FACTORS INFLUENCING ACCESS TO QUALITY MATERNAL HEALTHCARE SERVICES IN GHANA: ANALYSIS OF THE LITERATURE

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Master of International Health

12 September 2016 – 8 September 2017

KIT (ROYAL TROPICAL INSTITUTE)

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A thesis submitted in partial fulfillment of the requirement for the degree of Master of International Health

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Where other people’s work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.
The thesis “Factors Influencing Access to Quality Maternal Healthcare Services in Ghana: Analysis of The Literature” is my own work.

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Master in International Health
12 September 2016 – 8 September 2017
KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam
Amsterdam, The Netherlands

September 2017

Organised by:
KIT (Royal Tropical Institute) Health Unit
Amsterdam, The Netherlands

In co-operation with:
Vrije Universiteit Amsterdam/ Free University of Amsterdam (VU)
Amsterdam, The Netherlands
DEDICATION

This thesis is dedicated to

My dear wife; Miss Amina Zakaria,

My kids; Wuntuma and Hanbal

And

My best friend; Apostle George Apasera
Acknowledgement

My sincere gratitude goes to the Government of Ghana for financing my studies at KIT through the Ghana Education Trust Fund (GETFund).

I also thank KIT and all the staff particularly, the course administration and coordinators, and the lecturers for giving me the opportunity to study in this noble institution and also, their support towards building my skills and competences.

Special appreciation goes to my advisors and the back stopper for their support, time, guidance and contributions made into the writing of this thesis. I really learnt a lot from their experience.

My deepest gratitude goes to my wife, my mom and dad and the entire family for the prayers and support given me throughout my studies.

My appreciation goes to Apostle George Apasera and Dr Abdulai Abubakari for their support and encouragement.

Thanks to all my colleagues; from the NTC, MIH, 53rd batch of ICHD, University of Bergen, to University of Heidelberg for the experiences shared.

My ultimate praise goes to the almighty God for His blessings.
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### Abbreviations

<table>
<thead>
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<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
</tr>
<tr>
<td>CHAG</td>
<td>Christian Health Association of Ghana</td>
</tr>
<tr>
<td>CHO</td>
<td>Community Health Officers</td>
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<tr>
<td>CHV</td>
<td>Community Health Volunteers</td>
</tr>
<tr>
<td>CHPS</td>
<td>Community-based Health Planning and Services</td>
</tr>
<tr>
<td>EmOC</td>
<td>Emergency Obstetric Care</td>
</tr>
<tr>
<td>FANC</td>
<td>Focused Antenatal Care</td>
</tr>
<tr>
<td>GDHS</td>
<td>Ghana Demographic Health Survey</td>
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<td>GHS</td>
<td>Ghana Health Service</td>
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<tr>
<td>GOG</td>
<td>Government of Ghana</td>
</tr>
<tr>
<td>LMIC</td>
<td>Low and Middle-income Countries</td>
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<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MHS</td>
<td>Maternal Health Service</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>NCDs</td>
<td>Non-Communicable Diseases</td>
</tr>
<tr>
<td>NHIS</td>
<td>National Health Insurance Scheme</td>
</tr>
<tr>
<td>PNC</td>
<td>Postnatal Care</td>
</tr>
<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>TBA</td>
<td>Traditional Birth Attendants</td>
</tr>
<tr>
<td>TLTL</td>
<td>Too Little Too Late</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>YLD</td>
<td>Years of Life lost due to Disability</td>
</tr>
<tr>
<td>YLL</td>
<td>Years of Life Lost</td>
</tr>
</tbody>
</table>
Abstract

Background: Maternal mortality remains a global health challenge (303,000 deaths in 2015), with low and middle-income countries (LMIC), including Ghana, suffering the greatest burden (99%). Access to quality maternal health services (MHS) is of key importance, yet is still a challenge.

Objective: To identify and analyse factors influencing access to quality MHS including emergency obstetric care (EmOC) and safe abortion care (SAC) in Ghana, in order to make recommendations to improve access.

Methodology: The study undertook review and analysis of literature and a desk study. Levesque et al.’s (2013) access to health care conceptual framework was adopted to guide the review.

Findings: Inadequate health facilities and lack of skilled staff, low coverage of National Health Insurance Scheme (NHIS), insufficient medical supplies and poor provider attitude were identified as the major supply-side barriers for access to quality MHS. On the demand-side, main negative factors were socio-cultural barriers, long distance travel and low socio-economic status.

Conclusion: Accessing quality MHS, remains a challenge in the Ghana, due to both supply-side and demand-side factors. A number of effective interventions were identified, that potentially can address these barriers.

Recommendations: The government of Ghana (GOG) through the Ministry of Health need to increase financial commitment to health; expand health infrastructure, including a nationwide scale up of Community-based Health Planning Services; enforce the train and retain policy; redistribute health staff in favour of the underserved areas, review the free MHS policy under NHIS, to include all pregnant women and mothers regardless of their NHIS status, and include safe abortion care; and use community participatory interventions, such as women’s participatory learning groups and volunteer peer counseling to provide health education and antenatal care services at the community level.

Key words: Maternal health services, quality, access, low and middle-income countries, and Ghana.

By: Alabani Hafizu

Word count: 12,698
Introduction

Poor maternal health is a global health challenge especially in low and middle-income countries (LMIC). Globally, 830 women are estimated to die leaving many more with disabilities as a result of pregnancy or childbirth related complications most of which can be prevented or treated with LMIC suffers the greatest burden (99%) (WHO, 2016b). Ghana has significantly reduced its maternal mortality ratio (49%) between 1990 and 2015, however, it was still far less than the 75% target of the MDG 5 for the same period (Ninepence, 2015; The World Bank, 2016). Access to quality MHS including emergency obstetric care (EmOC) during pregnancy, childbirth and days after delivery is the major solution to prevent or manage these complications (WHO, 2016b). However, despite the high burden of maternal mortality in LMIC, access to quality maternal health service has been low especially in SSA. Less than half (49%) of expectant mothers in SSA had at least four ANC visit and just above half (53%) of all births in the region were attended by skilled health providers in 2016 (Unicef, 2017; WHO, 2017a).

Ghana, like many other LMICs is faced with the challenge for access to quality maternal health service. For instance, ANC coverage has been stagnant over the past years (75.2%) in 2011 and (75.3%) in 2015 with skilled delivery (49.4% to 55.7%) and postnatal care (65.3% to 68.8%) saw slight increase over that same period (Ghana Health Service, 2015). Despite several interventions such as the Safe-Motherhood training initiative and the Post Abortion Care initiative in the 1990s (Odoi-agyarko, 2003), the implementation of CHPS program in 2000 (Nyonator et al., 2005) and the free delivery policy in 2003 (Ofori-Adjei, 2007) to improve access to quality maternal health services in the country. Understanding factors that affect women’s access maternal health services will help policy makers and program designers to design and implement interventions to improve access to maternal health services in Ghana.

Prior to my study at KIT, I worked with Tamale Teaching Hospital and Saboba Medical centre as general nurse. These exposed me to the challenges women encounter on their quest to childbirth. I therefore chose this topic to understand the factors influencing women’s access to quality maternal health services in Ghana and to identify evidence-based interventions that could improve access to these services in the country.
Chapter One: Background Information of Ghana

1.1 Geography and Administration

The Republic of Ghana is located in West Africa bordering Togo to the east, Cote d’Ivoire to the west and Burkina Faso to the north, while to the south are the Gulf Guinea and the Atlantic Ocean. The country has a population of approximately 27.4 million people with an estimated population density of 114 per kilometre square (km2). Administratively, Ghana is divided into 10 regions with Accra being the capital as shown in figure 1 below. The regions are further subdivided into a total of 216 decentralized districts (Ghana Statistical Service, 2015; WHO, 2015).

Figure 1 Map of Ghana Indicating the Administrative Regions of the Country

Source: Ghana Statistical Service 2015
1.2 Demography and Education

The country has a life expectancy of 60 years for male and 63 years for female. Children under 15 years are the largest (38.3%) population group in the country and elderly above 65 years are the smallest, representing 5% of the total population. The country sex ratio is 95 male per 100 females, with little over half (51%) of the population living in urban areas. The literacy rate among the population aged 15 years and above has been improving and was estimated to be 65% in 2010, with about 52% of females aged 25 and above having at least secondary education as compare to 68.5% of male with same age (Ghana Statistical Service, 2015; UNDP, 2016).

1.3 Socio-economic situation

Ghana is a lower middle-income country with per capita GDP of 1,363 US dollars. Though majority of the population (45%) engages in agriculture, the service and the industrial sectors are now the major contributors to the country’s economy. On wealth distribution, a greater proportion of the population in the urban areas (71%) were classified as being in the top two wealth quintiles in the 2014 GDHS as compare to only 10% of the rural population. Regionally, Greater Accra rates as the richest region in the country, with the three northern regions being the poorest (Ghana Statistical Service, 2015).

1.4 Socio-cultural and religious situation

Ghana is a multi-cultural and ethnic country and comprises of 48% Ashanti-Akan, 17% Mole-Dagomba, 14% Ewe, 7% Ga-Dangme and other minor ethnic groups like the Gurma, Guang and the Grusi. Christianity (71%) and Islam (18%) are the major religious groups in the country. Only 6% of the population practices traditional religion and 5% have no affiliation to any religion (Ghana Statistical Service, 2015).

1.5 Current Health Situation in Ghana

Ghana, like many other Low and Middle-Income Countries (LMIC), is currently faced with a double burden of communicable and non-communicable diseases (NCDs). Even though communicable diseases since long have been the major causes of disease burden in the country, non-communicable diseases are fast emerging and account for about 39% all deaths in the
country (IHME, 2013). Malaria was the leading cause of hospital admissions in 2016, with stroke being the leading cause of mortality among the admitted patients in the same period (Ghana Health Service, 2017). Table 1 and 2 show the top ten causes of hospital admissions and mortality in 2016 in Ghana. Maternal, Neonatal and Nutritional related conditions are the leading cause of years of life lost (YLL) due to premature deaths and years of healthy life lost due to disability (YLD); see appendix 1 for details (WHO, 2016a).

