have several implications in the delivery and conceptualisation of quality in the study area. The Ghana Health Service needs to empower basic facilities in the municipality with essential obstetric drugs and equipment required to discharge their core functions. Curriculum adjustment, continuous education and environmental modifications are essential for improving upon provider competencies while cultural reorientation, through targetted health promotion campaigns, has the potential of empowering rural women to take charge of their reproductive health needs.

KEY WORDS

Perception

Quality

Emergency obstetric care

Northern Region

Ghana

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Aligongo for giving me a chance to education and to my siblings Kelinbisa, Aboninga, Atariwine, Kasagne and Atogewelige for their goodwill messages. I duly also appreciate my partner, Mr. Henry Agamba and my children: Herman Atudewe, Herbert Wekem and Ann Wepia who willingly adapted to the stewardship of their dad, while I spent long hours outside home on this project. To you I say, thank you for understanding the situation. To all my buddies: Sister Anna, Nancy, Vicky and Thess, I appreciate the many times you checked on me and wished me well.

Finally, on a rather down note, I remember late Prof. Joseph Kwesi Ogah who started this project with me but unfortunately could not live to see its completion. Prof., I wish you a peaceful rest with your maker.

DEDICATION

To Rev. Sr Ann Schulte (SHCJ)

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LIST OF ACRONYMS

ANC	Antenatal Care
BEmOC	Basic Emergency Obstetric Care
BEmONC	Basic Emergency Obstetric and Newborn Care
BP	Blood pressure
CEmOC	Comprehensive Emergency Obstetric Care
CHIM	Centre for Health Information Management
CHPS	Community Based Health Planning and Services
CIA	Central Intelligence Agency
CS	Caesarean Section
EmOC	Emergency Obstetric Care
EOU	Evacuation of the Uterus
ESMOE	Essential Steps in the Management of Obstetric Emergencies
ETAT	Emergency Triaging, Assessment and Treatment
FGD	Focus Group Discussion
GHS	Ghana Health Service
GSS	Ghana Statistical Service
HEW	Health Extension Workers
ICD	International Classification of Diseases
ICF	International Classification of Functioning, Disability and Health
ICU	Intensive Care Unit
LAC	Latin America and the Caribbean
LMIC	Low and Middle Income Countries
MCE	Municipal Chief Executive

MMDAs	Metropolitan, Municipal and District Assemblies
MMR	Maternal Mortality Rate
MoH	Ministry of Health
MVA	Manual Vacuum Aspiration
NGO	Non-governmental Organization
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NICU	Neonatal Intensive Care Unit
OPD	Out Patient Department
PPH	Post-partum Haemorrhage
SARA	Service Availability and Readiness Assessment
SPA	Service Provision Assessment
TBA	Traditional Birth Attendant
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization
WIFA	Women in Fertility Age

CHAPTER ONE

INTRODUCTION

Background to the Study

Pregnancy is a period of great anticipation and awe as many women look forward to a successful delivery (Rovas, Baltrusaityte, & Drupiene, 2017). Regrettably, not all mothers survive the process as they die due to complications during pregnancy, childbirth or in the 42 days after termination of pregnancy - a death usually referred to as maternal death (Hogan et al., 2010). Specifically, maternal death refers to the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (Alkema et al., 2015).

Maternal death can be direct or indirect. It is direct when it is caused by obstetric complication (e.g eclampsia) but indirect when it results from an already existing disease that gets worsen by the physiologic effects of the pregnancy (Alkema et al., 2015). Examples of indirect causes of maternal death are: anaemia, malaria and cancer related deaths while direct causes consist of post-partum hemorrhage, puerperal sepsis, eclampsia, obstructed labour and abortion (Say et al., 2014). EmOC targets the prevention of the direct causes of maternal death. Of these and appearing in order of magnitude hemorrhage, hypertensive disorders, sepsis and unsafe abortion are responsible for a greater percentage of deaths (UNFPA, UNICEF, World Bank Group, & UN, 2015). While maternal deaths often come along with stillbirths and neonatal deaths (Hanson, Kujala, Waiswa, Marchant, & Schellenberg, 2017), many of the women who survive endure lifelong incapacitating conditions due to

complications arising from childbirth (Chou et al., 2016; Silveira et al., 2016). For several decades, this preventable tragedy has befallen several communities and bestowed significant economic and social burdens on humanity (Yadav, 2012). No doubt it became a spiritual norm for the Church of England where newly delivered mothers went to church to thank God for delivering them from imminent death associated with childbirth (Chamberlain, 2006).

In the developed world, such as England and Wales, maternal mortality was at its frightening height throughout the nineteenth century until 1936 when the rates began to fall (Loudon, 1986a). Attention on the plight in developing countries, however, occurred in 1985 when a publication by Rosenfield and Maine (1985) drew global attention to the phenomenon. This subsequently led to the launch of the safe motherhood initiative which consisted of ante natal care, family planning, clean / safe delivery and essential obstetric care (Mahler, 1987). The implementation of these strategies in the latter part of the twentieth century led to general declines in the number of women dying annually as a result of pregnancy related complications (WHO, UNICEF, UNFPA, & World Bank Group, 2019).

Over the years, there have been steady declines in the maternal mortality ratio globally. In 2015, the global maternal mortality ratio witnessed a reduction rate of close to 44 percent with absolute figures showing a decline from 532,000 to 303,000. This corresponds to a drop from 385 to 216 deaths per 100 000 live births as of 2015 (Alkema et al., 2015). In 2017, the ratio further dropped to 211 per 100,000 live births (WHO et al., 2019). Nonetheless, the current slow rate of decline at 2.9%, falls below the 6.4% required to achieve the Sustainable Development goal of 70 deaths per 100,000 live births (UNICEF, 2019).

Though the statistics projects a somehow promising scenario, figures on developing countries present a rather gloomy situation. This is because almost all the world's maternal deaths take place in developing countries with sub-Saharan Africa recording more than half of the burden (UNFPA et al., 2015). While on average, 11 maternal deaths are recorded for every 100,000 live births in the developed world, as many as 462 of this cohort face similar fate in sub-Saharan Africa (WHO, 2019). Similarly, one out of 45 women is at risk of maternal death in low income countries as compared to one out of 5,400 in high income countries (WHO). Whereas countries such as Norway, Italy and Poland have been lauded for causing substantial declines in maternal mortality rates, South Sudan has been cited as the country bedeviled with the highest concentrations of maternal death currently carrying the heaviest burden of 1,150 per 100,000 live births (Central Intelligence Agency, 2019). To think that these figures are even under-reported given the paucity of data on maternal mortality in most developing countries, makes it a very daunting public health issue in these areas (Black, Laxminarayan, Temmerman, & Walker, 2016).

Ghana is purported to be making progress in reducing its maternal mortality rate (Mamaye, 2017). The country currently records a maternal mortality ratio of 308 deaths per 100,000 live births (WHO et al., 2019), having recovered from an initial rate of 731 in 1990 (Hogan et al. 2010). In addition, 15% of all pregnancies in the country developed complications and became emergencies (Ghana Statistical Service [GSS], Ghana Health Service [GHS], International Cassification of Functioning, Disability and Health [ICF], & Ministry of Health [MoH], 2018). The data show that Ghana, like many other sub-Saharan countries, failed to achieve its 2015 target of 185 deaths per

100,000 live births (Centre for Health Information Management [CHIM], 2017). One reason for the poor performance of developing countries relative to their most advanced counterparts is that of the low quality of maternal care services in the former (Black et al., 2016). This is because the five main direct obstetric complications which result in about 75% of maternal deaths usually happen during labour, delivery or immediately after delivery and cannot be foreseen nor predicted (Sageer et al., 2019). Nevertheless, simple mundane good practices alongside appropriate emergency intervention at such a crucial period could save many preventable maternal deaths and stillbirths (Hodgins et al., 2016). Where inappropriate or low quality care is provided, mothers' conditions worsen and they may die (Kozhimannil, Hardeman, & Henning-Smith, 2017). Research has shown that good quality emergency obstetric care (EmOC) is critical for averting most maternal deaths and disabilities and factors that may impede upon this ought to be identified and addressed to forestall needless maternal deaths in the developing world (Paxton, Maine, Freedman, Fry, & Lobis, 2005).

Statement of the Problem

Variances in maternal mortality and morbidity rates among countries and across regions are primarily due to the differences in the effectiveness of the health care system (Akachi & Kruk, 2017). Koblinsky et al. (2016) revealed that though the direct causes of maternal deaths may be similar in both developed and developing countries, the discrepancies lie in how they are recognised and managed. Thus, the greater burden of maternal mortality in some countries is largely due to the poor quality of maternal care services available (Sageer et al., 2019). Loudon (1986) puts it bluntly when he attributed high

maternal mortality to "bad midwives, bad medical practitioners, or unhealthy mothers all acting concurrently" (p.27).

To improve upon positive maternal outcomes, the government of Ghana launched a free maternal care policy that comprised free antenatal, delivery and post natal care services to all Ghanaian women (Asante, Chikwama, Daniels, & Armar-Klemesu, 2007). Since its inception, Ghana's fee exemption policy has increased the utilisation of maternal care services in the country (GSS, GHS, ICF, & MoH, 2018). Paradoxically, many women continue to lose their lives during childbirth (WHO et al., 2019). Aside the clinical content of care, is the perception of quality held by users as it determines the extent to which maternal health care services are utilised in the country (Nakua et al., 2015). Although some studies on this subject exist in Ghana, these are mostly conducted in the Southern part of the country (Ambruoso, Abbey, & Hussein, 2005; Hindin, Adu-bonsaffoh, & Adanu, 2012). The Northern region, which is home to this research, has different demographics from Southern Ghana in terms of cultural, religious, political and economic orientations (GSS, 2015). From 2010 to date, the maternal mortality ratio has also been on the ascendency. As at the close of 2016, the region gained the worst performing accolade for recording the highest maternal mortality ratio of 207 / 100,000 live births (CHIM, 2017). Within the region, the studied municipality registered a greater number of maternal deaths as at the close of 2017 (DHIMS, 2017). The question is, how has perception of quality of obstetric care contributed to these deaths? Few studies on EmOC in the region (Browne & Essegbey, 2005; Ministry of Health [MoH], 2011) merely assessed availability of signal functions. More-so, such studies used quantitative approaches that are known to be deficient in capturing phenomenon in detail.

To fill this gap, the researcher employed a qualitative case study methodology to investigate into detail the perception of quality of EmOC as well as unravel client- provider related factors that may be accountable for the current state of care quality in selected health care facilities in one municipality in the Northern Region of Ghana.

Purpose of the Study

The purpose of this research was to explore the perception of quality of EmOC in selected health care facilities in one municipality in the Northern Region of Ghana.

Research Objectives

The study objectives are to:

1. Explore the nature and availability of EmOC in selected health facilities,
2. Identify stakeholders' perception on quality of EmOC,
3. Describe how stakeholders' perception of EmOC influence care delivery,
4. Determine how provider-related factors contribute to outcome of care and
5. Determine how client-related factors contribute to outcome of care

Significance of the Study

The study provided a clear exposition on the state of EmOC services in the municipality. It further outlined how the care content was perceived by health providers and the community. These findings are crucial as they drew attention to their possible link to the high number of maternal deaths recorded in the municipality. This revelation thus required the adoption of context

specific strategies that would promote the health of women especially during child birth. It was also expected that managers of health facilities would utilise this information for quality improvement purpose in their facilities to promote effective utilization of the EmOC intervention. The study also contributed to theory development in service delivery research as the researcher took the debate further to examine the concept of quality through stakeholder perception. In so doing, the study uncovered a set of contextual factors significant especially in clients appreciation of quality. This spectacular contribution opens a new chapter in the quality debate and calls for a much nuanced assessment of the concept. In addition, the research served as a valuable source of information for individuals, non-governmental organizations and other relevant bodies interested in promoting maternal and child health. Above all, the study presented recommendation that would aid in the revision of policy to meet the obstetric needs of child bearing women in the northern part of the country.

Delimitation

The study was conducted in three health centres (Basic care) and a municipal hospital (Comprehensive care) in one municipality in the Northern Region of Ghana. Target population consisted of providers and users of EmOC. These were: nurses, midwives and doctors / obstetrician as well as clients. Also were relatives (care takers) who accompanied clients to the facility and witnessed care delivery as well as those who visited clients on admission.

Limitations

This case study reflected the provision and perception of EmOC in selected facilities in one municipality in Northern Region. Its findings may not, therefore, be generalisable to settings outside the study area. The study was

restricted to health providers, clients and community members. It is possible that some vital information might be lost due to this restriction. Nonetheless, enough effort was put in to ensure that information provided by these was well presented. Also, participants' experiences may not entirely relate to the latest experience of emergency obstetric complication. To moderate the impact, the researcher employed the use of multiple data to overcome this deficiency.

Definition of Terms

Post-partum hemorrhage- Vaginal bleeding after delivery (Ghana Health Service, 2008).

Puerperal sepsis- Bacterial infection of the birth canal (Ameh, Adegoke, Pattinson, & Broek, 2014).

Eclampsia –Medical condition resulting from hypertension in pregnancy (Babbar, Armo, & Murthy, 2015).

Obstructed labour -Baby blocked in mother's pelvis (Hardee, Gay, & Blanc, 2016).

Emergency Obstetric Care- A health facility's capacity to treat women with pregnancy complications (WHO, 2009).

Basic Emergency Obstetric Care- A facility's ability to provide basic medical care to treat pregnancy complications (WHO, 2009).

Comprehensive Emergency Obstetric Care- A facility's ability to provide more advanced form of medical care such as blood transfusion and Caesarean Section (WHO, 2009).

Organization of the Study

This thesis is divided into five chapters. Chapter One consists of a brief introduction into the research, followed by the Background of the Study,

Problem Statement and the Research Objectives. The Significance of the research as well as its Limitation and Delimitations are also contained here. Chapter Two is devoted to literature review and comprises both theoretical and empirical literature on the subject. Chapter Three spells out the methodology for the research while Chapter Four is the Results and Discussion segment. Chapter Five is the last chapter and consists of Summary, Conclusions and Recommendations.

CHAPTER TWO

LITERATURE REVIEW

The purpose of this research was to explore the perception of quality of EmOC in selected health care facilities in one municipality in the Northern Region of Ghana. In order to achieve this purpose, literature was reviewed using books, journal articles and magazines and presented under the following headings: concept of EmOC and factors influencing its provision. The chapter continued with review of related literature on concepts and theories of quality. This led to the development of a conceptual framework that served as a guide to the current research enquiry.

Concept of Emergency Obstetric Care

EmOC refer to the capacity of a health facility to provide essential services to avert loss of life during childbirth and is the latest of the safe motherhood package (WHO, 2009). It specifically targets the direct causes of maternal mortality arguing that if women who develop complications during delivery are provided with prompt, adequate and quality care, they will survive (Gabrysch et al., 2012). The strategy has been acknowledged and strongly advocated by the WHO and other seasoned writers as the most efficient and effective approach towards the reduction of maternal mortality particularly in developing countries (Geelhoed et al., 2018; Knowlton et al., 2017; WHO, 2009). EmOC primarily consists of key medical interventions that are used to treat the direct obstetric complications generally attributed to a significant proportion of maternal deaths around the world (Augusto, Keyes, Madede, Chilundo, & Bailey, 2018; WHO, 2009). According to WHO (2009), EmOC operates at two levels: basic and comprehensive. Health facilities that provide

the following seven basic signal functions or medical interventions are known as Basic EmOC facilities: administration of parenteral antibiotics, oxytocic drugs and anticonvulsants, manual removal of placenta, removal of retained products (e.g. manual vacuum extraction, dilatation and curettage), assisted vaginal delivery (e.g. vacuum extraction, forceps delivery), and perform basic neonatal resuscitation (e.g., with bag and mask) while comprehensive EmOC facilities perform all the basic EmOC signal functions and in addition perform surgery (Cesarean section) and provide blood transfusion making a total of nine key interventions (Paxton et al., 2005). This in effect means upgrading the status of selected health centers and referral hospitals with stocks of essential drugs, supplies and equipment as well as training the requisite human resources needed for the delivery of quality services at all times (Ijadunola, Ijadunola, Esimai, & Abiona, 2010). Table 1 provides a detailed classification of maternal complications and their signal functions.

The WHO further argued that the adherence to EmOC service guidelines outlined within the eight key indicators can help avert maternal and perinatal deaths. The expansion of EmOC services to rural locations or disconnected communities will create the opportunity to provide sufficient life-saving services as well as good-quality care to pregnant women. In short, the indicators address three main themes. These include service availability, use of facilities and the performance of health-care systems in saving the lives of women with obstetric complications - the latter referring to the quality of care (Lindtj, Mitiku, Zidda, & Yaya, 2017). The indicators, which should serve as standards, advocate for the availability of at least five emergency obstetric care facilities (including at least one comprehensive facility) for every 500 000 population.

Table 1- Maternal Complications and Signal Functions

Major obstetric complication	Signal function
Haemorrhage	Antepartum: Perform blood transfusion Perform surgery (e.g., caesarean section for placenta praevia) Postpartum: Administer uterotonic drugs Perform blood transfusion Perform manual removal of placenta Perform removal of retained products Perform surgery (hysterectomy) for uterine rupture
Prolonged or obstructed labour	Perform assisted vaginal delivery Perform surgery (caesarean section) Administer uterotonic drugs Perform neonatal resuscitation
Postpartum sepsis	Administer parenteral antibiotics, Remove retained products, Perform surgery for pelvic abscess
Complications of abortion	For haemorrhage: Perform blood transfusion, Remove retained products For sepsis: Administer parenteral antibiotics, Remove retained products For intra-abdominal injury: Administer parenteral antibiotics, Perform blood transfusion, Perform surgery
Pre-eclampsia or eclampsia	Administer parenteral anticonvulsants, Perform neonatal resuscitation, Perform surgery (caesarean section)
Ectopic pregnancy	Perform surgery, Perform blood transfusion
Ruptured uterus	Perform surgery, Perform blood transfusion, Administer parenteral antibiotics
Newborn distress (intra partum)	Perform newborn resuscitation, Perform surgery (caesarean section)

Source: WHO (2009).

The guide further proposed that all subnational areas should have at least five emergency obstetric care facilities (including at least one comprehensive facility) for every 500 000 population. It further recommended that all women with major direct obstetric complication should be treated in emergency

obstetric care facilities. Also, the proportion of births by caesarean section in the population should not be less than 5% or more than 15%. It is further expected that the case fatality rate among women with direct obstetric complications in emergency obstetric care facilities is less than 1%.

Although, Ghana lagged behind significantly in several of these indicators (Ministry of Health [MoH], 2011), basic EmOC is, nonetheless, provided by primary level facilities such as clinics and health centers while comprehensive care is provided by primary level referral facilities (district hospital) or the secondary level referral facilities (regional hospital) across the country (Amoah, & Phillips, 2017). It is important to acknowledge that several concerns have been highlighted about the quality of emergency obstetric care services provided in these facilities.

Factors influencing quality of EmOC

The WHO advances that prevention of maternal mortality is possible only when the resources needed to provide EmOC signal services are in place hence transforming certain facilities into EmOC facilities. The availability of EmOC has been widely studied using signal functions which has to do with the availability of key resources and the ability to perform required services (Owolabi, Biddlecom, & Whitehead, 2018). These have mostly been surveys using the WHO key indicators that seek to address service availability and utilisation. This review is based on current published works on the subject matter and dwells mainly on the quality of resources and content of care as exists in health facilities.

Researchers have maintained that quality of emergency obstetric care has remained generally poor in most developing countries and this partly

accounts for the continuous loss of lives during childbirth (Cesar et al., 2016; Knowlton et al., 2017; Wilunda et al., 2015). Factors that influence the quality of EmOC primarily cloud around non-aherence to standards and inadequacy of operational components namely designated facility, drugs, equipment and personnel though with less attention on client factors.

Structures of care

Structures consist of the tools and materials required for effective delivery of EmOC services. The outcome of care depends largely on the availability of structures and vice-versa.

Service availability

The practice of EmOC is challenged by lack of essentials for its smooth operation. This wanton lack exerts significant influence on the quality of care that is rendered (Koblinsky et al., 2016; Otolorin, Gomez, Currie, Thapa, & Dao, 2015). Several studies decry the lack of equipment and personnel which compromise with the quality of care provided. For example, Wilunda et al. (2015), conducted a cross sectional study of all health facilities in two districts in Uganda and found gaps in the availability of needed infrastructure, equipment, supplies, drugs and staff for maternal and neonatal care particularly at health centers. There were equally gaps in the quality of care provided in facilities. Though there were more than required number of EmOC facilities per the WHO indicators, none of the health centers qualified as a basic EmOC facility possibly denying women of this essential intervention in some communities (Ayanore, 2017). Also, Cham, Sundby and Vangen (2009), identified the lack of blood for transfusion, shortages of key drugs as well as shortage of doctors. These compromised the quality of obstetric care rendered.

Indeed in a related study elsewhere. Galadanci et al. (2011) hinted of a close correlation between the maternal mortality rate (MMR) and the equipment and hygiene status of studied health facilities implying the lack of equipment can cause an increase in maternal mortality. Similarly, Ntambue, Malonga, Cowgill, Dramaix-Wilmet and Donnen (2017), discovered vital supplies such as drugs and equipment for performing certain EmONC functions were non available in all the facilities surveyed in DR. Congo. In a mixed method approach, Dalinjong (2018), examined access to maternal care services after the free maternal health policy and disclosed that though basic drugs and supplies were available, they were inadequate in the health facilities and, therefore, fell short of demand.

In assessing the capability of a second-level health facility to provide emergency care, Japiong et al. (2016), noted deficits in many essential items and services such as basic airway supplies, chest tubes and several emergency medications. They suggested that quality of care could be improved through periodic training of staff, increase in bed numbers in the emergency unit, ensuring availability of essential items and making personal protective equipment available for all staff caring for patients. Hussein et al. (2016), did a review on maternal death and obstetric are audits from 2000-2004 and found that the causes of Nigeria's high maternal mortality rate rested on delays in Caesarean section, absence of magnesium sulphate and shortage of safe blood transfusion service. An assessment of obstetric service availability, readiness and coverage in LMIC equally discovered low levels of availability, readiness and coverage of obstetric services (Kanyangarara & Victoria, 2018). The need to focus on upgrading EmOC essentials and improving readiness to deliver obstetric service, principally in rural areas was recommended. Relatedly, Kyei-

onanjiri, Caro-ollah, Awoonor-Williams and Mccann (2018), revealed inadequate skill mix of maternity health personnel as a huge challenge to the provision of EmOC in the Upper East Region of Ghana as in many other countries in the sub-region.

Some multi-country level studies have similar results. For instance, a study among seven African countries identified that the ability of a health facility to provide effective care lies in a robust human resource base coupled with well-equipped facilities to guarantee good quality primary care services. Unfortunately, these vital ingredients were largely inadequate (Kruk, Marchant, Doubova, Leslie, & Pate, 2017). Another study into the quality of basic maternal care functions in health facilities of five African countries equally revealed that though over 40% of facility deliveries in these countries take place in primary level facilities, quality of basic maternal care functions was markedly lower in these facilities than in secondary level facilities (Kruk et al., 2016). A geospatial evaluation of timely access to surgical care in seven countries concluded that many facilities lacked the basic infrastructure needed for providing basic surgical care. Of the 120 studied hospitals, only 41 fully provided the eight (8) needed services on a regular basis whilst the rest provided less than the required number of services (Knowlton et al., 2017).

Provider Related Factors

Since the health care provider implements policy at the grass root level, several concerns have been drawn to their ability to effectively implement strategies for desired health outcomes. Some studies have, therefore, explored provider related factors and their influence on quality of care. These factors include provider competency, motivation and behaviour.

Knowledge, skills and competency

According to Baloyi and Mtshali (2018), most maternal and child deaths are partly attributed to the quality of care emanating from inefficient workforce in health facilities around the world. The situation is thus similar as examplified by studies in both developed and developing countries. In a study conducted in Latin America and the Carribbean, Thompson, Land, Camacho-Hubner, and Fullerton (2015), reported that providers lacked the competence in manual removal of the placenta, bimanual compression of the uterus, and newborn resuscitation. Similarly, Nageswaran and Golden (2017), studied clinical proceedings in hospitals in the United States and report that nurses in these facilities lacked the requisite skills needed for effective management of children with medical complexity. There were serious skill deficits in medical processes such as child feeding, suctioning, the use of pulse oximetry as well as the ventilator. Still in the said study, care givers of children with medical complexity had to fire many home nursing staff because of poor skills base in handling children among others. In Ethiopia, a qualitative study by Yasin, Geleto and Berhane (2019), among 12 health workers and three newly delivered women identified several barriers associated with the provision of emergency obstetric care including lack of provider competence in performing certain tasks. In China, close to 50% of maternal deaths in 2014 were associated to inadequate knowledge and skills of medical personnel (Yin, Li, Lu, Yao, & Hou, 2018). Pakistan introduced the community midwifery programme to accelerate the provision of skilled delivery in communities. With 75% experiential learning and 25% class tuition, community midwives still lacked the midwifery skills to function effectively due to defects in their training

(Mubeen, Jan, Sheikh, Lakhani, & Jan, 2019). In a cross sectional survey in India, Rao and She (2018), found out that patients did or did not bypass some facilities based on the competence of clinicians in those facilities. They mentioned that though provider competence increased the rate of bypassing, this relationship was not absolute as greater increases in competency did not elicit same from patients.

Studies that investigated into knowledge of health providers on clinical activites also found widespread gaps in provider knowledge and global standards. In Nigeria, Ijadunola et al. (2010), used a self-administered questionnaire and conducted non-participant observation on 152 health workers (doctors, midwives, nurses and community health extension workers) employed in the maternity units of all the public health facilities offering maternity care in five cities of 2 states in Nigeria. They disclosed that a greater percentage of health staff across all age groups in these facilities lacked the requisite knowledge in the area of EmOC provision. Non-participant observation also revealed widening gaps between knowledge and actual practice. Though staff admitted that they undertook certain pertinent tasks pertaining to ante natal care delivery such as counseling on birth preparedness and danger signs during pregnancy, over 75% of respondents did not actually perform these when observed while clients received no education at all on pregnancy complication and actions to take. In Tanzania, Larson, Vail, Mbaruku, Mbatia and Kruk (2017), disclosed provider knowledge on quality care was 47% while knowledge in emergency obstetric services fell below average. In Calabar, Nigeria, Asibong et al. (2014), investigated knowledge of health providers in a general hospital on the use of the partograph in labour monitoring. Results

indicate that though health providers had broad knowledge on the tool, they lacked thorough knowledge on its application as such failed to use it for the intended purpose. Another study among health facilities in six sub-Saharan Africa countries, also found gaps in health worker knowledge and performance of essential lifesaving interventions (de Graft-Johnson et al., 2017). Also in using clinical vignette to determine quality, Lohela et al. (2016), discovered moderate performance by health providers with a possible better performance by medical doctors and midwives in hospitals than health assistants and extension workers in clinics. The writers argue that the use of vignette is more effective in assessing quality as lack of competence may jeopadise health delivery even in the wake of availability of drugs and equipment. Bayley et al. (2013), studied knowledge of service providers in relation to routine and emergency obstetric care using a standard questionnaire and reported that though knowledge was good, knowledge of correct monitoring during routine labour fell below internationally agreed good practice. Similarly, knowledge in emergency obstetric care was generally good but poor in emergency newborn care and exceptionally poor in facilities offering BEmOC. They concluded that providers' poor knowledge regarding monitoring during routine labour and management of emergency newborn care may be responsible for most maternal and new deaths in Malawi. Larson et al. (2017) also identified providers' knowledge on BEmOC was below average in studied health facilities in Tanzania. Though the literature points largely to insufficient knowledge base among health providers, few instances of demonstrable good knowledge was not even actualised in the field of practice. For instance, Bedoya et al. (2017), disclosed that though health care providers in Kenya exhibited good knowledge

in hand hygiene and injection and blood sampling safety, they failed to comply to these in their practice. Also midwives in a Ghanaian study equally failed to administer analgesics to parturient women though they possessed knowledge on drug use during labour (Aziato, Kyei, & Deku, 2017), indicating a gap still exists between assumed knowledge and actual practice. The poor state of care quality is further traced to unqualified personnel. In an Indian state, personnel providing labour and childbirth care in maternity facilities were adjudged to be unqualified and largely failed to adher to care protocols leading to poor quality care (Sharma, Powell-Jackson, Haldar, Bradley, & Filippi, 2017). Yet provider's experience is also an important determinant of skillful care delivery with no demonstratable difference between physicians and nurses or between better- and less-equipped clinics (Kruk, Chukwuma, Mbaruku & Leslie, 2017).

Provider motivation

In as much as provider competency is critical to averting maternal and neonatal deaths, provider motivation is equally another compelling factor that determines the kind of care offered in health facilities. Previous research has demonstrated that provider motivation is very essential to health care delivery as it correlates positively with high quality care and also determines provider satisfaction (Hallam, Hooper, Buell, Ziegler, & Han, 2019). Factors that may affect provider motivation and interfere with quality of care include low salaries especially in the public sector (Atinga, Agyepong, & Esena, 2018; Filby, McConville, & Portela, 2016; Miteniece, Pavlova, Rechel, & Groot, 2017; Yasin et al., 2019), poor working conditions (Downe, Finlayson, Tunçalp, & Gülmezoglu, 2017; Filby et al., 2016; Maloney, Siahpush, Dinkel, Farazi, & Jose, 2018), unfriendly leadership style (Atinga et al., 2018; Marston et al.,

2016) high workload (Mgawadere, Smith, Asfaw, & Lambert, 2019; Ogu, Ntoimo, & Okonofua, 2017), low levels of external rewards such as opportunity for career advancement and promotion and other financial and material rewards (Stokes et al., 2016). Indeed Pinar (2019), observed in a study that midwives or nurses who worked for close to 10 years, who never stopped working, who did not practise the profession voluntarily, who felt the profession was not suitable for them and who had problems in their working environments, had lower levels of satisfaction be it internal, external or general. This is further illustrated in a Zambian study where Kanengoni, Andajani-sutjahjo and Holroyd (2019), disclosed that young midwives felt dissatisfied with their profession because it was determined by their mothers. In other words, when health providers are satisfied with the job environment, remuneration and leadership style, motivation is high and it translates into high quality care, so is the reverse true. In some instances where motivation is low, clients had to pay extra money in the form of bribe to receive good quality care (Baji, Rubashkin, Szebik, Stoll, & Vedam, 2017). Alternatively providers take on additional jobs to meet the economic demands of the times (Mosadeghrad, 2014). Nonetheless intrinsically motivated health workers derive inner satisfaction when a task is acompolished and are not so much intrigued by external rewards. Intrinsic motivation is regarded as positive, self-directed and stimulates better task performance and higher competence unlike extrinsic motivation which is externalised (Stokes et al., 2016). For example, community health workers in four African countries saw their profession as a way of helping family and neighbours and as a service to the community as such they executed their tasks wholeheartedly and were pleased doing this (Haver, Brieger, Zoungrana, Ansari, & Kagoma, 2015). Also

most nurses in a Turkey study expressed high internal satisfaction in their practice and wish to pursue it to the end (Pinar, 2019). Studies conducted in developing countries have often identified poor working conditions as having an impact on provider motivation. Women in a Nigerian study admitted that high workload among health providers dampened their motivation for work as clients were either abadoned or delayed due to this (Ogu et al., 2017). In a systematic review Geleto, Chojenta, Musa and Loxton (2018), identified poor staff motivation as a factor to poor management of EmOC in sub-Saharan Africa. Providers displace their dissatisfaction from the work environment on recipients of care by being harsh and uncourteous in the care delivery process (Yevoo, Agyepong, Gerrits, & van Dijk, 2018). Low morale among health providers may not only lead to low quality care but providers may be unwilling to give off their best even if they are capable (Basinga et al., 2011) and clients may have to bear the brut of providers' dissatifaction. This explains the need to keep health providers motivated for positive outcomes.

Provider behaviour

Provider interpersonal skills is another area that has received tremendous research attention. Generally, health providers are noted to exhibit poor interpersonal competence towards clients. So recurring is the phenomenon that it has become a formidable theme in most recent reviews on quality of health care (Geleto et al., 2018; Hussein et al., 2016; Kyei-nimakoh, Carolan-olah, & Mccann, 2017) yet has remained consistently unchallenged by policies over the years (Patterson, Hollins, & Karatzias, 2019). Its enduring presence is noted to have had significant impact on access to care and satisfaction with services. In some instances, such behaviours have led to certain unpleasant

health outcomes amaong care seekers (Mannava, Durrant, Fisher, Chersich, & Luchters, 2015). Good interpersonal skills contribute to access to care while unfriendly attitudes of providers inflict dissatisfaction and dissuade persons from visiting certain health facilities. Though poor interpersonal skills among health providers is a general phenomenon, it is more pronounced in developing countries where it is more associated with public health facilities (Geleto et al., 2018). In these countries, health providers engage in certain behaviours that are viewed as an affront to a person's dignity and casts a slur on the care delivery process. While some studies were specific with the kind of unkind treatment meted out to clients, others generally referred to provider negative attitude as being a distaste to most clients. With regards to specifics, clients in a Ghanaian hospital based study alleged health providers were rude, unfriendly, unapproachable and impatient towards them (Turkson, 2009). In Nigeria, Okonofua et al. (2017), found verbal abuse and unfriendly attitude of providers as sources of dissatisfaction among women visiting a referral hospital. Health providers equally used harsh and abusive language on women seeking care in Zanzibar, Tanzania (Sigalla, Bakar, & Manongi, 2018). Indeed, words such as pinching, slapping, yelling, hitting, beating, scolding etc. are very common in studies that have investigated into this area. Such abuses have been termed mistreatment as they undermine the dignity of childbearing women and also indent women's right to safe motherhood (Bohren et al., 2015). Some other studies that report negative attitude of health providers in general include that of Fagbamigbe & Idemudia (2015) in Nigeria, Ganle (2015) in Ghana, Kanengoni et al. (2019) in Eastern Zimbabwe and Alanazy, Rance and Brown (2019) in Saudi Arabia as well as Patterson et al. (2019) in Scotland.

Undeniably, bad attitude of health providers has become so engrained in health care delivery such that it forms an acceptable part of the working culture and are regarded more severe towards poor and minority sects (Miteniece, Pavlova, Rechel, & Rezeberga, 2019) and adolescents, With reagards to the latter, health providers are referred to as being judgemental, uncaring and disrespectful (Nair et al., 2015) making such behaviours really subjective, discriminatory and unprofessional.

These behaviours are, however, not present when health providers are dealing with family members or close associates during care delivery (Bohren et al., 2019). Also where clients paid bribe to receive care, providers dealt with such persons with sobriety (Rahmani & Brekke, 2013). Accordingly, very few studies have provided evidence of client pleasant encounters with health care providers in the care delivery process (Norhayati, Hazlina, Asrenee, & Sulaiman, 2017; Willebrand, Sjöberg, & Huss, 2018).

