

**FACTORS INFLUENCING UPTAKE OF SKILLED
BIRTH ATTENDANTS IN THE BOLGATANGA
MUNICIPALITY, UPPER EAST REGION, GHANA**

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FACTORS INFLUENCING UPTAKE OF SKILLED BIRTH ATTENDANTS IN THE
BOLGATANGA MUNICIPALITY, UPPER EAST REGION, GHANA

A thesis submitted in partial fulfilment of the requirement for the degree
of Master of Public Health

by

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Declaration

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the Bolgatanga Municipality, Upper East Region, Ghana** is my own
work.

Signature:

A handwritten signature in blue ink, consisting of a series of loops and a long horizontal stroke extending to the right.

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LIST OF ABBREVIATIONS

ANC	Ante Natal Care
BMHD	Bolga Municipal Health Directorate
BMA	Bolga Municipal Assembly
CHW	Community Health Workers
CHN	Community Health Nurse
CHO	Community Health Officer
CHPS	Community Health Planning and Services
CSBA	Community Skilled Birth Attendants
CWC	Child Welfare Clinic
CHAG	Christian Health Association of Ghana
DHIMS	District Health Information Management System
DHMT	District Health Management Team
DHS	Demographic Health Survey
EmOC	Emergency Obstetric Care
FBO	Faith Based Organizations
GHS	Ghana Health Services
GOG	Government of Ghana
GSS	Ghana Statistical Service
LB	Live Births
MDG	Millennium Development Goals
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
MCH	Maternal and Child Health
NHIS	National Health Insurance Scheme
NGO	Non-Governmental Organizations
NHP	National Health policy
PNC	Post Natal Care
SBA	Skilled Birth Attendants
TBA	Traditional Birth Attendants
TFR	Total Fertility Rate
UER	Upper East Region

UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
WHO	World Health Organization
WIFA	Women in their Fertile Age

ABSTRACT

In Ghana, the uptake of SBA is low especially in rural areas, at 54% as compared to 90% in urban areas. The WHO estimates that up to 80% of birth complications and deaths can be prevented through uptake of Skilled Births Attendants (SBA). This could reduce the MMR estimated between 300-499 maternal deaths per 100,000 live births in Ghana. However, in Bolga Municipal, the uptake of SBA is low in all rural health facilities (34%) with community facilities (CHPS compounds) contributing less than 10% to the total deliveries. Government's efforts to reduce the inequity by introducing the free maternal and child health services has not increased uptake of SBA. Therefore, there is need to understand the factors influencing uptake of SBA in rural areas such as Bolga. The Andersen behavioural model for healthcare utilisation was used to guide findings in this study.

The findings show that uptake of skilled birth care is poor among uneducated and low socio-economic status women. Poor staff attitude and disrespect for cultural values, mal-distribution of midwives coupled with inadequate medical supplies and additional charges in rural facilities, are factors that influence uptake of SBA. The Low decision making space of women, since men control a lot of resources and cultural norms also influences woman's behaviour towards uptake of SBA.

The study recommends interventions such as male involvement in ANC, redistribution of midwives to CHPS compounds, task-shifting combined with continuous education and supportive supervision to improve uptake of SBA. Furthermore, the mobilisation of communities to provide community based transport and to demand for quality services and maternal health entitlements from health implementers is necessary to further improve uptake of SBA at the lower facility level.

Key Words: Skilled birth attendants, socioeconomic factors, sociocultural factors, Ghana.

Word Count: 13,000

INTRODUCTION

Ghana is part of the Sub-Saharan African countries that account for over 66% of the global total maternal deaths (WHO, 2015a). The WHO intimates that majority of these deaths are unnecessary and can be averted through uptake of Skilled Births Attendants (SBA). The target for SBA coverage is pegged at above 85% per the Sustainable Development Goals (WHO, 2015b). However, uptake of SBA in Ghana is less than 60% nationally and in Bolgatanga is about 34% despite the increased distribution of health facilities through the implementation of the Community Health Planning Services (CHPS) compounds in rural areas, the increased number of midwives and the introduction of the Free Maternal Health Care (FMHC).

I worked as a nurse for several years with the Ghana Health Service and continued work as a health service administrator after I graduated from the University of Ghana in 2009. For the past three years I have been part of the DHMT of the Bolgatanga Health Directorate, where maternal and child health is a major priority. Through my role involving monitoring and supervision at the lower health facilities in all the nine sub-districts under Bolgatanga, the uptake of SBA was one of the major challenges. This challenge is peculiar across the country. I was also assigned as the coordinator of quarterly peer review meetings with sub -district leaders and midwives in an effort to improve service delivery at all sub-districts. However among the essential primary health packages, improving uptake of SBA was a daunting task. These issues generated my interest to study the factors influencing the uptake of SBA and to find the best interventions that could promote skilled birth care at the rural level.