Table 1 Top Ten Causes Hospital Admissions; 2015-2016

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cystis</td>
<td>328443</td>
</tr>
<tr>
<td>2</td>
<td>Encephalopathy</td>
<td>111371</td>
</tr>
<tr>
<td>3</td>
<td>Arthritis</td>
<td>79218</td>
</tr>
<tr>
<td>4</td>
<td>Septicaemia</td>
<td>78690</td>
</tr>
<tr>
<td>5</td>
<td>Jaundice</td>
<td>67008</td>
</tr>
<tr>
<td>6</td>
<td>Bleeding</td>
<td>46376</td>
</tr>
<tr>
<td>7</td>
<td>Antepartum haemorrhage</td>
<td>37006</td>
</tr>
<tr>
<td>8</td>
<td>Malaria</td>
<td>22462</td>
</tr>
<tr>
<td>9</td>
<td>Wound</td>
<td>15907</td>
</tr>
<tr>
<td>10</td>
<td>Pneumothorax</td>
<td>13917</td>
</tr>
<tr>
<td></td>
<td>All other Diseases</td>
<td>358676</td>
</tr>
</tbody>
</table>

Source: GHS 2016

Table 2 Top Ten Causes of Mortality among Admitted Patients; 2015-2016

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pneumonia</td>
<td>1084</td>
</tr>
<tr>
<td>2</td>
<td>Anaemia</td>
<td>909</td>
</tr>
<tr>
<td>3</td>
<td>HIV</td>
<td>786</td>
</tr>
<tr>
<td>4</td>
<td>Malaria</td>
<td>604</td>
</tr>
<tr>
<td>5</td>
<td>Congestive Cardiac Failure</td>
<td>585</td>
</tr>
<tr>
<td>6</td>
<td>Sepsis</td>
<td>558</td>
</tr>
<tr>
<td>7</td>
<td>Respiratory distress syndrome</td>
<td>518</td>
</tr>
<tr>
<td>8</td>
<td>Respiratory failure</td>
<td>518</td>
</tr>
<tr>
<td>9</td>
<td>Liver diseases</td>
<td>459</td>
</tr>
<tr>
<td>10</td>
<td>Encephalopathy</td>
<td>302</td>
</tr>
<tr>
<td></td>
<td>All other Diseases</td>
<td>8358</td>
</tr>
</tbody>
</table>

Source: GHS 2016
1.6 Health System

Ghana has a universal healthcare system with the public health sector being coordinated by the Ministry of Health (MOH) of Ghana. On service delivery, Ghana Health Service (GHS) is the major provider of healthcare services in the country accounting for approximately 40% of the total service provision. The Teaching Hospitals, Christian Health Association of Ghana (CHAG) institutions and other private health institutions also plays crucial role with regards to health service delivery in the country. The national healthcare system provides services in three levels: Community-based Health Planning and Services (CHPS), Health Post, Health Centres and Clinics which serves as a first line of contact and provide primary healthcare in the communities as the first level of health care in the country, the district and regional hospitals provide secondary care serves as the second level and the teaching hospitals provides tertiary care and serves as referral centres is the third level in the country illustrated in figure 2 below (Ghana Statistical Service, 2015).

Figure 2 Ghana' Health Delivery System

Source: (Schieber et al., 2012)
1.7 Health Financing

It was agree on the Centre for Global Health Security 10\textsuperscript{th} conference that governments of various countries should commit an average of 5\% of its GDP on health (Chatham House Report, 2014; Mamaye, 2015). However, the government of Ghana only spent 3.6\% of the nation’s GDP on health in 2014 with just an increase of 0.5\% since 1995 (World Bank Group, 2016). The government of Ghana in 2004 introduced the National Health Insurance Scheme (NHIS) aiming to achieve universal health coverage and to protect its citizens against the direct cost of health services expenditure. However, despite the implementation and operation of the NHIS, households and private still bear a heavy burden of paying for health services contributing about 47\% due to low nationwide coverage of the NHIS (37\% of out-of-pocket and other private risk-pooling system) of the total health spending while the NHIS contribute about 30\% (Schieber \textit{et al}., 2012).

1.8 Human Resource for Health

The national health workforce has improved over the past years especially the nursing staff. The current nurse-patient ratio including community health nurses is 1: 959, midwife-patient ratio is 1: 1,374 and doctor-patient ratio stands at 1: 9,043. However, there are uneven distributions of health staff in the country. For instance, a midwife in northern Ghana performs an average of 190 deliveries per year, 70\% more as compared to a midwife in southern Ghana (110) (Ministry of Health, 2014a)

1.9 Maternal Healthcare Services in Ghana:

The Ghanaian government through the MOH and GHS is the main provider of maternal healthcare services in the country. Most private health institutions as well as the Christian Health Association of Ghana (CHAG) institutions contribute enormously to the maternal healthcare system in Ghana. Each of the three components of the maternal health services (MHS) (ANC, deliveries and PNC) and other sexual and reproductive health services are provided in all of the three levels of the healthcare systems. MHS are free in all government health institutions, CHAG institutions and as well as some private health institutions across the country. Traditional Birth Attendants (TBAs) have a positive impact on access to MHS in the country. Though the focus on training TBAs to assist deliveries in the communities has now shift to training Community
Health Officers (CHOs) and Midwives in the country, TBAs contributed to approximately 30% of all deliveries in the country in 2014 (Ghana Health Service, 2014; Aryeetey et al., 2015).

To reduce maternal mortality and promote maternal health, “Free delivery policy” was introduced in 2003 to curtail the financial difficulties associated in accessing maternal healthcare services in the country. With this policy, MHS such as antenatal care, childbirth, postnatal care and care for any complications that may arise as a result of pregnancy or childbirth are provided for free and clients do not need to pay for drugs, laboratory services, ultra-scan, among others (Ofori-Adjei, 2007). National Health Insurance Scheme (NHIS) was also introduced in 2004 by the Ghanaian government to ensure an increased access to universal healthcare services including MHS in the country and now the free MHS is under the authority of the NHIS (Ofori-Adjei, 2007).

Maternal healthcare provide services to expectant mothers in three levels namely; antenatal care (ANC), delivery (childbirth), and postnatal care (PNC). In Ghana, Focused Antenatal Care (FANC) is provided to expectant mothers where holistic healthcare service is given to individual mothers rather than identifying and classifying certain groups of women as being at high risk and therefore giving them maximum attention (Ghana Health Service, 2013). The gold standard for maternal healthcare services utilization in Ghana is based on former World Health Organization guidelines of a target of at least four antenatal visits with the first visit at week 12 of gestation, and subsequent visits week 26, 32, and 36-38 (Ghana Health Service, 2014). WHO has recently increased the number of ANC visits from four to eight with the first visit at week 12 of gestation, and thereafter in week 20, 26, 30 34, 36, 38 and 40 (WHO, 2016c), which Ghana is yet to adopt.
Chapter Two: Problem Statement, Justification, Objectives and Methodology.

This chapter presents the problem statement, justification, main and specific objectives of the study. It also includes methodology and limitations of the study.

2.1 Problem Statement

Maternal mortality is a global public health challenge which importance was acknowledged in the year 2000 when the United Nations drew up the Millennium Development Goals (MDGs) to reduce the burden of global diseases and extreme poverty with goal 5 aimed at reducing maternal mortality rate by 75% between the period of 1990 to 2015 (United Nations, 2006). The issue was further emphasised in the Sustainable Development Goals (SDGs) which aims at reducing the maternal mortality ratio to less than 70 deaths per 100,000 live births by 2030 (WHO, 2016b). Maternal mortality is said to be “the death of a woman whilst pregnant or within 42 days after delivery or termination of pregnancy, irrespective of the duration or the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes” pp-32 (UNAIDS, 2015)

Significant progress has been made in reducing maternal mortality since the MDGs target was set in the year 2000. This saw a global decline of maternal mortality ratio of about 44% from 385 per 100,000 live births in 1990 to 216 per 100,000 live births in 2015 (WHO, UNICEF, UNFPA, et al., 2015). However, despite the consistent decline in maternal deaths, it still accounted for 303,000 deaths globally in 2015 (WHO, 2016b).

Direct obstetric complications such as haemorrhage, complication of unsafe abortion, hypertensive disorders, sepsis and obstructed labour have been identified to be the major factors causing maternal mortality globally. Most of these complications are preventable. Early identification and timely delivery, prompt emergency obstetric care interventions, clean deliveries, family planning, safe abortion services and appropriate treatment for hypertension, haemorrhage, HIV and malaria among others have been identified to be the major intervention to these complications (Care International, 2014; Koblinsky et al., 2016). According to WHO,
access to quality MHS including emergency obstetric care (EmOC) during pregnancy, childbirth and days after delivery is the pathway through which these interventions can be achieved (WHO, 2016b). However, though ANC coverage has improved from 35% in 1990 to 52% in 2015 and skilled birth attendance also increased from 61% in 2000 to 78% in 2016 globally, it has not been as rapid as expected and also, not evenly distributed across the regions (Miller et al., 2016; WHO, 2017b).

LMIC suffer the greatest burden of maternal mortality accounting for 99% of all maternal deaths in 2015, with Sub-Saharan Africa (SSA) alone contributing 66% of the total deaths (WHO, et al. 2015). Maternal mortality ratio stands at 239 per 100,000 live births (1 in 36 women) in LMIC as compared to 12 per 100,000 live births (1 in 4900 women) in high-income countries (WHO, 2016b). Despite the high burden of maternal mortality in LMIC, access to quality maternal health service has been low especially in SSA. Less than half (49%) of expectant mothers in SSA had at least four ANC visits and just above half (53%) of all births in the region were attended by skilled health providers in 2016 (Unicef, 2017; WHO, 2017a). Limited access to other services such as EmOC, modern contraceptive services, safe abortion care (SAC), among others, a situation described by Miller et al. (2016) as “Too Little Too Late” (TLTL) in addition to low economic status, low level of education and weak empowerment of women, labelled by Ahmed et al. (2010) as the 3Es, had been identified to be the determinants of access to quality MHS in LMIC.