Improving upon the situation

Bradley and McAuliffe (2009) ascribe the lack of skills to inadequate number of opportunities for career advancement and the absence of effective human resource management system to enhance the capability of the provider to provide good quality care. Ameh and Van Den Broek (2015) also allude that increasing the capacity of health-care providers to be able to diagnose and manage complications during pregnancy, childbirth and the post-partum period can prevent maternal and neonatal deaths. The authors advocated skills-and-drills competency-based training in skilled birth attendance, emergency obstetric care and early newborn care (EmONC) as a vital approach to improving knowledge and skills of providers. In persuing this agenda, Brenner

et al. (2017), observed the impact of performance based financing scheme on 33 health facilities, 23 intervention facilities and 10 control facilities and 401 pregnant women across four districts in Malawi. Results showed that the scheme improved the availability of both functional equipment and essential drug stocks in the intervention facilities as well as positive effects in respect to drug procurement and clinical care activities at non-intervention facilities, probably as a result of improved district management performance. Schneeberger and Mathai (2015), approved of taskshifting, (process of involving more health workers through shorter training session) in emergency obstetric care as very essential in reducing maternal and neonatal morbidity and mortality. Concomitant to these, Geelhoed et al. (2018), reported of considerable progress in vacuum extraction and other signal functions of emergency obstetric care and in the decision-making process for caesarean sections following interventions such as training, accreditation, audit, monitoring and evaluation. Also, Tiruneh et al. (2018), conducted an implementation research that promoted training to providers, mentoring and monitoring through supportive supervision, provision of equipment and supplies, strengthening referral linkages, and improving infection-prevention practice, in 134 health centers, covering 91 rural districts of Ethiopia. The BEmONC implementation strength index score, which ranged between zero and 10, increased significantly from 4.3 at baseline to 6.7 at follow-up ($p < .05$). Respectively, the health center delivery rate significantly increased from 24% to 56% ($p < .05$). There was also a dose–response relationship between the explanatory and outcome variables. For every unit increase in BEmONC implementation strength score there was a corresponding average of 4.5

percentage points (95% confidence interval: 2.1–6.9) increase in facility-based deliveries; while a higher score for BEmONC implementation strength of a health facility at follow-up was associated with a higher met need for emergency obstetric care.

Lindtj, Mitiku, Zidda and Yaya (2017), sought to reduce maternal death by introducing an intervention to improve coverage of CEmOC and BEmOC. The authors focused on strengthening the current institutions in rural areas, increasing the capacity and quality of work at health institutions and increasing referrals to hospitals through Health Extension Workers (HEW) in health centres. The intervention also included training non-physician clinicians to carry out CEmOC thereby improving the needed skills of midwives and nurses for BEmOC and also by equipping institutions with essential instruments to do basic and comprehensive emergency procedures, as well as establishing a system of intense supervision and monitoring. At the end of the six year period, findings point to a reduction in maternal mortality rate, the percentage of women who utilised antenatal increased by 20%, while the number of those who delivered at home reduced by 10.5%. Also, the number of deliveries at heath posts and health centres increased with a reduction in the use of traditional birth attendants. In effort to reduce maternal mortality in South Africa, Moran, Naidoo and Moodley (2015), introduced a special training package known as Essential Steps in the Management of Obstetric Emergencies (ESMOE) whereby a special drilling exercise on obstetric case management was introduced in routines of maternity units in the country. The minimal success suggested an introduction of the intervention in medical schools in the country and policies to ensure that doctors and nurses use the skills they learnt

appropriately, professionally and ethically. Still in a bid to improve upon knowledge, lessons on obstetrical emergencies taught to Guatemalan traditional birth attendents significantly increased their knowledge in this area and improved competence (Mettler, Assistant, & Certi, 2018). Nonetheless, in a systematic review of pre-service and in-service education for maternal and new born care providers for LMIC, Gavine, Macgillivray, Mcconville, Gandhi and Renfew (2019), disclosed that though these had effects on knowledge and skills, the level of evidence was poor and could not demonstrate whether it led to health worker behaviour change with positive effect on users. More-so, most trainings were based on life saving interventions yet none of the in-service programmes considered the education of midwives to global standards with the full scope of competencies needed.

Client Related Factors

Client factors have demonstrated to wield significant impact on health care delivery in general. These are largely socio-economic in nature and comprise economic background, education and cultural issues.

Economic background

The WHO states that poverty is one of the factors responsible for poor maternal and child outcomes in developing countries (WHO, 2016). Sageer et al. (2019), equally noted that the causes of maternal death are eventually changing from known medical causes to social issues such as poverty, illiteracy and poor personal responsibility towards health. Poverty is rated a major barrier to access to quality health care especially in the developing world (Lindtj et al., 2017) and women are those who experience the worst form of poverty around the world (Shaw et al., 2017). Women with low socio-economic status present

with perculiar characteristics: they are underprivileged and likely to obtain complications during delivery and even die (Bohren et al., 2015; Miteniece et al., 2019), they also appear vulnerable, are likely to be discriminated against or experience dehumanized and low quality care in health facilities (Berwick, Kelley, Kruk, Nishtar, & Pate, 2018; Bogren et al., 2020; Kanengoni et al., 2019). More-so they stand the risk of losing a new born (Dol et al., 2019), having wasted children and those with low cognitive and psychomotor abilities than their most affluent counterparts (Black et al., 2016; Narea, Toppelberg, Irarrázaval, & Xu, 2020). Poverty resonates positively with maternal mortality such that reductions in poverty are deemed very essential for reductions in maternal and neonatal mortality (Cavallaro et al., 2020; Dickert et al., 2017; Frost et al., 2016). In most of sub-Saharan African countries, poverty is rife in most rural areas which are regrettably denied the basic neccesities of life including health care (Stumbitz, Lewis, Kyei, & Lyon, 2018). Such extreme deprivation have swayed women away from accessing biomedical care in Tanzania, Haiti and Nigeria (Fagbamigbe & Idemudia, 2015; Gage et al., 2018; Spangler & Bloom, 2015). Confirming this previous stance, a systematic review on access to care in sub-Saharan Africa identified poverty and low income as very instrumental actors (Geleto et al., 2018). Cost in hospital care has thus served as a great disincentive to most rural women who do not have financial resources to pay for maternal health services (Kruk et al., 2016; Paul & Chouhan, 2019). Dalinjong, Wang and Homer (2018) and Atinga et al., (2018) reveal that women in parts of Northern Ghana could not pay for health services due to extreme poverty and either abandoned treatment or resorted to other forms of treatment that exacerbated their conditions. Indeed, Dalinjong (2018),

laments that cost of health care has not only served as barrier to access to care but it has actually plunged several households into poverty due to large sums of money required for certain clinical proceedings.

Attempts at moderating the impact of poverty on access to health care has led to the establishment of health insurance schemes in countries. Such arrangement has led to increases in the uptake of maternal care services globally (Gomez et al., 2015; Kozhimannil et al., 2017). However, several of them have failed to fully live up to their responsibilities. Aside the fact that most poor women are not covered, the processes involved in caring for the poor under the scheme are so arduous that health providers are mostly discouraged from providing such people with the needed services (D'Ambruoso, Byass, & Qomariyah, 2010). In addition, its sustainability in developing countries poses a challenge as most are crumbling under inadequate budgetary allocations and achieving lesser impact at such (Alhassan, Nketiah-amponsah, & Arhinful, 2016).

Maternal education

Maternal education is very vital to health care delivery such that its lack poses serious consequences on the health of women and populations at large. Studies have demonstrated that there exists a harmonious relationship between maternal education and maternal outcomes. According to Alkire (2010), countries of high female literacy rates have lower maternal mortality rates and vice versa. Also a multi-country cross-sectional study by Tuncalp et al. (2014), revealed that illiterate mothers often encountered severe maternal outcomes at childbirth. A study conducted on low and middle income countries further disclosed that women with no or low levels of education stand a much higher

chance of maternal mortality, so do their newborns risk losing their lives after birth. It is also reported elsewhere that the chance of a newborn dying is very much higher for women with no education than those with some level of secondary education (Dol et al., 2019). Maternal education thus affects both mother and baby and presents as a strong predictor of a child's nutritional status and the general ability of the woman to properly nurture her children and take care of their health needs (Abuya, Ciera, & Kimani-murage, 2012; Okonofua, et al., 2017).

Mother's education also influences access to health care. Indeed, studies that have reported a positive correlation between mother's education and health care access are numerous (Larson, Hermosilla, Kimweri, Mbaruku, & Kruk, 2014; Narea et al., 2020; Rahmani & Brekke, 2013). The level of education, however, matters. Bhalotra and Clarke (2013), disclose that at least a one year of formal education reduces maternal mortality by 174 per 100,000 live births while seven to eight years of schooling caused a reduction of 15 deaths per 100,000 live births. Secondary education is thus desired for a more positive association between health care access and positive maternal outcomes (Gage, Ilombu & Akonyemi, 2016). Maternal education also determines the level of satisfaction with health services. Higher levels of maternal education increases patient satisfaction possibly because of experience and perception of outcome (Srivastava, Avan, Rajbangshi, & Bhattacharyya, 2015). However, a recent study indicated that only women with a tertiary education stood a higher chance of seeking clarification on contrasting health information and not so much with satisfaction with health services (Stahl & Schober, 2019). Female education is often higher in urban areas, which are additionally inundated with ultra modern

health care facilities, translating in better supply of maternal care services in such areas than in rural areas. In rural Afghanistan, for instance the literacy rate among women is as low as 10% while about 60% of this rural population lack access to rudimentary health care (Lagrou et al., 2018). The educational background of women also influences health literacy and the rate of adherence to health information (Birmeta, Dibaba, & Woldeyohannes, 2013; Lori, Munro, & Chuey, 2016). Most illiterate mothers lack health literacy skills and know little about danger signs during pregnancy (Adeoye, Ijarotimi, & Fatusi, 2015; Nair et al., 2014). In fact, some women out of ignorance, offered a positive interpretation of such signs providing justifiable reason for their non-use of health services (Geleto et al., 2018).

Most of the studies in this area report of client's demography and access to care while little is known about the actual intrusion of these factors in the care delivery process. Few studies, such as Bogren et al. (2020), established this fact. The writers observed female low education posed as a constraint to good quality care due to a high probability of treatment non-compliance. Others also indicated that educated women are likely to seek after quality health care as they have the knowledge and other resources required to achieve improved health care (Abor, Abekah-Nkrumah, Sakyi, Adjasi, & Abor, 2011). Although socio-economc factors have largely affected access to care, there are instances where rich and educated women failed to utilise service as a result of other equally compelling hitches such as health worker attitude and perception (Fagbamigbe & Idemudia, 2015).

Cultural background

Culture refers to the shared norms, beliefs and expectations, spoken language and behavioural patterns among a defined group of persons (Coast, Jones, Portela, & Lattof, 2014). It includes a people's perceptions and attitudes to illness and health, religion, language, manners, dress, housing, diet as well as the distinctive social and economic attributes that define such a group. In most settings, cultural beliefs, taboos and prohibitions mostly disafavour women and children hence have been identified as exerting significant toll on maternal and child health outcomes in countries (Wilunda et al., 2015). Some cultural taboos on food, example, non consumption of okro, fish, crab and egg during pregnancy has led wake to most pregnant women losing out of essential nutrients required for a healthy pregnancy and also inducing malnutrition in children (Yarney, 2019). Relatedly, certain cultural practices and rituals worsen the health condition of mother and baby. According to Ketut and Mubasyiroh (2019), women in rural Indonesia abhor the practice of artificial contraception and perform umblical cord care using conventional procedures. Also, pregnant women in rural Gambia continue to perform multiple, economically less rewarding but arduous tasks during pregnancy as part of cultural norms (Lowe, Chen, & Huang, 2016). Such health averse cultural practices are ubiquitous in rural areas where women already lack the needed resources required for healthy motherhood thereby increasing their susceptibility to unpleasant maternal and neonatal outcomes in the end (Miteniece et al., 2019). Cultural factors have been significantly highlighted in prior literature to determine health facility / service access, acceptability and outcome of care. Most studies in this area dwell on the influence of culture on access to hospital or maternity care services (Awoonor-

williams, 2018; Dickert et al., 2017; Finlayson & Downe, 2013; Mselle & Kohi, 2016). Bogren et al. (2020) further hinted that quality in hospital care devoid of respect and accentuated by neglect and verbal abuse blurred the acceptability of such services by women. Dissatisfaction then ensues and compels women to seek alternative sources of care. For instance, women preferred the services of TBAs and other older experienced women in communities because they are deemed to be more understanding of local cutoms and traditions regarding childbirth (Der, Taleh, & Liliane, 2016).

These cultural infractions are said to be closely linked to women's low autonomy as a result of their general social and economic incapacitations (Mselle & Kohi, 2016). Gender stereotyping, connected to culture, also determines health outcomes. As part of culture, society prescribes gender roles that must be religiously adered to. Cultural perceptions about gender imposes the breadwinner role on the male while females man the kitchen and care for children. Anything short of this brings the dignity of the man into disrepute. In a study in Northern Ghana, Ganle, Dery, Manu and Obeng (2016), hinted that women disliked their partners accompanying them for ante natal services due to societal perception of being dominated by their wives. Such arrangement prevents men fron actively involving in the health needs of the family except for granting permission to seek care and payment of hospital bills lack of which may impede access. In most African countries, women must necessarily seek permissions from their spouses and partners before accessing care, denial of which is final but not without attendant consequences (Fagbamigbe & Idemudia, 2015). The cultural orientation of the typical African society sees women as second class citizens whereby they are relegated to occupy the lower

achaelon in society (Ganle, Otupiri, Parker, & Fitzpatrick, 2015). Women are thus prohibited in the decision making process involved in seeking obstetric care imposing this preserve on men and sometimes older women in society (Lowe et al., 2016; Mselle & Kohi, 2016; Tabatabaie, 2012). Unfortunately they bear the brut of unfavourable outcomes sometimes to the peril of their lives and that of the unborn.

Clients' contentment with service outcome highlight the extent to which such service is in conformity to their cultural norms and practices (Nair et al., 2014). Consequently, failure to inculcate socio-cultural prerequisites in formal health care delivery has dissuaded several women from accessing maternal care services in remote areas (Wallace et al., 2018) In a review on mistreatment of women by Bohren et al. (2015), it was identified that hospital care opposition to traditionl birthing positions such as kneeling or squatting and the lack of privacy associated made women rebellious, passive or non-compliant to care necessitating malhandling by health providers. Several studies continue to report of similar findings even after this review (Okonofua et al., 2017). Although the poor outcome of maternal and newborn care can be linked to several factors including the cultural background of clients, women's perception of pregnancy related risks, those with previous complications and those who had ealier neonatal deaths are more likely to seek appropriate hospital care than those without (Simkhada, Van Teijlingen, Porter, & Simkhada, 2008). This brief review on client factors highlights the impact of these factors on access to health care. Little, however, is known about their influences on quality of care in health facilities.

Process of Care

For best health outcomes, standard guidelines exist to guide health care delivery. They are mostly quality statements that are used against functionality of health faiclities at the time. These have been mostly authored by the WHO as well as other writers. They include the "Standards for Improving maternal and Newborn care" (WHO, 2016), "New Signal Functions to Measure the ability of Health Facilities to Measure Maternal and Newborn Care" (Gabrysch et al., 2012), the Service Provision Assessment (SPA), developed for the Demographic and Health Surveys programme (ICF, 2017), "Guide for Essential Practice (WHO, 2015). Other context specific guidelines such as the Safe Motherhood Protocol by the GHS exists to guide maternity care delivery in the country (Ghana Health Service, 2008). However, in a review to determine the effectiveness of these guidelines in measuring quality of care, Brizuela, Leslie, Sharma, Langer, and Tunçalp (2019), disclosed that existing guidelines in measuring quality needed to be harmonized to reduce arduous measurement processes. Also, measurement tools failed to include patience experience of care which is vital for care utilisation.

Quality standards

Studies report of general substandard care in developing countries unlike more advanced form of care in developed countries. In Nigeria, Gage, Ilombu and Akinyemi (2016), found out that elementary necessities for antenatal care provision, readiness to deliver basic emergency obstetric and newborn care, and management practices reflective of quality maternal health services were of poor state in the health facilities surveyed. Thompson et al. (2015), conducted an assessment of a broad array of health workers providing

obstetric and newborn care in eight Latin America and the Caribbean (LAC) countries and disclosed that hand washing which is an indicator of quality of antepartum care, was not performed most of the time. Labor management was carried out devoid of respectful care and most clinical proceedings very vital in the prevention of complications during labour, delivery and immediately after delivery/newborn care were not written out as having been done. The WHO (2013), developed a tool known as "The Service Availability and Readiness Assessment" (SARA) tool to determine the readiness of health facilities to deliver health care interventions. It comprises a set of tracer items and summary measures to determine the extent to which minimum criteria for the provision of services are met. Applying the tool in Low and Middle Income Countries, O'Neill, Takane, Sheffel, Abou-Zahr and Boerma (2013), identified differences in the distribution of health facility infrastructure, human resource and in the kinds of services offered. Challenges were also associated with laboratory diagnostic capacities and gaps in essential medicines and commodities.

Historically, studies on quality of care employed clinical audit as a tool for quality improvement.Using this approach in a rural hospital in Tanzania, Nyamtema, Jong, Urassa and Roosmalen (2011), disclosed that out of 6572 deliveries, 363 mothers secured severe maternal morbidities out of which 36 women died. Almost all causes of morbidities were attributed to substandard care emanating from either patients, health workers or administration related factors. Of these, health worker related sub-standard care was found to be largely responsible for most maternal morbidities in the facility. There was also general lack of magnesium sulphate (for treatment of eclampsia) in primary level facilities.

Functional quality

Functional quality, also known as interpersonal care, describes the manner through which health care is provided (Forsberg, Vikman, & Rattray, 2018; Grönroos, 1984). It is underpinned by the provider's ability to meet the needs of those who need the services most, at the lowest cost to the organization, within the limits and directives set by higher authorities and purchasers, Ovretveit (as cited by Curry, & Sinclair, 2002). Functional quality is a customer based approach to measuring quality by evaluating perceptions of care received by clients (Mendes et al., 2018; Samina, Tabish, & Samiya, 2008). So far documented evidence shows differences in how quality is perceived by clients and providers. While clients' perception is mostly rooted in interpersonal aspect (Itumalla, Acharyulu, & Shekhar, 2014; James, Calderon, & Cook, 2016; Karassavidou, Glaveli, & Papadopoulos, 2009; Kondasani & Panda, 2016; Mcclintock et al., 2016; Tabler et al., 2014; Yarney & Atinga, 2017), providers are more concerned with technical care and this drives their health care delivery efforts (Janhunen, Kankkunen, & Kvist, 2017; Khamis & Njau, 2016). However, very few studies on the two perspectives developed perception in health care based on both technical and interpersonal attributes (Islam et al., 2015; Larson et al., 2014). Within the health care literature, functional quality has been widely studied using the Gap model (Parasuraman, Zeithaml, & Berry, 1985).

The Gap model

The Gap model was developed to illustrate customer perception of service received. The model shows the existence of four gaps at service delivery point which culminate into an overall fifth gap between consumers' expectation

of service and perception of service rendered. According to the Authors, gaps in service delivery comprise the difference between consumer expectation and management perception of such expectations, the difference between management perception and service quality specification, the difference between service quality specifications and service delivery, the difference between service delivery and external communications and the difference between expected service and perceived service. The authors further argued that difficulties in consumer satisfaction are rooted in service reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding / knowing the customer and tangibles. These attributes later collapsed into a refined list of five service quality dimensions: Tangibles, reliability, responsiveness, assurance: and empathy (Parasuraman, Zeithaml, & Berry 1988). The Gap Model has been critised on the grounds that quality can best be studied based on performance rather than perception (Cronin, & Taylor, 1992). Writers such as Neupane and Devkota (2017) and Kang and James (2004) equally observed that the Gap Model is centered on the service delivery process thereby ignoring the technical aspect of care. It is also argued that perceived quality is dependent on the kind of service offered hence one general approach may be inappropriate across all service settings (Kalaja, Myshketa, & Scalera, 2016; Ramsaran-Fowdar, 2005). These limitations of the model made it inappropriate for this current research which is based on investigating into the quality in emergency obstetrics.

Technical quality

According to Lam (1997), quality is based on the technical accuracy of the diagnoses and procedures that are directed towards the realisation of positive

results. Dagger, Sweeney and Johnson (2007), equally maintained that it is the application of medical science and technology to health care. The application of medical science and technology in the clinical process should be carried out in such a way that its process increases its benefit to individual's health without a corresponding increase in risk in outcome (Mosadeghrad, 2013). Clinical process relates to how care is technically delivered and includes the appropriate application of therapeutic and diagnostic interventions for positive outcome (Tripathi, Stanton, Strobino, & Bartlett, 2015). A number of technical quality attributes have been identified in the literature. These include: knowledge, professionalism and experience of a service provider (Aharony, & Stephen, 1993; Dagger, Sweeney, & Johnson 2007). Technical quality is often evaluated using a clinical audit process that measures the work of health care providers against international or local standard (Duggirala, Rajendran, & Anantharaman, 2008). However, Kalaja et al., (2016), noted that customers are most often accursed of lacking requisite knowledge and expertise to evaluate the technical / clinical content of their interaction with the provider. Customers' perception of quality is generally based on functional care, which is the manner through which care is given. This is not often regarded as a good indicator of the quality of clinical care (Jha, Orav, Zheng, & Epstein, 2008). Nonetheless, clients' perception of quality in health care is equally important as it determines the extent to which health services are utilised (Mendes et al., 2018). In health care, technical quality is the most widely used method in assessing quality of care through the lens of Donabedian's Structure-Process-Outcome Model (Donabedian, 1988).

Structure-process-outcome model

Donabedian's (1966, 1988), triangular model on health care quality happens to be the basis upon which quality assessment in health care evolved over the years. The model is conceptualised on the assumption that quality attributes in the form of structures, processes and outcomes exist and operate simultaneously. Structures denote the physical environment where care is provided. It includes human resources, physical resources as well as equipment. Process is concerned with how care is technically provided and includes interactions between clients and providers while outcome is the impact of care provided on the health of the client / patient. It comprises changes to health status and behaviour which usually are long-term. These three determinants of quality are said to exert significant influence on clients' satisfaction of maternal health care services (Srivastava et al., 2015). Notwithstanding, Mendes et al. (2018) argue that effective service delivery should not only ensure that these determinants are in place but that service equally meets the aspirations of those who use it. As such equal weight should be given to clients and their relatives when determing quality of health care (Hanefeld, Powell-jackson, & Balabanova, 2017). The Structure-Process-Outcome Model is deficient in this regard. It mainly centres on technical provision of care while conspicuously ignoring clients' characteristics and inputs in the care process. To address this theoritical limitation, this research is centered on, not only the technical provision of care by health providers, but also includes an exploration of clients'

perceptions of quality since they are the end users of services.

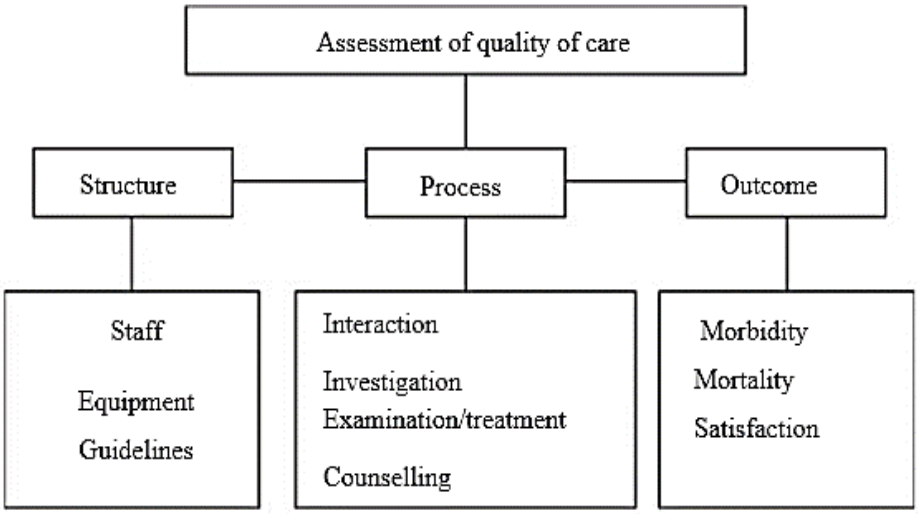

Figure 1: The Donabedian model of assessment of quality of care (1988)
Source: www.reserachgate.com

The Concept of Quality

The concept of quality remains one of the most highly contentious issues both in practice and in research and not only in the health care domain but also in other academic fields of endeavour. According to Crosby (1979), quality means zero defect, conforming to requirements and getting it right the first time. The author's statement suggests that a product or good is of quality when it conforms to the preferences of both the customer and the producer such that what the customer receives is precisely what is assured by the organization (Linguatech, Byu, & Ksu, 2014). Feigenbaum (1983), on the other hand views quality as customers' judgment of the superiority of a product or service based on its physical features. To Juran and DeFeo (as cited by Linguatech et al., 2014 p. 407), "quality is fitness for use" and that "fitness is defined by the customer." This implies it is the customer who determines the quality of a product. These varied conceptualisation of quality have all been underpinned by the relative value of the customer or the end user of the product. The relativity in the

conceptualization of quality is as a result of human diverse circumstances (Mosadeghrad, 2014). Quality is, therefore, considered one of the most highly contextual issues when it comes to the service industry (Karassavidou, Glaveli, & Papadopoulos, 2009; Shabbir, Malik, & Janjua, 2017). Quality differs not only from person to person but from one geographical area to another (Hanefeld et al., 2017) thus contributing to the lack of a universally acceptable definition (Mosadeghrad, 2012). The lack of consensus regarding the precise definition of quality has seen quality evolved from customer dependent to being defined in terms of outcomes (Raven, Tolhurst, Tang, & van den Broek, 2012), processes (Donabedian, 1988) and services (Parasuraman et al., 1985).

Our current knowledge on perception of quality emanated from the marketing field where goods quality dictated the survival of businesses (Karassavidou et al., 2009). However, unlike goods' quality which can easily be evaluated by customers (e,g by touch and smell), service quality is intangible, heterogeneous and inseparable making its measurement complex and challenging (Mosadeghrad, 2014). The inseparable nature of services lies in the fact that they are produced and consumed simultaneously. For instance, as a service, EmOC is provided by a cadre of health staff who perform different but related roles aimed at treating obstetric complications during labour, delivery or immediately after delivery. Service is thus a package that cannot be appreciated in fragments. Nonetheless, researchers have over the years tried to untangle the complexities surrounding quality by studying different perspectives of quality (Siddiq, Baloch, & Takrim, 2016). From the customer perspective, quality of service is defined as the ability to meet or exceed customer expectations (Mendes et al., 2018). Service quality is characterised by

the fulfillment of clients' expectations of services at reduced cost, elimination of lengthy procedures, timely delivery, no defects in product and an enhanced value addition to customers (Siddiq et al.). While Aggarwal, Aeran and Rathee (2019), denotes quality to reflect what consumers say it is and not what the provider says it is, Mendes et al. (2018), represents quality of service as the ability to meet or exceed customer expectations. Parasuraman and others (1985) on the other hand, describe service quality as the delivery of superior services to meet client's expectations. The authors argued that service quality is the gap between customers' expectation from the service and their perception of actual care received. Quality is perception minus expectation and correlate positively with customer satisfaction in that high quality ensures customer or patient satisfaction and vice versa (Neupane, & Devkota, 2017).

These arguments highlight the relative importance of the client in the conceptualization of quality. But this cannot be said of health care quality where it is argued that high satisfaction does not necessarily ensure high quality care (Cleary, & O'Kane, 2015). This is mainly due to the subjective nature of the concept as perceptions may be influenced by contextual factors such as social organization and culture, which may be different from best medical practice (Karkee, Lee, & Pokharel, 2014). In the medical literature, therefore, quality has often been treated more as process and outcome than a service (Raven et al., 2012). Though this is crucial, it is important that in obstetric care the service component of quality be considered since it determines the extent to which services meet client expectations and their subsequent utilisation.

Health care (EmOC) quality

As a concept, health care quality is grounded in similar complexities as service quality in other domains. Health care service quality is inseparable in that it is simutaneously produced by a heterogeneous group of peopole providing and receiving care in different contexts (Mosadeghrad, 2014). The service is further complicated in its intangible nature as it cannot be touched, felt, seen, counted, or measured like physically manufactured goods (Mendes et al., 2018; Mosadeghrad, 2014). But unlike service quality which is centered on meeting clients' expectations, most explanations of health care quality contain a technical undertone characterised by desired health outcomes. Donabedian (1966), indicates that health care quality consist of structures, process and outcome. He later proposed the seven pillars of quality notably acceptability, efficacy, efficiency, optimality, legitimacy, equity, and cost. On the other hand, Maxwell (1984), conceptualises health care quality into seven dimensions. These dwell on access to services, relevance to need (for the whole community), effectiveness (for individual patients), equity (fairness), social acceptability, efficiency and economy. The WHO (2006) streamlines these attributes and refers to quality of health care as being effective, efficient, accessible, acceptable / patient oriented, equitable and safe. Quality in health care is also the degree to which the resources or services for health care agree with specified standards that will generally lead to desired outcomes (Aggarwal et al., 2019; Roemer & Montoya-Aguilar, 1988). The American Institute of Medicine stated that "quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (Institute Of Medicine, 1999).

The institute further suggested that quality means care that is effective, safe, efficient, timely, equitable and patient-centered. This corresponds with Campbell et al. (2000) argument that, health care quality is rooted in terms of clinical access and effectiveness (interpersonal interactions). While clinical access relates to whether individuals can access the health structures and processes of care that they require, effectiveness refers to whether the care they eventually receive is purposeful. In addition, the ability to access effective care on an efficient and equitable basis for the realisation of health benefit and wellbeing for the entire population remains important (Hulton, Matthews & Stones 2000). In maternal health research, the cognisance of the reproductive right of the woman is critical to health care quality. In this domain, quality is "the degree to which maternal health services for individuals and populations increase the likelihood of timely and appropriate treatment for the purpose of achieving desired outcomes that are both consistent with current professional knowledge and uphold basic reproductive rights" (Hulton et al., p.9). Implicitly or explicitly, quality in the health care establishment is perceived as in conformity to agreed standards and less of as experienced by the client (Raven et al., 2012).

Recent literature has, however, taken patients' satisfaction as an important requirement for quality. For example, Al-awamreh and Mohammad, (2019), represent health care quality as the provision of care that exceeds patient expectations with the realisation of maximum possible clinical outcomes Mosadeghrad (2013), also relates quality health care to three targets: patients' expectation, scientific standards and providers' satisfaction and that which must consistently delight the patient through the provision efficacious, effective and

efficient healthcare services. The services should be based on current clinical guidelines and standards, which meet the patients' needs and satisfies providers.

Despite the relativity inherent in the conceptualisation of quality, diverse opinions exist regarding the constituents and measurement of health care quality (Mosadeghrad, 2013). Several frameworks on the appropriateness of quality measurement appear a common place in quality research (Hall, 2004) based on diverse perspectives - providers, users, managers, experts, etc. While service providers such as physicians are delighted in the technical quality of care and outcome, patients are more satisfied when services address their psychosocial needs (Mohammed et al., 2016). Arguably, some attempts at understanding quality have either placed client satisfaction at the forefront (functional quality) which corresponds with patient centered care or are based on the scientific content of care (technical quality) (Karkee, Lee & Pokharel 2014). Primarily, two forms of quality span through the health literature (technical quality and interpersonal / functional quality) (Grönroos, 1984; James et al., 2016; Mendes et al., 2018). In determining these, researchers have largely drawn on the views and perceptions of various categories of respondents (eg. clients, providers and stakeholders) alongside their individual notions to shape how quality of care has come to be conceptualised, measured and understood (Kruk, Kelley, Syed, Tarp, & Addison 2017). Though some researchers have criticised such approaches as possessing greater magnitude of sampling errors and inherent biases (Lee, Khong, & Ghista 2006; Lin, & Kelly, 1995) they continue to form an important part in the conceptualisation of quality within the health care domain (Kondasani, & Panda, 2016). These technical and functional /interpersonal qualities have been summarized as the duo in health care quality

research (Ramanujam, 2011). Recent scholars have, however, suggested that a more comprehensive understanding of the concept would require an inclusion of societal norms, relationships, trust and values since these elements altogether shape how people perceive events around them (Hanefeld et al., 2017).

Perceived quality

Perceived quality refers to consumers' evaluation of service experienced (Karassavidou et al., 2009). It represents a client's judgment of service excellence or overall superiority of service delivered (Cronin, & Taylor, 1992). Perception is formed based on expectation which describes what clients feel about the service offered (Mohammed et al., 2016; Shabbir, & Malik, 2015). This feeling is normally influenced by word of mouth communications, personal needs and past experience (Kondasani, & Panda, 2016). An individual's assessment of quality is based on these three precedencies which provide basis for their expectations. A gap occurs when consumers are not satisfied with services (Parasuraman et al., 1985). Samina et al. (2008), submit that to understand patients' satisfaction with service, in quantitative terms, their perception of quality of care received must first be studied and contrasted with expectations. There is good quality service when perceived performance score is higher than expectation and satisfaction is achieved while a lower score signifies poor quality (Shabbir, & Malik, 2015). Nonetheless, clients may also exhibit certain behaviours as a way of registering their dissatisfaction (Demir, 2019). This assertion is well elaborated in the subsequent paragraphs.

Patient satisfaction highlights the extent to which a customer feels pleased with a service offered by an organization and is more likely to utilise the service again at a later time (Shabbir, & Malik, 2015). Satisfaction is

congruent on service utilisation, recommendation to friends and compliance with treatment, positive clinical outcomes and high customer retention which altogether yield increased productivity to organizations (Anhang et al., 2014; Baker, 2001; Ramsaran-Fowdar, 2005). Recommendation to friends, also known as word of mouth, is the message that customers will pass on to others regarding their experiences with a service or product (Donio, Massari, & PassianteDabho, 2006). This singular act is so powerful it can determine whether organizations remain in business or not. This is because positive word of mouth promotes service utilisation or rebuying of product while negative word of mouth equally attracts unfavourable response (Shabbir, & Malik, 2015; Zeithaml et al., 1996). In the health care literature, perception has mostly been studied from a customer perspective as is evident in its definitions. Although this is commendable, it is also expedient to explore the provider's perception of service since they are a critical force in any service improvement effort. Yet few Ghanaian studies have addressed this issue in the Ghanaian context.

Impact of perceived quality (outcome of care)

Outcome of care delivery is summarised under labour outcome, service utilisation, recommendation to friends and client satisfaction. Perception of quality of service has a direct bearing on the extent to which clients utilise service and the content of service provided by health care providers. Available literature reveal that clients are more satisfied when services meet their psychosocial needs (Mendes et al., 2018). Conversely providers are more concerned with technical quality and are satisfied when service produces desired health outcomes (Islam et al., 2015). The implications of these varied views are very essential for quality improvement purpose. More often, efforts

are being doubled at providing needed strategies to improve upon maternal and child health care. These include provision of additional health care infrastructure, equipment, supplies and training of requisite human resources. Yet improvement in resources does not often yield significant utilisation of service especially in obstetrics (Nakua et al., 2015). This obviously means there is a problem with the quality of health service provided leading to under utilisation and defeating the prospects of maternal interventions (Hulton et al., 2000). Women will not utilise services when they perceive something negative about the service (Rahmani, & Brekke, 2013; Yevoo et al., 2018). Maternal and child health services have suffered low patronage partly because of the perceptions that clients hold about these services. Low utilisation of services has often been traced to provider attitude and the way in which care is provided which may not be in conformity to client's preferences (Ganle, 2015).

Clients who perceive good services are more likely to partronise service again than those who rate such service as poor (Christopher, Appiah, & Aggrey, 2014). Additionally, clients with a good perception of the quality of health service provided, more likely rated and patronized them more than those with poor perception of quality of care (Onyeneho, Amazigo, Njepuome, Nwaorgu, & Okeibunor, 2016). Also, women prefer home delivery to skilled attendance not because of long distance or economic reasons but because they have either directly ever received poor quality and dehumanizing care or they have been told this by their peers (Bohren et al., 2015).

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determine whether organisations remain in business or not. This is because positive word of mouth promotes service utilisation or rebuying of product while negative word of mouth equally attracts unfavourable response (Shabbir & Malik, 2015). Lee et al. (2006), allude that out of 100 patients who experience deficient health care, only 25 are more likely to patronise the service again while the greater majority of customers would be unlikely to patronise the same organization again. As if this is not enough, each member of the dissatisfied customers will go on to spread the news about their experiences to at least nine relatives and friends. The effect of this is that the organization risks losing close to 500 potential customers due to the word-of-mouth propaganda of dissatisfied members.