Bolgatanga is the study area because I am familiar with the district through working with rural communities and the study was also focused on uptake of SBA as this is very low. Besides, maternal and child health is a very important indicator of the quality of life of a people and a major measure of a functioning and responsive health system towards making basic health services accessible to everyone (WHO, 2010).

Organisation of study

This study is organised into six (6) chapters. Chapter one provides information on the background of the study area. Chapter two contains problem statement, justification, study objectives and methodology and

the conceptual framework used for the study. In Chapter three, literature findings that includes the health system factors, and the individual/community factors and how they relate to the study topic is reviewed. Chapter four contains a review of evidence-informed interventions that could be adopted by the MOH/GHS to promote uptake of SBA. Chapter five contains discussions of the findings and finally chapter six follows with conclusions and recommendations.

CHAPTER ONE: BACKGROUND OF BOLGATANGA MUNICIPAL

1. Introduction

Ghana is part of the West Africa Sub-Region and shares boundaries with Togo, Ivory Coast and Burkina Faso. The country is divided into ten (10) administrative Regions which comprise 216 decentralized districts to form the local government administrative structures (GSS, 2013). **The study area is Bolgatanga Municipal**/district in the Upper East Region, which is located in the Northern part of Ghana.

The Upper East Region is the smallest region in terms of land area with only 2.7% of the total land area of the country (GSS, 2013). It has thirteen (13) districts of which Bolgatanga (see map attached as appendix 1) is the Regional capital. The Bolga Municipal Health Directorate (BMHD) has nine health centres and 18 functional Community Health Planning Services (CHPS) compounds, operating across the municipality. There is also one Regional Hospital located in Bolgatanga which serves as the referral point for all other 12 districts in the Region (GHS, 2014; GHS, 2015)

1.1 Demographic characteristics

The data from the 2010 population and housing census indicates that the population of Ghana is 24.7 million, with a national growth rate of 2.5 per annum. The population density is 103 persons per kilometre square and the urban population constitutes 51%. The sex ratio is 95.2 male per 100 females indicating a more than half female population (51.2%). Women in their Fertility Age (WIFA), 15–49 years constitute 28.8% of the total population (6,360,535), of which 56% (3,559,821) live in urban settings. The Total Fertility Rate (TFR) is 4.2, but higher in the rural areas at 5.2 compared to urban (3.4). Comparatively, childbearing rates are higher in the age group of 20-24 years compared to the other age groups (GSS, 2013; DHS, 2014).

The Upper East Region has a population of about 1.1 million, of which Bolga constitutes 12.6% (131,550) of the entire population. The females are 52% (68,767) of total population (62,783). The rural population is a little more than half (50.2) of the population. The population is described as youthful with persons below 15 years constituting 37% and those aged 60 years and above comprising 7.4%. The WIFA is about 27% (34,909) of

the total population. The Total Fertility Rate (TFR) is 3.0, lower than the national average of 4.2 (GSS,2014). This could be attributable to the high modern contraceptive use in Region (about 24%) compared to the national average of 22% (DHS, 2014).