Ghana has made a significant progress in reducing maternal mortality recording 319 deaths per 100,000 live births in 2015, a 49% decline since 1990 (The World Bank, 2016). Over the last five years, Ghana has recorded a high but stagnated ANC coverage of 75.2% in 2011 and 75.3% in 2015 with a slight increase of skilled delivery and PNC over the same period of 49.4% in 2011 to 55.7% in 2015 and 65.3% in 2011 to 68.8% in 2015 respectively (Ghana Health Service, 2015). Though Ghana is performing well in terms of maternal mortality as compared to most countries in the sub-region, it fell short of reaching the MDG 5 target (Ninepence, 2015; The World Bank, 2016).

Direct obstetric complications account for about 86% of all maternal mortalities in the country with haemorrhage, hypertensive disorder, unsafe abortion and sepsis being the major causes of these deaths as illustrated in figure 3 below (Ghana Health Service, 2015). As stated earlier,
access to quality MHS is the major solution to these problem (WHO, 2016b). Masters et al., (2013) explained that MHS is highly cost effective and that it provides contact between the woman and the healthcare providers which may promote the health seeking behaviour of the women especially during delivery and also provide opportunities for the women to access preventive and curative services including malaria and HIV/AIDS. Levesque et al. (2013) hypothesized that women’s access to quality MHS including EmOC and SAC in a given population is influenced by five inter-related dimensions of both health system (supply-side) and individual/population (demand-side) factors. Ghana has implemented several interventions related to these dimensions after the Nairobi’s International Conference on Safe-Motherhood Initiative in 1987 (Odoi-agyarko, 2003); the Safe-Motherhood training initiative and the Post Abortion Care initiative in the 1990s (Odoi-agyarko, 2003), the implementation of CHPS program in 2000 (Nyonator et al., 2005) and the free delivery policy in 2003 (Ofori-Adjei, 2007).

**Figure 3 Causes of Maternal Deaths in Ghana, 2015**

![Figure 3 Causes of Maternal Deaths in Ghana, 2015](image)

**Source: Ghana Health Service 2015**

Also, capacity building of regional and district hospitals to provide comprehensive and basic emergency obstetric and neonatal care and the implementation of Prevention and Management of Postpartum Haemorrhage (PPH) program with the use of misoprostol as key component for the
PPH management are all interventions implemented by the Ghanaian government to improve access to quality maternal health services and EmOC and to reduce the high maternal mortality rate in the country (Ghana Health Service, 2017). However despite all these initiatives, the coverage and quality of essential MHS have not improved much over the years which explain why maternal mortality rate have not improved as expected in the country.

2.2 Justification

Identifying factors associated with access to quality MHS including safe abortion care and EmOC services was the main interest of this paper. Evidence show that poor maternal health has enormous consequences on the health system and the general socio-economic situation, and that maternal mortality is just a fraction of the consequences of poor maternal health. Poor maternal has been observed to increased inequalities between populations and societies in a countries (Graham et al., 2016).

Maternal and child health is identified to be one of the major indicators to predict the general economy of a country as proved in the MDGs (United Nations, 2006). WHO explains that the health of the mother is important to the survival and thrive of the child and has a direct effect to the general well-being of the society and that access to quality care is needed to ensure this (WHO, 2005).

Ghana fell short in meeting the MDG 5 target in 2015, and now, the world has shift to a new SDGs era which seeks to achieve maternal mortality ratio of 70/100,000 live births by 2030 globally (United Nations, 2015). The new SDGs sees maternal health as not just the prevention of maternal mortalities and morbidities, but also a human right issue (Graham et al., 2016). This therefore makes access to quality maternal health services a very relevant issue, hence a study to identify factors influencing access to quality maternal health service in Ghana.

Having a deeper insight into reasons women access maternal health services will help policy makers and program designers to design and implement interventions to improve access to maternal health services in Ghana.

Prior to this study, a number of studies have been published on maternal healthcare service utilization in Ghana (Abor et al., 2011; Arthur, 2012; Gething et al., 2012; Apanga and Adam,
2015; Asante-Sarpong et al., 2016b; Bonfrer, Breebaart and De Poel, 2016). However, most of these studies focused primarily on specific topics, while some targeted specific geographical locations. For instance, the Abor et al. (2011) study was only on socio-economic factors influencing maternal health service utilization whilst the Gething et al. (2012) study was on geographical access as barrier to health service utilization. This study focuses on identifying all relevant factors and presents information on both health systems (supply-side) factors and individual or population related (demand-side) factors associated with access to quality maternal health service in Ghana.

2.3 Objectives

The aim of this study is to identify and analyse factors influencing access to quality maternal healthcare services in Ghana in order to make recommendations to stakeholders in health to implement evidenced-based interventions to improve access to quality maternal health services in the Ghana.

2.3.1 Specific objectives

- To identify the individual and population (demand-side) related factors influencing access to quality maternal health services in Ghana.
- To explore the health system (supply-side) factors influencing access to quality maternal health services in Ghana.
- To identify and analyse evidence-based interventions in Ghana and other Low and Middle-income Countries to improve access to quality maternal health services in Ghana.
- To suggest recommendations to stakeholders in health to improve access to quality maternal health services in Ghana.

2.4 Methodology

This is a descriptive and explorative study, the objective of which was achieved through review and analysis of literature and desk study. The main search engines used were PubMed and Google Scholar. The amc library was used as database through which literature that was not freely available was accessed using PubMed. For reports and grey literature, Google and websites of Ministry of Health (MOH) Ghana, Ghana Health Service and key global
developmental agencies such as WHO, UN, and UNICEF were also used. Only studies in English and studies published in LMIC 2005 to 2017 found to be relevant to the objectives of this study were used.

2.4.1 Search Technique

Key words used were maternal health services, accessibility, quality, safe abortion care, emergency obstetric care, approachability, acceptability, availability, accommodation, affordability, appropriateness, evidence-based interventions, low and middle-income countries, Sub-Saharan Africa and Ghana. Booleans operators such as AND, OR and NOT were used to combine search terms and to separate concepts to obtain relevant articles see table 3 for details. Snow balling technique was also employed in this study where data were obtained through the references of some of the reviewed articles and journals.

Table 3 Key words used

<table>
<thead>
<tr>
<th>Issues</th>
<th>Factors</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal health services OR</td>
<td>Approachability OR Ability to perceive OR</td>
<td>Low and Middle-income Countries OR</td>
</tr>
<tr>
<td>Antenatal care OR Delivery OR</td>
<td>Outreach OR Health literacy OR Health beliefs OR Information OR</td>
<td>Sub-Saharan Africa OR Ghana</td>
</tr>
<tr>
<td>Postnatal care OR Emergency</td>
<td>Acceptability OR Ability to seek OR Professional values OR culture OR</td>
<td>OR</td>
</tr>
<tr>
<td>obstetric care OR safe abortion care</td>
<td>Gender OR autonomy OR Availability OR ability to reach OR Accommodation OR geographic location OR</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>Living environments OR Transportation OR Social support OR health insurance OR</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>Affordability OR ability to pay OR Direct costs OR Indirect costs OR</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
</tr>
</tbody>
</table>
Opportunity costs OR income
OR
Appropriateness OR ability to engage
OR
Technical OR Interpersonal quality
OR
Client’s empowerment

2.4.2 Conceptual Framework

Levesque et al.'s (2013) access to health care conceptual framework was adopted for this study. This model was adopted because it matches the objectives of the study and therefore used to guide the search and organized the search results.

The model identifies two sets of factors to be influencing an individual access to health care; the health system (supply-side) factors and individual or population related (demand-side) factors. It is based on the assumption that five sets of dimensions on each set of factors interact to influence an individual access to health services explained in detail below.

✓ **Supply-side factors**: these are the health system related factors also described as the five dimensions of accessibility to services that influence an individual accessibility to health services which include; approachability, acceptability, availability and accommodation, affordability and appropriateness of services (Levesque et al. 2013).

✓ **Demand-side factors**: these are the corresponding individual or population related factors to the five dimensions of the supply-side factors that influence an individual access to health service. It include the individual ability to perceive the need for care, ability to seek care, ability to reach the service delivery point, ability to pay for the services and the ability to engage care illustrated in figure 2 below (Levesque et al. 2013).
2.4.3 Study Limitations

The study was based only on literature published in English. There might have been good literature in other languages such as French, especially from the French speaking countries in SSA which were not included in this study. Also, most of the literature reviewed was accessed online; this means, documents that was not available online but only as hard copy might have been left out. In addition, the study relied only on published literature and lack primary data, which limits its reflection on the real and current situation of the problem in the country.

It was also difficult to find literature on how provider’s values and norms, client’s assets and social capital affect women’s access to services.
Chapter Three: Factors Influencing Access to Quality Maternal Health Services in Ghana

Introduction

This chapter presents the findings regarding factors influencing access to quality maternal health services in Ghana, and is structured in accordance with Levesque et al.’s (2013) conceptual framework of access to health care. It discusses access to maternal health services based on both the health system (supply-side) perspective and individual/population (demand-side) perspective.

3.1 Approachability/Ability to perceive

Making health services easily approachable by providing health information to the population through health education and outreach services (supply-side factors) and the population ability to identify their need for health care (demand-side factors) are key for access to quality health services including maternal health services in the country.

3.1.1 Health Information, Outreach and Transparency

Comprehensive and readily available health information is needed to guide women and the family to make informed health decisions and to easily approach health services. Health-related information can easily be created and shared globally in this new era of information and communication technology (ICT) (Braa et al., 2007). Quality and credible health information is needed to ensure equal access to health information among the population (Custodio et al., 2009). Health service providers in Ghana rely mainly on interpersonal communication (health provider to patient through hospital visit, outreach services, durbars and seminars), radio and television, print media, and now social media to disseminate health-related information (Ghana Health Service, 2015). Ghana health service provides outreach services to hard-to-reach communities through Community Health Workers, to be discussed later under service availability in this chapter. Health promotion services including health education, child, and women’s health services are provided during this outreach services to improve on access to preventive services and health information in the country (GHS family health division 2015).

However, a study by Sokey & Adisah-atta (2017) revealed that majority of rural dwellers in Ghana lack access to health-related information. The study noted that about 91.8% could not access health information due to lack of structured source of health information, 88.9%, 89.5%
and 81.3% cited language, lack of mobile phones and internet services and geographical location as barriers to access to health information.