Conceptual Framework

The conceptual framework for this research was adapted from Donabedian's quality of care model. The current model shows that quality of EmOC consists of an interplay of several factors (Structures, Process and Outcome) such that there exists a direct and inverse relationship between them. Structures consist of availability of EmOC's key components notably drugs, equipment and personnel as well as provider factors and client factors. Process denotes the manner through which care (signal function) is provided and presents in two concurrent forms: Technical and interpersonal. Technical care is the curative care that health providers deliver to clients while interpersonal care refers to the warmth or kindness that health providers extend to clients in the care process. Outcome is the consequences of service provided and include service utilisation, pregnancy outcome and client satisfaction. Utilisation refers to the probability that client would access the services again. Pregnancy or

labour outcome refers to the clinical success of treatment while satisfaction refers to the extent to which client is pleased with service. The arrows suggest an interdependent relationship amng the constructs. The researcher thus postulates that the availability of key components determines or influences the performance of signal functions and invariably the outcome. So is the inverse true. Two constructs that are alien to the original model have been introduced in this model on purpose. These are "client factors" and "perception". By this addition, the researcher further advances that quality of EmOC is influenced by not only health facility factors but also clients' predispositions and that these altogether, influence the process of care and the outcome thereof through perception. Assumingly, provider and client backgrounds can directly or indirectly influence outcome through perception.

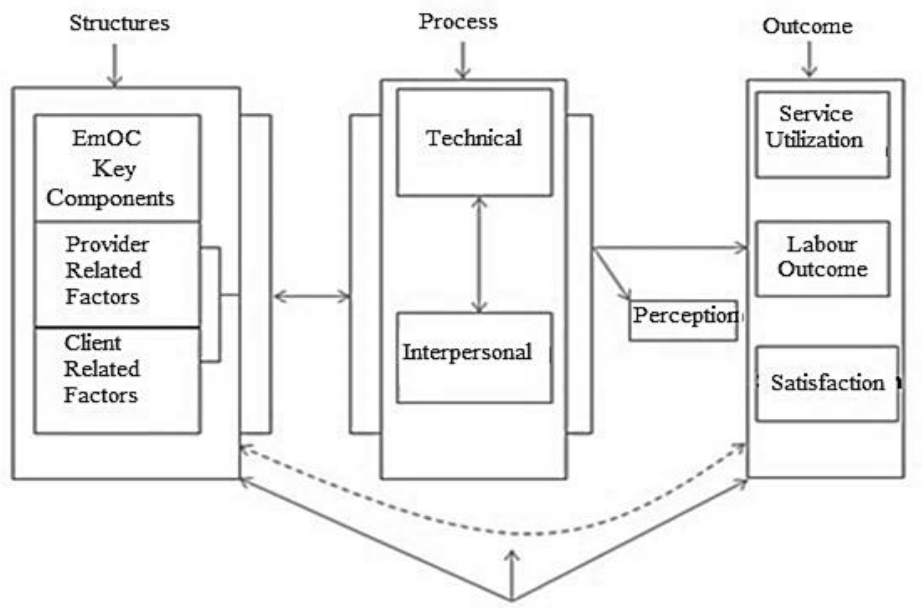

Figure 2: Structure-Process-Outcome Model adapted from Donabedian (1988)
Source: Author's construct

Summary

Empirically, quality in health care (EmOC) has been extensively studied globally and particularly in developing countries such as Nigeria, Tanzania, Ethiopia and Southern Ghana. In the cited works, quality has been assessed either through quality standards or by the mere existence of EmOC's components / signal functions. While quality standards are mostly not adhered to, there is a general lack of key components translating in the non-performance of some signal functions across studies. Aside this deficiency, provider related factors notably knowledge, skills and competency, motivation and behaviour have been identified as having a negative impact on quality of health care. In addition, some factors associated with clients have also been named to have effect on access to health care or EmOC. These basically dwell on clients' background characteristics and the cultural environment. Theoretically, quality in health care has been conceptualised through a clinical lens emanating from expert views and opinions. Consequently, quality is viewed in two ways: Technical and interpersonal as examplified in Donabedian's (1980) clinical model. In recent times, perceived quality has been introduced as a viable means of studying the concept of quality. Studies in line with this, draw inspiration from the Gap model by Parasuraman and colleagues. In advancing this debate, researchers opine that providing services to meet the needs of clients has the potential of maximizing utilisation and improving upon maternal and neonatal health outcomes.

The summary presented provides with certain noticeable gaps: First, while information is readily available on the coverage of EmOC, not much is known about its actual performance or the nature of care especially in the

Northern Region of Ghana where maternal mortality is currently beyond acceptable limits. Also, quality in health care literature has sounded more technical in nature as it primarily centres on supply side factors while relegating clients' factors to issues related to geographical access to care. In addition, the most common models for understanding health care quality have either drawn on one perspective or the other thereby presenting inexhaustive information on the concept. In this research, attempt is made to address these important literature deficits by investigating into the reality of quality as exists in a particular geographical area. Also, health provider and client perceptions of quality in emergency obstetrics is explored in order to propose a model intended to represent quality of EmOC from this angle. More-so, some client factors identified in this study have demonstrated to move beyond challenges of access to directly interfere with clinical content of care in the study area.

CHAPTER THREE

RESEARCH METHODS

The purpose of this research was to explore the perception of quality of EmOC in selected health care facilities in one municipality in the Northern Region of Ghana. This chapter covers the research design, study area, population, sampling procedure, data collection instruments, data collection procedures and the procedure for data processing and analysis.

Research Design

The study adopted a qualitative case study design, grounded within a constructivist paradigm, for the current research. According to Yin (2009), case study is appropriate when one is interested in investigating programs, events, persons, processes, institutions, social groups, or any other contemporary phenomenon. It is a design that affords an opportunity to explore phenomenon in the context in which it occurs and by means of multiple data collection methods (Yin, 2014). Based on these premises, the adopted the design to investigate quality of EmOC which is, herein, viewed as the 'case'. The design makes it possible to capture the 'hows' and 'whys' associated with the provision of EmOC.

The concept of quality is one of relativity and this influences how it is viewed or practiced by people across sectors (Hulton et al., 2000). Assumingly, quality in this work can best be studied by observing the different constructions of reality carried out by health care providers in their day to day service delivery activities (culture). Situating the research in this context, therefore, conforms to the belief that reality resides in and within the actions of people (O'Reilly, 2012). What they say and do individually and collectively in a cultural milieu

constitute multiple constructions of reality which are largely influenced by contextual factors. Case study evolved from a Constructivist paradigm (Court, 2013). Unlike Positivists who believe reality is out there for one to grasp, Constructivists / Interpretivists believe that reality is but a construction of the human mind hence is relative (Baxter & Jack, 2008). Constructivists contest the scientific view that reality can be tested with the researcher being distinct from the research. They argue that this approach is deficient in capturing the complexities of human behaviour which are best captured when research is carried out in natural setting where the researcher interacts with the people (Willig, 2008).

Justification of the design

Although this research could be conducted using other research designs, the best approach to understanding the practice and perception of a subjective construct like quality is through a case study design. This approach provides an opportunity to study phenomenon as it occurs in the natural context (Creswell, 2007). Context is viewed as an important element in case study research because it is bounded by time and space and its benefits are a strength to conducting intensive investigations on issues (Hancock & Algozzine, 2006). For example, this research ia an attempt to investigate into quality of EmOC in the Northern Region which is currently registering the highest number of maternal deaths in the country. In order to understand the occurrence of the phenomenon, it is imperative that it is studied in the context in which it occurs in order to unnerve the variables intrinsic to it. Another advantage is that in a case study, a researcher adopts an insider perspective that enables them to observe, listen, record and report on first-hand, information relating to aspects of a group's

culture (Silverman, 2009). This flexible exploratory process obviously adds more to what is already known about a particular phenomenon (Creswell).

Case study methods such as observation and in-depth interviews make it possible for the researcher to capture the nuances or most often taken for granted issues in many research areas (Creswell, 2009) perhaps including that of maternal and child health research. O'Reilly (2012) indicated that such neglected nuances may be responsible for our inability to completely understand phenomenon. Case study, therefore, provides study findings that are more comprehensive, non- reductive, detailed and reflective of context.

Ontological assumptions

The ontological orientation of this research is rooted in interpretive constructivism which maintains that the world that researchers study does not come in already labeled or theorised but that reality exists in the form of mental constructions carried by people in natural settings (Gambold, 2017). This stance argues that human beings try to make meaning of the world in which they live by developing their own subjective interpretations of phenomenon that occurs around them (Creswell, 2007). These interpretations are usually a result of their interactions with others as well as the historical and traditional norms that govern the place within which the individual operates (Creswell, 2007). In Constructivism, the researcher is expected to view the phenomenon through the lens of participants by depending largely on the participants' perspectives or constructions of reality. These constructions are usually viewed as stories through which study subjects define their views of reality (Baxter & Jack, 2008).

Epistemological assumptions

To understand the multiple realities inherent in Constructivism, the researcher does not come to the research scene with predetermined theories or hypothesis to test for objective truth therein or otherwise (Creswell, 2009). Rather he or she employs open ended exploratory means to adequately study and comprehend such realities (Charmaz, 2006). The researcher is then able to interpret or inductively produce a theory or a pattern of meaning derived from these constructions (Creswell, 2007). Similarly, methodology in a constructivist interpretive viewpoint involves interactions between the researcher and subjects to enable him or her provide polished interpretations based on meanings derived from the people's account (Yberma, Yanow, Wels, & Kamsteeg, 2010). For this to occur, there should be mutual interaction between the researcher and the participants where the researcher becomes part of the study and subsequently interprets the participants' experience to the reader (Willig, 2008). Indeed, if there is anything to learn in an under-researched area such as the provision and perception of EmOC in Ghana, this could arguably be achieved through a case study approach and by methods that do not only capture taken for granted phenomenon but that also uncover the hows and whys of phenomenon which are featuristic of every piece of qualitative writing (Yberma et al., 2010).

Reflexivity

In qualitative research, researchers are required to declare their reflexivity and their role in meaning making. Reflexivity refers to a researcher's positioning with regards to a phenomenon under investigation (Willig, 2008). Based on personal reflections, the student researcher here-in approached this

work both as an insider and outsider. As an insider, the researcher benefitted from training workshops and research coaching on conducting qualitative studies. As an outsider, the researcher did not hail from the study area and did not have any professional medical background. The researcher had, however, experienced childbirth and was aware that some women lose their lives during the process of child bearing.

Study Area

The Northern Region, which is home to the research, is currently faced with the highest concentration of maternal deaths in the country (CHIM, 2017). Health care delivery is particularly low and the inhabitants are generally poor and with least education (Cudjoe, Azure, Assem, & Nortey, 2013).

Geography and demographics

Before December 2018, the region was the largest among the then ten regions of Ghana in terms of land size. It occupied a total landmass of 70,384 square kilometres which was equivalent to 30 per cent of the total land area of Ghana (Government of Ghana, 2016). At the close of 2018, backed by a legislative instrument, six other regions were carved out of very large regions in the country as part of government's efforts at decentralising governance giving rise to a total of sixteen regions in the country. As a result, the Northern Region was sliced into three regions (Northern Region, Savannah Region and North East Region). Each of these was dedicated to one of the three main ethnic groups in the region notably Dagombas, Gonjas and Mamprusis. Respectively, their regional capitals became Tamale, Damango and Nalerigo. The now Northern Region has 14 districts. The region is surrounded by the North East Region to the north, to the east by the eastern Ghana-Togo boarder, to the south

by the Oti Region and to the west by the Savannah Region (Daily Graphic, 2019). Except for areas lying within the north-eastern corner and the Gambaga escarpment along the western corridor, northern region is generally a low lying area. The use of motor cycles is the commonest means of transport in the area. As of September 2019, the estimated population of the area was 1,905,628 (GSS, 2019). The number of females was slightly higher than males recording 50.4 and 49.6 percent respectively. Most of the districts are rural with sparse and hard to reach communities segregated by large farmlands and poor drainage system. This makes access to health care especially during the rainy season, a daunting task (GSS).

There are marked differences between the people of Northern region and that of the other regions in southern Ghana in terms of cultural, religious, political and economic orientations (Government of Ghana, 2016). In general, these factors are said to exert considerable effects on health care delivery in developing countries (Ronsmans & Graham, 2006). In terms of culture, the region operates a patriarchal system of governance where women occupy the lowest echelon in society and are not allowed to express themselves in public spheres (Gyekye, 2003). The Dagbon kingdom is located in the Yendi municipality of the region and is headed by the Yaa Na as the paramount chief. The natives are of the Mole Dagbon origin and are generally referred to as Dagombas. The other ethnic groups include Konkomba, Akan, Ewe, Basare, Moshie, Chokosi and Hausa. The population is largely rural with 56 percent living in the rural areas while 44 percent are in urban communities. The inhabitants are largely Muslims who practice the Islamic faith, while

Christianity and other religious groups constitute a minority (Government of Ghana).

Unlike southern part of Ghana, but very characteristic of northern Ghana, polygamy is common. On the average, the number of wives per man is five (National Population Council, 2011). The main occupation here is subsistence farming with yam, maize, millet, guinea corn, rice, groundnuts, beans, soya beans and cowpea being the main crops cultivated (Amanor-Boadu et al., 2015). Other economic activities are: weaving, agro-processing (shea butter extraction), meat processing, fish mongering, wholesale and retail of general goods, transport and many more. The region is also regarded as the hub of Ghana's meat market as inhabitants are mostly engaged in livestock farming where animals are either traded off to other parts of the country, or are used to feed the meat market in the region (Adzitey, 2013). These, notwithstanding, the Northern Region is rated as one of the poorest regions in the country (Cooke, Hague, & McKay, 2016; GSS, 2015). In addition, the insurgence of a protracted chieftaincy dispute has affected the development of the area and by extension, the health of the citizenry.

Health care

In terms of statistics, Northern region has always performed poorly in several health care indicators particularly in maternal and child health care delivery (CHIM, 2017). This is partly due to challenges faced by the region notably inadequate health staff, poor infrastructure, immortorable roads and inadequate means of transport (Northern Regional Health Directorate, 2016). Currently, the region has one teaching hospital, 14 hospitals, two polyclinics, 36 health centres, 16 clinics and 96 community based health planning and

services (CHPS) units. In 2016, the region had a total of 216 doctors and 5,557 nurses, way below the numbers of health staff in regions in the southern part of the country. With a total population of 2, 927 959 inhabitants, the doctor-population ratio was 13,877 in 2016 while nurse-population was 522 and with a mid-wife-WIFA (women in fertility age) ratio at 1,123 (CHIM). These high figures may have a telling on the quality of service provided in facilities (Dzakpasu, Powell-jackson, & Campbell, 2014). In the Northern Region, and Ghana for that matter, basic emergency obstetric care (BEmOC) is carried out by primary level facilities such as clinics, health centres and district hospitals while comprehensive emergency obstetric care (CEmOC) is provided by secondary level facilities such as the regional hospital and some referral hospitals according to need (Amoah, & Phillips, 2017).

Sampling Procedures

For a relatively novel research such as quality in EmOC provision, both purposive and convenience sampling techniques were used to harness the rich information required for a complete understanding of the phenomenon (Creswell, 2007). Purposive sampling occurs when a researcher selects a sample from whom much information can be learnt while convenience sampling selects participants based on their availability (Etikan, 2016). Since EmOC services target the prevention of maternal mortality, one municipality was purposively selected for the study as it registered a greater amount of maternal deaths in the region as at the close of 2017 (DHIMS, 2017). Thereafter, all EmOC facilities were duly identified and earmarked for the study. The study utilised both purposive and convenience sampling techniques to recruit women who received any form of EmOC intervention at selected facilities during pregnancy and

delivery between June and October 2019. Persons who either accompanied them to the facility or visited them while they were on admission were equally consulted and enrolled into the study. Since some complications started from home, residents of clients were identified using a snowball technique and relatives who witnessed the on-set of complications at home were also drawn in. Mothers who had received any form of the intervention six months prior to the study were identified at post natal clinics and formed part of the sample. The study also sampled health providers who attended to maternal complications at the health facilities. Out of a total of 28 essential workforce available during the time of field work, 21 of this number was involved in the study. According to Guest et al. (2006), the smallest ideal sample size for data saturation is 15. In line with this, at least 15 participants were supposed to be selected from each category of respondents. In reality, however, more than this number from each category of participants was engaged in the study.

Data Collection Instruments

The researcher used a semi-structured in-depth interview guide, focus group discussion and observation guide as data collection instruments. The interview guide contained open ended questions in areas that need to be explored in depth or covered by the interview (Patton, 2002). According to Shaw (2000), the finest method to explore how clients perceive service quality is through qualitative interviews with them. The guide was used to explore client /provider perspectives of care as well as their respective influences on the outcome of care. It served as a framework that guided the interview process regarding the questions to cover and their sequence (Patton, 2002). It provided opportunity for the interviewer to gather much details by using cues, prompts

or probes (Mathers, Fox, & Hunn, 2002). For example, where a participant had challenges with a question, the interviewer used cues or prompts to get them started. Similarly, the interviewer used probes to enable interviewees throw more light on their responses, or elaborate further on their line of thought. It is suitable especially in exploratory research where less is known about the subject matter (Mathers, Fox, & Hunn). Though this technique often contains many entities of analysis, which are not always readily recognised, it is appropriate for gathering detailed information on individual experiences, opinions and feelings as it captures the nuances and contradictions in responses (Campbell, Quincy, Osserman, & Pedersen, 2013).

The interview guide was constructed by the author but in conformity to prior literature (Hulton et al., 2000; Parasuraman et al., 1985) and informed by identified gaps. First, the author read through the literature and derived the gaps upon which the interview guide was constructed to investigate into the gaps. The guide contained six main sections each addressing a research objective raised in this thesis as well as a section on participants' demography. Respectively, Section A consisted of participants' socio-demography and was in two folds: clients' and providers'. That of clients comprised demographics such as age, occupation, educational background, marital status, number of children etc while that of providers were: age, educational background, cadre of staff and number of years in practice. Section B dwelled on nature and availability of care and had sub-topics on clients' and providers' experiences of care provision and utilisation. In section C, questions were intended to explore stakeholder views on quality. It was assessed by examining their expectations of care with actual experience of care. Questions bothering on impact of

perception on care delivery are contained in section D. Sub-topics were: client satisfaction with care quality, provider satisfaction with care quality and service utilisation. Section E was on how provider-related factors contributed to outcome of care. Areas covered were: technical competence (knowledge and skills), economic factors, provider motivation and workload. Section F contained questions on client-related factors and how these contributed to the outcme of care. Sub-topics were socio-economic factors, client's cooperation and cultural influences. There were prompts and probes to explore in detail, participants' submissions. Each interview session lasted between 60 to 90mins.

Focus group discussion was another data collection method employed in this thesis. It is a technique whereby a researcher gathers a group of people to discuss a topic of interest by drawing into their personal experiences, attitudes, beliefs and perceptions (Sofaer, 2002). It is recommended especially for theory generation in the sciences (Mosadeghrad, 2012). According to Nyumba (2018), between six to eight participants in a group is sufficient enough to provide useful data. Guest, Namey and McKenna (2017), also propose that a minimum of two focus groups are capable of producing 80% of themes in a data set while three focus groups can yield as much as 90% of themes. Therefore, three focus groups each with male and female relatives (community members) who witnessed complications either at home or visited patients on admission in health facility were conducted. The item format on the focus guide was similar to the interview guide earlier on described. The procedure of data collection was same as the in-depth face-to-face interview process except that in the focus group discussion, the researcher/assistant moderated discussion between

participants unlike the interview where the process was between the researcher and the participant.

Observation of clinical proceedings is rated the best method in assessing the technical quality of care (Kruk et al., 2017). This is usually achieved through a guide or checklist. The observation guide for the current study was adapted from Emerson, Fretz and Shaw (2005). It contains questions such as:

i. What are people doing? What are they trying to accomplish?
ii. How exactly do they do this? What specific means and/or strategies do they use?
iii. How do members talk about, characterise and understand what is going on?
iv. What assumptions/ traditions are they making?
v. What do I see going on here? What did I learn from these notes?
vi. Why did I include them?

The items were extended to 22 to cover the objectives of this research. Its use enabled the researcher to capture the details of EmOC service delivery as exists in the selected facilities (Reeves, Kuper & Hodges, 2008). This was compared with the national protocol and other quality standards on EmOC delivery (GHS, 2008; WHO, 2013) and quality of care adjudged. The check-list also aided in unraveling provider- client related factors influencing care outcome. All instruments were pilot tested in a similar context and discrepancies corrected.

Data Collection Procedures

Data collection produres commenced with gaining access to the study area. First, ethical approval was sought from and granted by the Ghana Health

Service (GHS-ERC004/04/19) and the University of Cape Coast [UCC] Ethical Review Board (UCCIRB/CES/2019/03). An introductory letter to the site of the research was also obtained from the Department of Health, Physical Education and Recreation of the UCC. Permission to the study site was obtained from the Northern Regional Health Directorate, heads of the study institutions as well as the in-charge in each of the maternity wards at all case study facilities. A gate keeper was also identified who made access to these places and participants possible. In addition, health care providers in studied facilities were informed about the purpose of the study. Having observed all necessary protocols, the researcher proceeded with data collection.

The researcher spent five days a week but included weekends and holidays periodically for a maximum of four months in the study facilities. Specifically, the first three weeks were spent in three health centres which were supposed to be providing BEmOC while 13 weeks were spent at the CEmOC facility which was the municipal hospital. The researcher used some time within this period to organize focus group discussions with community members. On daily basis, the researcher reported at designated study site at 7a.m and stayed as long as there were cases to be observed. Daily observation of deliveries was done using an observation guide. At the end of each day's work, the researcher wrote out all observations into the field note book for further processing. In the second month of fieldwork, the researcher began the interview process with EmOC staff. However, interviews with clients took place any time within the period and upon discharge from the health facility. Some clients granted interviews in an obscure place within the hospital environment while others were followed up to their homes. The interview process began by researcher

introducing herself and the purpose of the study to participants. Then informed consent was sought before commencement of each interview. The consent form spelt out the purpose of the study, the procedure, the potential risks and benefits of being part of the study, the confidentiality of data and the right to withdraw at any time during the data collection process. Participants signed or thumbprinted on the forms to demonstrate their consent. All participants were assured of anonymity; information provided was solely for academic purpose. Their identity would not be disclosed to a third party neither would their names appear in, perhaps, publications resulting from the study. Participants were further informed that though quotes from them would be used to buttress research findings, these would not relate to their individual persons. To ensure this, identification numbers were assigned to participants instead of names in the interview guide. The interview started with researcher or assistant asking respective questions on the guide and using prompts and probes to get participant to throw more light on issues. At the end of each interview session, the researcher politely thanked the participant and proceeded to the next available participant. This procedure went on from participant to the other till data saturation was achieved. The principal investigator conducted interviews in English language while a research assistant, who was a native of the area, did same in the local dialect. A participant was interviewed once during the process unless the need for clarification called for a second contact.

With respect to focus group discussion, the researcher with a research assistant (a native) did virtual grouping of members depending on proximity of their dwelling places and negotiated to meet with them. Female relatives agreed to meet in the courtyards of some selected clients while group discussions with

men took place under sheds in front of selected houses. Different dates were fixed for each group. On the scheduled dates, the research team met with participants at appointed venues and times. However, some participants who had earlier on agreed to partake in the study, failed to turn up on some occasions due to undisclosed reasons. Where the number was great, a new date was fixed and additional recruitment was done at the postnatal clinic and in the community. Discussions were held in the predominant local dialect which was dagbani. In starting the process, the research assistant explained the purpose of the meeting and rules of engagement. Once started, the research assistant moderated the discussion by ensuring all participants had a fair chance to contribute and that older persons did not suppress younger ones with their views. The focus group discussion came to an end when information provided became repetitive, indicating data saturation. The researcher recorded all proceedings with an audio recorder after receiving consent to do so. A group consisted of between five to seven participants and discussions lasted an average of 66 minutes. However, follow up for clarification on issues in the study facilities and communities still went on till after data analysis.

Audio recordings of interviews and focus group discussions with participants were anonymised, properly labelled, and stored in a retrievable form for further processing upon exit from the field. Both hard and soft copies of data were kept in a box and locked with a padlock and key such that only the researcher and her supervisors had access to them for final analysis.

Data Processing and Analysis

Upon exit from the field, the researcher compiled all observation notes. In addition, with the help of a research assistant, interviews and focus group

discussions were transcribed verbatim from audio to text. The three data sources in the forms of transcriptions, were read thoroughly and severally for familiarity with content then edited and checked for completeness. Data analysis followed Corbin and Strauss (1990), grounded theory approach. This comprised the application of open coding, axial coding and selective coding where necessary alongside memoing to derive the research findings. The researcher used open coding at the initial stage of the data analysis process. The researcher started the process by an initial in-depth line by line reading of each transcript. This was followed by slow reading of transcripts. Thereafter, the researcher grouped related concepts, in each transcript, into categories and sub categories. Using patterns of occurrence, the researcher derived themes from each category. After this, the researcher triangulated the data sources by comparing commonality of codes in the various transcripts or data sources. Eventually, themes that emerged from sub-categories, upon triangulation, formed the study findings. Nonetheless, certain key themes that addressed study objectives were also considered though such may not be repetitive in the transcripts (Price, 2010). The relevance of open coding is that it enables rigorous analysis of data to identify patterns, concepts and themes. This is especially efficient when data are collected from multiple sources. Axial and selective coding were used in this research to derive a conceptual framework on client / provider perspective on quality of EmOC. Axial coding was performed by identifying the relationship or connections that exists among the codes. This was achieved through the process of memoing which concerns researcher's ideas or documentation of how categories relate to their subcategories by constantly testing these against the data. In doing this, the researcher used both inductive and deductive

reasoning processes to establish relationship between concepts and categories. Inductive processes involved testing the relationship between categories and sub-categories as derived from data while deductive processes compared the findings in relation to what exists in literature. Finally, selective coding was carried out by identifying a core code that contained all the data. In doing this, the researcher read through the transcripts to unify relevant categories into a core category that represented the central phenomenon of quality of EmOC.

Table 2: Data Analysis Framework

Research Objectives	Data Source	Type of Analysis (Grounded theory)
1. To explore the nature and availability of care	• Observation • Interviews • Focus group discussion	Open coding • Initial in depth reading of each text • Slow reading of texts • Translate words / sentences into conceptual labels • Group related concepts into categories in each text • Derive themes from categories • Triangulate data sources • Write on emerging themes after triangulation
2. To identify stakeholders' perception on quality of EmOC	• In-depth interviews • Focus group discussion	• Open coding as above • Axial coding • Selective coding
3. To describe how stakeholders' perception of EmOC influence care delivery	• In-depth interviews • Focus group discussion	• Open coding • Write on emerging themes
4. To determine how client-related factors contributed to outcome of care	• Observation • In-depth interview • Focus group discussion	• Open coding • Write on emerging themes
5. To determine how provider-related factors contributed to outcome of care	• Observation • In-depth interview • Focus group discussion	• Open coding • Write on emerging themes

Source: Author's construct

Data Credibility

In case study, data credibility is very essential. Credibility refers to the trustworthiness of the research findings (Denzin & Lincoln, 2005). The researcher used Denzin and Lincoln data credibility criteria to enhance the credibility of the current research findings. These are member checkings, triangulation of results and thick description and concrete detail. Member checkings was done by gaining feedback from the data interpretations and conclusions from the study Supervisors as well as participants of the research. In simple terms, the researcher took findings back to participants to verify if they were true of their accounts. Also, the Supervisors of the study were individually served copies of the codebook as a quality control measure. Triangulation of data was also persued to ensure data credibility. It is grounded on the principle that if two or more data sources yield similar conclusions, then such result is valid. More-so is the case when different and contrasting methods of data collection provide identical findings on the same research phenomenon. The researcher made use of multiple data: interviews, focus group discussion and observation. Where the results were same from each source, then findings were deemed credible. Conversely, where the findings were different because of the different data sources, which is highly common in qualitative research, such spectacular findings were equally considered true of the researched phenomenon. The use of different categories of participant also enhanced trustworthiness. This was achieved when results appeared similar across the different groups thereby making such submissions sound. Triangulation is essential because it eliminates subjective biases inherent in qualitative research (Creswell, 2007). Thick and detailed descriptions were used to show readers

what is contained in scenes of obstetric care delivery rather than tell them what to think about those scenes. To achieve this, the researcher immersed herself in the data collection and interpretation processes, paid particular attention to detail and ensured that complex events were unravelled and presented more clearly in the presentation of results. These approaches eliminate researcher bias and promote trustworthiness of research findings.

CHAPTER FOUR

RESULTS AND DISCUSSION

The purpose of this research was to explore the perception of quality of EmOC in selected health care facilities in one municipality in the Northern Region of Ghana. This section contains results and findings based on respective objectives of the study using a descriptive analytic framework. The findings are presented in terms of categories, themes and sub-themes and are based on personal observations, focused group discussions and in-depth face to face interviews. Study participants comprised clients, community members and health care providers.

Population

The study participants were in three different categories namely (i) clients (ii) community members and (iii) health care providers. Respectively, they were 17 clients, 21 health care providers and 39 community membes giving rise to a total of 77 participants. Clients who received emergency obstetric treatment were largely those in their 40s. They were mostly illiterates as they had received no formal education. Consequently, they were either unemployed, engaged in peasant farming or in petty trading such as sale of iced water and soft drinks. These activities did not earn them enough monthly income as they earned below the minimum wage rate. The women were largely in polygamous marriages and had an average of more than six children. The commonest reported obstetric complication was post-partum haemorrhage and though most of their babies survived, some had breathing difficulties and had to be resuscitated while others lost their lives. Even with the availability of health care facilities, quite a number of mothers gave birth at home.

Community members who were engaged in focus group discussion comprised three groups each of men and women. The characteristics of the women were not different from those of clients captured earlier except that most of them were those in their 30s. Aside this, they equally lacked formal education, were mostly engaged in petty trading and had an average of six children. The men were slightly different. Indeed, the appreciable results attached to each variable went in favour of men. They had attained some considerable level of education and though most were in the informal sector, they earned more than women. They were also engaged in subsistence farming and rearing of animals to supplement their income to cater for their wives and children.

Eighteen midwives, an obstetric nurse (male midwife), an anesthetist and a specialist gynaecologist were the health care providers who participated in the study. These were drawn out of a total of twenty-four midwives, two house officers, two medical officers and three anesthetics who made up the total population at the study facilities. Twelve of the midwives possessed a Post-secondary certificate meaning they were either Community or Enrolled nurses who went on to specialise in Midwifery. The rest of the midwives were diploma holders. Most of the participants were still in their youthful ages and had practiced for a period of one to ten years. Table 2 contains background characteristics of participants who were involved in the study.

Table 3- Participants' Characteristics

Variable	Clients	Community members	Providers
Sex			
Female	17 (100)	21(63.3)	18 (85.7)
Male	-	18 (36.7)	3 (14.3)
Age			
Below 20	1 (5.9)	3 (7.7)	-
20-29	5 (29.4)	13 (33.3)	8 (38.1)
30-39	4 23.5)	19 (48.7)	9 (42.1)
40-49	7 (41.2)	3 (7.7)	1 (4.8)
50 and above	-	1 (2.6)	3 (14.3)
Education			
None	13 (76.5)	23 (59.0)	-
Basic	2 (11.8)	13 (33.3)	-
Secondary	1 (5.9)	2 (5.1)	-
Post-secondary	-	-	12 (57.1)
Tertiary	1 (5.9)	1 (2.6)	9 (42.9)
Occupation			-
Unemployed	6 (35.3)	9 (74.3)	-
Informal	10 (58.8)	29 (23.1)	-
Formal	1 (5.9)	1 (2.6)	-
Rank			
Staff midwife	-	-	11 (52.4)
Senior staff midwife	-	-	5 (23.8)
Senior midwifery officer	-	-	3 (14.3)
Deputy director midwifery services	-	-	1 (4.8)
Obstetrics and gynaecology specialist	-	-	1 (4.8)
Years in practice			
1-10	-	-	16 (76.2)
11-20	-	-	3 (14.3)
21-30	-	-	-
31-40	-	-	2 (9.5)
Marital status			
None	1 (5.9)	4 (10.3)	-
Monogamy	4 (23.5)	11 (28.2)	-

Table 3- Cont

Polygamy	12 (70.6)	24 (61.5)	-
Number of children			
None	3 (17.6)	2 (5.2)	-
1-3	4 (23.5)	13 (33.3)	-
4-6	2(11.8)	13 (33.3)	-
Above 6	8 (47.1)	11 (28.2)	-
Type of obstetric complication observed			
Post-partum haemorrhage	12 (70.6)	-	-
Pre-eclampsia	3 (17.6)	-	-
Placenta praevia	1 (5.9)	-	-
Maternal distress	1 (5.9)	-	-
Delivery outcome			
Live birth	10 (58.8)	-	-
Stillbirth	3 (17.6)	-	-
Early neonatal death	1 (5.9)	-	-
Birth asphyxia	3 (17.6)	-	-
Place of delivery			
Health facility	10 (58.8)	-	-
Home	7 (41.2)	-	-
Total number of participants	17	39	21

Source: Field data 2019

Objective 1: To Explore the Nature and Availability of EmOC in Selected Health Facilities

The purpose of the first objective is to unravel what went into the provision of emergency obstetric care in study facilities. The first prerequisite is to establish the availability of EmOC's components notably drugs, equipment and personnel. Next is to describe how these were negotiated in the provision of signal functions required to treat obstetric emergencies in health facilities and the quality thereof. Data were gathered using observation guide, in-depth interview and focus group discussion and analysed using Grounded theory (open coding). Code work for this objective is contained in Table 4.

Evidence of emergency readiness

There were physical signals to demonstrate that EmOC services were available in the studied facilities. These are as presented:

Availability of human resources

Licenced midwives and Obstetric Gynaecology specialist in EmOC facilities

The conceptual framework guiding the current study, which is an adaptation of Donabedian's (1988) quality of care model, posits that availability of EmOC's components is a necessary requirement for the performance of signal functions and has a direct bearing on the quality of care provided. Observations conducted in all three health centres (basic care) and a referral hospital (comprehensive care) and interviews with participants revealed physical evidence of the existence and provision of emergency obstetric care services in all facilities. On a normal working day, it was a common sight to see midwives taking turns in respective wards to provide care and a very usual sight of a client being rushed into ward on account of home delivery and bleeding as a result of either retained placenta or products.

In terms of human resources, there was at least a midwife at the basic level health facilities who provided maternity services to clients. They reported to work at 8 am from Monday to Friday and stayed as long as there were cases to be handled. They were, however, on call at night and at the weekends. In one of the health centres, the midwife in charge also did general consultations in the absence of the Physician Assistant. Similarly, a midwife and a health assistant each were on shift at the comprehensive level (referral hospital) which provided 24 hour service. The three tier shift system lasted 7 hours during the day and 10 hours at night. At the beginning of this research, the researcher met only one

medical doctor, a specialist obstetrician gynaecologist, who provided specialist services, oversaw the delivery of maternity services in wards and was on call day and night. Two house officers were posted to the hospital and these were put in charge of the maternity and labour wards in the hospital. There were three anesthetists who equally took turns at the theatre to provide needed anesthesia on surgical cases. The voices below attest to the availability of human resources in facilities:

"…*We have our trained midwives and anesthetists too and the facility head is an Obstetrician Gynaecologist…" (# Pr. 5)*. Relatedly a client commented:

"…Midwives are always available here so what- ever time that you come, they will attend to you…" (# C13).

In a focus group discussion (FGD), it was indicated:

"…The other hospitals don't have doctors but because there are doctors here who can help us, that is why we come…"(# FGD 2)

Existence of material resources

Emergency drugs in wards

The evidence also points to the fact that in the labour and maternity wards of all facilities, there were emergency drugs such as oxytocin, methydopa, hydralazine and magsulphate. These were contained in suitable containers and placed on a wooden structure in some cases or are housed in a showcase or a cupboard in other instances. Other drugs such as nifedipine was contained in plastic bowls and placed on nurses' table for easy access while infusions such as ringers lactate and normal saline were placed at any other secure but accessible places in wards. At the comprehensive level, the essential drugs and infusions were kept in a locker at the maternity ward and the theatre

and were utilised when complications arose. According to midwives, these arrangements were to ensure that in case of complication service delivery was swift to avert loss of life:

"…We have our emergency package here. If a client is bleeding, I will just look inside our emergency locker take those emergency drugs that I need to arrest bleeding…" (# Pr.11)

Another service provider indicated:

"…Here, we have everything needed to provide emergency obstetric care, most especially drugs such as oxytocin, cytotech, trazemic acid and bendro and anti hypertensive drugs such…" (# Pr. 1).

Functioning blood bank and Ultra-modern theatre

Physical structures to facilitate service delivery have also been well catered for in the municipality. A senior staff indicated that the referral hospital had an ultra-modern theatre that, among others, took care of emergency obstetric cases that demanded caesarean section. There was also a functioning blood bank. The blood bank consisted of a small fridge that contained limited amount of whole blood of different groupings ready to be dispensed to mothers with obstetric complications such as bleeding after delivery and who may need blood to survive. The theatre equally housed a number of oxygen cylinders most of which were most of the time, empty. Filled cylinders were wheeled to the maternity or labour wards which were about 20 and 60 metres away respectfully when a client was in need of oxygen. It is worthy to note that though there were oxygen cylinders in respective wards, these were mostly empty compelling service providers to have to move to the theatre to get oxygen. Part of the theatre was an intensive care unit where mothers who received emergency caesarean

sections were kept and monitored for after surgery complications before they were wheeled to the maternity ward for further management and discharge. There was a neonatal resuscitation corner within the delivery room area in EmOC facilities where newly born babies with breathing difficulties were temporary managed. Those with severe forms of birth asphysia or babies with breathing difficulties after birth were referred to the neonatal intensive care unit (NICU) located within the labour ward building at the referral hospital.

In the maternity ward of the hospital, two rooms have been allocated to mothers with PPH and those with high BP (of more than 150 systolic and 100 diastolic with or without urine protein. Such women were immediately detained and treated to prevent the risk of eclampsia and death. These two rooms were close to the nurses table for easy access and monitoring.

Equipment availability

Participants further alluded that equipment for effective management of obstetric cases were equally available. These included a vacuum extractor used in assisted vaginal deliveries and an air bag for resuscitation of neonates at the basic care centres. The comprehensive level had these items in the labour ward as well as an evacuation of the uterus set (EOU) now MVA (Manual vacuum aspiration) in the maternity ward. This was a complete set of instruments used in gaining access to a woman's uterus to be able to provide services such as removal of retained products. The speculum belonged here. Clients were very much aware of the structural adequacy of facilities and justified their reasons for deciding to access service there:

> "…I *came to the hospital because they have all the things needed to assist me in case of complication. Also midwives are always available …" (# C 13).*

In a focus group it was said:

> "…*And if she needs urgent attention you can easily get it there because they will perform operation and do other C.S. and do other things there that is why I chose to take her there…" (# FGD 1).*

To the midwife, there were enough equipment to facilitate EmOC service delivery:

> *"…For the equipment, we have them…" (# Pr. 8)*

Protocol on walls

To enable effective service delivery, EmOC facilities in the municipality had perculiar characteristics that further distinguished them from other health care facilities. Observations captured EmOC protocols posted on the walls in both Basic and Comprehensive level facilities. Comprehensive level facility further had in place an internal communication network. The facility was also a beneficiary of ETAT (Emergency Triaging, Assessment and Treatment), an intervention organised by a non-governmental organization (NGO) known as Systems for Health. These activities, labelled as "facilitators" by the researcher were aimed at addressing the issue of delays which characterised most maternal deaths and disabilities in the past.

In health care delivery, compliance to a standard protocol is a necessary pre-requisite for positive health outcomes. A protocol is a standard document that describes and directs how services should be provided to produce desired

health outcomes. Protocols are often found in lockers or on nurses' table in health care facilities. However, this is different in the study area. Here, the labour and maternity wards of facilities had protocols on management of major causes of maternal death such as post-partum haemorrhage, eclampsia and sepsis posted on the side walls of wards and at vantage places. It was a common spectacle to see these pictures in all EmOC facilities. Providers indicated this was intended to catch their attention and to ensure that in case of complication, these papers on walls will serve as ready guide to them to be able to provide swift care to prevent maternal death. In the words of other providers, the protocols were deliberately posted there to serve as reminders on the proper procedures for providing key interventions in the event of a complication since failure to perform certain activities at certain crucial moments could have detrimental effects on the client. Providers further indicated they had received training on management of obstetric complications and the protocol was given to serve as reinforcement to what they were taught at training sessions to improve upon quality of care:

> *"…We have posted the protocol on the side walls so that when you are found with such a case maybe in a process you may forget a step, you can easily just lift up your head and then glance through to be able to provide the services to the client…" (# Pr. 8).*

> *"…Yes we were trained on the protocol and they gave it to us so we have to use it. If you can't do it or you have forgotten, you check on the walls…" (# Pr. 14).*

Internal communication network

There existed an internal communication system in the referral hospital that enabled providers to contact other units within the hospital for assistance to hasten service delivery during emergency. Some midwives indicated, for example, that calling the blood bank to request for a particular blood group to save a mother with low level of blood instead of walking there which could constitute a delay. Names and contacts of clinicians were thus posted in wards to facilitate the call for help process. This is evident in the following:

> *"…We have pasted the names of clinicians in every ward and their contacts so instead of me going there to call for help I can just use the land line to call for hel…p" (# Pr. 4).*

Aside an internal communication network, a lot of case management also took place between midwives and specialist via mobile phones or through a social media platform known as WhatsApp:

> *"…Those days, people will arrive plenty dead. Now at least we are called through WhatsApp. Even midnight, midwives will call m…" (# Pr. 5)*

Emergency Triaging, Assessment and Treatment (ETAT)

The municipal hospital, which provided comprehensive care at the time of research, doubled as a referral centre. It was adopted as an ETAT facility by Systems for Health (an NGO) and by so doing, it benefitted from series of workshops and supplies aimed at improving upon quality of care. By ETAT principles, providers were trained to provide care based on client need. They were empowered to be able to identify and prioritise persons presenting with high risk disease conditions using an identification procedure that will enable

prompt and timely intervention. Clients or patients were sorted out and assigned a label based on the risk and severity of their conditions. Colours such as red, yellow and green were attached to folders at the triaging stage signifying severe, moderate and mild conditions respectively and these attracted the needed attention from units within the hospital. For example, a patient with post-partum haemorrhage (PPH) was considered high risk person as such a red paper was attached to the patient's folder and wherever it went within the hospital, providers responded immediately and service provision was swift. Providers indicated how they incorporated this in their daily routines to improve care outcomes:

"…You know we have this training that we called ETAT (Emergency Triaging Assessment and Treatment). So every patient who comes to this ward is triaged in the first place to know the condition. We have the green, yellow and red zone. Red zone means the person is at high risk level so you need to keep an eye on the person…" (# Pr. 2).

Physical evidence of existence of EmOC is presented in Figure 2.

Figure 3: Pictorial evidence of emergency readiness (2019)

Source: Field data

Performance of signal functions

The activities pertaining to actual provision of care are contained in this category.

Practice of basic signal functions (health centre)

Routine care at the basic level

The evidence suggests that although EmOC's components and signal functions seem to exist in respective facilities in the municipality, there exists a sharp disconnect between the seemingly ideal state espoused earlier in this chapter and the reality of events in health facilities. In reality, the provision of service was marred with certain inherent challenges that greatly compromised with the quality of services provided. Health providers indicated that by the operations of the National Health Insurance Scheme (NHIS), the body entrusted with funding health care in Ghana, health centres were not supposed to engage in providing EmOC but rather to refer all cases to the next level which is the municipal hospital. This can compound the workload at the hospital and affect the quality of care.

Refer imminent complications to second level facility

Midwives at the basic level facilities disclosed that they were debarred from carrying out their core mandate of providing such basic interventions. Such facilities were required to conduct the usual routine service (just like any other in their category) and to refer all complications to the comprehensive level. In line with this, they were denied all emergency medications needed to treat complications. According to them, they have been asked to escape risk, an act that, they think probably undermined their role in such facilities:

> *"…We have often been told by Health Insurance officers to escape risk …..so I am referring all the cases and I am sitting, bear I am escaping risk…" (# Pr. 7).*

Another midwife lamented how her training has not been put to good use so far:

> *"…I am able to perform the basic signal functions. I have gone for the training and we have the equipment here but we cannot practice…" (# Pr. 8)*

Essentially, Basic EmOC facilities did not exist since they were engaged in the provision of only routine service. Midwives practised the preventive model whereby women with certain disease conditions, that placed them at high risk, were identified at antenatal clinic each day and referred to the hospital for treatment. Aside putting undue pressure on the other facility, providers viewed these referrals as needless as they were associated with delays that compromised with the health outcomes of mothers:

> *"…So if a woman goes through manual placental removal and she is bleeding, I should send her to the hospital because of the antibiotics. What if she doesn't survive, what happens…" (# Pr. 7).*

Issues with referral

(Needless referrals, client / relative resistance, transportation challenges)

Some midwives disclosed that the referral system in the municipality was very poor. They maintained that settlements within the study area were sparse in nature and characterised by large farmlands, rivers and streams. Aside this, few communities were found within the town. Most of the inhabitants were farmers who moved out to settle in areas to engage in farming. They ended up being prolific in such areas and creating large communities. Because they lived far away, they most often had problems with access to social services including health care. The means of transport was not only lacking but the route of access

was equally a major issue. This necessitated home deliveries and mothers who encountered complications had little chance of receiving the needed intervention: A provider explained how complex the situation could be:

> *"…The nurses will want to refer the patient but no means of transport to go….. ..Some are from far away, very, very remote areas that apart from market day they cannot get vehicles to come so this place…" (# Pr. 5).*

Practice of comprehensive care (hospital)

Performs basic care, blood transfusion and Caesarean section

It was observed that the municipal hospital was the only facility that provided EmOC (basic and comprehensive) at the time of field work. The facility singularly catered for the high number of obstetric emergencies arriving in the hospital on daily basis. The studied municipal hospital receives referrals from close to ten hospitals and several other health centres and clinics within its catchment area. Many women are also carted on motor bikes and tricycles from homes in villages far and near to receive care due to pregnancy related complications. Some arrived gasping for breath, received timely intervention and survived. Sadly, issues with transportation have always led to other cases arriving rather too late or not at all and midwives could not do much under such circumstances:

> *"…They brought a woman who delivered and was bleeding. On the motor bike she had died. We didn't receive her because there was no pulse, nothing…" (# Pr.2).*

The maternity and labour wards were most often bustling with deliveries and midwives were often seen attending to complications in somehow crowded

rooms as a result of high admissions. Some midwives disclosed that except Caesarean Section (CS), they were able to perform several emergency interventions on their own though not much could be established about the quality of care:

> *"…As long as the case arrives here alive ,we do our best to make sure that the client stays alive unless we open the car and say that as for this client, she is not breathing that one we don't even admit…" (# Pr.3)*

Another health provider provides further explanation on what they do at the facility in terms of obstetrics:

> *"…We manage those cases, if somebody comes with placenta praevia we can manage if it is abrumptio we can manage err bleeding, eclampsia we manage those cases…" (# Pr. 1)*

It was further revealed that aside the frequent cases of home delivery that often came with PPH, providers were very apt at handling emergency obstetric cases that occurred within the facility. Certain categories of clients were considered high risk of developing complications during or after delivery. Such women were easily identified during triaging and adequate measures were put in place to ensure that complications were prevented or arrested immediately they occurred:

> *"…Sometimes, some women are more at risk of obtaining complications so we prepare and give them that care when the need arises…" (# Pr. 12).*

Quality of EmOC

This category relates to the extent to which the structural component directs the performance of signal functions and the quality of it.

Non- adherence to standard practice (protocol)

Inadequate monitoring during labour

Although EmOC targets the five common causes of maternal death, certain preventive measures such as the use of the partograph could reduce the occurrence of complications and thereby increase the survival rate of mother and baby. It was, however, observed that the partograph was never used in EmOC facilities. Rather a piece of paper was devised and monitoring activities recorded on it. Providers recorded foetal heart rate and vaginal examination results not according to the 30 minutes and 4 hour duration per standard practice but according to when they deemed fit. Consequentially, providers missed the clue to intervene because of the non-use of the partograph. As a result, still births, birth asphyxia and early neonatal death were very common occurrences especially in the hospital. A maternal death occurred on grounds of obstructed labour possibly because providers failed to use the partograph to monitor labour among others. The partograph would have indicated when to take appropriate action to avert the loss. Some senior members lamented this sad situation:

> *"….The tool for you to monitor labour is the partograph. And I don't think there is any midwife in our wards that does not know how to use the partograph. But you go there, they are not using it and you ask why…" (# Pr. 5).*

A senior member indicated there were other cogent reasons providers missed out on the use of the partograph:

> *"…They hide behind that they are not many and the workload is much and the women arrive late but I keep on saying that even the day that you people get only one patient, that comes in 3cm or 4cm, 4cm that you are supposed to start partograph you don't do it…" (# Pr. 6).*

A senior midwife disclosed that the non-use of the partograph was a general issue in the Northern region and was attributable to provider's technical insufficiency other than any other reason:

> *"…You see if you give them the question and say they should plot, they will plot but applying it in the day to day management they don't know and they don't want to embarrass themselve…" (# Pr. 6)*

Inadequate monitoring in wards

Observation notes recorded that although clients suffering from the two main causes of maternal death (PPH and eclampsia) were housed in separate rooms very close to the nurses' table, they didn't receive the monitoring that this arrangement sought to achieve. But for the timely intervention of a caretaker in the ward at the time of events, a newly delivered mother who narrowly escaped death would have actually lost her life. Abiba (not her real name) was on admission in the Maternity ward on account of PPH. She delivered at home in a town nearby but bled profusely as a result of retained placenta. She was taken to the health centre in the village but was immediately referred to the municipal hospital. Upon arrival, manual removal of placenta was conducted.

She was admitted and transfused with three pints of blood. On the second day of admission, her daughter paid her a visit but met her mother in a pool of blood. The midwife and the health assistant on duty were attending to some patients at the other side of the ward. It took the shout of a visitor to turn an apparent incident of maternal death to a nearmiss:

> *"…I went to stand by her and saw that all the blood had come out again and it was a pool on the bed and all over the bed so I run to call the nurse…" (# C 6)*

Non adherence to standard practice during complication

The protocol is a standard tool that contains internationally agreed best practices. However, although health providers indicated their reasons for hanging pieces of protocol on walls, they did not actually go by the tenets of the protocol during service delivery. Providers said they depended more on their clinical judgement than the protocol. Their operations were, therefore, informed by what they perceived as right and not as described in the protocol:

> *"…We use our clinical judgement to handle complications and is helping us because whatever judgement the fellow is using as long as is not going strictly according to the protocol you are making some kind of good effort… " (# Pr. 3).*

By this mode of operation, providers deployed certain crude and unprofessional methods of providing care as long as they succeeded with such methods in the past. On suspicion of PPH the midwife quickly wore gloves, muttered some few words to the client apparently to seek consent and with or without consent, inserted virtually the whole length of her right arm into the cervix through to the womb to check and scoop retained products out. This was carried out amidst

sobs and wails from the woman who sometimes tried to escape from the delivery bed. She was encouraged to stay calm for what was being done, was in her own interest. This procedure was immediately followed by the administration of two key drugs (oxytocin and misoprostol), both uterotonics. Three categories of women were subjected to this ordeal at the facility on daily basis. These were women at high risk of PPH whose wombs had to be completely ransacked to ensure nothing was left to chance, those who bled profusely as a result of retained products / clots after having been discharged from delivery bed and those who were rushed in from home on account of retained placenta. They received this intervention known as manual removal of placenta or retained products without any form of sedation. For example, a midwife said the following in relation to the practice of the intervention:

> *"...You just insert your hand into the vagina then you just go inside to see whether there is retained placenta or product of conception, sometimes there may be membranes, so you go in and scoop them out..." (# Pr.16).*

A client also shared her experience:

> *"...After I delivered, they said they had to deliver the other thing too so I was lying down and they injected my thigh and delivered that thing. After that I was bleeding. Then the man put his hand inside my vagina and was removing some things out..." (# C 3).*

Clients who presented with very high BP received treatment using magnesium sulphate. However, treatment was sometimes done hurriedly and did not follow the standard time duration of between 10 to 15 minutes.

Midwives revealed that some women who received this wrong treatment immediately became unconcious as an effect and had to to be managed. A health provider indicated:

> *"…It is in the protocol that we start such treatment with a loading dose of 14 grams of magnesium sulphate. You start with 4 grams then give slowly between 10-15 minutes. How many people have time to do that!..."* (# Pr. 14).

It was evident that women were so agitated by such practices that they sometimes refused to corporate during such moments. Midwives were very aware of this unprofessional act and admitted it was inappropriate. However, their main motive of conducting such service was to arrest the problem as soon as possible to protect life:

> *"…Sometimes is not the appropriate thing, sometimes you have to use speculum just to check whether there is retained products but since is an emergency and we have to, we have to arrest it well or arrest it early so we will not lose life…" (# Pr. 16).*

Issues associated with equipment

The inadequacy of care presented so far points to a more serious issue of multiple lapses in the delivery of EmOC in the municipality. There were several issues associated with EmOC components and that had rippling effects on the nature of care that was provided. These issues are presented with respect to identified themes in participants' submissions.

Missing / over-used equipment

Some midwives attested to the fact that certain human related deficiencies were largely responsible for the current state of care quality. More often the right tools for the job were nowhere to be found though they were occasionally supplied to the wards, they got missing the next moment. With respect to the current scenario, the health provider was conscious he / she was providing inappropriate care but was handicapped because the municipal hospital had only one speculum during the field work period of this research. The only speculum was so overused that it was not possible to access it when it was needed most:

> *"…We have to use speculum for going inside to check but you see we have even in our facility we are having only one speculum…i" (# Pr. 16)*

One could actually find empty boxes that came with certain equipment but equipment not found in them. There were missing. They were alleged to have either been smuggled to other wards or picked out by some unseen forces. This was a source of worry to providers who needed these equipment to provide quality care as evident in these excerpts:

> *"…Aaaarh at times equipment just varnished into thin air and you can only imagine what might have happened to it…" (# Pr. 13).*

> *"…You enter our in- charge's office right now and see box of the nebulizer, the box that it came in, the BP apparatus the box that they came in. where are the instruments…?" (# Pr.15).*

Improvised care

The turning of facilities into EmOC facilities meant, among others, an upgrade in the structural component of care. Qualified facilities received the needed equipment to facilitate care delivery. Nonetheless, there were other equipment that were not available and health providers had to improvise to be able to provide care. Some health providers described the tourniquet as a tool that is used to locate the vein to pass a line, however, this is a tool that providers lamented they had never seen before. In the absence of realia, service providers improvised. According to them, the tube of a giving set is instead cut and used to wrap round the wrist to enable the location of a vein. Though this method eventually achieved the same purpose, it presents a picture of the quality of care provided:

> *"…You use what you have to do the work because nurses we are good at improvising. Me like this, I have not seen a tourniquet since I passed out of sch. They use the real thing to train us, you come out and it is not there and you have to always improvise…" (# Pr. 7)*

Dysfunctional and redundant equipment

While some equipment were not functioning properly, others were not in use at all. The tool used in monitoring blood pressure (BP) is the BP apparatus. A participant hinted that the facilities used the digital type that uses dry cells for its operation. Most times, the machines either ran out of dry cells or they were broken down. Providers depended once more on their clinical judgement and the strength of urine protein to inform the possibility of high BP since the machine was usually out of order.

"…You know BP checking is very important so sometimes. At first we were having the one that goes with the battery so client comes our BP is down because the battery is low, batteries are not working…" (# Pr.9).

Another participant expressed the following in an in-depth interview:

"…As you can see, our BP apparatus has broken down for some time now so how do we check the BP of clients? If a pregnant woman comes and the BP is high how can we tell…? (# Pr. 18)

While some machines were broken down, other equally relevant tools were there but not in use, while others were not there at all. It was observed that the vacuum extractor and the forceps, both instruments in assisted vagina delivery were not in use. At the basic level the vacuum extractor was still in its sealed pack. At the comprehensive level, it was part of emergency tools but it never got used, at least not within the period of research. The forceps was not found at all. This scenario led to the non-performance of certain needed interventions such as assisted vagina delivery that required the use of some of these equipment:

"…When we were in school, we were taught how to use them but now the new midwives that have come if you allow them to do it they will rather cause harm than good so we discouraged it…" (# Pr. 14).

" ...As for forceps, they have stopped it because if not somebody who is trained it can cause problems for the babies..." (# Pr. 10).

The ultra sound machine also came up as a very important tool in ensuring quality of emergency obstetric care though it is not listed among EmOC's key equipment. Health providers disclosed that the machine was very vital in determining the welfare of foetus in order to provide the needed intervention. Unfortunately, the hospital had only one ultrasound machine at the time of research and this was manned by a lone sonographer who was on duty only in the day. Cases that came at night had to be managed till the following day at which period the worse often had happened:

"...There are some people who need urgent scan but we have to manage them for the next day to go and take scan. Why, because there is no scan in the ward and the sonographer doesn't work at night..."(# Pr.4).

Non-performance of needed intervention

It was further observed that some pregnancy presentations elicited certain interventions that never took place. It was a routine for a midwife to stand infront of a client positioned on the delivery bed, support the perineum with a pad and shout series of pushes in the ears of clients. At times, it was obvious that certain decisions needed to be made with respect to assisting the woman to deliver but such assistance never came. It was the woman's responsibility to push baby's head out and failure to do this meant midwives had little to do on such occasions. Obviously, cases of this nature ended up with

a CS which most clients were detested. A woman shared her experience on the delivery bed:

> *"...I think they should have also done something just to help me and the child to come through without going through CS. But they were just standing infront of me shouting that I should push..." (# C 2).*

Issues with drugs

Non availability or shortage of drugs

Some midwives decried the non availability or shortage of essential drugs though they earlier on claimed they had drugs readily available to attend to emergency cases. These drugs were, in essence, not available or inadequate most of the time. The samples on standby ran out of stock and clients were required to replace these drugs using their health insurance cards to pick these drugs from the pharmacy. Unfortunately, the pharmacy sometimes did not even have general OPD drugs and midwives received the brut of clients on such occasions thereby interfering in the care process:

> *"...There are sometimes that even common paracetamol is not in the facility and relatives will be insulting you..." (# Pr. 4).*

Another provider revealed:

> *"As we speak, oxytocin is not there" (# Pr. 5)*

The perennial shortage of drugs was largely due to the unrealistic tariffs paid on insured drugs by the NHIS in the country. A participant who was part of hodpital's management team indicated that more often accredited suppliers could not meet the contract of supplying drugs to the facilities due to financial challenges and delays in reimbursement from the National Health Insurance

Authority (NHIA). In addition, the drug tariff could not meet the cost of drugs provided by accredited agencies. Facilities then had to top up the difference and where they lacked funds to do so, the pharmacies were empty:

> "…*Health Insurance is paying 30 pesewas for an ample of oxytocin. There was a time, there was none in the whole country and people were selling oxytocin for 6 cedis. Right now I understand oxytocin is 2 cedis, 60 pesewas or so and they are still paying 30 pesewas even with that they won't pay early...*"

Absence of potent obstetric drugs on insurance list

Post-partum haemorrhage (PPH) was the major cause of maternal death in the municipality. Observation notes revealed that aside the option of hysterectomy, misoprostol and oxytocin were the famous drugs used in treating PPH. Misoprostol was further used to induce labour among post-date mothers. While oxytocin was an official drug because it was seemingly covered by the NHIS in the country, misoprostol was not. As a normal practice in health facilities, every pregnant woman who came to deliver was given oxytocin (dosage) in the thigh after delivery to cause the uterus to contract and to stop bleeding. In more severe bleeding cases, midwives added another drug, misoprostol, to arrest bleeding. Midwives indicated that misoprostol was more effective in controlling bleeding than oxytocin, unfortunately, this important obstetric drug was not on the list of approved drugs in the country. This made management of complications sometimes very challenging:

Community members equally expressed their frustrations pertaining to the situation:

"…I think Health Insurance only covers the main para, apart from that there is nothing for patients…" (# FGD 1)

A client relative also shared the following:

Sale of drugs by midwives

It came to light that midwives were allowed to use certain drugs to manage cases in the absence of a medical doctor. Drugs such as misoprostol, oxytocin, tranexamic acid, nifedipine and methydopa were drugs midwife could administer on their own. But the non-availability or shortage of drugs had given a chance for the sale of certain drugs by midwives and other cadre of health staff in health facilities. Almost every midwife had misoprostol in their bag and, according to them, the intention was to use it to treat more severe PPH cases after which clients paid for the cost of drug:

"…We the midwives at times there are certain drugs you must have especially cytotech, (misoprostol). If the facility doesn't have, the midwife must always have cytotech…" (#Pr.1)

Though the intent was good, some midwives were found abusing the practice by imposing misoprostol on almost every woman who came to access service claiming it would, in this case, serve as a prophylactic. Aside going beyond the ideal dosage of 600 microgramms which is equivalent to three tablets, the entire sachet of 1000 microgramms (five tablets) was sold to clients making them pay for more than needed. In cases where clients resisted the use of the drug, providers became peeved and sometimes withheld service from these people: A worried health provider hinted:

"…And most at times is about money issues.. I want to sell this to you, this drug I have I want to give it to you, this kind of

thing. That is what makes them to behave like that and the client says oh now I know, go and bring it and they say no, go and buy it from outside…" (# Pr.13)

Disguised cash and carry system

The reality on the ground indicates that the NHIS delayed in settling facility claims. Though this created the no drug syndrome, EmOC facilities, nonetheless, continued to run by making clients acquire prescribed drugs from outside. A senior member disclosed that sometimes the hospital went ahead to procure drugs from the open market to be able to provide emergency services. Sometimes drugs were procured on credit because of a facility's inability to pay ready cash and clients had to pay for these on purchase at the hospital pharmacy. This was a source of worry for some clients who hitherto though that with health insurance, services ought to be free:

"…With the drugs no, no, no I don't think HI is working over there because they will write the drug for you to go and buy whether HI covers it or not…" (# FGD 1).

Another client indicated:

"…And the drugs too, here they will say they don't have the drugs, they will write it for you and you send it inside the pharmacy and buy there…" (# C1).

Expired drugs

The scarcity of emergency obstetric drugs in most cases called for administration of expired drugs in facilities. Some drugs from drug stores on the market were found to have expired. The usual assumption was that since the expiry date didn't exceed a three month period, such drugs were potentially

wholesome. It was, therefore, not unusual to see expired drugs brought into the wards even sometimes as donations from charitable organizations. This was a source of bother to some providers who felt the Northern Region in general was not well served. This impacted negatively on the provision of good quality care:

> *"…Tell me how many hospitals in Accra will you go and see expired drugs? Is all over the Northern region here…" (# Pr. 4)*

> *"…They last gave us magsulphate but it was expired…" (# Pr.19).*

Personnel deficit

Shortage in number of personnel

Evidence further pointed to a serious lack of midwives in the municipality at the period of research. While basic facilities had at least one midwife, there were a total of 24 midwives in the municipal hospital with 19 of them being at post at the period of this research. These midwives were shared among the antenatal, maternity and labour wards in the hospital. A senior member lamented that the number was woefully inadequate considering the large number of cases seen every day at the facility as compared to other facilities found elsewhere in the region. The considerably low numbers exerted high pressure on midwives and influenced the quality of care provided as contained in provider excerpts below:

> *"…The whole Northern region, apart from now Central hospital, we deliver more than the rest yet they all have more midwives than us…" (# Pr. 6).*

> *"…It is about the numbers. It's unhealthy to see one midwife on duty, if she delivers this one, and the woman starts pouring*

and the baby is not breathing which of them is she going to save…" (# Pr. 5).

It was, however, disclosed that though annually midwives were posted to the municipality, they negotiated their way to other places because of perceived insecurity and perhaps unfriendly weather conditions in the area:

"…They were saying that because of the behaviour of the people, midwives don't want to accept postings here…" (# Pr. 10)

Lone midwife on duty

Because of the scarcity of midwives, there was always one midwife each on duty at the labour and maternity wards. This was below the WHO's recommendation of at least two midwives at every delivery. They were each supported by a health assistant who might be absent on certain occasions. Yet, there was another group of support staff. These were client / patient relatives. Due to their low numbers, midwives sometimes sought the support of relatives to deliver care. Relatives of clients supported EmOC service delivery by chasing after folders, acquiring blood and medications, feeding etc. This engagement went overboard sometimes as some relatives went ahead to augment clinical care in wards thereby endangering the lives of clients in this regard. A health provider shared this concern:

"…Can you imagine an eclamptic patient was given concoction by a relative to drink at the blind side of the provider…?" (# Pr.5).

Inexperienced midwives on shift

The lone midwife shift system got exacerbated by the placement of newly trained midwives on shift all alone. Some new midwives indicated that

they had actually stayed home for a long period after completion and might have lost a lot of information pertaining to quality care delivery. They needed to be supported for some time before they could be allowed to practice on their own. But it didn't turn out the case. Newly posted midwives were immediately handed over to wards to begin work. Such midwives battled with work as they were very unsure of their environment:

> *"…I completed my service years ago and have also stayed home for a period of time. But see, I have been left alone and I'm struggling to cater for all these women…at least I should have been paired with a senior colleague for sometime before I can practice on my own…"(# Pr 4).*

It was even more disturbing when such midwives were placed on night shift. A participant explained that such arrangement was made because in case of emergency, a call for help could address whatever issue there may be. Depending on the time at night, a call for help may not generate the needed support and emergencies could just turn out as bad cases by the mere placement of lone inexperienced midwives on night duties. A newly trained midwife shared her experience:

> *"…I am the only midwife for night shift. Imagine if a complication, I have forgotten of or I have no idea of comes at 2am how can I be calling when that particular senior will be fast asleep? Even imagine the length of time it will take for that person to get here…" (# Pr. 4).*

Communication challenges

The municipality, just like the rest of Northern Ghana, is a multi-ethnic society. There are several ethnic groups with virtually every group speaking a unique local language. The commonest language was dagbani but some ethnic groups especially those along the Eastern Corridor were unable to express themselves in it. Observations discovered that, almost all health providers connected with the provision of EmOC in the municipality were non-natives (and non-speakers) at the time of this research. While some learnt the language as a result of long period of stay, others could hardly understand or express themselves. There were times health provider and client struggled to understand each other in order to provide appropriate care:

> *"…And sometimes too, they don't seem to understand what we say nor do we understand what they say, language barrier. We try to speak but they don't understand and information gets distorted once it passes through so many hands…" (# Pr. 8)*

One other frustrated provider indicated:

> *"…Here the language barrier is a problem for me. I don't understand the language…" (# Pr. 4)*

Student midwives attend to deliveries

Part of the training of health staff requires that students gain practical feel of their profession by serving in health facilities, a system known as internship. Students are supposed to complete log books on their activities in the wards and this includes the number of deliveries conducted. Though such students are supposed to be supervised, in a setting like the one under study, where the lack of staff exerts significant stress on available staff, student nurses

/midwives were allowed to monitor and deliver women all alone. Since the concentration here is not quality of delivery but number of deliveries, student midwives appeared more interested in catching babies than preventing complications. Monitoring of labour was poor, some deliveries were poorly conducted and mother and baby suffered the consequences:

> *"…Whenever students come in, because they have to have 10 or 20 deliveries, the midwives give it to them and that is where we have all the troubles…" (# Pr. 6)*

A client relative also shared the following:

> *"…I personally took my wife to the hospital and you know what I experienced there, I wasn't happy at all because after delivery she had a very deep cut. They said the nurse who attended to her was doing clinical or internship…" (# FGD 1).*

Blood shortage

No blood syndrome

According to some providers, not until recently, many mothers who obtained blood related complications during childbirth eventually lost their lives because there was often no blood and referral to the Tamale Teaching Hospital did not achieve the desired results. But with the establishment of a blood bank, things improved. The blood bank enabled the facility to provide timely emergency obstetric care to prevent maternal death. Used blood was to be replaced by client relatives either by donation or by paying a token for the blood used. The amount was used to buy confectionary for voluntary donors. Some relatives resisted this initiative claiming they were farmers and needed to have enough blood in order to cultivate their farms. At times midwives had to

intervene to donate blood in order to provide timely care and to protect client's life. At other times patients chance of survival depended on sheer luck as little could be done :

> *"...Like when they come and the case needs blood, they say they are farmers, they can't donate blood. Even some midwives sometimes donate blood for clients when the case is very serious and relatives are delaying..." (# Pr. 16).*

> *"...Most of our clients are coming with the start of their pregnancy being anaemic so whether or not they will need blood and when you mention blood issue, it becomes something else..." (# Pr.9).*

The findings in this chapter show that EmOC facilities rightfully received the initial boost to function well. However, the contextual failures and bottlenecks presented herein cast a doubt on its effectiveness and sustenance in the study area. Table four contains the code work on the nature and availability of EmOC in the municipality.

Table 4-Objective 1 Code work on Nature and Availability of EmOC

Category	Theme	Sub-theme
Evidence of emergency readiness	Availability of human resources	-Licenced midwives and Obstetric Gynaecology specialist in EmOC facilities
	Existence of material resources	-Emergency drugs in wards -Functioning blood bank and ultra-modern theatre -Equipment availability
	Facilitators	-Protocol on wards -Internal communication network -Emergency triaging, assessment and treatment
Performance of signal functions	Practice of EmOC signal functions (health centre)	-Routine care at the basic level -Refer imminent complications to second level facility
	Issues with referral	-Needless referrals -Client / relative resistance -Transportation challenges
	Practice of comprehensive care	-Performs basic care, blood transfusion and caesarean section
Quality of EmOC	Non adherence to standard practice	-Inadequate monitoring during labour -Inadequate monitoring in wards -Non adherence to standard practice during complication
	Issues associated with equipment	-Missing / overused equipment -Improvised care -Dysfunctional and redundant equipment -Non-performance of needed intervention

Table 4: Cont.