### 3.1.2 Health Literacy, Beliefs and Trust

Woman and family’s knowledge on needs in relation to maternal health care and awareness of the service are important factors for access to quality maternal health services. A number of studies have reported that maternal and husband’s level of education is positively linked with health literacy and the ability to perceive the need for maternal health care (Banke-thomas et al. 2017; Enuameh et al. 2016; Benedict Oppong Asamoah et al. 2014; Abor et al. 2011). This was confirmed in the 2014 GDHS reports which showed that women with secondary education or higher were more likely to access ANC (99.9%), skilled birth attendants (96.2%) and postnatal care (93.6%) as compared to women without education who showed service utilization rate of 94.1% ANC, 52.3% skilled birth attendants, 68.4% postnatal care (Ghana Statistical Service, 2015).

A study by Asante-Sarpong et al. (2016a) on free delivery and access to maternal health services in Central region revealed that women with sufficient knowledge on the full package of the service were more likely to access maternal health service than those without sufficient knowledge.

On emergency obstetric complication, Lori et al. (2015) reported insufficient knowledge of pregnancy danger signs among women in Ghana. The study noted that women could not comprehend information received during ANC which affect their ability to recognize danger signs in labour leading to delay in seeking care and consequently complications.

Similarly, Sundaram et al. (2012) reported that women who were aware of the legality of abortion services in Ghana were more likely to access safe abortion services (70%) as compared to those with insufficient knowledge (54%). Guttmacher Institute (2013) and Morhee & Morhee (2006) also reported an association of maternal and partner’s education with access to safe abortion services in Ghana.

With regards to trust, Ganle et al. (2015) reported in their study done in northern Ghana that women are losing confidence in the public health sector. The study revealed that women
perceived the current health system to be operated by young nurses and midwives and that these young personnel only possessed book knowledge and lack the skills, competences and experiences to deliver quality services.

3.2 Acceptability and woman’s ability to seek care

This describes the socio-cultural factors that determine the woman’s possibilities of accepting services and her ability to seek maternal health services.

3.2.1 Cultural beliefs and value

Religion and culture are deeply rooted in most Ghanaian communities which influence their beliefs and values (Webster 2013).

Several studies identified cultural beliefs and values to have an enormous effect on women’s ability to access quality maternal health services in Ghana. A study by Ganle et al. (2015) revealed that an interaction of several cultural factors influences women’s ability to access care from a skilled health provider. For instance, the practice of not announcing the pregnancy of a first-time pregnancy until after six months of pregnancy out of fear for evil-eye on both the baby and the mother in northern Ghana serves as a barrier for these women to access maternal health services. The same study also revealed that women deliver at home to demonstrate that they are faithful to their partners and to make their marriage a stable one. This is because, women who experience difficult labour or delivered at hospitals are perceived to have had extra marital sex and their moral conduct is questioned (Ganle et al., 2015). Pre-marital sex and extra-marital sex are greatly frowned upon in many Ghanaian societies and pregnancies resulting from this are stigmatized. This affects the ability of women with such pregnancies to accept and seek maternal health services (Ganle et al., 2015). This is confirmed by other studies, Enuameh et al. (2016) and Benedict O Asamoah et al. (2014) which found that marital status is strongly associated with access to maternal health services and that married women are more likely to access maternal health services (88.7%) as compared to unmarried women (11.2%).

Again the notion that only complicated pregnancies should be delivered at the health facilities and that hospital setting is unnatural for childbirth were also reported to be some of the socio-cultural factors influencing the women’s possibility of accessing maternal health services in
Ghana (Ganle et al., 2014; Sarkodie and Abubakari, 2014). Again, Moyer & Philip’s study in rural northern Ghana found that though declining, the culture of consulting the gods or soothsayers to determine the woman’s place of delivery still has a great effect on the women’s ability to access quality maternal health services (Moyer and Philip, 2013).

Several studies have reported strong association between less access to maternal health services and Muslim women in Ghana (Sakeah et al. 2014; Abor et al. 2011 & Obeng et al. 2006). Ganle's (2016b) qualitative study on Muslim women and access to MHS revealed that Islamic religion enjoins women to preserve their bodies and that their bodies are sacred and shouldn’t be exposed to other people especially to the other sex. But the structure of most health facilities in Ghana makes it difficult to maintain this privacy. And also, provider’s insensitivity to Muslim beliefs and insufficient knowledge of providers about Islamic religion greatly affects Muslim women’s possibility to accept and seek maternal health services. This confirms Ganle et al’s. (2014) qualitative study in northern Ghana which is dominated by Muslims that the presence of male midwife in health facilities serves as disincentives for women to access maternal health services. The study noted that women rather will prefer the services of TBAs than that of a skilled male midwife.

Hagman (2013) and Morhee & Morhee (2006) also reported a correlation of socio-cultural factors and access to safe abortion and noted the stigma attached to abortion as the reason for the rise of unsafe abortion in the country.

3.2.2 Gender and Autonomy

Most Ghanaian societies are characterized by a patriarchal system where men are seen as the “decision making powers” and majority of the household heads are males (66.2%) (Ghana Statistical Service, 2015). This limits women’s decision making ability even during emergencies in pregnancy, limiting access to quality maternal health services and the risk of maternal morbidity and mortality (Hagman, 2013). A study by Moyer & Philip (2013) reported that husbands, household heads, mother-in-laws and TBAs are most often those who determine if, when and where pregnant women access maternal health services in rural northern Ghana. A study done by Sarkodie & Abubakari (2014) in northern Ghana found that only 34% of women
make their own decision regarding the place to access maternal health services. Ayanore (2016) also reported similar findings on the study of focused maternal care in Ghana.

Level of maternal and husband’s education again has a positive association with autonomy and health decision-making. Sarkodie & Abubakari (2014) stated that education gives the woman her autonomy and this influences her health seeking behaviour and the higher her educational status the more likely she will be able to make her own health decisions. They found in their study that women with no or less education were highly associated with the use of TBAs services unlike highly educated women. Women who are empowered through education and a high socio-economic status are more likely to access maternal health services (Ononokpo and Odimegwu, 2014).

On the side of maternal age and ability to seek care, young people particular young women require the permission and approval from their guardians (parents or spouses) in the context of Ghana to seek care. This limits their ability to access maternal health services. Enuameh et al. (2016) and Asamoah et al. (2014) reported that women aged 20 and above were more likely to access maternal health services than women who were below 20 years. Similar findings were reported in the GDHS 2014. Again, women in their 20s were more likely to access safe abortion services than women aged less than 20 (Sundaram et al., 2012; Guttmacher Institute, 2013).

3.3 Availability and Accommodation/Ability to Reach

Availability of health services and accommodation of client needs, and the ability of the client to reach the services are important pillars for access to health care including maternal health services in the country. According to Peters et al. (2008), the distance between health user and the health facility has been recognized to be a major challenge for access to healthcare services. Inadequate health services and long distance travel to access maternal health services can serve as a disincentive for women to access the services in Ghana (Nesbitt et al., 2016).

As discussed earlier, the government of Ghana initiated and implemented Community-based Health Planning Services (CHPS) program to improve access to basic health care including maternal health services in Ghana. This is reported to be successful in areas where the services are readily available (Ministry of Health, 2014b). A study done by Sakeah et al. (2014) in the
Upper East region (the region that benefited most from this initiative) reported evidence for an increased in uptake (80%) of skilled birth attendance and this was as a result of the presence of the Community Health Officers and CHPS in those communities. However, nationwide coverage is inadequate as 2,580 CHPS compounds are currently functional when about 6,500 CHPS are required (Ministry of Health, 2014a). Also, lack of midwives to provide basic emergency obstetric care such as vacuum delivery and removal of retained placenta is reported to be one of the challenges for the CHPS program (Ministry of Health, 2014b; Sakeah et al., 2014).

Government also expanded regional and districts health infrastructure to improve access to health services in the country. This, in addition to the efforts put by the faith-based and other private organizations, resulted in an increase in the number of health facilities in the country from 1 : 3,011 in 2007 to a total of 1 : 5,865 in 2015 (Ministry of Health, 2008, 2015). Both these improvements have had a positive effect on women’s access to maternal health services in the country. The number of health workforce has also increased which led to the improvement of doctor and nurse/midwife to population ratio of 1 : 13,683 in 2007 to 1 : 9,043 in 2015 and 1 : 1,454 in 2007 to 1 : 959 in 2015 respectively, increasing women’s ability to reach health providers for maternal health services (Ministry of Health, 2008, 2015). There are however great disparities in the distribution of health staff and health facilities in the country with the rural areas suffering the most. For instance about 70% of doctors work in only two regions in the country (Ashanti and Greater Accra) with only 30% working in the remaining 8 regions where a greater proportions of the population lives (Ministry of Health, 2015).

A study by Gething et al. (2012) on availability of maternal health services found that about 90% of all women in their reproductive age in Ghana are able to reach within 2 hours travel time to any regular maternal health service (ANC, delivery care and PNC) facility. However, only 55% are within 2 hours reach to Comprehensive-Emergency Obstetric and Neonatal Care (C-EmONC). Nesbitt et al. (2016) and Bosomprah et al. (2016) also reported similar findings in their respective studies. Table 1 below shows the regional variation for the availability of maternal healthcare services confirming the disparities of the distribution of health facilities in Ghana. Also, about 40% of all the district hospitals are not covered by the national ambulance services. As a result, emergency responses including emergency obstetric complications are poor in these districts.
A study by Masters et al. (2013) found that distance and travel time were very important factors that determine the mothers’ decision to either use or not to use maternal health services. According to the same study, the chance of a mother accessing skilled delivery decreases by 24% with an increase in one hour traveling time and 12% in at least three times ANC visit. (Sarkodie and Abubakari, 2014) also reported similar findings in their study on maternal health services utilization and socio-economic status in northern Ghana. Asamoah, Agardh and Cromley (2014), Ganle et al. (2014) Sarkodie and Abubakari (2014) and Johnson et al. (2015) also reported an association of long travel distance and less access to maternal health services in Ghana. Distance and travel time is influenced by place of residence with women in rural areas suffering the most. Studies have found that rural women in LMIC including Ghana are less likely to access maternal health services as compared to women in the urban areas (Asante-Sarpong et al., 2016a; Ayanore, 2016; Banke-thomas, Banke-thomas and Ameh, 2017).