	Issues with drugs	-Non-availability or shortage of drugs -Absence of potent obstetric drugs on insurance list -Sale of drugs by midwives -Disguised cash and carry system -Expired drugs
	Personnel deficit	-Shortage in number of personnel -Lone midwife on duty -Inexperienced midwives on shift -Communication challenges -Student midwives attend to deliveries
	Blood shortage	-No blood syndrome

Source: Field data 2019

Findings from the study reveal that there was no functioning basic EmOC facility except for the referral hospital that provided both basic and comprehensive care in the studied municipality. However, assisted vaginal delivery with vacuum or forceps was never performed and did not seem to be an option in the facility. This supports previous findings on the subject (Kanyangarara & Victoria, 2018). Midwives assigned technical reasons such as lack of skills and damage to baby for its non-use. Aside the referral facility, all three purported BEmOC facilities were, in effect, providing normal routine care. The non performance of signal functions defeated the purpose for their establishment which was geared towards providing basic obstetric interventions to prevent maternal death in communities. This particular revelation is not perculiar to this study as some other studies in sub-Saharan Africa and parts of Asia report of non existent BEmOC facilities in areas studied (Bridget, Thwala,

Bhauw & Ssengooba, 2018; Wilunda et al., 2015). The Ghanaian situation is attributed to regulations and general resource constraints by the NHIS in the country. The scheme operates a model that allocates resources based on the calibre of health personnel available in a health facility (NHIS, 2018). This approach determines the functions of facilities and directs the fiscal and material resources to be channeled to it. Accordingly, certain services including emergency obstetric care are only provided in health facilities with required human resource base (e.g midwives, medical officer, or specialist) and expertise to promote good quality care. This approach has the tendency of increasing the rate of maternal death because once health centres at sub-districts level perform routine delivery services, it is possible to expect obstetric emergencies since the causes of maternal death cannot be predicted (Koblinsky et al., 2016). Denying emergency obstetric interventions to women at the basic level can, therefore, compromise the life chances of those who deliver in such facilities. The current situation, therefore, presents a possible unmet need for EmOC as exists in most rural areas (Ayanore, 2017; Kyei-onanjiri et al., 2018). There may be the need for GHS to engage the NHIA to collectively empower BEmOC facilities with drugs and equipment required to discharge their core functions. This has the potential to contribute to a reduction in the number of maternal deaths.

The conceptual framework guiding this study postulates that quality consists of structures, process and outcome. Whilst structures relate to the physical component of the health care environment including health personnel, process is the manner in which health care is provided while outcome is the consequential effect of care. In this research, structures include the availability of EmOC's key components notably drugs, equipment and personnel. The

evidence from the study suggests that, the afore-mentioned components were not available most of the time. This revelation corroborates that of other studies in sub-Saharan Africa and parts of Asia which report of a general lack in drugs, equipment and personnel in EmOC facilities and this affected the provision of services and the quality thereof (Bridget et al., 2018; Ntambue et al., 2017). For health facilities to remain operational users sometimes had to pay for drugs and other services provided. This was a great disincentive for most women in the North who were mostly poor and did not have reliable source of income to pay for health care. These women accordingly sought alternative care as a result of cost associated with hospital care defeating the very purpose of a free maternal care policy in the country. This reinforces the findings of Dalinjong et al. (2018) and Atinga et al. (2018), who discovered that some women in parts of Northern Ghana could not pay for health services due to extreme poverty and either abandoned treatment or resorted to other forms of treatment that exacerbated their conditions. To support the poor and consolidate the fight against maternal mortality there is a possibility of widening welfare schemes and social intervention programmes across the country to cater for the economic needs of poor women while a sufficient investment and sustainable funding model in free maternity care services will improve access to health services in rural Ghana.

Another finding of the study is that though standardised and local guidelines on providing quality EmOC exist, they were not adhered to during the care provision process leading to an overall judgement of sub-standard care provided in health facilities. The revelation of sub-standard nature of care appears common in most studies conducted in developing countries (Kanyangarara & Victoria, 2018). Evidence from the study disclose that

midwives applied crude management procedures, did not manage pain with anesthesia when certain painful interventions, such as manual removal of the placenta was carried out and equally failed to exhibit or exhibited minimum courtesies towards clients during the process. Other essential interventions such as treatment for pre-eclampsia was also carried out rather too hurriedly. These activities are viewed as serious affront to quality care as they have the potential of inducing undesirable health outcomes for mother and baby (Afulani & Moyer, 2019). To a large extent, the lack of basic essentials invariably elicited the type of care provided in health facilities (Asibong et al., 2014; Otolorin et al., 2015). But while providers exhibited this control based on professional discretion and structural limitation, users were visibly perturbed by some of such operations and were in most times dissatisfied with care content (Kyei-onanjiri et al., 2018). The evolving literature points to culturally insensitive procedures in health facilities that have dissuaded some women of accessing care and subjected others to livelong debilitating maternal morbidities and even death after hospital discharge (Tabatabaei, Pour, & Azadeh, 2016). It is, however, important to note that the non-availability of most essentials in health facilities in this study was a result of poor maintenance culture and management failure as no accountability rules existed at the time of research. In advancing general health care delivery in Ghana, and especially in maternal health, lapses that interfere with good quality maternal health care need to be addressed (WHO, 2016). This is where managerial and leadership accountability has the potential of addressing unethical, unprofessional and irresponsible behaviours as evident in this study. More-so, health providers did not adhere to standard routine protocols on labour management using the partograph though this has

been demonstrated to have far reaching impact on reducing maternal and perinatal mortality and morbidity (Yisma, Dessalegn, Astatkie & Fesseha, 2013). Several factors were attributed, ranging from heavy workload to women arriving rather too late (late presentation) as well as inadequate knowledge in application of the partograph. More importantly health providers did not appear to attach much importance to adhering to protocol on management of normal deliveries as did in severe life threatening situations. This approach is rather unfortunate since causes of maternal death cannot be predicted but are largely preventable. It is important that every pregnancy is viewed as an emergency and accordingly provided with required quality attention to avert unpleasant consequences.

Standard practice requires at least two midwives and a supporting staff on shift in comprehensive EmOC facilities (Brizuela et al., 2019). This study found a rather troubling situation. There was often one midwife on duty at a time. The situation is common in most developing countries though (Cesar et al., 2016; Nesbitt et al., 2013). However, the perculiarity in this finding is that the scheduled midwife was likely to be inexperienced since current appointment offers are based on one's willingness to work in a deprived area. One would, however, expect that such people may be placed in the day shift where they could be mentored by senior colleagues and other available heath staff. Unfortunately the dearth in human resources in rural areas necessitated the placement of these inexperienced persons to manage shifts all alone sometimes with a supporting staff who did not possess similar professional training to assist. The low numbers of midwives, as against high number of obstetric emergencies that presented at the facility, therefore, pre-empts a possible

situation of inadequate care most especially when the health worker in charge is a novice. To cater for this lapse, the one year clinical rotation for newly trained midwives may be extended to two years to enhance experiential learning and improve upon quality. Also, it is important that the GHS revises the curriculum for health training schools to include more of experiential learning to equip trainees with required skills for effective work. The GHS may also consider closing up the resource gap in rural areas by perennial transfers of health staff across the country. There should be added incentives such as free accommodation and transport to especially encourage health staff to pick up postings to deprived areas in order to improve upon quality of care and prevent maternal death.

Objective 2: To Identify Stakeholders' Perception on Quality of EmOC

The purpose of this objective is to describe how patients and health care providers perceived the concept of quality of EmOC. Drawing from the conceptual framework of this study, the researcher postulated that the availability of EmOC's components and key functions as well as patient and provider factors have direct and converse effects on quality of technical and interpersonal care and influences outcome. Additionally, patient and provider factors in themselves can directly or indirectly influence care outcome through perception. Based on these premises, the researcher set out to explore the concept of quality of EmOC based on stakeholders' perception. The data used for this purpose were derived from in-depth interviews and focus group discussions with participants. The analysis was performed using Grounded theory (Open coding, axial coding and selective coding). The findings presented in this section highlight a sharp dichotomy between what patients / relatives and

health providers consider as quality care. While patients associated contexual and interpersonal attributes in describing quality, providers emphasised mainly on clinical content interlaced with positive health outcomes. The results led to the construction of a framework for evaluating quality of EmOC. See code work on Table 5.

Contextual attributes

Contextual attributes comprise themes and sub-themes that pertained to clients' physical and fiscal environments.

Accessibility

Service availability

Clients referred to service availability as a famous prerequisite for quality. When clients were asked about their expectation of service received, some who travelled long distance to the EmOC facilities started their narrations from the long distance they had to cover in order to access health care. Though there was a health facility in a nearby town, this facility could not provide the intervention needed to arrest the bleeding that ensued after the woman's delivery. They had to trek several miles to access the care needed. Not only was the distance to EmOC facilities very long, (geographical accessibility), there was also the absence of motorable road network linking rural communities to health facilities. As a result, during emergency, transportation to facilities became very challenging as there were no routes of access:

"…The situation is our village is that we don't have a hospital unless Gbingbalga. They started the Binbalga hospital three months ago. But when you are pregnant you come here and do the check up and go back… even when

you are sick and there is no motorbike... a car can't go there.... If a car is coming, it will stop on the way.... It can't pass" (# C. 14).

A health provider also lamented how geographical access to needed intervention could possibly account for many deaths in hard to reach communities:

"...They are farming communities and are very far from access and they will go and settle in that community. If mothers are dying what of children...?"

Affordability

Moderate cost of treatment

Clients' perception of quality was intensely clouded by the cost of service. Clients expected cost of treatment of any obstetric complication to be moderate especially with the implementation of a national health insurance policy. Ironically, cost of treatment was perceived high in this study thus tainting their appreciation of what they would have thought of as quality care. It was, therefore, not uncommon to have clients constantly refer to the cost of treatment whenever they were asked to evaluate the quality of EmOC received. Participants in a focus group discussion made the following assertions:

> *"...We have to pay for a whole lot of things: drugs, soap etc. meanwhile we have insurance, why is it so...?" (# FGD 2).*
>
> *"...How they are collecting money from us is too much. That is why they did health insurance and you buy your own things and send it there.... they will collect and take money in addition..." (#FGD4).*

Adapting clients' items

Clients' expectations further implied health providers accepted and used the birthing items they carried along to the facility. They maintained that prior

to delivery, they were given information on birth preparedness and complication readiness during antenatal care sessions. As part of the process, they were required to complement service delivery by bringing along a list of items for their delivery and also to treat any complication that may occur. Clients acquired these but they were most often rejected by service providers on grounds of unwholesomeness but who in turn sold, what they considered, as suitable items to them:

> *"...Our wives send old clothes to clean the blood and to clean themselves after delivery, they say they are rags. Then they sell their pad to you and say that one is good and take soap and Dettol ..." (# FGD 1).*
>
> *"...They will recommend certain things for you to buy them and on your delivery day they will say no, they didn't ask you to buy those things. They have the good ones in stock and you are forced to buy what they have because you want to have your patient relaxed so you have to just obey them..." (# FGD 2).*

Health providers differed from the views of patients and relatives on the NHIS and free health care delivery. They contended that quality care is not free since some of the things they used to provide good care were not acquired freely as assumed. According to them, the NHIA's rhetoric of free health care was not an absolute reality as most of the items needed to facilitate care delivery were often not readily available, inadequate or were of poor quality in the various health facilities. As such clients actually needed to pay for good services:

"…They say Health Insurance says it is free. We will love that everything is free but the fact is, the things are not there" (# Pr. 5).

Another provider said:

"…So is it the rags that you are going to use to collect the blood from the uterus? You will use the pad and when you finish she has to pay because you also bought the pad…" (# Pr. 7).

Accountability

Realistic charges

In patients' view, quality should commensurate with the kind of service offered and there should be convincing evidence for the charges they are levied. In other words, there should be value for money. In the current situation, clients alluded that they were told to pay certain monies when there was no evidence pointing to the exact purpose for which payments were required and in most cases such payments were not backed by receipts. It was at the discretion of the person on duty and this departed from what clients would have expected about quality care:

"…They will just say they used pad, Dettol, soap, drugs etc and they will just charge you…" (# FGD 2).

Another participant said:

"…They sometimes say that those things they sell out are for the good of our wives but if that is the case, why don't they give receipt…?" (# FGD 1).

Standard charges

To qualify for quality, clients were of the view that they should be standardized charges for all procedures carried out during emergency. Such charges may then be captured in a receipt after they have been paid for and authenticated with a recognised and official stamp as evidence of payment. As it turned out, some clients said they paid monies based on word of mouth of providers. Though they may suspect such deeds, most of them tend to grudgingly settle such bills. This has the potential of discouraging uptake of maternal care services in this area:

> *"…Before discharge, I was made to pay some amount actually. The lady who took over told me when your wife delivers sometimes you need to pay some money so they really took some money from me…" (# FGD 1).*

Acceptability

Preference of native providers

Clients expected native health care providers to attend to them since they were thought of as being culturally sensitive than non-natives. For example, participants shared that it is culturally inappropriate for a midwife to stop a male visitor to the ward on whatsoever grounds. Men are regarded superior species and should be allowed to have their way at all times. In the studied municipality, almost all midwives were non-natives. They were often regarded as aliens, rude and a threat giving rise to constant moments of confrontations among providers and clients / relatives:

> *"…Our prayer is to get good nurses to handle us especially those who come from here…" (# C 8).*

A focus group discussion also revealed :

"…Those people they don't respect us…" (# FGD 1).

Perception of male providers

Although clients / relatives preferred to receive care from indigens, this excluded the services of obstetric nurses (male midwives). It was a community held norm that aside the husband, no man is allowed to touch a woman's genitals. Hence the presence of male midwives in the hospital did not seem a pleasant sight for some participants who expressed dissatisfaction with respect to service provided :

"…When my wife was going to deliver, male nurses were around meanwhile we are natives and we know one another. that is why sometimes some of the woman don't want to open their legs because they see the men around…" (#FGD 1).

"…I hear some of those who deliver the women are men. How can a man deliver a woman"? (# FGD 2).

A patient who was being treated of post-partum haemorrhage (PPH) by an obstetric nurse had to conceal her discomfort because of health implications if she resisted care from him:

"…Infact I was a bit shy of the man but I was also scared about the bleeding because I can die so I really didn't bother about it again…" (# C 3).

Perception of caesarean section (CS)

Patients maintained that ordinarily, delivery and its attendant issues have to be a normal and natural occurrence. As such they expected to go through normal vaginal delivery. Where an intervention had to take place to enable or

facilitate delivery, it was viewed differently and affected perception of care quality. It sent an immediate signal of poor quality care. To the client and / or relative in the study area, the emphasis is not so much on a safe delivery as it is on the amount of money required to settle hospital bills emanating from clinical intervention such as Caesarean section. This is contained in the following quotes:

> *"…You see when you go through CS, the men complain because they pay more money for CS because if you are to go to the theatre, they have to go to the pharmacy and pick injections, drips and all these we pay. Like 200gh plus so because of the money problem the man can complain…" (# C 2).*

Additionally, the fact that CS affects the number of children one would have was an issue militating against patients' perception of quality as some participants said that their husbands prefer large family sizes and are worried with anything that will interfere with this outcome:

> *"…The men also complain that with CS a woman cannot have more than three children and you know our men here like children…" (# C 2).*

Perception of young midwives

Clients had a negative perception towards young midwives and that reflected on how they evaluated the quality they received. Hitherto in Ghana, midwifery was a speciality where nurses were given specialist training to provide needed care. Nurses had to practice for some time before going on this training hence they had prior experience and had advanced considerably in age and many would have personal birthing experience. Currently, due to the high

rate of attrition, qualified secondary school leavers are absorbed, trained and licensed to practice as midwives without prior practice experience aside their clinicals and placements during the training process. This study revealed that clients had negative perception of this calibre of staff as well as the services they provided. They were accused of spending time on their mobile phones, painting of faces (make-up) and constantly engaged in conversations instead of attending to clients:

"..They are always pressing their phones and telling us not to disturb them meanwhile we are also wailing in pain. There is no older person there again…" (# C 8).

Clients also preferred older midwives because they felt such people might have given birth before and would have been more understanding than the current cohort of young midwives:

> *"…Those who deliver and see how painful it is, that person won't mishandle you but those who have never delivered will be rough towards you because the person doesn't know how delivery i…s" (# FGD 5).*

Relatives at point of care delivery

Due to insecurity of having alien health providers around, relatives preferred to be at the site of service delivery to monitor how care was provided. The daily routine of EmOC delivery was to receive a woman with complication into a secluded room and provide the right intervention or to admit women in labour for monitoring and delivery. Once in their care, providers prohibited clients contact with relatives until after treatment or delivery. Relatives of

clients had a different view of this as they suspected a possible mishandling of their relative with such approaches:

> *"…Seriously I would even prefer that they allow the husbands to be around. Sometimes when the husband is around the lady feels relieved psychologically knowing that if anything is going to happen, the husband is around…"(# FGD 1)*

Another focus group discussion exposed:

> *"…When entering inside the ward, the nurses sack you as if you are a chicken. That is not good, we are adults not children…" (#FGD 2).*

Physical environment

Privacy, cleanliness, strong and accessible beds, good ventilation

The physical environment where care is provided was equally vital for clients in their evaluation of quality care. One would expect that with emergency cases where the emphasis is on efforts to survive a dying patient, things like ward features and environment would not be something of importance. Contrastingly clients, having gained consciousness, expected the ward to be of a certain state of standard befitting a hospital in contemporary society. Relatives also had expectations regarding the state of the maternity wards. These centered on privacy and cleanliness of the ward, the furniture in it, ventilation and general ward appearance. Clients who lost their babies desired a separate room that would prevent them from seeing other newly born babies as that reminded them of their loss. Clients highlighted the following to show their distaste for the current state of maternity and labour wards:

"…The room was good and the bed I laid on was also good. Only that because I didn't get a baby, when I see those other women with babies I feel sad…" (# C 1).

"…It was very difficult for me to climb the bed because it was high and I was tired but I finally did…" (# C 2).

"…The place was too hot and you have to be lying on the bed all the time so I preferred sitting outside…" (# C 8).

Interpersonal attributes

The human aspect of care is captured under this heading.

Caring, compassionate, considerate

Although clients and relatives expected the hospital to be able to treat their complications, they did not attach so much importance to clinical care as they did to other forms of care. Results show their expectation centered mainly on the provider and how they provided care. Responsiveness was what patients looked for in their providers. They expected them to be caring and supportive of their plight and to assist them cover the routines of hospital delivery instead of allowing them to struggle this out on their own. The demand for compassionate care are conteined in the following

"… It was very difficult for me to climb the bed because it was high and I was tired but I finally did…" (# C 3).

The following emerged in a focus group discussion:

"…They don't care about people.... and they will be behaving like delivery is an easy thing... I wonder if some of them have even given birth before" (# FGD 3).

Patients further expected providers to be considerate and compassionate towards them when they present with complications. They indicated it was no fault of theirs as they lived in areas where access to healthcare was a huge challenge. When they finally arrived in the hospital with complications, they expected providers to understand their challenge and to do their best to give good care. According to them,providers rather poured lots of insults on them, accusing them of trying to make their work difficult and making clients feel less human in this regard. Consequently, clients would prefer to stay home where they could receive more compassionate though unprofessional care:

"…We have a problem of transportation in our village but whenever we come they will be insulting us that all the time, we come with trouble…." (# C 14).

"…I can say that the old ladies in the house are more competent than those in the hospital. They handle you the way they should handle you and they won't say bad things to you, only that they cannot help with the complication…". (# FGD 3).

Assurance, supportive

Finally, observation notes discovered that most cases that arrived in the hospital from homes were already in a bad state and relatives had little hope for their loved ones. Even with this, they expected assurance from care providers that could reduce their level of anxiety. According to clients, providers paid no heed to the emotional state of relatives and clients but worsen it with unfavourable comments:

"…When we arrived nobody said any kind thing to us.They were just insulting us to the extent that I started crying. if we

wanted to talk we ended up crying because of the way they were handling us but it isn't our fault…" (# C 14).

Even those who obtained complications after delivery in the hospital received similar resentment from care providers as some reported they were rebuked for shielding reproductive information thereby subjecting providers to extra work as they struggled to treat complications after delivery:

"…They were insulting me that I know I usually bleed after delivery and I did not tell them but the fact is if not this one, I have never delivered in the hospital…" (# C 9).

Though providers admitted they needed to show some amount of politeness and decorum when dealing with patients, they found it difficult to do this due to the huge workload in the hospital. In addition they needed to work on complications very fast to forestall life as such there was little room for courtesies:

"…Well one of the things that is hindering us from achieving that particular goal could also be our number. Our number is not enough to meet the demands of work here…." (# Pr. 13)

In addition, providers acknowledged that persons accompanying clients to receive care were mostly those other than the husband. In that case, allowing their presence in the delivery room may be compromising client's privacy.

This explained why they kept such people out:

"…Most often than not, it is not the partners that bring them. The man you see with the woman, he said my wife when you go into it either the elderly sister husband or the husband's elder

brother. The moment you call him in, person is a total stranger to her that is coming to see her nakedness" (# Pr. 15).

Clinical attributes

Health providers' expectations of quality rested on actions aimed at arresting complications and sustaining human life. They achieved this by adopting certain scientific and evidence based practices in their day to day administration of care. They contended that clients did not have technical knowledge to appreciate clinical care but only reacted at anything that involved cost. Themes identified under this category are: timeliness, efficiency, appropriateness, effectiveness and efficacy.

Timeliness

Promptness, urgency, priority

Timeliness refers to the immediacy with which health providers attended to emergency cases. To the provider, the urgency, promptness and priority attached to emergency cases attest to the quality that care providers want to achieve. Some obstetric emergencies that arrived in the hospital were already in a horrible state and a further bit of delay could increase the risk of complications and possible deaths of clients. Providers went by a certain protocol to ensure that clients received timely care:

"…We attach a red paper to an emergency folder so whoever sees this will know that this folder must be attended to urgently. Whether at the dispensary, OPD, Lab everywhere you see it the folder should be treated urgently…"(# Pr. 1).

Another participant shared how timeliness of care averted possible death:

"…One woman delivered at home, retained placenta and was brought to the labour ward. She was almost gone. So we had to rush. After expelling the clots and giving her the necessary treatment she was okay…" (Pr. 10)

According to health staff, clients and / or relatives may not understand the urgency of a case and may delay in responding to certain demands and that may worsen client's already deteriorating condition. Providers often asked for rubber and pad from labouring women or those with obstetric complications presenting for treatment at the facilities. Most times clients did not have these and that delayed and that delayed the intervention process. As such, providers devised means of accessing needed items by stocking them and using them to arrest complications immediately they occur or arrive since a little more delay could lead to loss of clients' lives: They justify their reasons for the demands on grounds of saving lives:

"…We ask for those things so that we examine you and then every little time you delay is very dangerous to the woman because she may be having more serious problem than you imagine it to be if you don't check her you wouldn't know… " (# Pr. 3).

Providers further indicated that certain risk signs during pregnancy may lead to complications if appropriate care is not immediately provided. Clients may not have knowledge of these and may not see quality care in the effort of the midwife. Hypertension in pregnancy is one such conditions that clients may

take for granted but which has caused several maternal deaths. A pregnant woman with blood pressure of above 150/ 110 with two or more pluses of urine protein stands the risk of imminent eclampsia and eclampsia if immediate care is not taken. Such a woman must immediately be put on a magnesium sulphate treatment but she may be unaware of her risk and may interfere in timely delivery of care:

> *"...Another thing is that a client comes high BP urine protein 2 pluses, you detain her and want to start MagSof treatment then she resists. When you insist because of her risk, they feel you are forcing them…" (# Pr. 13).*

Results show that in their effort to provide timely care, providers sometimes trampled upon the rights of clients. When the option for emergency Caesarean Section was the only way out, providers desperately carried clients to the theatre when even consent had not been granted for the intervention. They opined that clients or relatives' delay in granting consent could compromise the life chances of mother and baby since they (clients) are ignorant of risk factors:

> *"...If we delay we might lose both…" (#Pr. 5)*

Another participant indicated:

> "*…If we say we will wait for the man's consent, the mother and the feotus will all expire…" (Pr. 4).*

Efficiency

Standard care, clean delivery

Efficiency refers to the use of available resources to achieve maximum health outcome. It aims at avoiding waste. Some health providers disclosed that although the NHIS provided for logistics and supplies, drugs and equipment, to

facilitate care delivery, the Scheme did not ensure regular supply of these relevant resources and materials. More-so, that which was eventually supplied was of inferior quality and inadequate. They explained that the the beds lacked disposable mackintosh and health care providers found the use of 'parazone' to clean beds for the next client, not appropriate or hygienic. The use of cotton, as provided by the NHIS was not suitable for estimating amount of blood loss during deliveries to determine blood transfusion. Also they found the use of rags provided by clients for delivery related activities very unsuitable as it led to infections in most cases:

> *"...In the past, the same surface bed the markintosh you finish delivering we put on parazone and clean it for the next person, they say is archaic, and it is archaic so come with rubber..." (# Pr.5)*

Another provider said:

> *"Instead of pad, they bring rags. This time the infection is even better, somebody can bring rags and while tearing it you will be sneezing. Even one came with rags like that and when we removed it cockroaches were coming out of it..." (# Pr.14).*

Midwives felt that in ensuring efficiency, clients must complement service delivery by possessing additional birthing items such as mankintosh to use as bed spread and a perinium pad that could be used to access and determine volume of blood loss in order to intervene accordingly:

> *"...And without those things you are not able to check because our beds are supposed to be having disposable*

mackintosh we can re-use some of them but we don't have, unfortunately…." (# Pr.3).

Another provider justified their actions:

"…We no more get Tetanus these days, why, because those days that they will bring any dirty rag and you are forced to use it, is no more there. We want pad for clean delivery…"

Clients did not easily give in to some of these actions by providers partly because they felt these behaviours were not really directed towards quality as they were to other things. They exhibited this by either resisting midwife's instructions or arguing it out with them:

"…Sit on the bed, they say no, they prefer mat. A client came and I said oh because of infection prevention, we are using rubber the husband told me that no we have a mat in the house, he will bring it for the client to lie on…" (# Pr. 4).

Providers argued that the sale of mackintosh, pad and other things was intended to provide the best clinical care available. They appeared determined to fight maternal mortality in their jurisdictions and used all possible means to achieve this outcome. The use of rags in the past compromised greatly the quality of care that was provided as some clients developed sepsis afterwards. In effect, providers went ahead to provide suitable care for clients when even clients were not ready to pay for these items. According to them their actions were geared towards quality care and not trading as may be perceived by clients and their relatives:

"…When they come and you tell them, this thing is not there, we need it then is like you are selling things to them. I personally

had to use a new cloth I bought while here, tore it and used on a client because she was bleeding and had no cloth and no one came with her, should I leave her in the blood…?" (# Pr. 14).

This was corroborated by a patient in one instant:

"…As for treatment they will certainly treat you well. But they will let you know . you owe them They will cater for you very well. And you will be asked to go and buy and replace or pay for it" (# C 4).

Efficacy

Drug use and perceived efficacy, skills and competence of staff

Efficacy is the ability of EmOC intervention to produce the desired results. In this research, efficacy was associated with the use of drugs and the competence and skills of providers to achieve desired outcomes. According to some midwives, they ensured efficacious care by the use of certain drugs they rated superior and also by a call for help agenda. Oxytocin was the official drug for the treatment of the most common cause of maternal death which is PPH. But midwives always carried misoprostol with them because they claimed it was more efficacious than oxytocin. They administered it alongside oxytocin in extreme cases to achieve best results:

"….They are all uterotonics but in extreme cases where the client is bleeding so much it will look like you use plenty meat to prepare soup, it doesn't spoil the soup. It is in extreme cases…" (# Pr.5).

In addition, some providers said they sometimes compromised and settled on the use of less quality drugs to treat patients and would not qualify this as quality care since they felt less satisfied with their performance:

"You want to put a client on certain medication like ammoxiclav that is higher than amoxycline but the husband will not bring money and you have to reduce your treatment to the level that they will be able to afford so in that way I am not satisfied" (# Pr. 3).

Call for help

Efficacy further bothered on teamwork as revealed in the study. To achieve efficacious results, providers called on colleagues to support in care delivery where the case was beyond their control. A call for help approach was adopted in many instances to provide good care:

"…We put info in them that call, call, call but sometimes you will call and they will come and take decisions…" (# Pr. 6)

Appropriateness

Right clinical decisions, risk identification

Providers further sought to connote quality with the appropriateness of care they perceived to be providing. Appropriate care is the selection of an intervention that is deemed to be more efficient in treating a disease from a list of others and which is capable of producing the most desired outcomes for patients. They fulfilled this by the right clinical decisions and risk identification procedures that enabled them to decide on the appropriate care to provide under emergency situations. Although client consent is desired in the provision of appropriate care, health providers delivered care sometimes without their consent indicating they did that to prevent any adverse outcome. They further mentioned that clients or relatives resisted some of these interventions probably

because they lacked the technical knowledge to appreciate this quality dimension.

A midwife said:

> *"…I told the husband of a woman that the baby is coming with the buttocks but because the lady has not delivered before we were taking her to the theatre. This man fought us that we should put cytotech. We had to go against him and rush her to theatre if not the mother and the feotus will both expire…" (#Pr. 4).*

Effectiveness

Positive outcome, client satisfaction

Midwives indicated that effective care was what they aimed to provide. Effectiveness is the degree to which an application of clinical knowledge brings about desired health effect. It includes the diagnosis and treatment of complication to produce desired results for parties involved. Effectiveness includes efficacy that is, the ability of an intervention to produce good results, as well as client satisfaction. To them, it was the ultimate goal for all the efforts that went into providing care:

> *"…At the end of the day the woman doesn't go home with any complications, the woman goes home with the baby, mother is fine, baby is also fine…" (# Pr. 12).*

Another participant said:

> *"…Our prime objective is baby is healthy and mother is healthy.." (# Pr. 1).*

Providers were also able to judge effectiveness of their service by the show of gratitude exhibited by some clients:

"…They will say oh madam I was the one who came and delivered, I bled but you did your best. Thank you…" (# Pr. 11).

Based on the findings presented, the following framework has been deduced and proposed for assessing perception of emergency obstetric care in poor communities:

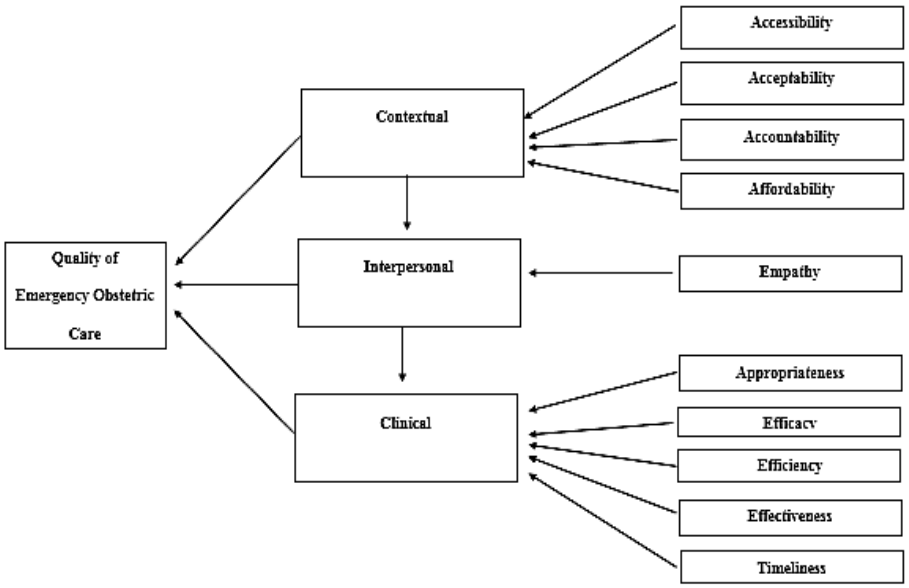

Figure 4: The 5As4EsT Framework for assessing perception of quality of EmOC.

Source: Author's construct

In this study, three sets of quality dimensions were discovered namely: clinical, interpersonal and contextual factors unlike earlier studies that have identified two dimensions (Aggarwal et al., 2019; Mosadeghrad, 2012). Clinical quality resonates that of Donabedian's (1988), concept of quality and appears to be the heartbeat of policy makers and implementers who arguably are interested in achieving best clinical outcomes as evident in the process of health care organization and dispensation. In line with this agenda, health providers view health care quality in clinical terms such as timeliness, effectiveness, appropriateness, efficiency and efficacy and these dictate the care content. This

clinical orientation of quality is contrary to patients' expectations of human centered care that is assuring, caring, compassionate, considerate and supportive as evident in this study. For instance, in applying the clinical model, health providers engaged in activities supposedly intended to yield desired health outcomes and prevent deaths. They strived to treat cases on daily basis and exacted this without compromise. Some interventions were forcefully carried out without consent and even in the face of resistance because health providers saw this as the best option to produce effective and good outcomes. Indeed, though providers were aware of the emotional needs of their clients, this appeared secondary when the quest to sustain life threw a challenge (Mgawadere et al., 2019). The implication of such approach is that it has the tendency of affecting utilisation as patients do not share in the technical acumen of their providers and may not understand the import of such actions (Hanefeld et al., 2017). This comes to bear in a study in Bangladesh where women expressed satisfaction with services when even the technical component such as drugs and equipment were unavailable (Islam et al., 2015). Health staff may, therefore, have to temper their clinical exuberance with a human element possibly to meet the needs of clients.

Table 5: Objective 2 Code Work on Stakeholder Perception of Quality of EmOC

Category	Theme	Sub-theme
Contextual attributes	Accessibility	-Service availability
	Affordability	-Moderate cost of treatment -Adapting clients' items
	Accountability	-Realistic charges -Standard charges
	Acceptability	-Preference of native providers -Perception of male providers -Perception of Caesarean section -Perception of young midwives -Presence of relative at point of care delivery
	Physical environment	-Privacy -Cleanliness -Strong and accessible beds -Good ventilation
Interpersonal attribute	Empathy	-Caring -Compassionate -Considerate -Assurance -Supportive
Clinical attributes	Timeliness	-Promptness -Urgency -Priority
	Efficiency	-Standard care -Clean delivery
	Efficacy	-Drug use -Skills and competence of staff
	Appropriateness	-Call for help -Risk identification -Right clinical decisions
	Effectiveness	-Positive outcome -Client satisfaction

Source: Field data 2019

The expectation of empathic care over clinical care outcomes as found in this study may be surprising since obstetric emergencies are life threatening conditions that require best technical care to succeed whereupon patients and relatives may not be interested in care process as they should in care outcome. The implication is that priding on a wholly clinical model, even in life threatening situations, may not produce desired impact among clients especially in developing countries where culture and traditions exert significant influence on people's perceptions and appreciations of issues (Hanefeld et al., 2017). To ensure effective utilisation and promote quality of health care, therefore, health providers should devote considerable attention to emotional aspect of care as well. Balancing empathic care and clinical care may potentially provide the opportunity for health care providers to meet quality of care expectation which calls for a reconceptualisation of the drivers of quality. The important considerations highlighted in this study may need to form an essential part of emerging curriculum for instruction in health training institutions. This has the potential to help guide the delivery of quality health care. For now, this aspect of care appears to be taken for granted and treated with limited consideration in health facilities across the sub-Saharan African region as studies continually affirm poor provider-patient relationship (Bohren et al., 2019; Kruk et al., 2017). Where the challenge has to do with a mismatch between human and material resources posing as stressors on good quality care, as emerged in this study, governments and health care providers should ensure these are enhanced to provide total care.

The unique finding of contextual attributes discovered in this study reflects perceived quality, which is customer evaluation of care received

(Mendes et al., 2018). The finding is in line with previous works that have advanced several dimensions on customer perception of quality with these dimensions clustering around health facility related issues, technical ability and conduct of health providers (Aggarwal et al., 2019; Mehra, Lokhande, Chavan & Rane, 2020). While interpersonal and clinical dimensions have been well discussed in the literature as did in this study, the emerging evidence is on the contextual dimension of care (Hanefeld et al., 2017). The contextual attributes of accessibility, affordability, accountability and acceptability are similar to Anderson's "determinants of health care utilisation" model (Aday & Anderson 1975) and Penchansky's work on "the concept of access" (Miteniece et al., 2019; Penchansky & Thomas, 1981). In this study, however, they emerged as non-clinical quality concepts that relate to patients' satisfaction with health care services.