Ghana’s abortion policy only permits physician and midwives to provide abortion services. However, these professionals are inadequate and unevenly distributed in the country (Aniteye and Mayhew, 2013). This makes safe abortion care (SAC) generally to be inadequate and unevenly distributed with urban slums and rural communities suffering the most (Population Council 2015; Morhee & Morhee 2006). A study by Aboagye et al. (2007) in 90 health facilities in Ghana found that only 12 (13.3%) of the facilities offers safe abortion care. The same study revealed that about three-quarters of health facilities in Ghana lack medical supplies required for safe abortion care which affects women’s access to the services. Similar findings were reported by Payne et al. (2013) on their study on why women die from unsafe abortion in Ghana.
Table 4 Geographical Access to Three Levels of Facility-based Deliveries in Ghana by Regions

<table>
<thead>
<tr>
<th>Region</th>
<th>Travel time category</th>
<th>‘ABC’ facilities offering any care at birth</th>
<th>EmONC facilities (partial, basic or comprehensive)</th>
<th>EmONC facilities (comprehensive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NATIONAL Total = 6,205,703</td>
<td>&lt; 2 hrs</td>
<td>5,586,265 (90%)</td>
<td>4,099,329 (66%)</td>
<td>3,384,040 (55%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>619,438 (10%)</td>
<td>2,106,374 (34%)</td>
<td>2,821,663 (46%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>185,917 (3%)</td>
<td>1,091,760 (18%)</td>
<td>1,766,659 (29%)</td>
</tr>
<tr>
<td>Ashanti Total = 1,795,118</td>
<td>&lt; 2 hrs</td>
<td>1,708,397 (95%)</td>
<td>1,315,565 (73%)</td>
<td>1,223,834 (68%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>87,721 (5%)</td>
<td>480,553 (27%)</td>
<td>572,284 (32%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>12,561 (1%)</td>
<td>197,955 (11%)</td>
<td>276,998 (15%)</td>
</tr>
<tr>
<td>Brong Ahafo Total = 548,345</td>
<td>&lt; 2 hrs</td>
<td>479,302 (87%)</td>
<td>318,954 (58%)</td>
<td>269,541 (49%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>69,043 (13%)</td>
<td>229,301 (42%)</td>
<td>278,503 (51%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>11,851 (2%)</td>
<td>133,026 (24%)</td>
<td>189,944 (39%)</td>
</tr>
<tr>
<td>Central Total = 496,948</td>
<td>&lt; 2 hrs</td>
<td>430,841 (87%)</td>
<td>297,882 (60%)</td>
<td>250,054 (50%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>66,107 (13%)</td>
<td>199,066 (40%)</td>
<td>246,894 (50%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>7,534 (2%)</td>
<td>106,144 (21%)</td>
<td>195,614 (39%)</td>
</tr>
<tr>
<td>Eastern Total = 624,211</td>
<td>&lt; 2 hrs</td>
<td>600,380 (96%)</td>
<td>426,226 (68%)</td>
<td>394,962 (63%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>23,831 (4%)</td>
<td>197,986 (32%)</td>
<td>229,249 (37%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>8,000 (1%)</td>
<td>64,969 (10%)</td>
<td>110,305 (18%)</td>
</tr>
<tr>
<td>Greater Accra Total = 785,183</td>
<td>&lt; 2 hrs</td>
<td>782,777 (99%)</td>
<td>736,233 (94%)</td>
<td>644,111 (82%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>2,406 (1%)</td>
<td>48,660 (6%)</td>
<td>140,972 (18%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>0 (0%)</td>
<td>19,734 (3%)</td>
<td>63,860 (8%)</td>
</tr>
<tr>
<td>Northern Total = 531,093</td>
<td>&lt; 2 hrs</td>
<td>428,007 (78%)</td>
<td>205,709 (37%)</td>
<td>139,096 (25%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>122,486 (22%)</td>
<td>345,383 (63%)</td>
<td>411,096 (75%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>37,463 (7%)</td>
<td>228,182 (41%)</td>
<td>276,431 (50%)</td>
</tr>
<tr>
<td>Upper East Total = 551,093</td>
<td>&lt; 2 hrs</td>
<td>230,331 (98%)</td>
<td>130,994 (56%)</td>
<td>122,261 (52%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>4,245 (2%)</td>
<td>103,852 (44%)</td>
<td>112,234 (48%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>43 (0%)</td>
<td>45,690 (20%)</td>
<td>82,763 (35%)</td>
</tr>
<tr>
<td>Upper West Total = 160,357</td>
<td>&lt; 2 hrs</td>
<td>145,442 (91%)</td>
<td>94,318 (59%)</td>
<td>56,933 (36%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>14,915 (9%)</td>
<td>66,099 (41%)</td>
<td>103,423 (65%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>1,735 (1%)</td>
<td>38,352 (24%)</td>
<td>73,455 (46%)</td>
</tr>
<tr>
<td>Volta Total = 472,916</td>
<td>&lt; 2 hrs</td>
<td>340,811 (73%)</td>
<td>273,282 (58%)</td>
<td>178,094 (38%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>132,105 (28%)</td>
<td>199,634 (42%)</td>
<td>298,822 (62%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>65,228 (14%)</td>
<td>114,32 (24%)</td>
<td>209,138 (44%)</td>
</tr>
<tr>
<td>Western Total = 535,956</td>
<td>&lt; 2 hrs</td>
<td>439,376 (82%)</td>
<td>299,875 (56%)</td>
<td>104,152 (19%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 hrs</td>
<td>96,580 (18%)</td>
<td>236,081 (44%)</td>
<td>431,204 (81%)</td>
</tr>
<tr>
<td></td>
<td>&gt; 4 hrs</td>
<td>41,502 (8%)</td>
<td>142,975 (27%)</td>
<td>288,162 (54%)</td>
</tr>
</tbody>
</table>

Source: Gething et al. (2012)
3.4 Affordability/Ability to Pay

Financial access to health services relies on the country’s health financing system and the individual’s financial capacity; that is, the individual’s ability and willingness to pay for the services (Murry and Evans, 2003). It includes both direct and indirect and opportunistic costs and is considered to be one of the major factors determining access to quality health services (Peters et al., 2008).

3.4.1 Cost of Accessing Services

In Ghana, maternal health services such as antenatal care, deliveries, postnatal care, emergency obstetric care, spontaneous abortion (miscarriage or pregnancy loss before 20 weeks) care and post abortion care are fee exempted and covered by the National Health Insurance Scheme (NHIS). However, care for induced abortion (abortion performed at the request by the pregnant woman herself) is not included in this package (Ofori-Adjei, 2007). This was an initiative to abolish out-of-pocket payment for MHS, prevent clients and families from catastrophic expenditure on MHS and to improve access to maternal health services including emergency obstetric care. Women enrolment to the NHIS indeed is reported to have a positive impact on women’s access to MHS. A study by Ameyaw et al. (2017) on access to MHS and being an active member of NHIS among different wealth quintile showed that NHIS influences women’s access to SBAs in all the wealth quintiles. Women in the lowest wealth with NHIS were 14% (CI = 1.42 – 2.13) more likely to access SBAs than women who were not subscribers, 7% (CI = 1.00 – 2.10) in middle wealth quintile and 5% (CI = 1.01 – 3.18) in the highest wealth quintile. Several studies have also found that women covered by NHIS have better health seeking behaviour leading to higher uptake of MHS (Asante-Sarpong et al. 2016a; Brugiavini & Pace 2016; Enuameh et al. 2016; Bonfrer et al. (2016), Dixon et al. 2014; Owoo & Lambon-Quayefio 2013; Arthur 2012). However, nationwide coverage of the NHIS among women is currently low (34%) with a significant decreased in coverage over the past years as shown in table 2 below (Ministry of Health, 2014a). A cross-sectional study by (Kusi et al., 2015) found that cost of annual contribution, registration difficulties, poor quality of care received by NHIS subscribers at the health facilities, lack of trust in the NHIS among others were the reasons for non-enrolment among those who were uninsured.
Table 5 Proportion of Expected Pregnant Women Exempted under NHIS

<table>
<thead>
<tr>
<th>Year</th>
<th>Registered</th>
<th>Expected</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1712,718</td>
<td>1,011,488</td>
<td>70%</td>
</tr>
<tr>
<td>2012</td>
<td>742,279</td>
<td>1,037,286</td>
<td>72%</td>
</tr>
<tr>
<td>2013</td>
<td>239,481</td>
<td>1,063,767</td>
<td>23%</td>
</tr>
<tr>
<td>2014</td>
<td>373,760</td>
<td>1,090,949</td>
<td>34%</td>
</tr>
</tbody>
</table>

Source: Ministry of Health, Ghana – Holistic Assessment of 2014 Program Work

Mamaye, (2015) reported that though maternal health services are free in the country under the NHIS, women under the scheme still sometimes pay for services such as ultrasound scan, drugs and laboratory services due to shortage and unavailability of such services in the public health facilities and they have to seek such services in private health facilities. These could be the reasons for lost in trust and low coverage of the NHIS.

3.4.2 Socio-economic status/wealth of the woman and family/insurance

Family and women’s ability to generate financial resources and ability to pay for health services without catastrophic expenditure and indebtedness is crucial for women’s access to maternal health services (Levesque et al. 2013).

Low socio-economic status or poverty limits family and women’s ability to access maternal health services in LMIC. A study by Finlayson & Downe (2013) showed that families and women with marginalized financial capacity will rather prefer to use their limited resources on basic needs such as food and shelter than maternal health services. The same study revealed that cost of transportation and opportunistic costs such as loss of income and, feeding while away from home deters poor women from accessing maternal health services, including care for emergency obstetric complications even if the services are free.

Several studies have found that high socio-economic status and being in high wealth quintile have a positive link with access to quality maternal health services in LMIC. For instance a study
by Banke-thomas et al. (2017) on adolescent mothers’ utilization of maternal health services in LMIC revealed that high wealth quintile is strongly associated with women’s access to maternal health services. Similarly, the 2014 Ghana demographic health survey showed that women in the highest wealth quintile had the highest access to maternal health services with ANC being (99.7%), skilled deliveries (96.4%) and postnatal care (95%) as compared to ANC of 94%, 46% of skilled deliveries and 64% postnatal care respectively for women in the lowest wealth quintile (Ghana Statistical Service, 2015). Enuameh et al. (2016), Ayanore( 2016), Asamoah et al. (2014), Owoo & Lambon-Quayefio (2013), Arthur (2012) and Abor et al. (2011) also reported similar findings in their studies.

Most women in Ghana are financially dependents especially adolescents and therefore face financial constraints in accessing safe abortion care since the services is not free in the country (Baiden, 2009). A study by Sundaram et al. (2012) on access to abortion services in Ghana, found that 71% of women in the highest wealth quintile has access to safe abortion care as compared to 38% of women in the lowest wealth quintile. Similar results were reported by Guttmacher Institute (2013) and Morhee & Morhee (2006).

3.5 Appropriateness/Ability to engage

Technical and interpersonal quality of services provided and the family and client’s ability to engage with the care determines the appropriateness of the services received by the client (Levesque et al. 2013).

3.5.1 Technical Quality

Healthcare quality remains a challenge in many LMIC mostly due inadequate logistics and human resource (Alhassan et al., 2015). The government of Ghana has implemented a number of interventions some of which include infrastructure work, protocol development, training manual, training of health staff, monitoring and evaluation (M&E) policy development and incentives to health staff since 1988 to improve the quality of healthcare services in the country; see table 6 for detailed information of the interventions. Maternal and child health received the greatest attention (16%) of the interventions as shown in figure 5 below (Escribano-ferrer et al., 2016).
Table 6 Description of Health Interventions in Ghana

<table>
<thead>
<tr>
<th>Type of Interventions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulations</td>
<td>Laws, standards and accreditation</td>
</tr>
<tr>
<td>Policies and strategies</td>
<td>Documents describing long term goals and strategic lines</td>
</tr>
<tr>
<td>Protocols and guidelines</td>
<td>Describe steps to follow to guide practice</td>
</tr>
<tr>
<td>Training manuals</td>
<td>Development of training manuals</td>
</tr>
<tr>
<td>Technical assistance</td>
<td>Includes specialist outreach programs, telemedicine and external support to a particular task or post</td>
</tr>
<tr>
<td>Community mobilization</td>
<td>Interventions to increase community education, awareness and participation</td>
</tr>
<tr>
<td>Staff training</td>
<td>Mainly in-service training</td>
</tr>
<tr>
<td>Health information</td>
<td>Includes supervision and monitoring and evaluation</td>
</tr>
<tr>
<td>Processes and continuous improvement</td>
<td>Projects dealing with change and addressing processes and systems</td>
</tr>
<tr>
<td>Equipment and infrastructures</td>
<td>Purchasing commodities, equipment and infrastructure supported by health partners during the period comprising 2014. Contributions from the government are not captured here</td>
</tr>
<tr>
<td>Monetary incentives</td>
<td>Performance based financing</td>
</tr>
</tbody>
</table>

Source: Escribano-ferrer et al., (2016)

Figure 5 Interventions with the Main Purpose of Improving Quality of Care Ghana by Themes

Source: Escribano-ferrer et al., (2016)

However, a qualitative study conducted by Ganle et al. (2014) found that many public health facilities providing maternal health services in northern Ghana were challenged with quality
issues. Insufficient staffing, insufficient skilled staff, delays in service provisions, overcrowding in the wards and lack of privacy during delivery were observed in many facilities. The study noted that most women have lost confidence in the public health facilities and would rather prefer the service of either TBAs or private health facilities. Another study in the northern Ghana revealed logistics required for the prevention of postpartum bleeding and management of hypertensive disorders were sufficient (99% of women delivered received oxytocin) in most of the health facilities. However, basic requirements for assisted delivery (vacuum extractors or forceps) and management of obstructed labour were observed to be insufficient (Duysburgh et al., 2014).

3.5.2 Interpersonal Quality

The cadre of health professionals available and the attitude of the health providers have an impact on client’s health outcome and client satisfaction (Levesque et al. 2013). However, a qualitative study by Banchani and Tenkorang, (2015) in Tamale metropolis reported limited knowledge on maternal health policies among these providers.

Studies in Ghana have identified that health provider’s attitude can either serves as a deterrent or facilitator of women’s access to quality maternal health services. A qualitative study conducted by Ganle et al. (2014) in Ghana revealed that women visit health facilities with the expectation to enter into good relationship with the health providers in order to understand their condition and that of their babies. However, they often experience the opposite Women receive authorizations and many forms of maltreatment from care providers especially during ANC and labour. According to Ganle et al. (2014), provider-client relationship is poor in Ghana and this has a negative effect on uptake of maternal health services in the country.

In another qualitative study, Yakubu et al. (2014) reported shouting, screaming, beating and ignoring women during labour as some of the forms of maltreatment by midwives in rural Ghana. According Yakubu et al. (2014), the midwives stated that they are accountable for the outcome of the pregnancy and that the maltreatment comes in when the “women in the second stage of labour refuse to push” which may have effect on both the mother and the baby. Nakua et al. (2015) also reported that negative attitude of health providers and maltreatment such as
insults and other forms of abuse by health staff were cited by women as the reason they prefer TBAs over skilled birth attendants in Ghana.

3.5.3 Ability to Engage

Client’s involvement in care is require for optimal service to the client and this is determine by the client’s health literacy and willingness to participate in the care (Levesque et al., 2013). Clients are expected to be actively involved in their health decision-making and take responsibilities over their health. Health providers are in turn, responsible to provide the required health information for clients to make informed health decisions (Montori et al., 2017).

As stated earlier under approachability, health information is mainly shared in Ghana through interpersonal communication (health provider to patient through hospital visit, outreach services, durbars and seminars), radio and television, print media, and now social media (Ghana Health Service, 2015).
Chapter Four: Evidence-based Interventions for Improving Access to Quality Maternal Health Services in Low and Middle-income Countries

This chapter reviews evidence-based interventions that have proven to have positively influenced access to quality maternal health services in Ghana and other low and middle-income countries with much focus in SSA. From among multiple interventions identified, the interventions discussed below were selected based on the main barriers for access to MHS in Ghana, their relevance and adaptation feasibility for the Ghanaian health system. Levesque et al.'s (2013) model on patient-centred access to healthcare was used as a guide. The interventions reviewed aimed at improving services approachability/client’s ability to perceive the need for care, acceptability/client’s ability to seek care, availability/client’s ability to reach, affordability/client’s ability to pay and appropriateness/client’s ability to engage in care identified in chapter 3.

4.1 Approachability/Ability to Perceive and Acceptability/Ability to seek care Related Interventions

The main barriers for access to MHS in Ghana, in relation to the domain of approachability and acceptability, were low health literacy among women, and socio-cultural and religious barriers.

A systematic review by Lassi et al., (2016) revealed that integration of home visiting, community mobilization and counselling services are the community-based interventions to improve client’s ability to perceive and approach care, and to accept and seek care. In this approach, antenatal and postnatal services are provided through home visit by Community Health Worker. Women are educated on birth preparedness and how to identify pregnancy danger signs to prevent delay in seeking care and subsequently prevent pregnancy related complications (Elmusharaf, Byrne and Donovan, 2015). To improve on MHS approachability and acceptability in Malawi, the Ministry of Health for Malawi in collaboration with Partners In Health a project dubbed Healthy Mothers Healthy Communities in 2015. In the project, community members were chosen through the community leaders and trained for five days as community health workers (CHW). These CHW were used to map and accompany pregnant women to health facilities for ANC, deliveries and PNC. Antenatal attendance was reported to increase 53% after 6months of the start of the project. However, impact of the project on
deliveries and PNC was not reported (Kachimanga et al., 2016). Pakistan’s government initiated Lady Health Workers (LHW) program which used the home-visit approach to collaborate with TBAs and CHVs to promote skilled deliveries, use of clean delivery kits and postnatal care (Bhutta et al., 2011).

Women’s participatory learning groups and volunteer peer counselling intervention in Mchini district in Malawi have been identified to be successful in improving women health literacy, health beliefs and positively affect their health seeking behaviour. In the project, literate local women were identified and trained for eleven days as facilitators and five days for peer counsellors. The women facilitators used manuals and participatory appraisal methods to guide women in group discussion. The peer counsellors identified pregnant women and made at least five home visits to these women to provide health education on MHS during pregnancy and after delivery. The group members identified and prioritized maternal health issues including emergency obstetric and safe abortion issues, identified strategies on how to overcome the health challenges in their discussions (Lewycka et al., 2013). Similar intervention in Nepal was reported to be successful (Manandhar et al., 2004).

In South Africa, abortion services are provided to women and adolescent girls on request with no mandatory consent from their guardians (spouse or parents) as a result of abortion law reforms in 1996. This gave the women and adolescent girls the autonomy to access safe abortion service as a results, abortion related mortality reduced significantly in the country (Benson, Andersen and Samandari, 2011). Also in Mozambique, Pathfinder International used a community engagement approach to overcome gender and socio-cultural barriers on access to safe abortion services. They trained and sensitized community leaders, men and women on safe abortion which led to an improvement on uptake of safe abortion services in health facilities in Mozambique (Pathfinder International 2010).

4.2 Availability and accommodation/Ability to Reach

Inadequate health facilities, inadequate health staff, long distance travel to reach health facilities and insufficient emergency transport were found to be the main barriers under availability/ability for women’s access to MHS. Bright et al. (2017) reported in their systemic review that delivering
services close to the communities is the most beneficial intervention for improving access to services.

In Ghana, especially the rural communities have challenges in terms of health facilities and highly skilled health professional and therefore use community health workers/officers and health volunteers as health service providers. Many LMIC also face these challenges which led many of these countries to undertake training of and task-shifting to community health workers as skilled birth attendants to improve access to maternal health services, though at low quality. For example, nurse-aides were trained and tasks were shifted to them to perform low-risk deliveries in hospitals in rural Zimbabwe. The program was reported to be successful and effective. It was observed that maternal mortality was significantly reduced among deliveries conducted by the nurse-aides (Bhutta et al., 2009).