The concept of service accessibility as identified in this stuy represents the closeness of health services. This attribute promotes service utilisation and by extension quality, in that the closer the facility, the more likely the chance of utilisation and the brighter the outcome (Stal et al., 2015). Women may prefer the services of a traditional birth attendant in the neighbourhood not necessarily because it is good but because it is available and accessible (Hanefeld et al., 2017). Though experts may refer to such form of care as unprofessional, clients are satisfied by its proximity. Therefore, the current emphasis, on stocking hospitals in urban centres with human and material resources to promote quality may not necessary translate into quality that may lead to a reduction in maternal mortality if women who need these cannot access them in the first place due to distance (Bogren et al., 2020). The implication is that maternal health will still

be under threat because quality services are far from reach. In essence, there is little to be realised even under best clinical condition when a woman arrives rather too late as a result of long distance travel. In this regard, it is important that quality control measures encompass accessibility element where efforts should include pulling down the barriers of access to improve maternal health outcomes (Bogren et al., 2020; Hong et al., 2019).

Affordability denotes clients' ability to pay for services (WHO, 2013) but it appeared as a key determinant in patient's appreciation of quality care in this study. This finding departs from those who equate quality to high cost (Hussey, Wertheimer, & Mehrotra, 2013), participants in this study view cost as a disincentive and a marker of poor quality care irrespective of outcome. There were a lot of excesses in health facilities thereby inflating cost and dissatisfying patients and relatives in that regard. This finding supports the claim by Akazili, Adjuik, Jehu-Appiah and Zere (2008), of extreme wastefulness in some Ghanaian health facilities. The inefficiencies of such a system presents distaste to patients and their relatives who are more likely to scorn services provided defeating the very purpose of introducing maternal interventions to save lives. It is suggested that heads of facilities rise up to effective monitoring and supervision of activities in health facilities to ensure that such inefficiencies that are passed on to patients are eliminated to encourage uptake of services (Srivastava et al., 2015).

Acceptability is another finding in the study and refers to the extent to which health care is in congruence with patients' socio-cultural background (Hanefeld et al., 2017). In communities, the health care environment and the care process should fall within the norms and values of community members if

it has to be accepted and utilised (Bogren et al., 2020). In this study, patients were more likely to be satisfied with service and rate it as quality care if it was provided by older native female midwives and in the company of a relative in well ventilated rooms with secured privacy. These are cherished community values that need to be inculcated in health care delivery to improve upon patient appreciation of care content in this area. Anything less could mar the fortunes of even the best maternal interventions in health facilities as the anticipated gains may not be forthcoming or realised (Gomez et al., 2015).

The discussion shows that a better understanding of quality of health care should include the evaluation of both clinical and perceived quality where perceived quality includes contextual factors as these may produce appropriate results that may inform both policy and practice.

Objective 3: To Describe how Stakeholders' Perception of EmOC Influence Care Delivery

The purpose of this objective is to describe how divergence in stakeholder perspectives of quality influenced health care delivery in one municipality in the Northern Region of Ghana. Data sources included observation, in-depth interview and focus group discussion. Data analysis was performed using Grounded theory (Open coding). The code work on this objective is contained in Table 6.

Dissatisfaction with care quality

The narratives reveal clients' expectations of service were largely unmet and this created a general feeling of dissatisfaction. The participants exhibited certain repulsive behaviours as a result of their dissatisfaction and

these were mostly felt on service provision and utilisation as presented on subsequent pages.

Service provision

Communal interference

The evidence revealed that cases arriving in the hospital and health facilities were often followed by a crowd of community members who raced alongside to the facility apparently to commiserate with their sick relatives. They did not only crowd the entrance to the wards and interfered in service provision, they waited for long hours and only dispersed upon several persuasions from health staff. In an informal conversation, a health staff remarked "if you want to know how busy the wards are, look at the number of people at the entrance". Although some sheds were erected for visitors to the hospital, and health facilities, these were rarely utilised. The corridors of labour and maternity wards were often crowded with relatives and family friends whose actions were mostly fuelled by feelings of mistrust, uncertainty, fear and apprehension of hospital care other than the quest to empathise:

> *"..Sometimes, a case can come and about ten of the relatives will push here and if you tell them they cannot all be at the facility, they wouldn't go. They will just be standing or sitting down and blocking the passage…"(# Pr. 8).*

In a focus group discussion, the following assertion was made by community members with regards to their presence around the wards:

> *"…We want to protect our wives so that the nurses do not harass them…" (# FGD 1)*

Relatives in wards

Another instance of repulsive behaviour exhibited by relatives or community members as a result of dissatisfaction with service, was the usual presence of care takers at the bed side of patients in maternity wards. According to some of these care takers, midwives did not take good care of their loved ones in their care and they preferred to do this by themselves. They stayed in wards and assumed the bed side nursing role of midwives: serving pale, emptying cathethar, feeding and empathising. Some of their activities went overboard as some even attempted to share bed with sick relatives:

"…They come at night and want to sleep by their patients on their bed…" (# Pr. 4).

A client also attested:

"…We want to stay close by to help our relatives.The nurses don't want us in the ward and yet they won't take care of our relative…" (# C 8).

As community based facilities, utilised by members bonded by a spirit of social cohesion, it was a norm for relatives to visit the sick on admission. Some indwives explained that client's relatives who visited from home did so irrespective of visiting hours. At almost every moment in time scores of relatives thronged the wards to emphatise with sick relatives. Aside interrupting with service provision because doctor may be on rounds reviewing cases, health staff perceived them as a bother to patients' recovery:

"…Twelve midnight, some people are coming to visit people, is it normal? What are you going to do? This fellow perhaps didn't sleep the whole day and is now sleeping, they are coming…" (# Pr. 5).

Unknown to health staff, these attitudes were borne out of members' apprehension about the quality of services provided:

"…Here, we don't believe in the services of the hospital…' (# FGD1).

"…When you go they won't let you inside the ward yet they won't take care of the patient but will keep insulting her in the room…" (# C 8).

Service utilisation

Non / under utilisation

It was disclosed that pregnant women utilised the antenatal component of maternity care but were mostly not found during delivery where they stood a much higher risk of maternal death. Clients assigned several reasons for this behaviour including their perception of the quality of delivery service:

"…When you go, they say buy this, buy that. Only their selling of things is our problem in the hospital…"(# FGD 1).

Another client said:

"…Because of the collection of soap and dettol, some of the women won't come to the hospital to give birth. They give birth at home and come to the hospital with complications…" (# C 2).

It has been reported that most maternal deaths occur during delivery or at the post-delivery stage. The fact that some women in this area found themselves elsewhere during delivery other than health facilities in the area means some women could be losing their lives due to complications obtained during deliveries since no other place could better treat complications other than the health facilities. Several of the complications treated at the referral hospital

came from women who delivered at home and this gives the impression that many are those who might have lost their lives because they could not make it to the hospital. It appears utilisation of care became a necessity only in cases of perceived severity of the condition. In that case, clients/ relatives had no choice but to attempt to utilise care. This possibly explains why mothers who arrived in the hospital came in a bad state and could have actually lost their lives but for the timely intervention of health staff:

> *"…As for the complications, we normally don't pray that such a thing happens but when it does we have no choice but to go there…" (# FGD 2).*
>
> *"…Some women are rushed bleeding profusely and unconscious…" (# Pr 14).*

Delayed utilisation

The results suggest that some clients that actually came in a bad state deliberately or ignorantly delayed at home hoping to overcome their situation. As a matter of fact, clients / relatives wanted to escape hospital care at all cost because of their perception of services at some health facilities. Clients seemed to be baffled by the high cost of care that was deliberately perpetuated by service providers and were a bit reluctant to utilise service. Their delay was thus to escape cost and perhaps harsh treatment from health providers:

> *"…Then the blood started flowing and one woman advised us to wait a while, if not if we go to the hospital, they will insult us... And it didn't last long she delivered and she also fainted and we can't find means to come…" (# FGD 1).*

A participant also shared:

> *"…There was a woman they brought in dead, it was PPH. I think that she delivered and was bleeding and that time they won't see it necessary to come to the hospital. When they see that the woman is gasping for air that is the time they will be carrying her here. So they bring some here, dead…" (# Pr. 2)*

Lay practices

As a result of dissatisfaction with services provided, clients engaged in certain behaviours that appeared averse to positive maternal outcomes. These are as presented:

Use of local oxytocin to augment labour

Rapid delivery

Clients' prior experiences with the health care system led them to engage in certain inappropriate practices that impacted on their health and placed a high demand on quality of care. According to health providers, there was widespread use of local oxytocin (herbal concoction) to augment labour. The herb was perceived to be effective in causing rapid contractions to quicken delivery but without corresponding dilatation of the cervix. Almost all the women who delivered at the health facilities and who were observed by the researcher had taken this concoction at home before setting off to the hospital. While some delivered en route to the facility and obtained severe tears as a result of undilitated cervix, others delivered immediately upon arrival and bled severely afterwards on account of forced labour and delivery. Fortunately, with the presence of a Specialist and a functioning blood bank, such women survived

amidst great effort and collaboration among service providers. Hitherto, most of such women died:

> *"…They give them the local cynto which they call 'calgoteem'. They give this and you will see the hyper contractions there, sometimes before they enter the hospital they rupture…" (# Pr. 20).*

Another provider said the following:

> *"…Some too take a local oxytocin to increase contractions so you see that they are having contractions but the cervix is not dilating. Most women died of uterus rupture in the past" (# Pr.17).*

Coping strategy

Though clients / patients would not readily admit that they had taken such medications for fear of intimidation by health providers, midwives knew the possible reason for this practice. They disclosed that clients' resolve to engage in such actions served as an escape mechanism whereby they tried to adjust to the unfriendly attitude of some health providers. They had heard a lot about the behaviour of health staff and in order to dodge the harsh treatment, they sped up labour to avoid a longer stay at the health facility that may elicit a possible mishandle. A health provider attested about the motive of clients who engaged in this practice:

> *"…They will say something like, why will I come and they will be shouting at me and talk to me anyhow whilst I can do my own thing at home so sometimes, you know they like to take the concoction for this reason…" (# Pr. 10).*

Low confidence in health care

This caption covers what clients and providers perceived of outcome of care and how that determined subsequent utilisation of care.

Treatment outcome

Clinical

The evidence shows that, health providers were very enthusiastic about preventing maternal death in their facilities. In so doing, they appeared to engage in adhering to standards without compromise to achieve good results. They were satisfied when clients recovered from complications and returned to their homes in good health. Except for those on referral who might arrive rather too late to be survived, all maternal complications occurring in the referral hospital were successfully treated by whatever means possible and discharged:

> *"…We work tirelessly because when we get maternal death and they come to audit, we look stupid and embarrassed so we don't like it…'(# Pr. 14.)*

Divine intervention

In direct contrast, patients / relatives did not ascribe a positive outcome of their conditions to an effective health care system but attributed it to the Supernatural (God's intervention). Though this could be as a result of their religious inclinations, since the community is an Islamic one, it is worth noting that this stance is a reflection of their perception of care received. They expressed feelings of pain and disappointment with the health system and attributed a good outcome to divine intervention:

"…But even that when a woman survives a complication, it is God that is working through the health providers. They alone cannot prevent somebody from dying but God…" (# FGD 1).

Another client said:

"…My thoughts were that, God should save my mother for me because I was scared of the blood she was losing because it could kill her…" (# C 6).

Provider / client conflict

Divergence in client / provider perception of quality led to issues of mistrust and perceived extortion as elaborated:

Mistrust

Suspicion by clients / relatives

As earlier on presented, clients were particularly concerned about interpersonal care failure of which they resorted to complementing care or not utilising hospital services at all. Aside this, there were issues of trust and mistrust among providers and clients pertaining to their respective worldviews about quality. It was observed that per practice, during obstetric emergency, clients or patients were taken over from relatives into appropriate hospital space where service providers made frantic efforts to arrest the situation. Their actions were concealed from worried relatives who may be pacing impatiently outside. When the situation was under control, the relative was informed about progress and whatever support that might be needed to continue with care. In areas of transparency and accountability, this might not be a challenge as relatives are ready to cooperate with providers. However, in the studied municipality, the situation is different. Relatives read lots of meaning in the efforts of service

providers due to their perception of the activities of providers. There was, therefore, heightened suspicion whenever midwives demanded certain things and relatives may cooperate or not depending on prevailing circumstances. The end result was a disgruntled client or relative who did not feel satisfied with the service provided and doubted the credibility of health staff:

> *"…They asked us for blood but I told them that we didn't have blood but they got blood somewhere for her and later on asked me to pay for that blood. Where did they get that blood from?" (# FGD 2).*

Suspicion by other health staff

The conduct of midwives was not only suspected by clients or patients but by other providers as well. Other categories of staff were found confronting some midwives over undue levies on clients. In one instant, the researcher observed a confrontation between a nurse and a midwife when the latter asked a client to purchase a hermatinic drug from a store in town. A nurse who was a relative of the client intercepted her and demanded to know why the relative was asked to buy the drug outside. Apparently the nurse's behaviour was borne out of their perception of the nefarious activities of midwives. There was heated argument and confrontations that went on for almost twenty minutes. All this while, the pale looking pregnant woman looked on helplessly. The midwife argued that it was a prescription by the physician and they were trying to get the client to get the drug from a good source and at a moderate cost. The other person, however, saw that as a deal to extort money:

"…I asked her to buy the drug from a particular drug store in town since the pharmacy didn't have some. The drugs in that store are cheaper but the nurse felt I was cheating the client.." (# Pr.7).

Perceived extortion

Clearly, there was growing dissatisfaction with quality of EmOC services across sections of the population. This was not due to an adverse maternal outcome as may be in the case of maternal death but the cost of care. Perceived extortion was what clients seemed to experience and this greatly distorted their appreciation of the quality of care provided. According to clients, there was excessive demand for money for items, drugs and other things such that midwives were perceived as trading their wares in the guise of providing quality care, a situation that may affect patronage of care:

"…It is their market place…, it is their business they are doing…" (# FGD 1).

"…They have turned the Maternity ward to a business centre whereby they sell all kinds of items and materials to the suffering women and I think this shouldn't be the case because it is a hospital…"(# FGD 1).

A worried provider attested to the fact that indeed colleagues extorted monies from clients:

"…Some of us too take too much unnecessary money from clients and that prevents them from coming to the hospital next time…" (# Pr. 15)

Seemingly, some facilities' heads and officers were aware of this unprofessional conduct of health staff but declined to intervene partly because

clients /patents failed to produce appropriate items on request and partly because NHIS did not meet their mandate of ensuring regular supply of needed items in hospitals:

> *"…It is business, but you see because the system is so challenged, Health Insurance is not even paying and clients are not making the work easier by bringing required items so they extort money from them and they are complaining…" (# Pr. 5).*

Cost of drugs

Clients' claim of perceived extortion was not only associated with midwives' business oriented behaviour but facility operations in general. They alluded that drugs sold in facility pharmacies were more expensive than those sold outside and that it was another deliberate effort to extort money from them. This was sometimes met with open defiance by some relatives:

> *"…They asked us to buy a particular blood tonic at Gh85. It was shown to us but my brother refused and went to the market and bought it at Gh50…" (# C 12).*

The following also emerged in a focus group discussion:

> *"…They wrote certain two drugs for me. The total cost was 109 cedis. A friend in town told me he had the drug in his shop. I took it to my friend's shop and got both drugs at 84 Ghana cedis. Just imagine the difference…" (# FGD 1).*

Clients failed to acknowledge the fact that the differences in prices could be as a result of the different pharmaceutical companies engaged in the production and sale of these drugs. Brand name and level of efficacy could be determinants of price differentials. This notwithstanding, management and

heads of these facilities revealed that due to the lapses associated with the NHIS, they sometimes had to procure drugs at high purchase prices due to lack of funds to pay ready cash. Such purchasing terms and agreements attracted additional interest and this could only be passed on to he client in order to cover cost:

> *"…As at now when we go to buy some of these things, they will tell us we should bring cash and if Health Insurance hasn't refunded our monies and paid us, we don't have the cash to give so if one is 2 cedis, because we don't know when you will pay then we make it 10 cedis…" (# Pr. 5).*

These evidences notwithstanding, providers admitted they sometimes had to charge more in order to give the balance to the woman for her upkeep. According to them, clients sometimes asked them to take money from their husbands for them since the men mostly did not give them money for survival. On such occasions, midwives added the requested amount to the total bill and asked the man to settle these after which they gave to the woman. This increased the cost of treatment but which necessarily did not all go to the midwife though it affected how the community viewed the cost of obstetric care in the facility:

> *"…Sometimes the women will even tell you that you should charge their husbands so that you will collect the small and give to them so that when they go home they can be feeding because the husbands don't give them anything…" (# Pr. 7).*

> *"…Sometimes we even have to over levy the husbands so that we give them the left over money because they complain their husbands don't give them money…" (# Pr. 10).*

Low confidence in health care

Non-compliance with needful interventions

Patients and relatives were unwilling to cooperate with service providers in the interest of best care because of their perception of service. Certain key interventions that needed to be performed to safeguard the lives of mothers were sometimes fiercely resisted by relatives who were suspicious of health workers' behaviours and attitudes. They often felt health workers were insincere with their approaches which were largely directed towards exploitation and nothing else. A pregnant woman lost her life due to lack of trust in the health care system. A health provider explained:

> *"…I once had an issue with one client. She is two previous C.S, 38 weeks and because she is two previous C.S, we didn't want her to go into labour and rupture because we don't know what really is going to happen when she is going to labour So when the time drew closer, I called her, she didn't answer so I called the husband line and it went through. The man told me the wife is not nine months pregnant so he cannot bring her and actually did…" (# Pr. 9).*

A client confirmed:

> *"…The nurse asked me to come to the hospital but I refused because my time was not due…" (# C 9).*

Role of prior information

Clients' experience with other actors in the health care delivery sector played a role in how they perceived

Misrepresentation of reality

Free health care

From the narrations, issues relating to the operationalisation of the Health Insurance Scheme came up severally, in the course of this research. Health providers accused them of not sending rightful information to customers and for causing undue tension between them and clients. They indicated that information provided by officials of Health Insurance Scheme regarding access to health care departed from the reality. Yet clients / patients internalised such information and were often engaged in scuffles with health providers when they were told differently:

> *"…You see the information is that the Health Insurance was wrongly packaged in the Northern region. When you go to the office to register, they tell you when you go to the hospital, don't pay for anything. They will do everything for you for free. Is that the situation on the ground…?" (# Pr. 20).*

Although this research did not include the NHIS in the municipality as participants, some providers alluded that officials had severally attacked midwives in facilities over what they claimed as unnecessary charges. They seemed to suggest that what was supplied from their outfit to facilities was efficient enough to produce good results and there was no need for additional purchases by clients. They thus criticised midwives and other health providers for profiteering as contained in this quote:

> *"…I could remember last 2 months, the Health Insurance PRO came and went straight to Labour Ward to attack the midwives; they are selling pad and the rest…" (# Pr.5).*

The results in this section depict a deficient and non-regulated health care system in this part of the country where clients or patients ultimately pay the price for insufficiency. Dissatisfied customers are not likely to engage in health services again and may lose out of good care. In the long round, the efforts and resources vested in controlling maternal mortality in this area go to naught as they are unable to achieve the desired impact.

Table 6: Objective 3 Code Work on How Stakeholder Perception

Influence care delivery		
Category	Theme	Sub-theme
Dissatisfaction with quality of care	Service provision	-Communal interference -Relatives in wards
	Service utilisation	-Non / under utilisation -Delayed utilisation
Lay practices	Use of local oxytocin to augment labour	- Rapid delivery -Coping strategy
Low confidence in health care	Treatment outcomes	-Clinical -Divine intervention
Provider client conflict	Trust and mistrust	-Suspicion by client - Suspicion by other health staff -Perceived extortion -Cost of drugs -Non-compliance with needful interventions
Role of prior information	Misrepresentation of reality	-Free health care

Source: Field data 2019

The study found widespread dissatisfaction among clients and relatives in relation to quality of EmOC provided in the Municipality. Client dissatisfaction has dire consequences on uptake of quality care. According to Al-awamreh and Mohammad (2019), a dissatisfied client may not only fail to utilise same service again but will actually go ahead to inform several others about their experience and that may affect future patronage. The findings in this study buttress this earlier claim and further contend that dissatisfied clients may not totally fail to utilise care but they may delay in doing so and may eventually turn up at the very nick of time where they are gripped with fear of a possible death and may find the hospital as a last resort. The delay in presentation of an obstetric complication imposes pressure on limited resources in health facilities and affects quality of care provided (Patterson et al., 2019). It is revealing to note that such delays in presentation, among others, attest to people's revolt at an unfriendly health care system. The solution, therefore, lies in creating a patient centered health care system that will best reflect patients' needs and serve the purpose of increasing uptake and preventing maternal mortality.

In the previous section, the point was made that patients' perception of quality did not have to do so much with clinical outcome as did interpersonal care. As a matter of fact, patients and relatives in this study believed that hospitals should be able to treat diseases hence anything in line with that did not seem extraordinary. Their dissatisfaction, however, centered on the non-caring nature of hospital care as expectations in this regard were largely unmet. This contrasts with providers' expectations of clinical care though these were equally unmet due to scarcity of resources to promote best clinical care. The general feeling of dissatisfaction among stakeholders in this study appears a norm in

most studies (Aiken et al., 2017; Mgawadere et al., 2019). This should be expected because according to (Patterson et. al., 2019), as long as resources remain scant, it affects the provision of care and its perception by clients. This situation led to certain behaviours that impacted on the quality of EmOC services in the municipality. For instance, health providers coped with their situation by improvising care, selling emergency drugs and other required items and withholding good personal relationship with patients as a result of pressure from the work environment. In the case of clients or patients, the literature point largely to a non-utilisation angle due to perception of poor quality service (Alanazy et al., 2019; Okonofua et al., 2017; Wesson et al., 2018). The evidence from this study further reveal other related behaviours such as interference in service provision, health risk coping mechanisms, low confidence in health care, trust and mistrust issues between providers and patients which altogether impact on health care delivery. These findings are not alien to this research as study participants elsewhere exhibited similar characteristics in protest of perceived poor quality service. For example, in some other settings, disgruntled clients complained, withheld reproductive information and became non-compliant with treatment (Demir, 2019) leading to ineffective care delivery in such places.

Health care is a reserve for people who are trained to proficiency and certified to practice. These include doctors, nurses and midwives who are supposed to provide care and monitor patients' recovery in health facilities. In some rural communities such as the one under study, it is not uncommon to find patient relatives assume the bedside nursing role of providers by serving pail, cleaning and feeding sick relatives on admission as evident in study findings. This act may not so much be a response to the low number of health staff in

rural areas as it is a reflection of community perception of poor quality service from health facilities, a void they will like to fulfill. The activities of these relatives in and around health facility premises invariably interfered with general service provision as they added to the already congested situation in hospital wards and delayed movement in the event of emergency. Some others openly confronted service providers when asked to leave the wards thus turning wards into areas of power struggles rather than avenues for medical treatment as revealed in earlier studies (Yevoo et al., 2018). It is important that government bridges the gap of health inequity in the country by providing the necessary human and material resources in rural areas to reduce the occurrence of such unpleasant scenes in health facilities and allow for proper handling and treatment of cases if even this cannot guarantee patient satisfaction.

As patients are told about deficient care or experience this themselves, Mgawadere et al. (2019), they adopt certain behaviours subsequently as coping mechanisms to events of dissatisfaction. The use of local oxytocin (herbal product) by women in this study to hasten delivery was a means to avoid perceived harsh treatment from health providers due to long period of stay in facilities during delivery. Such practices lead to increasing risk of obstetric complication that become very difficult to handle (Yevoo et al., 2018). The particular herbal product used by women is said to possess properties that speed up labour contractions but without corresponding dilatation of the cervix leading to uterus rupture in some cases (Zamawe et al., 2018). It also has anti-coagulation properties that make clotting of blood difficult during bleeding. These adverse effects of the product possibly contribute to the high cases of PPH in the region which has claimed several lives (Kyei-onanjiri et al., 2018).

These behaviours might not be pronounced if women had confidence in the health care system and used it as required. Whereas curriculum changes may improve upon client / provider relationship in hospitals, it is equally important that health facilities identify and include some harmful community practices in their maternity care education package for pregnant women to learn from and desist from such acts as evidence herein point to their possible contribution to adverse maternal outcome. More-so such education can be promoted using media houses and alternative approaches in localities as a means of reaching out to the general public and to stakeholders to influence change.

This study also found that some clients resisted treatment because of the cost involved as did participants in a Turkish study (Demir, 2019). This might be strange as the two places have different demographics such that it may be unlikely to derive similar results. Nonetheless, it sends clear signal that certain health behaviours may have universally connotations hence global interventions should leverage such commonalities to promote good maternal health. The clients and associates in this study suspected the medical bills that accompanied most medical procedures in the midst of a free maternity care policy and this dwindled their trust leading to resistance to treatment. Patterson et al. (2019), have disclosed that trust in midwives' competency, intentions and integrity, among others, led to a perception of positive child bearing experience among women in Scotland. Conversely, issues of mistrust and heightened suspicion of midwives' activities clouded the delivery of health care in Nigeria and that resulted in negative child bearing experience (Okonofua et al., 2017). The implication of the finding is that such mistrust creates deep seated resentment of the care process and influences treatment efforts (Demir, 2019). Also

patients' non-compliance to treatment due to suspicion of the provider and of their choices of treatment may worsen their conditions in the short term or subject them to complications later in life.

The study further discovered that the word-of -mouth propaganda and polarized state of the NHIS in Ghana equally contributed to lack of trust in hospital care and inflammed dissatisfaction. The promise of free health care by the scheme increased client expectations that were mostly not realised during the period of contact with care. Per this finding, the antecedents of patient dissatisfaction may not necessarily be tied to health provider behaviour as that may only represent the tip of the iced-berg. Beneath it are compelling root causes that require equal attention if the quest for preventing maternal mortality in Ghana and other developing countries is to be realised. To win the battle, we may have to re-examine Fathalla's submission decades ago but which remains relevant today that: the subject matter should not be centered on why do women not accept and utilise the service that we provide but rather that why do we not provide the service that women will accept and utilise (see Hulton et al., 2000). This assertion calls for complete re-organization of the current health care systems devoid of political maneuvering and propaganda if they have to impact on lives. Importantly, the need to fuse a client centered model with the current clinical model may help induce some benefits towards advancing maternal health care delivery in Ghana.

Objective 4: To Determine how Provider-related Factors Contribute to Outcome of Care

The purpose of this objective is to identify and describe how health provider factors impacted on outcome of care. Data were collected

qualitatively using observation, in-depth interview and focus group discussion. Data analysis was performed using Grounded theory (Open coding). Themes pertaining to this are grouped under six different categories and presented in Table 7.

Technical

This category entails themes that address the clinical ability of staff to handle maternal complications.

Clinical knowledge

Inability to pick up risk factors

The results show that some providers doubted the ability of their colleagues to effectively handle emergency obstetric cases. They indicated that some lacked the clinical knowledge to judge the clinical implications of certain signs and symptoms that accompanied certain cases and their risks. Certain threatening signs and symptoms were painfully ignored as a result of lack of clinical knowledge and experience. They lacked the clinical knowledge regarding case management and were unable to identify that certain risk factors that were present could possibly lead to death. They thus performed their tasks albeit these signals and clients health suffered as a result:

> *"…Sometimes they lack the necessary knowledge to go about certain issues. They don't just know when to take action…" (# Pr.9).*

Skill and competency

Inadequate skills

Midwifery is a highly skilled profession and practitioners are required to possess considerable amount of skills and experience to be able to perform

required functions. However, senior midwives hinted that some colleagues in the studied health facilities lacked some skills to work with. Some interventions such as assisted vaginal delivery, administration of parenteral anticonvulsants and services such as the use of the partograph were not performed not because they were not needed but because the skill to perform such was not available:

"…We have more weak than strong midwives… "(# Pr.6).

Another provider said:

"…Some don't know the work so when they are on shift and there is emergency and they don't call for help, is likely to go bad…" (# Pr. 17).

Low confidence in performing intervention

It came to light that some health providers did not only lack clinical knowledge and competence in performing complex medical tasks but they actually lacked the confidence to successfully execute certain tasks. They basically could not initiate nor perform the intervention required of them. Such people ended up either not performing the action at all, called on others to help or they did it wrongly and endangered client's life as a result:

"…A lot of people are so demotivated about what to do when emergency comes…" (# Pr. 15).

The technical inadequacy of some providers was traced to the Midwifery training system currently operating in the country. Some providers alleged that the educational system right from pre-school to tertiary level was entirely deficient in its ability to produce competent health professionals for the country's health needs. The curriculum centered mainly on theory than practice. Consequently, teachers who graduate from such a system are themselves not

capable of imparting desired knowledge and skills to those under training. In effect, products are churned out without adequate technical competence and are thus unable to work effectively:

> *"…The problem is about the quality of the schools and it is across the country. They are getting inexperienced people in the classroom who don't have clinical knowledge…" (# Pr. 6)*

Open bias towards diploma nurses

According to some providers, the educational system has become that porous because schools in Ghana now price money above academic and professional excellence. In achieving this, they admit all category of people who ordinarily are not academically qualified to pursue certain courses. In this study, graduates with Diploma qualification in Nursing or Midwifery were deemed to be more qualified and competent than Post-seconadary graduates. Post-secondary refers to the category of staff who had prior two year certificate training and passed out as either enrolled or community nurses. They worked for a few years and then went to specialise in midwifery while Diploma nurses gained direct entry to pursue midwifery after Senior High School. Some senior staff disclosed that technically, the latter was preferred because they were seen as more knowledgeable and efficient, after a short period in practice, than the former who were described as perpetually weak:

> *"…They were enrolled nurses but went to do the midwifery course, so weak, still weak…" (# Pr. 5).*

Interestingly, clients could not decipher the differences in skill abilities of respective providers and applauded the clinical excellence of providers as a whole though not without reference to a 'God role' in treatment:

"…For competency I have no doubt the midwives are competent. Because sometimes you will think your patient is even dying but they can treat her and with God, she will be well again…" (# FGD 1).

A client also said:

"…The providers know the work. They are good…" (# C 5).

Interpersonal

The type of relationship that existed among health workers influenced how EmOC was provided and its outcome.

Leadership style

Laissez-faire

Health providers blamed the current state of issues especially in the referral facility to leadership style. They revealed that the non-availability of equipment and unprofessional behaviours of some of them were largely due to the inadequacies in management style as there was no form of deterrent for such misdeeds. Some disclosed that in other places where they had worked before, such occurrences were scarce as strong rules of accountability were in place to ensure work progressed without hitches. According to them, handing over of patients from one shift to another included drugs and equipment failure of which offenders paid for these. To escape such a punishment, providers made efforts to ensure that equipment were taken proper care of. This was not the case in the referral hospital and this was blamed on leadership style and the personae of respective ward heads:

"…Sometimes too, is the leadership style. I feel like the leadership here too is somehow. They are just not up and doing…" (# Pr.9).

Another provider affirmed:

> *"…But here your colleagues in charge don't even have leadership skills…" (# Pr. 6).*

Conflict

Personal scuffles

As a human institution, interpersonal conflicts within and across categories of health staff were common and that interfered with the quality of care that was provided. Some providers had nagging and private issues with each other and this affected work negatively. Sone alleged that where a midwife had a personal problem with the anesthetist, she was not likely to communicate with the anesthetist in case a client or patient needed attention. Lack of communication or failure to relay vital information in this respect had resultant consequences on the client who might be the unfortunate recipient of the effect of struggle among workers. Some health providers were not pleased with this situation:

> *"…The doctor informed the midwife to tell the anesthetist to prepare but because she was having problems with the anesthetist, she felt reluctant to do so. Who is going to suffer, it's the client…" (# Pr. 9).*

Superiority complex

Unwilling to call for help during emergency

The protocol for managing obstetric complications requires that, when complications develop or arise, midwife calls for help. This is to ensure that people come around to provide speedy service since one person alone may delay in providing appropriate care. However, some midwives rarely utilised this

requirement. They maintained that such gestures did not present one in good light before one's peers as such there was the need to practice by oneself to gain experience overtime. Based on this, they tried things on their own or tried to remember how similar cases were handled previously and did same. The effect of such trials on clients' health could only be imagined:

> *"...I just remembered what my colleague did and I also did for that same woman. If I didn't have that experience I had to call but how can I be calling all the time? I need to get experience..." (# Pr. 4).*

Old midwives demean skills of new midwives

The call for help approach, referred to earlier, could be from anyone granted that person can help fast track the care process. Some midwives, however, said older and experienced staff satisfied their ego by demeaning the skills of newly trained staff. They did not find younger midwives as persons possessing the needed skills to be called upon to help in case of emergency. With such dispositions, some older midwives went ahead to singularly handle emergency cases, the end result of which was sometimes not good:

> *"...A lady with breech presentation came. Midwife did not call for help but proceeded to deliver her. The baby came out hands and feet are out but since she can't deliver the head, the head is stucked up there dangling. They asked the midwife, "why didn't you call for help?" Only for her to say "who should I call for help?".(# Pr. 9).*

Medical officers' unwilling to cooperate with midwives

Another area of conflict resided between midwives and newly trained doctors when it came to complication management. Midwives explained that because they had worked with several senior doctors and specialists, they had gained experience on how to proceed with certain case management and sometimes suggested this to house officers or junior doctors. Sometimes, the latter, did not give in to such suggestions and went their own way mostly with a wrong approach or consulted their superior for advice but just to be told the same process suggested by the midwives. Doubting their capability, midwives most often handled cases without the involvement of junior doctors who felt they were being sidelined hence they put up certain self-aggrandizing behaviours to win trust:

> *"…Sometimes, there are times we suggest to them oh why don't we do this, why don't we do this. Sometimes if you think it is obvious to suggest you encourage him but he will call Med-sup but you know when he calls Med-sup, this is what Med-Sup will say…" (# Pr. 2).*

The wrangling was more associated with medical doctors than house officers or junior doctors who were more willing to learn from those in practice. A very senior medical officer said the following in relation to behaviours of some medical doctors that necessitated rancor between them and midwives:

> *"…When they have become medical officers that is when some of them become bossy…" (# Pr. 6).*

Breakdown of peer support system

Experienced midwives unwilling to support new ones

It was reported, somewhere in this thesis, that due to shortage of midwives in facilities, newly posted midwives were placed on shift all alone to provide care instead of being paired with experienced ones. Even with this, they lamented that when they experienced intense challenges with care provision and called on older colleagues for guidance, some responses were often not pleasant. This led them to try to manage complications on their own exposing the client to some risks:

> *"…You are the one on duty, you are also a midwife like me, manage it…" (# Pr.13).*

Rivalry among midwives

It was observed that some young midwives attracted pleasant comments from their superiors at work due to their diligence and dedication. Some members of the other category who were possibly not pleased with this behaviour registered their protest by withdrawing support for new and young midwives. In addition, older midwives with Post-Secondary qualification felt they served much longer but with least promotion unlike the current cohort of midwives who were seen as young but with enviable ranks and salaries. This feeling sometimes created rancor among them and this affected their output:

> *"…We rival each other a lot. Old midwives think that the young ones complete with a diploma and are promoted easily. So they are unwilling to share knowledge or mentor the new ones coming…" (# Pr.15).*

Intrapersonal

The category conveys personal attributes of health workers and their link to outcome of care.