Maternity Waiting Home (MWH) is another initiative used to improve access to maternal health services including emergency obstetric care in LMIC. It is a residence built close to a health facility providing emergency obstetric care where high-risk expectant women and women living at a long distance from the nearest health facility can stay in the weeks prior to delivery and days after delivery (Satt, McLaughlin and Seung, 2013). This initiative is reported to successful in many LMIC including Ethiopia, Zambia, Malawi, and Zimbabwe (Lonkhuijzen, Stekelenburg and Roosmalen, 2014). For example in Zimbabwe, MWH have reported that the use of MWH increased access to skilled deliveries about six times and reduced perinatal mortality among high risk mothers by 48% (adjusted RR = 0.52; 95% CI: 0.29 – 0.91; P < 0.05) (Bhutta et al., 2009; Lonkhuijzen, Stekelenburg and Roosmalen, 2009). However, lack of proper local context assessment and consequent adjustment in MWH setup before implementation led to some challenges such as overcrowding, poor hygiene, water shortage and high cost of living in MWH. This led to failure of the initiative in some countries like Ghana, Nicaragua and Peru (Lonkhuijzen, Stekelenburg and Roosmalen, 2009).

Transportation is one of the major factors influencing client and family’s ability to reach health services in low and middle-income countries. This has led to a number of innovations to provide locally appropriate means of transportation, especially for emergency obstetric situations such as the use of motor-bikes, pick-up trucks, tractors, motorboats and bicycles. These alternative modes of transportation have contributed to reducing the delay in reaching health facility in
many LMIC (Holmes and Kennedy, 2010). For instance, in Malawi some health centres have been equipped with motorcycle-ambulances, to support referral of women with obstetric complications to hospitals that provide emergency obstetric care. A study by Hofman et al., (2008) revealed that the motorcycle-ambulance system was about 24% cheaper than the car ambulance system and reduced patient delay in reaching care by about 35%-76%. This motorcycle-ambulance initiative is feasible for Ghana. This will aid CHPS compounds, health centres and district hospitals without car ambulances to refer patients with complications including obstetric complications to referral facilities for further case management without delay.

Regarding the availability of safe abortion services, the government of South Africa in 1996 introduced abortion law reforms called the Choice on Termination of Pregnancy (CTOP) Act. This law enables women to access safe abortion services based on economic reasons and on request (Benson, Andersen and Samandari, 2011). Prior to this law, the only legal reasons for accessing safe abortion services was for therapeutic reasons related to health and wellbeing of the woman or the child. Such restrictive rule led to limited access to safe abortion services and high maternal mortality due to unsafe abortion. South Africa has also increased the number of health facilities that provide safe abortion care from 32% in 2000 to 62% in 2003. These led to an increased uptake in safe abortion services and a significant reduced unsafe abortion in the country (Benson et al., 2011).

4.3 Affordability/Ability to pay interventions

These are financial interventions that aimed at reducing the financial barriers for access to maternal health services. It protect the families from catastrophic expenditure maternal health services including obstetric emergencies, empower and motivate women to access care (Elmusharaf, Byrne and Donovan, 2015). Some of these interventions include National Health Insurance, conditional cash transfers, voucher schemes and emergency loan/insurance fund for emergency obstetric care. Studies on Bolivia’s Nationwide Social Insurance Scheme and Democratic Republic of Congo’s Community-based Insurance Scheme also reported an increased in access to maternal health services (Bhutta et al., 2009).

Conditional Cash Transfers are another approach used by many LMIC to empower clients and families to pay for health services and to improve access to care. This intervention involves providing clients and families with money which can be used for food or other basic needs, on
the condition that they make use pre-specified health services such as MHS (Borghi et al., 2006). A systematic review on the impact of conditional cash transfers in LMIC by Lagarde et al. (2007) reported an improvement in health literacy and health seeking behaviour, particularly uptake of maternal health services among beneficiaries in Malawi, Brazil, Honduras, Mexico and Nicaragua.

A voucher scheme is a non-cash financial incentive also used to improve access to health services, including maternal health services. In this approach, clients and families purchase voucher(s) for specific health service at a subsidized cost with a health facility, to prevent direct and high out-of-pocket health expenditure (Bhutta et al., 2009). Governments of Kenya, Tanzania, Uganda and India used this approach to improve access to maternal health services including emergency obstetric care in their countries, although no outcome data have been reported yet (Bhutta et al., 2009; The Republic of Uganda, 2012; Watt et al., 2015).

Emergency loans/insurances funds for emergency obstetric care are another financial interventions used to overcome financial barriers for access to maternal health services in emergency situations. This approach is used to pool and manage funds locally to assist clients and families to pay for emergency health services, transportation and any other indirect and opportunistic cost incurred in the process of care seeking. This can either be in the form of a loan or an insurance (Ensor and Ronoh, 2005). This type of financial intervention successfully operates in Sierra Leone, Democratic Republic of Congo and in some parts in Nigeria (Ekpoma clan in Nigeria) which is reported to have improve access to emergency obstetric care in these countries (Bhutta et al., 2009).

To overcome the financial barriers for women’s access to safe abortion services in South Africa, the government implemented fee exemption policy for abortion services in all state health facilities in the country in the mid-1990s (Benson, Andersen and Samandari, 2011).

4.4 Appropriateness/Ability to Engage

Interventions that target health system strengthening such as technical quality (infrastructure upgrading and provision of equipment and medical supplies) and interpersonal quality (health workers training) are very important for improving access to quality health services including maternal health services (Wekesah et al., 2016).
The Nigerian government in collaboration with Rotary International and supported by the German Federal Ministry of Economic Cooperation and Development initiated and implemented a two-year (2008 - 2009) project on quality assurance in obstetric services in two states (Kano and Kaduna) in northern Nigeria. The project was based on three principles; upgrading and improving on the quality of health infrastructure, provision of medical supplies and equipment and staff training (Galadanci et al., 2011). Prior to the project, access to quality obstetric services was extremely low and maternal mortality was excessively high. However, two years after the start of the project, reports showed increased knowledge, skills and competences of health workers, improved access to quality maternal health services, including emergency obstetric care, and a significant reduction in MMR from 1790/100,000 live births in 2008 to 940/100,000 in 2009 (Galadanci et al., 2011). Other countries including Burkina Faso, South Africa, Mozambique and Uganda have used health system strengthening to improve access to quality maternal health services including emergency obstetric care in LMIC (Santos et al., 2006; Richard, Ouédraogo and Brouwere, 2008; Brazier et al., 2009; Doherty et al., 2009; Galadanci et al., 2011; Ediau et al., 2013).
Chapter 5: Discussion of Findings

Access to maternal health services remains a significant challenge in Ghana. This study sought to explore and analyse the health system (supply-side) related factors and individual/population (demand-side) related factors that affect access to quality maternal health services, including safe abortion care in Ghana. It was found in chapter three that inadequate health information, insufficient knowledge of health providers on cultural and religious beliefs, inadequate health facilities, inadequate health staff and emergency transportation, low coverage of NHIS, insufficient medical supplies and poor provider’s attitude were the main health system (supply-side) barriers for access to MHS in Ghana. Also, low health literacy among women, socio-cultural and religious barriers, long distance travel/place of residence and low socio-economic status or poverty were identified as the demand-side related barriers for access to MHS in the country. This chapter discusses the results of the study presented in chapter three and four, and it is structured based on the Levesque et al’s. (2013) model on patient-centred access to healthcare.

Usefulness of the Framework to this Study: The framework was helpful in answering the study questions by laying out the factors the study sought to explore. It was very flexible and that enabled the study to explore the supply-side and demand-side factors that influence women’s ability to access MHS including EmOC and safe abortion care. The framework however failed to address policies and macro-environment factors that could affect women’s access to services.

5.1 Approachability/ability to perceive

Access to comprehensive health information is very important in guiding families and client for informed health decisions. The findings show that women who were aware of the availability of a particular service had a better chance of accessing the service than those who did not have knowledge about that service. However, in Ghana especially in the rural communities, access to health information is very low leading to high health illiteracy among women and their families. This is because, the health system relies mainly on interpersonal communication (through outreach services or when client visit the hospital) or the media (TV, radio, print or social media) to disseminate health information. Unfortunately, health providers particularly, the CHOs who provide outreach services are insufficient in the country. This contributed to low access to health information and health services in the country making it difficult for women and families to
perceive their need for, and approach health services. Women’s participatory learning groups and volunteer peer counselling interventions through home visit have proven to be successful in providing health information to the communities, improving on women’s health literacy and thereby improving access to MHS. For instance, the woman facilitator led women’s participatory learning group and the volunteer peer counselling intervention in Malawi can be adapted to provide health education and ANC services through home visiting in Ghana as it was proven to be successful.

5.2 Acceptability/ability to seek

Culture and religion are deeply rooted in Ghana and guide most of the activities in many Ghanaian communities including decision to access health services. Women’s access to MHS in Ghana especially in rural communities is influenced by interaction of several cultural and religious factors.

Gender and women status in a family or in the communities play a significant role on women’s access to MHS. In most Ghanaian communities, women cannot make their own decisions without the permission of their husbands or household heads. This lack of autonomy affects women’s ability to seek care. It was found in the findings that husbands, household heads, mother-in-laws and TBAs are those who determine if, when and where women access maternal health services. This makes it difficult for most women in these communities to make their own decisions to seek MHS.

Pregnancy rituals are performed in some communities in Ghana, where first-time pregnancy are not announced until after six months for fear of evil-eye on the foetus and the mother. Culturally, women are seen to be strong and do not need to access health facility for delivery, this makes women prefer to deliver at home than in the health facility to show that they are strong. Children and parenthood are highly valued in Ghana only when it is experienced in an acceptable manner. But because extra-marital sex or pre-marital sex is culturally to acceptable in many societies in Ghana, pregnancies resulting from it are highly stigmatised. Also, because children are valued, abortion is not accepted in many communities and act is stigmatised. These cultural factors limit women’s ability to seek MHS in Ghana. It was found in this study that community engagement interventions are effective in overcoming gender and socio-cultural barriers for access to MHS.
For instance in Mozambique, Pathfinder International used community engagement approach to trained and sensitized community leaders, men and women on safe abortion which led to improve in acceptability of safe abortion services in the country. Islamic religion was found to be a barrier for access to MHS. Muslim women prefer the services of TBAs to skilled male midwives, this is because the Islamic religion prohibits them to expose their nakedness to males who are not their husbands, as a result, they are unable to access care from male health providers. Interventions aimed at using Lady Health Workers (LHW) to provide MHS could promote acceptability of the services among Muslim women. The findings show that Pakistan’s government successfully used the LHW program which used the home-visit approach to collaborate with TBAs and CHVs to promote skilled deliveries, use of clean delivery kits and postnatal care in the country. This can be adapted to suit the context of Islamic communities in Ghana especially in northern part where Muslims are dominant.

5.3 Availability and accommodation/Ability to Reach

Proximity of health facilities to the pregnant woman was found to be a determinant of uptake of MHS in this study. In communities where women have to travel for more than 2 hours or pay for transport to access MHS declines. However, the findings show that health facilities and health staff for maternal health services are generally inadequate and unevenly distributed especially EmOC services, with the rural areas suffering the greatest burden. The CHPS initiative which was introduced to overcome distance barriers, nationwide has been low (2,580 available when 6,500 is required) with low skilled staff. The CHO's are not trained to provide basic obstetric emergencies and coverage of ambulance services is inadequate and expensive. These lead to delay in reaching health facilities especially during obstetric complications. The reviewed interventions show that approaches aimed at delivering MHS close to the communities were proven to be successful. As mentioned earlier, Mchini district in Malawi, used peer counsellors to promote birth preparedness and skilled delivery through home-based antenatal care (home-visit). Task-shifting was also found to be another useful intervention to ensure availability of skilled health providers at a lower cost. This intervention can be adapted in Ghana to train CHOs to provide basic emergency obstetric care at the CHPS level to improve on the availability skilled staff in the country.
MWH have been used in many LMICs to accommodate women close to health facilities to promote skilled delivery as in the case of Ethiopia and Zambia. It however failed in Ghana because of implementation issues such as water shortage, high cost of living, among other. Even so, MWH can be considered a feasible intervention in Ghana particularly for hard-to-reach communities. For the success of this intervention and learning from the challenges, community leaders, community members and women of reproductive age should be involved in the planning, implementation and management of the facility. Motor-cycle emergency transports are interventions used to overcome the delay in reaching health facility barriers. It was shown to be successful in Malawi as it was used in health centres for referral of women with obstetric complications to hospitals that provide emergency obstetric care. This motor-cycle emergency transportation intervention can be implemented in Ghana especially, in health facilities without car ambulances to help in referrals of emergency complications by equipping the facilities with motor-tri-cycle. Communities can also be empowered with these motor-cycles through community mobilisation and support from government and NGOs. This would help improve on their ability to reach health facilities and hence reduced the delay in reaching care for communities living long distance away from health facilities.

From the findings, it was found that health facilities providing safe abortion services are extremely inadequate in Ghana and the law also restricts abortion on economic reasons or on request. As a result women resort to unsafe abortion services leading to abortion complications and increased maternal mortality. Evidence shows that abortion complications are minimal in countries where abortion laws are liberal. Unsafe abortion significantly reduced, when the South African abortion reforms in the 1990s allowed women to access abortion services for economic reasons or on request and also expanded coverage of safe abortion services. Ghana need this form of intervention to reduce maternal mortality in the country, as mortality associated with unsafe abortion is one of the main causes of maternal mortality in Ghana. Though, religion and culture play an important role in the values of Ghanaian societies, with engagement of religious and community leader, it’s feasible to adapt and implement this intervention.

5.4 Affordability/Ability to pay

Family and women’s wealth status and NHIS coverage were identified to be the economic factors influencing women’s access to MHS. This study found that women who are active
members of the NHIS are financially protected and are entitled to free MHS. This was seen an enabling factor for women’s access to MHS. However, nationwide coverage of the NHIS was found to be very low (34%), meaning more than half of pregnant women are not covered by the insurance and this could affect their access to MHS. Also, it was reported that NHIS accredited health facilities sometimes faced shortage on certain services and women have to access and pay for these services in an NHS unaccredited facilities. These caused lost in trust on the NHIS and served as a disincentive for access to MHS especially to the financial marginalized families. It was also found that the NHIS does not provide financial protection for safe abortion services making it difficult for financially marginalised women to access. Wealth was also found to be a determinant for women’s access to MHS. Women belonging to first two wealth quintiles household were more likely to access MHS than women belonging to lowest wealth quintile. Women in the lowest wealth quintile could not afford the costs (direct, indirect and opportunistic costs) associated accessing MHS.

From the reviewed interventions, many LMICs have used financial incentive approaches such as conditional cash transfer, voucher schemes and emergency loan/insurance fund to overcome the financial barriers for access to MHS. Conditional cash transfer, where women and families are provided with money for health services, which can also be used for food or other basic needs was found to be very successful in improving women access to MHS in many LMICs according to Lagarde et al. (2007). Another very important financial intervention found was the emergency loans/insurances funds for emergency obstetric care, where community members pool and manage funds locally to assist clients and families to pay for health cost. It was found to successful in Sierra Leone, Democratic Republic of Congo and among the Ekpoma clan in Nigeria (Galadanci et al., 2011). These forms of financial interventions can be adapted to support the already existing NHIS in the country. Also, safe abortion care can be incorporated into the free maternal health policy to provide financial protection for women accessing safe abortion services.

5.5 Appropriateness/Ability to Engage

The study has shown that maternal health services quality has been challenged with insufficient skilled staff, insufficient health infrastructure, and inadequate medical supplies and equipment. Overcrowding and frequent shortage of medical supplies made women to lose confidence in
most government health facilities and rather prefer the service of TBAs. Unfriendly attitude of some health providers was also found to be a determinant for women’s access to MHS and their ability to participate in their care. Women often experience beatings, insults, neglect, and other forms abuse from providers which serve as disincentive for women access to MHS. Women required the needed health information to be able to fully participate in their care. However, as stated earlier in this study, health literacy among women in Ghana is low. Evidence shows that these women can be empowered through health education using peer counsellor and home visiting approach. Regarding MHS quality improvement, it was found that the Nigerian government in collaboration with Rotary International used quality assurance approach involved upgrading and improving on the quality of health infrastructure, provision of medical supplies and equipment and staff training to improve the quality of MHS in Kano and Kaduna states in Nigeria. This intervention is feasible and can be adapted suit the context of Ghana.
Chapter 6: Conclusion and Recommendations

This chapter responds to all the 4 objectives of the study in drawing conclusions (objectives 1 – 3) and suggesting recommendations to the stakeholders in health in Ghana (objective 4) based on the findings in chapters 3 and 4.

6.1 Conclusions

Accessing MHS, including EmOC and safe abortion care remains a challenge in the country. The study acknowledge that both supply-side and demand-side factors affects women’s access to quality MHS including EmOC and safe abortion care.

The most important supply-side factors identified to be barriers for women’s access to quality MHS were; inadequate health information, insufficient knowledge of health providers on cultural and religious beliefs, inadequate health facilities, inadequate health staff and emergency transportation, low coverage of NHIS, inadequate medical supplies and poor provider’s attitude.

More so, the study found low health literacy among women, socio-cultural and religious barriers (including gender issues), long distance travel/place of residence and low socio-economic status or poverty to be the main demand-side factors affecting women’s access to MHS in the country.

At the same time, a number of evidence-based interventions were identified for consideration in addressing MHS access barriers. For instance training of volunteer peer counsellors to provide health education through home visiting, women’s participatory learning groups, trained and shift task to low health staff to provide quality services at low cost, re-introduce MWH and involve community members for its management, liberalization of the abortion law to include accessing abortion service on request or for economic reasons, the use of motorcycle-ambulance, the use of other financial incentives (conditional cash transfer, voucher schemes and emergency transport funds) and the use of quality assurance to improve the quality of health services to support the existing maternal health interventions in the country.

6.2 Recommendations

Generally, long-term socio-economic interventions resulting in expansion of health infrastructure, more education, and poverty reduction, among others, will have lasting impact on access to MHS. These recommendations are however limited to those that are feasible and can be...
achieved within a relatively short term by the government of Ghana and other relevant stakeholders.

**Policy level: MOH and NHIS**

- The government of Ghana (GOG) through the Ministry of Health needs to increase financial commitment to health to expand of health infrastructure, including a nationwide scale up of Community-based Health Planning Services; ensure constant availability of medical supplies equipment to all health facilities providing MHS; and enforce the train and retain policy.
- Review the abortion law to permit abortion on request or based on economic reasons. This would give women autonomy to access safe abortion services and will reduce unsafe abortion related mortality in the country.
- The free MHS under the NHIS should be reviewed to include safe abortion care to ease the financial challenges for access to safe abortion care. Free MHS should be provided to all pregnant women and mothers regardless of their NHIS status, to ensure equal accesses of the services to all women.

**Health Service Delivery Level: GHS, Teaching Hospitals and CHAG**

- Redistribute health staff especially doctors and midwives in the country to ensure nationwide availability of these health staff.
- Employ task-shifting approach by training CHOs on basic obstetric emergencies to increase the availability of these services at the CHPS level.
- Employ quality assurance approach by ensuring regular supply of medical supplies and equipment including logistics for safe abortion, and regular refresher-training for health workers on MHS.
- Provision of cultural and religious accommodative health services to communities highly inclined to religious and cultural practices. For instance, the Pakistan’s Lady health workers’ approach can be adapted to train lady health workers to provide services to women in communities where the services of a male midwife is not accepted by their religion or culture.
- Use community engagement approach such as women’s participatory learning groups, volunteer peer counsellors and home-visiting to improve health literacy among women and also improve access to MHS.
Community level: NGOs and Civil Society Organization

- Empower women and families through income generating activities and other financial incentives such as conditional cash transfer and voucher scheme to compliment the NHIS. This would help overcome the indirect and opportunistic costs barriers and improve women’s financial capacity to access MHS.
- Mobilized and support communities to establish community-based transport services and emergency loans/insurances funds for emergency obstetric care to ease the challenges in reaching health facilities.
References


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doi: 10.1016/j.socscimed.2009.06.023.


International Pathfinder (2010) *Comprehensive Safe Abortion Programming: Pathfinder International’s Safe Abortion Program, the Pathfinder International approach*, 9 Galen Street, Suite 217 Watertown, MA 02472, USA.


part of a comprehensive maternal mortality reduction strategy in Lesotho.\textsuperscript{,} PIH Reports, 1(1).


Appendix 1: Top 10 disease burden in Ghana

Source: WHO statistical country profile