Negative attitude towards work

No commitment

Providers alleged that some colleagues had inherent issues with their individual person and this affected work. Such people lacked skills and performed poorly at work because they were not ready to learn from colleagues. As a practical field, it was expected that less endowed midwives would learn from colleagues who were more inclined and were ready to assist. That apart, there were sporadic in-service training sessions in the facilities where skills were occasionally taught. Some staff with least commitment to work did not utilise any of these opportunities, infrequent though that they might be. Such people ended up not being able to perform certain procedures and posed a threat to clients' safety:

> *"…There are people that have never gone for clinical training yet they are in this hospital…" (# Pr. 15).*

> *"…How can you say, you cannot perform a particular procedure, it is because you don't want to do it and you don't care to learn …actually you refuse to learn…" (# Pr. 3).*

Disinterest, Laziness, apathy

Certain lukewarm attitude of providers towards work was also attributed to lack of interest in the profession. Some midwives mentioned that though some colleagues reported to work as required, they actually did not wish to work and tried to dodge when certain challenging complications occurred. As a matter

of fact, nobody wanted to be faced with complication as any adverse outcome was traced to the person's incapability. While those with passion will endeavour to work on such cases, those with least interest called on others to perform procedure or did little about it:

> *"..Well, some of us providers it is like we are not interested in the job. I say that because sometimes, when complications come, you see that some just want to escape or they rather call others meanwhile they are also midwives…" (# Pr.17).*

Another provider shared the following in relation to some colleagues' lackadaisical attitude towards work:

> *"...Sometimes, you can't help but to wonder why there are so many professions and yet A or B is here, why are you here? Because they come around and they do nothing…" (# Pr.15).*

Missed call

Some other providers ascribed the negative attitude of some colleagues to "missed call". They indicated that some of them found themselves in the profession not out of passion but by the persuasion of family members and benefits associated with the profession compared to other professions in the contry. Such people were often not effective at work. They were always found at nurses table while student nurses worked on cases without supervision. Most times they were on their phones and paid little attention to events in the wards. They either called upon others to attend to complications or ended their shift and handed over to the next group depending on the severity of the case. In one situation, the researcher observed a medical officer shouting at midwives to trance out a case to the theatre immediately as he did not want any fatality to

occur under his watch. Meanwhile, the lady was in discomfort and needed to be stabilised before being sent to the theatre for further management:

A provider shared the following in relation to some colleagues' attitude towards work:

> *"…My father will say some of you midwives are not in the right vocation. It is like missed call…" (# Pr. 16).*

Negligence

Providers who were not passionate about their practice exhibited this in many ways including negligence at work. Some providers alleged that some colleagues performed certain clinical procedures without due recourse to standard practice and endangered clients lives as a result. For example, one midwife explained that a woman with PPH was brought to the hospital. Upon arrival, the midwife failed to take the lady's vitals but went ahead to transfuse with ringers lactate before proceeding to examine for the cause of bleeding. Apparently the lady had high BP and normal saline would have been preferred because of its sodium and potassium contents. The negligence of the provider to have checked for this earlier exposed the clients to risks but for the timely intervention of the medical doctor:

> *"…The doctor asked whether she checked the woman's vitals before setting up ringers lactate. She did the wrong thing. She set up ringers lactate without checking the woman's BP which was very high…" (# Pr. 4).*

Obstetric nurses non- performance

Obstetric nurses, also known as male midwives, were among those alleged to have found themselves in the wrong vocation due to their conduct at

work. Some participants accused them of pursuing midwifery based on economic grounds. They were referred to as being weak and lacked interest and cases often went bad in their hands. Observations also revealed that some of them were spiritual leaders (Mallams) who abhorred contact with blood. Such cases had to wait for a midwife to salvage and depending on the duration, clients later required several pints of blood to survive. A provider disclosed that some of them were released from the facilities because of non-performance:

> *"…As I speak with you, two of them even in the same month they released both of them and they left the hospital…"(# Pr.15).*

A provider also shared assumed motive of males in midwifery:

> *"You see some of these male midwives, they are not interested. The zeal is not in them. You can't compare their work with those of the females…" (# Pr.5).*

Biological make up

Temperament

Health worker attitude has been cited severally as a reason for clients' non-use of health services. Some have attributed such behaviours to workload and other pressures of life. In this study, some participants attributed health worker attitude to their biological make-up as some providers were deemed temperamental by nature and they brought this to bear on the work environment by being harsh and impolite to clients / patients. Some clients attested their provider's behaviour was a reflection of their biological background and not work pressures per se:

"…It is because our behaviors are not the same. Somebody is patient and somebody too has hot temper from the house so wherever the person goes it will be the same…".(# C 15).

In like manner, some providers were perceived as good:

"…Some of them are good but some of them they are bad…" (# C 1)

Motivation

This category entails issues that relate to health worker readiness to deliver quality care. It has to do with both intrinsic and extrinsic influences.

Extrinsic

Recognition of sacrifices

Providers were of the view that they needed to be given extra pay or remuneration for accepting postings to serve in the northern region. They made the claim that the municipality was disadvantaged in many ways: poor working conditions, harsh weather situations, mobility difficulties due to poor road network, lack of social life, absence of good schools for wards etc, yet some had served in the municipality for close to ten years. With nothing to gain for this sacrifice, some went on transfer immediately after being posted there while others negotiated their way out when posted there. The effect becomes very few demotivated people doing the work of many and struggling under the weight of the burden:

"…When you see the sacrifices we health personnel make here, you can never compare it to those in Accra but we receive the same salary…" (# Pr.4).

Another provider equally noted:

"…The stress is throwing on us because we don't have social life here and all that…" (# Pr. 6).

Inadequacy of emergency tools/ drugs

Another issue that bothered on provider motivation was the lack or inadequacy of needed equipment and drugs to work with especially in the referral hospital. Some providers were not satisfied with work because they had to always refer cases or provide sub-optimal care because of the lack of certain needed items. They seemed to pre-empt that the non-availability of needed items was a great source of demotivation since it derailed successful management of cases to achieve a possible positive outcome:

"…Sometimes you want to work but no logistics. Then sometimes you have the skill, you want to do the thing but no medicine for you to give so you just feel demoralised…"(# Pr.8).

"…There is no motivation because the things to work with are not even there, how can you work…?"(# Pr.9).

Intrinsic

Passion

Although some providers had issues with the external work environment and that tended to affect the desire to give off their best, others had great passion for their work irrespective and derived maximum intrinsic job satisfaction working in the otherwise, resource constrained environment. They seemed to surmount the challenges that may be and discharged their duties selflessly and wholeheartedly and achieved good results:

"…I think that passion for my job is the right expression because I love what I do, no matter how tired I am if I am on duty, you see that see that eerh I don't know where the energy comes from so I really have passion for my work…". (# Pr.15).

Client mistreatment

Evidence showed some clients received some level of mistreatment from health providers. This category details some forms of mistreatment derived from data.

Verbal abuse

Insults, sarcastic words

Although allegations of client mistreatment by midwives were very rife in the municipality during the field work, observations from the facilities captured rare scenes of mistreatment. Interactions with clients / relatives equally showed similar results. Such scarce unruly behaviours were mostly exhibited towards women who delivered at home in villages and had to be rushed to the facility on account of an obstetric complication as well as non-cooperating clients. Providers exhibited open anger at clients who delivered at home just to be rushed in with complications and in a state of exasperation uttered offensive words that later became the basis for clients' discontent with care:

"…*When we wanted to say that in our village there is no road, that midwife was insulting us……that because we are villagers we never like the truth but it isn't that…" (# C 14).*

To be sure the researcher presence was not the reason for the state of events in the facilities, the researcher exited site on pretext that she was going to meet with the supervisor. The researcher then stayed away for two weeks and upon

return followed up on women who received care in her absence. Their experiences were not different from the researcher's observation:

> *"…They were good. When I was bleeding they did very well if not I would have died. We used to hear that the nurses at the hospital are very bad but when I came, I didn't see that. They treated me nicely…" (# C 3).*

Others also said:

> *"…Sometimes it is from us. We will be complaining that the nurses are not good but some of the things are from we the client…s"(# FGD 4).*

Physical abuse

Thigh slaps, pinches, pushes

The indication is that these signs of mistreatment existed in their pronounced form in the past and were associated with normal deliveries. They had created an enduring impression on clients' minds such that when questions on emergency treatment were asked, clients sometimes referred to the past.Such negative experiences added up to some women not utilising hospital care:

> *"…There was a time a friend of mine said the wife complained that when she was going to deliver, they were slapping her thighs, "come on, push" and then they were slapping…"(# C 11).*
>
> *"…As for the nurses, everyone knows they have a bad character…" (# FGD 2).*

Bullying

Denial of care for selfish reason

Because of issues with equipment and drugs, treatment procedures were sometimes so cruel that some clients resisted. Some providers hinted that instead of colleagues to persuade such clients or use alternative ways of providing care, they withdrew from such people who may have to contend with the consequences of poor or haphazard treatment. It was revealed that provider's resentment was sometimes due to client's refusal to purchase drugs that they may be selling secretly. Thus they abused office by refusing or denying needed care when even clients later asked for it:

> *"...Most at times is about money issues. This drug that they have written for you, I have, I want to sell it to you, this kind of thing. That is what makes them to behave like that ..."(# Pr. 13)*

Occupational hazards

Health workers in general are exposed to certain risks and diseases as a result of the nature of their work. This study discovered some work related conditions and events that may interfere with the delivery of quality care.

Disease related

Stress, cancer, waist and back pains

Midwives allude that per their practice, they come into contact with body secretions and fluids and these subject them to a greater risk of contracting diseases. They mostly also assume a standing or bend posture when providing care and this subjected them to related diseases. The situation is more severe in instances where the required number of health personnel is insufficient as is the case in this municipality. At the

time of fieldwork, there were a total of 21 midwives turning turns at the Antenatal clinic, Maternity and Labour wards at the referral hospital. Midwives here complained of stress, waist and back pains as a result of excessive workload. They alluded that work demands were so huge that some emergencies were not attended to timely and that compromised the quality of care provided.

"…If you are stressed out how can you give out your best…?" (# Pr. 7).

Another provider said:

"…Here, the workload is too much for us…" (# C10).

Psychological

Insecurity

Observations from health facilities point to an unhealthy relationship between health workers specifically midwives and natives. There were often scenes of verbal exchanges between the two on medical and social grounds. For instance, relatives may refuse to donate blood, pay for charges etc. They visited the sick at any time and would not take it kindly when midwives intercepted them on grounds that doctors needed privacy to review cases. Sometimes access to wards during emergency was difficult because the entrance was occupied by hawkers, visitors, animals etc. Providers lamented that when they dared drive them away, they were later on caught up somewhere and given severe beating. Midwives thus entertained fear and insecurity as they worked in EmOC facilities in the localities. They stayed indoors after work for fear of being lynched:

"…There was this young man who was driving these food vendors away from selling in the hospital facility. Because of this they went and cutlassed him. They went to his house attacked him and broke the head and broke the hand…" (# Pr.5).

Another provider opined:

"..For here the people are violet. The men don't see why we women should stop them from seeing their wives on admission. They come at odd hours and when you prevent them, they insult you and even threaten to beat you up. They ever beat one of our colleagues like that...." (# Pr.15).

This section of the findings chapter has successfully identified and demonstrated the extent to which provider related factors contributed to the outcome of care in health facilities. These are largely modifiable factors that can be achieved through appropriate curriculum changes and workplace adaptations.

Table 7: Objective 4 Code Work on Provider-related Factors and Outcome of Care

Category	Theme	Sub-theme
Technical	Clinical knowledge	- Inability to pick up risk factors -Inadequate skills
	Skill and competency	- Lack skills in performing clinical procedures - Low confidence -Open bias towards diploma nurses
Interpersonal	Leadership style	-Laissez-faire
	Conflict	-Non-communication among co-workers due to personal scuffles
	Superiority complex	

Table 7- Cont.

		- Unwilling to call for help during emergency --Old midwives demean skills of new midwives -Medical officers / junior doctors / house officers unwilling to cooperate with midwives
	Breakdown of peer support system	-Experienced midwives unwilling to support new ones -Rivalry among midwives
Intrapersonal	Negative attitude towards work	-No commitment -Disinterest, laziness, apathy -Missed call -Negligence -Obstetric nurses non-performance
	Biological make-up	-Temperament
Motivation	Extrinsic	-Recognition of sacrifices -Inadequacy of emergency tools/ drugs
	Intrinsic	-Passion
Client mistreatment	Verbal abuse	-Insults, sarcastic words
	Physical abuse	-Thigh slaps, pinches, pushes
	Bullying	-Denial of care for selfish reasons
Occupational hazards	Disease related	-Stress, cancer, waist and back pains
	Psychological	-Insecurity

Source: Field data 2019

It is evident from findings that some health providers lacked the clinical knowledge, skills and competencies required to manage complications. When health providers lack skills, they are unable to provide good quality care to prevent maternal death. This finding is a reoccurring one in prior studies that have investigated into quality of health care in Low and Middle Income Countries (Amatullah, 2018; Miteniece et al., 2019). In the case of Ghana, the situation is attributed to and grounded on inadequacies in education and training systems as well as socio-political influences (Ayentimi, Burgess, & Dayaram, 2018). Lack of skills on the part of the health provider can itself cause maternal death or subject women to complications due to insufficient care. According to Ederer, Konig-bachmann, Romano, Knoblock and Zenzaier (2019), inexperienced service providers are regarded as threat to patients' safety as they are more likely to commit avoidable errors which endanger the lives of patients and undermine quality of care. To curb this unfortunate trend, continuous education and in-service training are highly desired for those in service while curriculum modification may cater for the needs of those under training. The curriculum for health training schools may have to be rooted in emerging pedagogy that is built on knowledge acquisition and application (hands-on training or experiential learning) (Gracía-pérez & Gil-lacruz, 2018). This is likely to imbibe in learners some clinical skills that may improve upon the current theoretically driven approach. In addition, continuous training and education after school have demonstrated to yield fruitful results elsewhere (Gavine et al., 2019). This could form part of routine works of EmOC facilities to improve upon provider clinical skills and to enable them keep speed with new protocols.

Provider motivation is another factor that influenced the quality of care provided in health facilities. Studies in developing countries report poor working conditions and low remuneration among staff as being responsible for poor quality care (Faye, Fournier, & Dumont, 2017; Lassi et al., 2016). However, midwives who are intrinsically motivated albeit these seeming constraints continue to give off their best at work. This study identified a few of such persons. Though intrinsic motivation has a more positive impact on quality of care and general productivity (Stokes et al., 2016), the rare trait of this attribute in health providers in this study thwarted the provision of good quality care. Similarly, some young midwives in this study disclosed they were either coerced by relatives to study midwifery or were intrigued by the job readiness nature of the profession. As such, they did not have personal interest in it. They openly referred to their stay in midwifery as a "missed call". Obstetric nurses (male midwives) was another category of staff that did not appear very dedicated to work as most of them virtually loitered about or dodged when work had to be done. Such categories of health professional may not only be lazy and irresponsible at work, they are more likely to complain of burnout, dissatisfaction, or change job thereby constantly creating a service gap for health professionals (Pinar, 2019). It is important that, as part of the admission process, heads of health training institutions place priority on personal background of prospective candidates. This can be ascertained by first, exploring students' innate passion and then their academic achievement. It is one of the ways to raise the right calibre of staff in health facilities as the current drive for infrastructural improvement and increased enrolment in schools do not

in fact, commensurate with quality and thus may not be solutions to ending maternal mortality.

Apart from the technical inadequacy of human resource, the organizational climate or social environment in health facilities also affects the content of care provided. Zaghini, Fiorini, Piredda, Fida & Sili (2020) disclosed that negative interpersonal behaviors among health workers affect quality of care and general productivity. Also, Aberese-Ako, Agyepong, Gerrits and Van Dijk (2015), identified role conflict among health staff in some Ghanaian hospitals such that while staff argued this out, the condition of patient billed for surgery in the said study worsened. Likewise, this study identified interpersonal level conflicts such as petty scuffles, lack of cooperation and policy induced conflicts. While causes of personal squabbles were not within the perview of this study, ineffective communication among providers was due to feuds which directly contributed in delaying treatment. To safeguard the health of clients, heads of health facilities may consider conflict resolution mechanisms where nagging issues among staff could be resolved to promote collegiality and teamwork.

It also came to light in this study, that experienced midwives with certificate background would not readily assist newly trained midwives with diploma certificates to acquire skills. The resistance was due to the low recognition of certain grades in the recruitment and promotion processes in the health sector and other public organizations. In mid-2000, the government of Ghana changed its educational policy on producing middle level workforce from certificate to diploma to keep up with current labour market trends (Newman, 2013). The new reform disadvantaged existing nursing staff with

certificate qualifications who are required to upgrade to a diploma qualification through further training. Ordinarily, people become bitter with arrangements such as these and may engage in counter-productive acts including withholding support where necessary (Zaghini et al., 2020). The denial of support exposed less skilled midwives to singularly handle emergency cases, some of which turned bad at the end. Reforms in the health sector of the country should cater for the professional needs of all categories of nursing and midwifery staff. This may moderate needless rivalry that compromises with patients care.

Not only was there rivalry among workers but the element of superiority complex also existed. As reported in the findings, long serving midwives demeaned the capabilities of newly trained workforce. They then failed to utilise the "call for help" option from juniors as a result. Although this may not be a pronounced finding in the literature, it, nonetheless, exists in previous research (Böhmig, 2010). Indeed, as a field that is mostly driven by teamwork and collaboration it is expected that all parties contribute for the mutual benefit of preventing maternal deaths. The self-aggrandisement posture assumed by experienced midwives in this study and the perception that juniors do not know anything lead to a culture of silence (Böhmig) and a subsequent blame game that can only mar service delivery. Managements of studied facilities may consider creating a healthy work environment by reconciling the differences through counselling and other socialization activities to enhance quality service delivery facilities. Also, frequent in-service training may also boost the skills and competencies of health personnel.

Objective 5: To Determine how Client-related Factors Contribute to Outcome of Care

The purpose of this objective is to identify and describe how client / patient factors contributed to outcome of care. The data collection methods included observation, in-depth interview and focus group discussion. A Grounded theory approach (Open coding) was used to process data to derive themes. The code work is on Table 8.

Client demography

This category entails how clients' socio-economic background influenced the quality and outcome of care.

Economic background

Poor feeding

Certain client related factors that compromised EmOC quality were equally identified. Observations at studied facilities showed that many of the women who received emergency obstetric treatment appeared very poor. They wore very old clothings and worn out foot wears and carried a plastic bag that contained some few items. Interviews with participants confirmed that the women were not engaged in any worthwhile economic activity but depended solely on their partners for their upkeep. Sadly, the men were not able to sufficiently provide for their health needs since they had many wives and children to cater for. As a usual practice, husbands donated a limited number of bags of corn at the end of the farming season to respective wives who are supposed to complement these efforts by providing for the soup component but they lacked the means to do so. Mostly, it was a stable meal of tuo zaafi (TZ) [solid meal made fom millet] and some watery soup without vegetables, meat

or fish. The carbohydrate content was very high without corresponding complements leading to micronutrient deficiencies and subsequent low haemoglobin levels amongst most pregnant women and parturient women. Women of this nature stood a higher risk of PPH and posed a challenge to the quality of care provided:

> *"…They are pregnant but the carbohydrate is more than the protein we think of. The men or husbands here will share bags of maize to their wives, maybe two bags each depending on the family size and they are supposed to use this to make family meals for the whole year…." (# Pr.20).*

Another provider said:

> *"…With anaemia mostly when they come is iron deficiency. It is not like we don't educate them on adequate intake of vegetables and protein some especially the protein they can't afford…" (# Pr.2).*

Even when the woman succeeded in acquiring fish for the family meal, the meat was served in the man's bowl. Informal conversations with patients discovered that due to the polygamous marriage structure, rivals tried to outdo each other in order to win the heart of the husband. More-so as a patriarchal society, men are regarded superior and wives referred to husbands as "lords". Husbands were thus entitled to best reserves including the only meat in the soup. This led to poor feeding among pregnant women leading to low haemoglobin levels:

> "…*Even when the woman has sold her water and made few coins that sometimes is not enough to buy the ingredients needed for the family soup. Because they are many wives competing for the*

man's attention, after cooking they rather go out to the roadside and buy a stick of roasted meat and serve this in the man's bowl in order to gain the attention of the man…"(Pr. 13).

A focus group discussion also revealed:

"…Here, we are supposed to serve our husbands well…" (# FGD 4).

Relative poverty

It came to light, however, that the spate of poverty was more a subject of relativity since some pregnant women had to battle with choices in respect of values. Health providers revealed that natives were more passionate about having fashionable outdooring than a healthy delivery and therefore did not attach much importance to maintaining a healthy pregnancy nor a safe delivery. Indeed, some even skipped meals to save money for outdooring leading to low haemoglobin levels and high risk of maternal and neonatal complications and death:

"…They rather spend much on outdooring. That is what is important to them. I even hear that some of them go hungry when they are pregnant so that they can save money to buy clothes for outdooring and all those things…" (# Pr.18).

A client confirmed:

"…The men will be complaining that there is no money to pay huge bills in the hospital meanwhile outdooring is also there…" (# C 2).

Social setting

Sleeping outdoors

Health providers further attributed the high cases of anaemia that compromised maternal and neonatal health outcomes to the social practice of sleeping outdoors. The Northern part of the country has extremely harsh weather conditions because of its nearness to the Sahara desert and its low levels of vegetation. During the dry season, there is intense heat and this compels inhabitants to move out of their rooms to sit under trees during the day and to sleep in the courtyard or on a specially designed roof top at night. In so doing, they got exposed to mosquito bites and subsequent release of malaria parasites that competed with the foetus for nutrients from the mother. This equally affected mothers' blood level leading to high demand for blood in the referral facility. Indeed, on a usual day, one was likely to count several pints of blood hanging loosely on almost every patient on admission in the maternity or labour wards:

> *"…They sleep outside, they are bitten by mosquitoes. They are a lot of malaria parasites at the placenta there preventing the transfer of nutrients, oxygen to the baby because they are also feeding on the sweet environment of placenta there. All of them they sleep outside…" (# Pr.5).*
>
> *"…We sleep outdoors because the rooms are hot…" (# FGD 6).*

Educational background

Illiteracy

This research further identified high illiteracy levels among native women and this interfered with the quality of care provided. People with no or

least education are less likely to comprehend or succumb to practices that yield best health outcomes, more-so when such practices requires a bit of effort on their part. Health providers lamented that though expectant mothers were counselled on good health actions to forestall unpleasant results, they defied most information given them and did the contrary:

> *"...As for the Northern region I think the illiteracy rate is very high. There are some who will come and you see that she is at risk you educate her but still she will go home and deliver there..." (# Pr.2)*

Non- adherence to clinical information / treatment

Patients' poor educational background did not only interfere in their assimilation and adherence to good practice but distorted their perception of clinical care. They appeared very defiant and uncompromising with health providers who were very keen at ensuring good outcomes. Providers claimed that due to the low levels of blood accompanying almost every pregnancy, expectant mothers were put on iron supplements to boost blood production. Sadly, these drugs were mostly not taken as clients claimed it had effects on them and the unborn baby:

> *"...Some of the women don't take the Ante Natal Care drugs even one woman had all the drugs in her bags when she came to deliver..." (# C 1).*
>
> *"...Me, I don't like drugs so when they give me I don't take..." (# FGD 4).*

Consequently, there were common events of pale and fragile looking mothers or newly delivered mothers being carted to the referral centre for medical

intervention. Such women were immediately transfused putting lots of strain on the already insufficient blood bank. To curtail this phenomenon, management of health facilities had to adopt another strategy to win the confidence of clients / patients. A blood supplement in the form of ampoules was prescribed instead and this, patients complied:

> *"...Anaemia in pregnancy is endemic in the Northern Region. So you give them medications they are not taking so at some point I brought the Tothema (blood tonic) for them to take. They see it as tea; they don't see it as medicine so they take it..." (# Pr.6).*

Although providers linked clients / patients' non adherence to treatment to their low levels of education, this behaviour and others could also be as a result of their cultural environment as evident in the next theme.

Socio-cultural practices

Some cultural practices among the people also influenced both quality and outcome of care. These are as presented:

Use of local substance to fortify baby

Perception of vulnerability

Observation notes showed a normal routine where caretakers accompanying the labouring woman to the hospital to carried along with them a substance purported to be able expel evil eyes associated with widows. Such women were seen as possessing ill luck that could cause the death of a newly born baby. The substance was thus pushed down the throat of the baby as a form of fortification. Almost all babies received this treatment immediately after being born in the hospital. It was introduced by either a grandmother, mother-in-law or an elderly woman under the pretext of visiting the newly delivered

woman. Some babies who had breathing difficulties after delivery and had to be resuscitated relapsed when such a substance was introduced into them and died:

> *"…The belief is that when a baby is born and a widow, whose husband has died and that person did not marry again but goes about sleeping with men, sees the baby in the cradle the baby will die…" (# C 10).*

Show of feminism

Enduring pain and danger signs

It was highlighted in this thesis that most women who sustained life threatening complications after delivery actually delivered at home. Interviews with participants revealed that they did this to conform to the norm in the society which required that chaste and faithful wives delivered at home as a proof of chastity and a show of feminism in their context. Hospital delivery was regarded an engagement for weak and unfaithful women. Those who accessed it were ridiculed especially by their rivals. This compelled labouring and newly delivered women to unduly endure dangerous and disquieting events at the expense of their lives. The assertion is contained in the excerpt below:

> *"…As for us, we prefer to give birth at home because that is what our mothers did…" (FGD 5).*

Low autonomy of women

High regard of husband

Another troubling cultural factor that interfered greatly in the quality of care provided was that of women low autonomy in the study area. Health providers lamented the lack of empowerment of the rural woman as a significant contributor to the cause of maternal death in rural areas. The religious practices

of the people, which are aspects of their culture, admonished wives to submit to the control of their husbands as this attracted blessing from Allah, typical of religious communities. Another angle to it could be traced to the economic incapacitation of most women in such communities. Most of them did not have any income on their own and depended solely on their husbands. In this regard, when the need for money arose, it required lots of effort on the part of women to be able to relay this to their husbands as it was likely to receive a rebuke. Health providers sometimes had to serve as the mouthpiece of most women to express their thoughts:

> *"…When the woman comes without her items for delivery, the midwife may use what she has in stock to attend to her hoping that when her husband comes, the lady will pick the money for her. When you have finished and the husband is in I can assure you that the woman will not say anything to the husband. You will have to find a way to tell him…" (# Pr.3).*
>
> *"Here, we the women don't speak to our husbands anyhow" (# C 2).*

Women barred from taking independent decisions

During the period of fieldwork, the researcher encountered several instances of patient's resistance to treatment on grounds their husbands needed to approve of the particular intervention before it could be carried out. Specifically, during emergency caesarean section doctors required patient's consent to proceed with surgery but this was not to be because a woman lacked the authority to grant such requests. Indeed several other emergencies that needed rapt action were delayed due to the husband factor. However, it came to

light that this seemingly upheld cultural norm had economic undertone to it. Some midwives said women in the area were not empowered economically hence they were mostly poor. Because they lacked financial resources, they could not take independent decisions and needed to consult their husbands who were the sole breadwinners. This was a major issue in the area and health providers reported its concequences on maternal health in the area:

> *"…Women are not empowered here. They have to wait for their husband before a decision for Caesarean Section is taken. Also because they don't have money to come to hospital, they have to wait for their husbands…" (# Pr. 6).*

Another said:

> *"…You want to send a client to the ward for further management and she is telling you that she has to call the husband to tell the husband first. Everything they have to consult the husband…" (# Pr. 9).*

A client said:

> *"…They said they wanted to operate me but my husband too wasn't there…" (# C 7).*

Husband's decision rules

Husbands appear as major stakeholders in the fight against maternal mortality especially in the study area. They seemed to be owners of their wives and their actions and inactions had implications on the health of their wives. Some midwives disclosed that the high regard and reverence attached to the male / husband factor demanded proactive men who would provide for and champion the health needs of their wives but this was not the case. Husbands

sometimes resisted certain interventions because of the cost involved. This compelled service providers to adopt alternative methods that may not be in the best interest of quality:

> *"…The men also complain because they pay more money for CS because if you are to go to the theatre, they have to go to the pharmacy and pick injections, drips and all these we pay more than 200gh plus so because of the money problem the man can complain…" (# C 2).*
>
> *"…The woman required emergency CS but the man insisted we insert misoprostol…" (# Pr 4).*

Mother in-law and grandmother role

Mothers-in-law and grandmothers were yet another set of stakeholders whose prejudices affected quality of care. Health providers accused these people of disallowing their daughters to access maternity care and for distorting information provided to clients at antenatal clinic. Certain healthy practices that midwives recommended to clients were debunked by old women back at home but who in turn prescribed harmful and primitive remedies. Midwives maintained that some of these remedies sometimes worsen their condition and they sometimes died at home or on the way to the hospital:

> *"…Somebody delivered and collapsed in the house. Instead of rushing her to the hospital, they were waiting for the husband to come, by the time the husband came and they carried her to emergency, she passed on…."(# Pr.5).*

Another provider clarified:

> *"…Those who start Antenatal here are given the information but if your mother-in-law says she will not allow you to come, you have to go by the culture…" (# Pr. 7).*

A client said:

> *"…The older woman who accompanied me to the hospital gave the substance to my baby. I couldn't resist because she was older than me…" (# C 7).*

Widowhood rites

Denial of freedom of movement

Other cultural elements such as widowhood rites and taboos also affected clients / patients quality of emergency obstetric care. In an interview, a health provider disclosed that a pregnant widow lost her life because she was inclined by culture to stay indoors for a particular period following the death of her husband. Unknown to relatives, the lady was hypertensive and required medical attention but this was unconsciously ignored. Her condition got exacerbated by her continuous encampment at home. On the day of delivery, emergency intervention achieved less result as she died immediately upon arrival at the hospital. The health provider disclosed:

> *"…She lost her husband. Now they told her that traditionally she is not supposed to go out for days, can you imagine? So they left her until she even came in to deliver and she was hypertensive so when they came just at the labour table, she passed on…" (# Pr.5).*

Taboos

Sacracy of pregnancy

Some midwives admitted that some women who went into labour eventually delivered at home and had complications because of the perception of pregnancy. Per the practices of the people, a parturient woman was vulnerable to evil attack hence events associated with this were kept away from the woman. In a particular situation death occurred in the neighbourhood and anyone who attended the funeral was defiled and could not be of assistance to the pregnant woman. The wait for an undefiled person took a much longer time and but for the swift response of the medical team at the hospital, she would have expired. A relative of a patient explained:

> *"…When somebody dies and you go there and enter the room, you can't help a labouring woman that is our problem…" (# P 14).*

Client co-operation

In this category, clients personal effort at promoting quality care and outcome are also presented and discussed:

Shielding reproductive information

Inaccurate diagnosis

Though EmOC targets the treatment of complications during delivery, certain risks identified earlier could be addressed to prevent the onset of complication. As part of routine delivery care midwives required the reproductive history of clients presenting for delivery to enable them prepare for any eventually. For example, a woman who has had many deliveries may have issues with uterus contraction and may bleed to death if care is not taken.

Consequently, when a woman presented at the labour ward, midwives first asked of her antenatal record book where they learnt about her history. In addition, midwives asked other relevant questions all of which were geared towards providing efficient care. Unfortunately, clients sometimes did not cooperate with matters of this nature. They withheld certain useful information or gave wrong responses that ended in wrong diagnosis and inadequate preparation towards complication. Providers viewed this behaviour of clients as an affront to quality care as it inhibited the adoption of appropriate preventive measures:

> *"…It starts from bad history taking. You ask a woman when you deliver, do you bleed, she says no. When you deliver do you feel dizzy, lose blood a lot, they will say no, no ,noo meanwhile perhaps she is the PPH type but she is not ready to give you information…" (# Pr.5).*

Clients' illiteracy was cited as a possible reason for this situation. Providers revealed that clients / patients were mostly uneducated and acted out of ignorance:

> *"…The people here are not enlightened about many things including pregnancy related issues…" (# Pr.16).*

The preventive model practiced in health facilities largely ensured complications were avoided or immediately arrested as providers strived to make adequate preparations towards it. By this approach to treatment, they became complacent and ill prepared when unforeseen complications occurred. For example, where client was a known PPH, providers made sure drugs and blood were procured earlier and in wait in case it happened. However, some

women who bled after delivery did not have history of PPH. Health providers failed to realise that the preventive model alone was not sufficient to prevent maternal death as some women who died did not have related history while those who presented with risk factors encountered no complications during delivery. As such, they needed to view every pregnancy as an emergency. Strangely, clients were unduly blamed for the misfortune:

> *"…They were blaming me that I know I usually bleed after delivery and I did not tell them but the fact is if not this one, I have never delivered in the hospital nor bled after delivery…" (# C 9).*

Resisting treatment

Health providers narrated that some clients failed to cooperate with treatment and that compromised with the quality of care provided. As part of maternity services, midwives screened pregnant women for some of the conditions that cause maternal death in order to intervene. For instance, a pregnant woman with repeated high BP and presence of protein in urine protein stands the risk of pre-eclampsia and is required to receive immediate treatment before it leads to eclampsia which is the second largest cause of maternal death in developing countries. In addition several pregnant women presented with serious medical conditions that needed to be attended to. Midwives revealed that in their bid to detain and offer the needed interventions, some clients resisted only to be carried back to the facility having developed more severe complications and putting undue strain on limited resources:

> *"…You want to do something for a client, you want her to see a doctor for better care, she is telling you no, she is not ready for*

admission when you think that admitting her is the best thing for he…r" (# Pr. 9).

Clients equally resisted certain procedures such as removal of retained products or suturing in the case of tears sustained during delivery. Clients admitted that such procedures and others were very painful as they came without any form of sedation. They, therefore, resisted such operations but of course, oblivions of the medical implications of their actions as such conditions could trigger bleeding and eventual death:

"…When the blood refused to stop and we went back inside, I was in pain .They said they will remove the blood out so that it will stop. Infact, at the time of scooping out the blood I was in so much pain so I didn't want to cooperate…" (# C 9).

The following submission was made in a focus group discussion:

"…The worst part is when they cut you and they want to suture it , they won't inject you, nothing. It will just be that dry needle and they will be using to suture your flesh so this time, I refused…" (FGD 3).

The client factors identified by this research are largely socio-cultural in nature and can be addressed through appropriate education and community engagement.

Table 8: Objective 5 Code work on Client-related Factors and Outcome of Care

Category	Theme	Sub-theme
Patient demography	Economic background	-Poor feeding -Relative poverty
	Social setting	-Sleeping out-doors
	Educational background	-Illiteracy -Non adherence to clinical information / treatment
Socio-cultural practices	Use of local substance to fortify baby	-Perception of vulnerability
	Show of feminism	-Enduring labour pains and danger signs
	Low autonomy of women	-High regard of husband -women barred from taking independent decisions -Husband decision rules -Mother in-law and grandmother role
	Widowhood rites	-Denial of freedom of movement
	Taboos	-Sacracy of pregnancy
Client cooperation	Shielding reproductive history	-Inaccurate diagnosis -Resisting treatment

Source: Field data 2019

Narratives from this study reveal that most women who developed complications were poor, lacked education and earned least income which resulted in poor feeding leading to lack of vital nutrients required for a healthy pregnancy. This implies most of them basically appeared unhealthy and stood a higher risk of death together with their babies. These afore-mentioned characteristics are noticeable among women who obtained complications in most other studies within sub-Saharan Africa (Bogren et al., 2020; Mselle & Kohi, 2016). Apart from an essentially nutrient deficient staple meal consumed

by the people here, the crave for meals made from instant noodles was gradually becoming a toast in the town as in most other parts of the country (Boatemaa, Badasu, & Aikins, 2018). Most inhabitants including pregnant women prefer these fast foods mostly sold on the streets at night at the expense of meals made from traditional green leafy vegetables and related feeds that are rich in iron and other nutrients. This behaviour of clients, alongside exposure to mosquito bites, contribute to high cases of anaemia in pregnancy and the consequential likely effect of bleeding after delivery (Frass, 2015). Indeed post partum haemorrhage is acknowledged as the main cause of maternal death in the area (GSS et al., 2018). It is important that intensive health education on proper nutriton is carried out during antenatal sessions in health facilities to equip women with the information desired for healthy pregnancy and delivery. Health promotion campaigns on the subject in communities may also influence a change in attitude and promote good health among pregnant women in the area. Similalry, a malarial prophylacsis may help protect mother and baby against the malaria disease that contributes to anaemia. In addition, most poor women equally failed to use antenatal services because of cost yet antenatal services is required for risks to be identified earlier for effective management (Kruk et al., 2016). This posed a great challenge to quality efforts during emergency as there was no prior obstetric history to guide care delivery. In some instances, health providers settled on less effective treatment options because clients could not pay for best care and this equally thwarted or subverted desired maternal health outcome. These findings affirm Sageer et al. (2019), assertion on the changing phases of causes of maternal death and provides justifiable reason for the numerous

maternal deaths recorded in the Northern Region as it is economically disadvantaged as compared to other regions in the country.

The virtual lack of formal education among parturient women in the study area was another major issue that interfered with the process of care in health facilities. Indeed, low education or high illiteracy rate in rural areas partly explains why maternal health remains a challenge in these areas (Okonofua, et al., 2017). Maternal education is essential because it has a positive bearing on access to service and assimilation of health information leading to the formation of positive health behaviours and an eventual positive delivery outcomes emanating from quality service (Paul & Chouhan, 2019). On the contrary, mothers with no formal education, characteristic of clients in this study, lacked knowledge on danger signs, failed to adhere to health providers' education on healthy pregnancy and delivery and eventually presented with avoidable pregnancy related complications that placed undue stress on providers as they struggled to provide care. Improving health literacy among women may improve upon their ability to detect danger signs during pregnancy and also enable them to adopt improved lifestyle and good nutrition for positive pregnancy outcomes and reduced stress among health providers (Miteniece et al., 2019).

The lack of formal education among clients further exposed them to ignorance about protecting their health and wellbeing most especially during pregnancy and delivery. Behaviour of clients in the study seems to pre-empt that their health is the responsibility of a free health care system. They exhibited this by caring less about their welfare during pregnancy but expending their little resources on heavy out-doorings some of which failed to take place

because they or their babies lost their lives in the process of care or immediately after. This is a clear case of lack of prioritisation inflicted by poor educational background (Paul & Chouhan, 2019). The need to attach a health promotion approach in addition to quality measures to preventing maternal mortality is necessary for women to assume personal responsibility of their health in this locality.

Findings further show that cultural practices associated with widowhood rites and pregnancy related taboos contributed to worsening women reproductive health status and subsequently interfered with quality of care provided. Similar issues have been identified in several studies conducted across countries in sub-Saharan Africa (Bogren et al., 2020; Ganle, 2015; Lavender, 2016). Studies equally reveal that mother's condition gets worst as long as the wait for husband or mother-in-law to grant permission to seek health care or proceed with care keeps longer (Gabrysch & Campbell, 2009). Late arrival of emergency cases puts additional burden on already limited resources in health facilities thereby compromising with quality and affecting maternal health outcomes. Cultural practices posed a further delay in the health facility which was hitherto the preserve for provider factors (Maine & Thaddeus, 1994). For example, certain neonatal deaths that occurred in health facility were not due to failures on the part of the health provider and might not have happened if natives did not interfere with care by introducing cultural norms and values into the hospital routine practices. Also certain hospital treatment proceedings that required client's consent were delayed because women did not have the cultural mandate to decide on issues not even concerning their own health. This finding corroborates that of a Tanzania study which revealed that majority of

Tanzanian women lacked autonomy that is the ability to take decisions on their own as well as the financial means to access transportation during labour (Mselle & Kohi, 2016). Women of this calibre arrived in hospitals in a rather bad state and this compromised with the quality of care that they received. Empowering women with financial resources may enable them to access maternity care when needed. Also, denouncing harmful cultural practices through a process of cultural reorientation may improve upon the health of women and reduce the occurrence of maternal death.

In this study, it was the husband's responsibility to render consent to certain hospital procedures on behalf of his wife. This is similar to Bogren et al. (2020) finding in Nepal. Where husband delayed in granting consent, health providers proceeded with non-consensual care which is viewed as an affront to quality care. Issues of Caesarean section were carried out this way in addition to certain needful interventions that required immediate action to prevent death begging questions on the role of the patient on treatment options. According to the patients' charter, all treatment proceedings must be explained to the patient and the patient has the right to either consent to or reject. In the event that this does not occur, standard care is compromised (Turkson, 2009). Lack of education and the general low autonomy of the African woman largely disadvantage them from being partakers in issues concerning them and also grants more support for the dominant role of the male figure in the African society (Mselle & Kohi, 2016). Nonetheless, cultural conformity has lesser grip on educated women than uneducated women as emerged in this study. Other studies have found out that educated women have more decision making power to defy cultural norms to seek appropriate and quality care unlike illiterate and

uneducated mothers (Abor et al., 2011). They are more likely to have fewer children and their spouses mostly cooperate with hospital care as compared to less educated couples (Lindtj et al., 2017). In addition, countries with high female literacy rates have lower maternal mortality rates and vice versa (Alkire, 2010). The way to go, therefore, is to educate and empower the girl child (Ganle, 2015). The Northern region has perculiar challenges and must be given special attention to improve upon the current maternal health situation. It would mean putting in extra measures such as cultural reorientation to improve upon the health of women in this area. Harmful cultural practices, such as those found in this study, should be discarded in place of more healthful ones to promote maternal and neonatal health. Facility management board could engage with leaders in communities to discourage such cultural norms that contribute to maternal death in the area. Intensive campaign is also needed to promote the uptake of family planning to reduce the high number of births that is common in the area and that which serves as a risk factor to maternal mortality. Husbands are a key force to reckon with in this society hence should be engaged as stakeholders in the fight against maternal mortality. In Nepal, for instance, involvement of husbands in maternity care education led to overall increases in utilisation and improved health outcomes for both mothers and babies (Mullany, Becker, & Hindin, 2007). Drawing from this evidence, it is possible to suggest that community based health promotion programmes targeting husbands and other stakeholders may influence a change of mindset towards maternal health issues in the area.

Traditionally, quality of health care frameworks are broadly grounded on supply side factors such as infrastructure, drugs, equipment and personnel

(Kanengoni et al., 2019). There is, however, limited mention of the role of the client in promoting quality care and where it exists, it is restricted to geographical access to care (Symon, Mcfadden, White, Fraser & Cummins, 2019). The findings in this section provide some evidence to suggest that demand side factors comprising client socio-economic-cultural characteristics equally exert significant influence on the quality of care provided in health facilities. These underpinning characteristics play an important role in the quality of care debate whereby improving upon these might just be as important as improving upon clinical quality in health facilities.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this research was to explore the perception of quality of EmOC in selected health care facilities in one municipality in the Northern Region of Ghana. This chapter contains the summary, conclusions and recommendations based on findings pertaining to respective objectives of the study. It also includes suggestions for future research, references of works that were duly cited and some appendix that guided the research process.

Summary

Maternal death refers to the death of a woman due to complications encountered during pregnancy, delivery or in the 42 days after termination of pregnancy (Alkema et al., 2015). It was a despicable global tragedy in early centuries as thousands of women lost their lives during child birth (Loudon, 1986b). The direct causes of death mainly hemorrhage, hypertensive disorders, sepsis and unsafe abortion were later found to be largely preventable (Rosenfield & Maine, 1985). This subsequently led to the launch of a set of interventions aimed at curtailing the deaths. The safe motherhood initiative, as it was called, consisted of antenatal care, family planning, clean / safe delivery and emergency obstetric care (EmOC) (Mahler, 1987). The implementation of these strategies in the latter part of the twentieth century led to general declines in the number of women dying annually as a result of pregnancy related complications (WHO et al., 2019). EmOC is the latest of the WHO's strategies. The intervention works on the premise that if women who obtain pregnancy related complications receive the needed attention, they will not die (WHO, 2009). It thus entails empowering selected health centers and referral hospitals

with stocks of essential drugs, supplies and equipment as well as training the requisite human resources needed for the delivery of quality services at all times (Ijadunola et al, 2010). Since its inception in 2009, EmOC has received immense research attention. Nevertheless, many women in sub-Saharan Africa continue to die from pregnancy related complications (UNICEF, 2019). Several factors may account for this including the quality of care as provided (Hodgins et al., 2016) and probably perceived. Unfortunately, not much information is available on perception of EmOC in the Northern Region which currently records the highest number of maternal deaths in the country. Considering other alternative methodologies, therefore, the finest approach to investigate into such a relatively novel concept in the region is through case study. The approach provides opportunity to study events in their natural contexts for a comprehensive understanding of phenomena (Yin, 2014). Thus, in this qualitative case study, methods such as observation, focus group discussion and in-depth face to face interview were used to capture the nuances in EmOC delivery. The research was guided by five main objectives emerging from gaps in the literature notably (i) to explore the nature and availability of EmOC in selected health facilities (ii) to identify stakeholders' perception on quality of EmOC (iii) to describe how stakeholders' perception of EmOC influence care delivery (iv) to determine how provider-related factors contributed to outcome of care and (v) to determine how client-related factors contributed to outcome of care. Research participants consisted of health care providers, clients and community members. Respectively, they were 21 health care providers, 17 clients and 39 community members.

The study employed purposive sampling to select all four EmOC facilities in the municipality as well as study participants required for the study (Patton, 2002). The observation guide contained six main sections each addressing a research objective raised in this thesis including a section on participants' demography. So was the structure of the guide to the focus group discussion. The observation guide was adapted from Emerson, et. al. (2005). Informed consent was sought from all participants before they were engaged in the research. Interviews with clients were conducted upon discharge from health facility and in a closed place. Others were contacted in their homes. Focus group discussions were held with qualified participants in a place of their choice. They consisted of three groups each of male and female members of the community who had either received an emergency obstetric intervention earlier on, witnessed on-set of complications at home or visited relatives on admission in the hospital. A research assistant conducted interviews in the local dialect which is dagbani. Health care providers were individually interviewed after close of work and in a convenient place. All conversations were tape recorded upon consent from participants. Data analysis used a grounded theory approach (Corbin & Strauss, 1990). First, researcher read all three data sources, one at a time, for familiarity with content, then edited and checked for completeness. After this, researcher did slow reading of each text, identified basic concepts and assigned them with conceptual labels. Thereafter, related concepts were grouped to form categories and sub-categories. Eventually, themes that emerged from sub-categories, upon triangulation, formed the study findings. Axial and selective coding were used in this research in deriving a conceptual framework on client / provider perspectives on quality of EmOC. Axial coding was

performed by relating categories to their subcategories and testing these against the data. Finally, selective coding was used to unify relevant categories into a core category that represents the central phenomenon of the study.

Key findings

1. To explore the nature and availability of EmOC in selected facilities: In the first place, basic emergency obstetric care services did not exist in the designated health centres. The municipal hospital was the only facility that provided both basic and comprehensive EmOC services in the municipality. Even with this, essential drugs and equipment needed for effective management of cases were mostly unavailable. The staff strength was inadequate. A lone inexperienced midwife was sometimes scheduled in the maternity or labour ward to provide services including those of EmOC that occurred either in the hospital or arrived from home. With respect to the nature of care, standard care was not adhered to: Midwives did not employ the partograph to monitor labour. Also, midwives applied crude management procedures, rushed with drug administration on some occasions and displayed minimum courtesies towards clients in the care delivery process. Quality was further compromised with the use of archaic or malfunctioning equipment. The afore-mentioned activities present a picture of sub-standard care in the health facility.
2. To identify stakeholders' perception on quality of EmOC: With regards to stakeholder perception of quality, health providers were much more enthused about technical quality as they equated quality care to such attributes as appropriateness, efficacy, efficiency

effectiveness and timeliness. Clients, on the other hand, perceived quality in terms of interpersonal (empathy) and contextual attributes notably accessibility, acceptability, accountability and affordability.

3. To describe how stakeholders' perception of EmOC influence care delivery: The divergence in perception of quality by stakeholders led to widespread dissatisfaction among clients. This was evident in community interference in the care delivery process, delayed utilisation of EmOC, heightened suspicion of health providers' care delivery activities and low confidence in the health care system.
4. To determine how health provider related factors contributed to outcome of care: Factors identified were low skill and competency levels leading to dissatisfaction or adverse outcome on some occasions. Personal scuffles among health providers also led to sporadic episodes of non-corperation especially during service delivery. Some providers referred to some colleagues' stay in midwifery as a "missed call". Obstetric nurses were mostly accussed of this as most of them showed disinterest per their activities in the work environment. Largely, health providers felt demotivated by unfriendly working environment and absence of external rewards and these impacted on quality of care.
5. To determine how client factors contributed to outcome of care: These were poverty, lack of education and socio-cultural practices. Indeed anaemia in pregnancy was endemic in the municipality due to poor nutrition. Accordingly, most women with pregnancy related complications ended up receiving a pint of blood or two as part of

treatment regimen. Women withheld certain vital information that could have aided in the delivery of good quality care due to ignorance of implications of such acts. In their bid to fulfill cultural demands of fidelity and submissiveness, women adhered to and endured threatening pregnancy and labour signs instead of reporting these in time to a health facility. Fundamentally, low female autonomy imposed by cultural norms in this highly patriachical society, disadvantaged women from actively taking part in health decisions thereby making them less capable of contributing to good quality care.

Conclusion

Key components for the provision of EmOC services were largely unavailable translating in the non-performance of some signal functions at the basic and comprehensive levels. Quality of EmOC was sub-standard in the municipal hospital that provided the two forms of EmOC services. The sub-standard nature of quality in itself has the potential of causing maternal and neonatal deaths as well as maternal morbidities. In addition, the non-availability of EmOC at the basic level sends a strong signal of unmet need and a possible translation of adverse maternal outcomes occurring in communities around the municipality. Second, the divergence in stakeholder perception of quality has several implications in conceptualising quality of EmOC. In broadening its conceptualisation, therefore, a framework for theorizing perception of quality of EmOC has been proposed based on these perspectives of divergence. By integrating these diverging perceptions in the reconceptualisation of the quality of EmOC, this framework potentially offers an opportunity to advance the

quality of EmOC delivery. Again, the inappropriate human relation outcomes in the health system were increasingly evident in the practice of self-care, mistrust in the health care system and an eventual possible low or under-utilisation of the EmOC intervention among the target group. This outcome is also more likely to contribute to high patronage of unskilled delivery either at home or with TBAs. Such actions may contribute to exacerbating maternal health outcomes in the area. In addition, low skills and competencies among health care providers may compromise with quality of clinical care provided and cause deaths, maternal morbidities or near misses among women receiving care in health facility. Poor interpersonal relations or frictions among health staff can possibly delay treatment for obstetric emergencies and may worsen the survival chances of clients. More-so, persons with least interest or demotivated health professionals may not only be lazy, negligible or irresponsible at work, they are more likely to complain of burnout, dissatisfaction, or change job thereby constantly creating a service gap for health professionals. High poverty levels among clients leading to poor nutrition and exposure to mosquito bites contribute to high cases of anaemia in pregnancy and the consequential likely effect of bleeding after birth. This momentous effect is acknowledged as the main cause of maternal death in the area. Clients' endurance of danger signs at pregnancy or during delivery as a cultural demand led to some maternal deaths upon arrival at the health facility. Low autonomy of women in this area imposed by a dominant patriachical society contributed to either delayed access to care or affected quality of care provided. Husbands did not find the need to commit resources for good treatment or comply with certain required medical procedures possibly because they had many wives whose previous pregnancies

did not demand such extreme expenses. The resultant effect of a preventable maternal death or a highly compromised care content may be considered as normal events in a traditional society in rural Ghana as examplified in this research.

Recommendations

Based on the findings of this study, the following recommendations are proposed to the respective authorities and bodies:

To the GHS;

i. There is the need to empower BEmOC facilities in the municipality with essential drugs, equipment and personnel to enable them discharge their core functions.

ii. Consider dispatching a team of experts occasionally to the Northern Region to train and coach midwives and related staff on lifesaving skills to improve upon provider skill and competency.

To the MoH;

i. Ensure that the curriculum for health training institutions is firmly grounded on both knowledge acquisition and practice (experiential learning) to cater for inefficiencies especially among newly trained staff. Conversely, the current clinical rotation of one year among newly trained midwives could be extended to two years to improve upon their clinical skills.

ii. Ensure that the subject of perceived quality or patient-centered care forms an integral part of the curriculum for instruction in health training institutions. This may propel health staff to inculcate this important

element in their practice hopefully to meet the needs of clients and promote uptake of health services.

To management of EmOC facilities;

i. Promote continuous education and regular in-service training for health staff to promote quality care.

ii. Promote environmental modification by ensuring that service delivery reflects the norms and values of communities within your catchment area.

iii. Engage with community members through durbars or health promotion activities to educate them on your operations and challenges in order to win the confidence of members to improve upon uptake of maternal interventions.

iv. Intensify health education and promotion on proper nutriton during antenatal sessions in health facilities to equip women with the information desired for healthy pregnancy and delivery.

v. Intensify health promotion campaigns through radio broadcasting or community durbars to influence a change in attitude and promote good health among pregnant women in the area.

vi. Instead of practicing the risk identification model, adopt the preventive model by approaching every pregnancy as emergency and put in appropriate preventive measures to forestall unpleasant consequences.

To Management of Health Training Institutions:

i. Place priority on personal background of prospective candidates in the admission process. First, explore students' innate passion and then their

academic achievements to ensure the right personnel are enlisted for training.

To local Non Governmental Organizations

i. Assume an advocacy role by engaging with chiefs and other opinion leaders in communities to discuss ways to harmonise cultural norms to the betterment of women.

These measures may potentially improve upon quality of EmOC and promote positive maternal health outcomes as well as general health care delivery in the locality.

Suggestions for Future Research

The study offers some important opportunities for future research direction:

i. Future research may adopt a quantitative approach to investigate into quality of EmOC on a much larger scale to appreciate the dynamics across localities in the Northern Region.

ii. Future research may consider the inclusion of management of the NHIS and respective Directors of Health to uncover salient issues that might not have been well covered in this research.

iii. Conducting a community based study on quality of EmOC may reveal information that might have been lost to this study.

iv. The current study may be replicated in similar settings as a means of verifying the authenticity of the study findings.

v. Researchers could focus on developing an instrument to test the 5As4EsT framework for assessing perception of quality of EmOC.

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APPENDICES

Appendix A- Ethical approval letter (Ghana health Service)

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

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

MyRef. GHS/RDD/ERC/Admin/App/19/232
Your Ref. No.

Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
GPS Address: GA-050-3303
Tel: +233-302-681109
Fax + 233-302-685424
Email: ghserc@gmail.com
20th June, 2019

Alice Ayawine
C/O Department of HPER
UCC-Cape Coast

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

GHS-ERC Number	**GHS-ERC004/04/19**
Project Title	Exploring the quality of emergency obstetric care in the Northern Region of Ghana
Approval Date	20th June,2019
Expiry Date	19th June, 2020
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-ERCCHAIRPERSON)

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

Appendix B Ethical approval letter (University of Cape Coast)

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309/ 0244207814
E-MAIL: irb@ucc.edu.gh
C/O Directorate of Research, Innovation and Consultancy

OUR REF: UCC/IRB/A/2016/372
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0009096

2ND MAY, 2019

Ms. Alice Ayawine
Department of Health, Physical Education and Recreation
University of Cape Coast

Dear Ms. Ayawine,

ETHICAL CLEARANCE – ID: (UCCIRB/CES/2019/03)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for the implementation of your research protocol titled **Exploring the quality of Emergency Obstetric Care in the Northern Region of Ghana**. This approval requires that you 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.

Please note that any modification of the project must be submitted to the UCCIRB for review and approval before its 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
ITUTIONAL REVIEW BOARD
NIVERSITY OF CAPE COAST
Date:.....

Appendix C- Introductory letter (University of Cape Coast)

UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

TELEPHONE: +233 - (0)206610931 / (0)543021384 / (0)268392819

TELEX: 2552, UCC, GH.

EMAIL: **hper@ucc.edu.gh**

Cables & Telegrams:
UNIVERSITY, CAPE COAST

Our Ref: ED/HTP/16/0003/5

29th January, 2019

TO WHOM IT MAY CONCERN

INTRODUCTORY LETTER:
MS. ALICE AYAWINE (ED/HTP/16/0003)

The above named person is a student of the Department of Health, Physical Education and Recreation of the University of Cape Coast. He is pursuing a Doctor of Philosophy degree in Health Promotion. In partial fulfilment of the requirements for the programme, she is conducting a research for her thesis titled **"Exploring the Quality of Emergency Obstetric Care in the Northern Region of Ghana".**

We would be very grateful if she is granted the opportunity to conduct her research and also provide her with the information needed from your outfit. The data will be used for academic purposes only and be assured that the information collected will be treated with utmost confidentiality.

We count on your usual co-operation.

Thank you.

Yours faithfully,

Dr. Daniel Apaak
(Head of Department)
Tel.: +233 (0)208587866
Email: daniel.apaak@ucc.edu.gh

Appendix D- Recommendation Letter (University of Cape Coast)

UNIVERSITY OF CAPE COAST

CAPE COAST, GHANA

Department of Health, Physical Education & Recreation

TELEPHONE: +233 - (0)244213465 Cables & Telegrams:
UNIVERSITY, CAPE COAST

Our Ref: ED/HTP/16/0003

25th January, 2019

TO WHOM IT MAY CONCERN

COVER LETTER: MISS ALICE AYAWINE

It is my pleasure to recommend Miss Alice Ayawine for ethical clearance from your office. She is a PhD Health Promotion student of the above department and conducting a study into the topic; **Exploring the quality of emergency obstetric care in the Northern Region of Ghana**. The study has been envisaged to explore the quality of emergency obstetric care given to pregnant women during delivery from the perspective of the clients and health professionals.

I think Miss Alice Ayawine has the capacity to conduct this research and has demonstrated this during her proposal defence. As one of her supervisors, I think we have observed all the necessary ethical considerations in the study and will need your assistance in giving her clearance to enable her conduct her research.

For any further information, please do not hesitate to contact me.

Yours faithfully,

Dr. Thomas Hormenu
thormenu@ucc.edu.gh

Appendix E- Information and consent form for clients

Title of Study: Exploring the Quality of Emergency Obstetric Care in the Northern Region of Ghana

Introduction: I am Alice Ayawine, a PhD. candidate from the department of Health, Physical Education and Recreation of the University of Cape Coast. My contact number is 0244561337. You can also email me at aayawine@yahoo.com

Background of research: I am conducting research on quality of emergency obstetric care in this facility and will be interacting with both clients and providers. Emergency obstetric care (EmOC) refers to the capacity of a health facility to provide essential services to prevent loss of life during childbirth. It primarily consists of key medical interventions that are used to treat the direct obstetric complications generally attributed to a significant proportion of maternal deaths recorded around the world. The research explores the quality of EmOC as practiced and perceived by stakeholders in selected first and second level facilities in the Northern Region.

Nature of research: The research will specifically study how EmOC is provided, its perception and provider- client related factors that influence care quality. To find answers to some of these issues, I invite you to take part in this research project. If you accept, you will be required to participate in an interview with myself or my research assistant.

Duration /what is involved: You are eligible for the study because you are a client or relative of a client in this facility. As a participant in the study, I will ask you some questions on your experiences with the utilisation of Emergency Obstetric Care. The questions are open-ended such that you can freely express your views on each of them. If you do not wish to answer any of the questions

posed during the interview, you may say so and I will move on to the next question. The interview will take place in a location of your choice and no one else but I and / or my research assistant (yet to be named) will be present. Your participation will last between 60-90 minutes.

Potential Risks: There may be minimal emotional discomfort associated with your participation as you share your experiences with us. In case this occurs, I will break for you to relax before we can continue with the interview.

Benefits: Your input in this study will be useful for quality improvement purposes and for interventions directed towards the improvement of maternal health in the region.

Costs: There will be no cost associated with your participation. But in case this occurs, it will be borne by me. I would pay for your transportation to the place you find convenient for the interview

Compensation: You will be given a token of appreciation for your participation.

Confidentiality: I will protect information about you to the best of my ability. The information you provide will be kept in a box and locked with a padlock and key and will only be accessed by me or my other research assistants (yet to be named) for in-depth analysis. You will not be named in any reports arising from the research. Since this is for academic purpose, the information you provide will be discarded only after a successful thesis defense. Disposal will be done through burning to prevent anyone from having access to them.

Voluntary participation/withdrawal: Taking part in the research is purely voluntary. You have the right to refuse to answer any question or even withdraw at any moment within the interview period.

Outcome and Feedback: The data accrued will be used for publication purposes. In addition, feedback will be delivered to you through community meetings.

Funding information: This project is self-funded. I bear responsibility for all costs associated with the research.

Conflict of Interest: There is no conflict of interest.

Provision of Information and Consent for participants: A copy of the Information sheet will be given to you after it has been signed or thumb-printed to take home.

Who to Contact for Clarification: For questions in relation to the research, please contact: Prof Mintah (Primary supervisor) on +233(0)540499131or Dr Hormenu (Secondary Supervisor) on +233(0)244213465 both of the University of Cape Coast.

You may also contact Hannah Frimpong of the Ghana Ethical Committee Review Board on 0507041223 for clarification on ethical issues and participants' rights.

CONSENT FORM

I declare that I voluntarily agree to answer the survey questions on the above topic after the survey has been explained to me. All my questions have been answered satisfactorily. I am aware that I can discontinue participation at any time if I so desire. I am also aware that I will be given copies of the participants' information and signed or thumb printed consent form for my personal records prior to the administration of the research questionnaire.

_____ _____

Date Signature or Thumbprint of Participant

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to participate in the research.

…… ……

Name and signature / thumbprint of witness Date

Investigator's Statement and Signature

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

Date …… Signature of person who obtained consent……..

Appendix F- Information and consent form for health providers

Title of Study: Exploring the Quality of Emergency Obstetric Care in the Northern Region of Ghana

Introduction: I am Ms. Alice Ayawine, a student from the department of Health, Physical Education and Recreation of the University of Cape Coast. My contact number is 0244561337. You can also email me at aayawine@yahoo.com

Background of research: I am conducting research on quality of emergency obstetric care in this facility and will be interacting with both clients and providers. Emergency obstetric care (EmOC) refers to the capacity of a health facility to provide essential services to prevent loss of life during childbirth. It primarily consists of key medical interventions that are used to treat the direct obstetric complications generally attributed to a significant proportion of maternal deaths recorded around the world. The research explores the quality of EmOC as practiced and perceived by stakeholders in selected first and second level facilities in the Northern Region.

Nature of research: The research will specifically study how EmOC is provided, its perception and provider- client related factors that influence care quality. To find answers to some of these issues, I invite you to take part in this research project. If you accept, you will be required to participate in an interview with myself or my research assistant.

Duration /what is involved: You are eligible for the study because you are an emergency obstetric care provider in this facility. As a participant in the study, I will ask you some questions on your experiences with the provision of Emergency Obstetric Care. The questions are open-ended such that you can freely express your views on each of them. If you do not wish to answer any of

the questions posed during the interview, you may say so and I will move on to the next question. The interview will take place in a location of your choice and no one else but I and / or my research assistant (yet to be named) will be present. Your participation will last between 60-90 minutes.

Potential Risks: There may be minimal emotional discomfort associated with your participation as you share your experiences with us. In case this occurs, I will break for you to relax before we can continue with the interview.

Benefits: Your input in this study will be useful for quality improvement purposes and for interventions directed towards the improvement of maternal health in the region.

Costs: There will be no cost associated with your participation. But in case this occurs, it will be borne by me. I would pay for your transportation to the place you find convenient for the interview

Compensation: You will not be compensated for your participation in the study. However, a warm thank you will be extended to you for your participation.

Confidentiality: I will protect information about you to the best of my ability. The information you provide will be kept in a box and locked with a padlock and key and will only be accessed by me or my other research assistants (yet to be named) for in-depth analysis. You will not be named in any reports arising from the research. Since this is for academic purpose, the information you provide will be discarded only after a successful thesis defense. Disposal will be done through burning to prevent anyone from having access to them.

Voluntary participation/withdrawal: Taking part in the research is purely voluntary. You have the right to refuse to answer any question or even withdraw at any moment within the interview period.

Outcome and Feedback: The data accrued will be used for publication purposes. In addition, feedback will be delivered to you through seminars, meetings, or any other appropriate medium

Funding information: This project is self-funded. I bear responsibility for all costs associated with the research.

Conflict of Interest: There is no conflict of interest.

Provision of Information and Consent for participants: A copy of the Information sheet will be given to you, after it has been signed, to keep.

Who to Contact for Clarification: For questions in relation to the research, please contact: Prof Mintah (Principal supervisor) on +233(0)540499131or Dr Hormenu (Co-supervisor) on +233(0)244213465 both of the University of Cape Coast.

You may also contact Hannah Frimpong of the Ghana Ethical Committee Review Board on 0507041223 for clarification on ethical issues and participants' rights.

CONSENT FORM

I declare that I voluntarily agree to answer the survey questions on the above topic after the survey has been explained to me. All my questions have been answered satisfactorily. I am aware that I can discontinue participation at any time if I so desire. I am also aware that I will be given copies of the participants information and signed or thumbprinted consent form for my personal records prior to the administration of the research questionnaire.

Date_____ Signature of Participant _____

Investigator's Statement and Signature

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

Date …… Signature of person who obtained consent……..

Appendix G- Semi-structured In-depth Interview Guide for Clients

Site ……..

Interviewer…….

Date…….

Start…… End…….

Section A: Socio demography:

Participant number….

Age

Occupation

Marital status

Type of marriage

Educational background

Number of children

Type of obstetric complication

Mode of delivery

Delivery outcome

Condition of baby at the time of the interview

Inpatient / referral

Section B: Nature and Availability of EmOC

Why did you choose to deliver in this facility and not any other?

Can you please tell me about your actual experiences with the service?

In terms of drugs and equipment needed for treatment

In terms of the physical features of the labour /maternity ward-in which client delivered?

In terms of the availability of personnel / care

Can you please tell me about how you were provided with care?

What was done? How was it done? Who did what? Did service commerce immediately you arrived? If not, why? Can you recount the times that provider showed courtesy during your treatment? Can you recount the moments that provider sympathised with your state? How did provider communicate your progress with treatment? Were you offered any form of emotional support? How did that come? Why do you say so?

Section C: Perception of EmOC

What is your expectation of EmOC

What are your experiences with the service in relation to your expectation?

Probe: In terms of physical structures, equipment and appearance and conduct of providers?

In terms of process: how care is provided? How do you know you were receiving good / bad care?

(Use probes and prompts to explore in detail participant's submission)

Section D: Perception and health care delivery

Are you satisfied with the services received?

Why do you say so?

What factors influence your satisfaction?

How did you cope with these?

Will you come here again to deliver?

Why will you come/ not come?

Will you recommend this facility to another person? Why / why not?

Section E: Client-related factors and quality of EmOC

Did provision of care proceed as required?

If yes what were the factors associated with the client?

If no, what were the barriers associated with the client?

-In terms of socio-economic factors

-In terms of client's cooperation

-In terms of cultural influences

(*Use probes and prompts to explore more possible factors)*

Section F: Provider-related factors and quality of EmOC

Did provision of care proceed as required?

If yes, what were the factors?

If no, what were the barriers associated with the provider?

Probe in terms of technical competence (Knowledge and skills)

Probe in terms of economic influences

Probe in terms of provider motivation

In terms of workload

(Use probes and prompts to explore more possible factors)

Thank you!

Appendix H-Semi-structured In-depth Interview Guide for Health Provider

Site ……

Interviewer…….

Date…….

Start …… End…….

Section A: Socio demography:

Participant number…..

Age

Educational background

Cadre of staff

Number of years in practic

Section B: Nature (Adherence) and availability of EmOC

Provider's experience with care provision

What is the current status of your facility?

Are Basic signal functions always available?

Are Comprehensive signal functions always available? Perform blood transfusion and Caeserean Section? Why?

Are you able to perform all signal functions as required by pregnancy complications? How / why?

Do you know if there are national guidelines for provision of emergency obstetric care?

Do you follow these guidelines in service delivery?

How / why?

Are periodic in-service training and workshops organised for you to enhance your skills?

What do you think of the quality of EmOC in this facility?

Section C. Perception of EmOC

What is your expectation of EmOC

What are your experiences with the service in relation to your expectation?

Probe:

In terms of physical structures, equipment, personnel and clients?

In terms of process: how care is provided?

In terms of outcome; what is the outcome of interest?

(Use probes and prompts to explore in detail participant's submission)

What do you make of clients' perception of quality?

Section D: Perception and health care delivery

Are you satisfied with the EmOC services you provide in this facility?

Why do you say so?

Do you think your clients are satisfied with your services?

What makes you think so?

Have you been successful in treating all cases that come to your facility? How / why?

Has the facility recorded increases in the number of women who access EmOC?

Why do you think this is the case?

Section E: Provider-related factors and outcome of care

Did provision of care proceed as required?

If yes what were the factors?

If no, what were the barriers associated with the provider?

-In terms of technical competence (Knowledge and skills)

-In terms of economic influences

-In terms of provider motivation

-In terms of workload

How do you evaluate your attitude towards clients?

(Use probes and prompts to explore more possible factors)

Section F: Client-related factors and outcome of care

Did provision of care proceed as required?

If yes what were the factors associated with the client?

If no, what were the barriers associated with the client?

-In terms of socio-economic factors

-In terms of client's cooperation

-In terms of cultural influences

(Use probes and prompts to explore more possible factors)

Thank you!

Appendix I- Focus Group Discussion Guide

Venue ……

Interviewer……

Date……

Start …… End……

Section A: socio demography

Age

Sex

Occupation

Education

Type of marriage

Number of children

Section B: Nature and availability of EmOC

Experience with EmOC services

Why did you choose that facility and not any other for treatment?

Can you please tell me about your experience at home in relation to you or relative's condition?

Can you please tell me about your experience in the health facility?

(Use probes and prompts to explore in detail participants' submission)

Section C: Perception of EmOC

What was your expectation of EmOC?

What were your experiences with the service in relation to your expectation?

In terms of physical structures, equipment and appearance and conduct of providers?

In terms of process: how care was provided?

In terms of outcome; what was the outcome of interest?

(Use probes and prompts to explore in detail participant's submission)

Section D: Perception and health care delivery

Were you satisfied with the services received?

Why do you say so?

What factors affected your satisfaction?

How did you cope with these?

Will you recommend the facility to another person?

Why?

Section E: Provider-related factors and quality of EmOC

What provider related factors influenced the quality of EmOC in the health facility?

Probe:

-In terms of technical competence (Knowledge and skills)]

-In terms of economic influences

-In terms of provider motivation

-In terms of workload

How do these factors influence quality?

(Use probes and prompts to explore more)

Section F: Client-related factors and quality of EmOC

What client related factors influence the quality of EmOC in the health facility?

Probe:

-In terms of socio-economic factors

-In terms of client's cooperation

-In terms of cultural influences

How do these factors influence quality?

(Use probes and prompts to explore more)

Thank you!

Appendix J- Observation Guide for Quality of EmOC

Place……

Time……

Availability and quality of EmOC

Were drugs, supplies and equipment for EmOC available?

Yes, list. No, why?

Were personnel available 24/7?

Who came in, when, why, in what state and with whom / how did complication arise?

What cadre of health personnel was at post?

What did they do? What did they try to accompolish?

How exactly did they do this? What specific means and strategies did they use? (Signal functions)

Did it reflect national guidelines? Why?

What happened at each of the stages of labour?

Did complication occur?

At which stage? What happened?

What was the mode of delivery? Why?

How was delivery done and by whom?

How did members talk about, characterise and understand what was going on?

What assumptions/ traditions were staff making?

What do I see going on here? What did I learn from these notes?

Why did I include them?

Interpersonal Care

What was the nature of interaction between client and provider during complication management?

Provider related factors

What factors affected staff performance? How / Why?

Client related factors

What client factors affected quality of care? How / Why