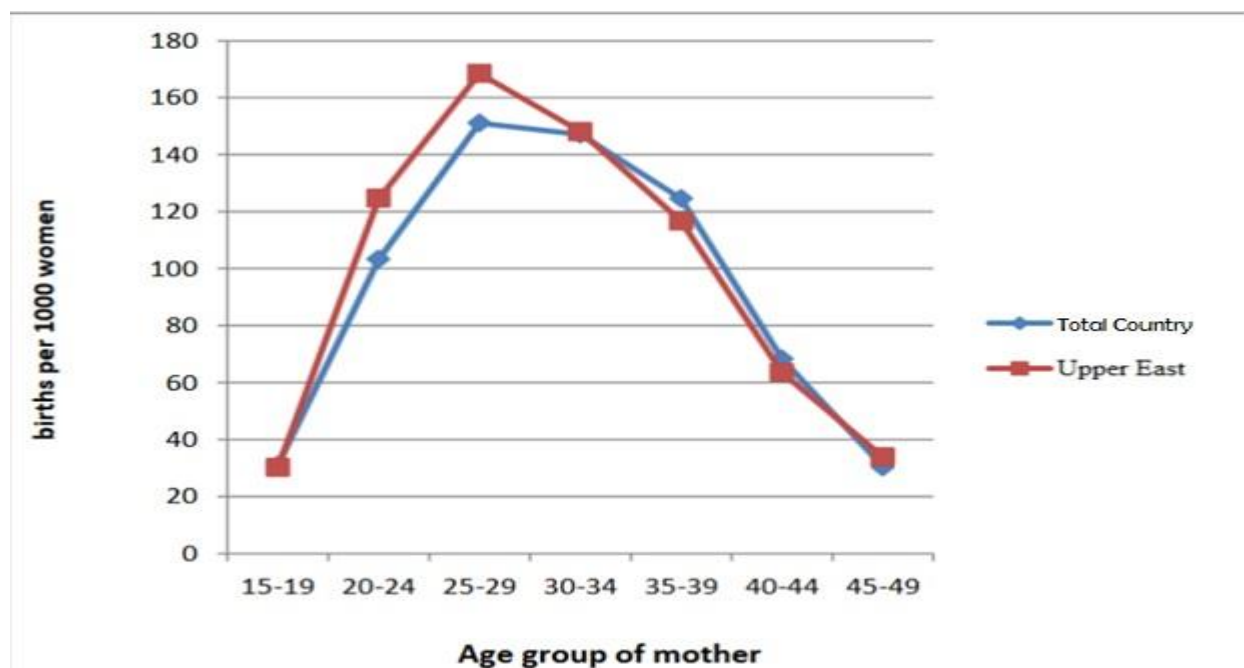
Table 1.1: The age, sex, and type of locality structure of the reproductive age group in Bolgatanga Municipal

Age group in years	% of total population	Male % of population	Female % of population	Type of Locality/Residence	
				Urban	rural
10-14	12.1	50.0	50.0	46.5	53.5
15-19	11.5	49.2	50.8	50.4	49.6
20-24	10.1	46.6	53.4	57.0	43.0
25-29	8.1	45.9	54.1	58.0	41.9
30-34	6.6	47.5	52.5	56.2	43.8
35-39	5.5	48.5	51.5	54.1	45.9
40-44	4.6	45.0	55.0	51.4	48.6
45-49	3.7	44.7	55.3	49.5	50.5

SOURCE: GSS, 2014

The fertility pattern in Bolga does not significantly differ from the whole Regional average. Table 1.1 above show that fertility begins at age 15-19, peaks between ages 20-29 and tapers down in the rest of ages till 50 years when it reaches zero (DHS, 2014). The data also shows a drop in proportion of women aged 35-39. The possible explanations are due to high outmigration of this age group to other regions (in search of jobs) or misinformation from women about their true age. The graph below shows the fertility pattern of women in the Upper East Region.

Figure 1.1 Fertility pattern of women in the Upper East Region



SOURCE: GSS, DHS, 2014

Although figure 1.1 does not include younger adolescents (10-14 years), available data shows that 3,289 pregnancies among this age group were recorded in the country in 2014 (GHS, 2014).

1.3 Socio-economic status

Agriculture employs about 80% of the economically productive population (15-64 years), in Bolga. Majority of the people are engaged in subsistence farming, which partly explains why poverty levels in the region are high as compared to the rest of Ghana. Thus, one in three people are poor. Women are also basically employed in small scale processing of shea nuts, groundnuts and handicraft works like basket weaving (GSS, 2014).

1.4 Cultural values, practices and religion

Bolgatanga as the capital of the Upper East Region (UER) has people with different ethnic backgrounds. The 'Gurunsi' (indigenous people) are the majority and the common language spoken is 'Gruni/frafra'. Like all Northern ethnic groups, the people practice the patrilineal system of inheritance and as such men turn to control a lot of resources. Data

shows that 72.3% of men are heads of households as against 27.7% of women (GSS, 2014). Polygyny is common, especially among the traditionalist and the Muslims. Christians, Traditionalists and Islam religious practitioners constitute 58%, 22% and 17% of the population respectively (GSS, 2014).

Marriage is considered an honour in the UER society. About 59% of females (aged 12 years and above) in rural communities of Bolga are married. Early marriages are common in rural settings and data shows that 4.4% and almost 10% married women were 12-14 years and 15-19 years when they got married respectively (GSS, 2014). This contributes to early pregnancies in teenagers and for which complications might lead to maternal deaths.

1.5 Education

Nationally, about 80% of males and 68.5% females 11 years and above are literate. The UER has lower literacy for men at 55.4% and 40.6% of women are literate. In urban areas, literacy is higher (56.5%) compared to rural areas (38%) (GSS, 2013). A third of the population in Bolgatanga are illiterate. The literate population of 11 years and above is 72.8% for men and 57.4% for women (GSS, 2014).

1.6 Health service delivery system

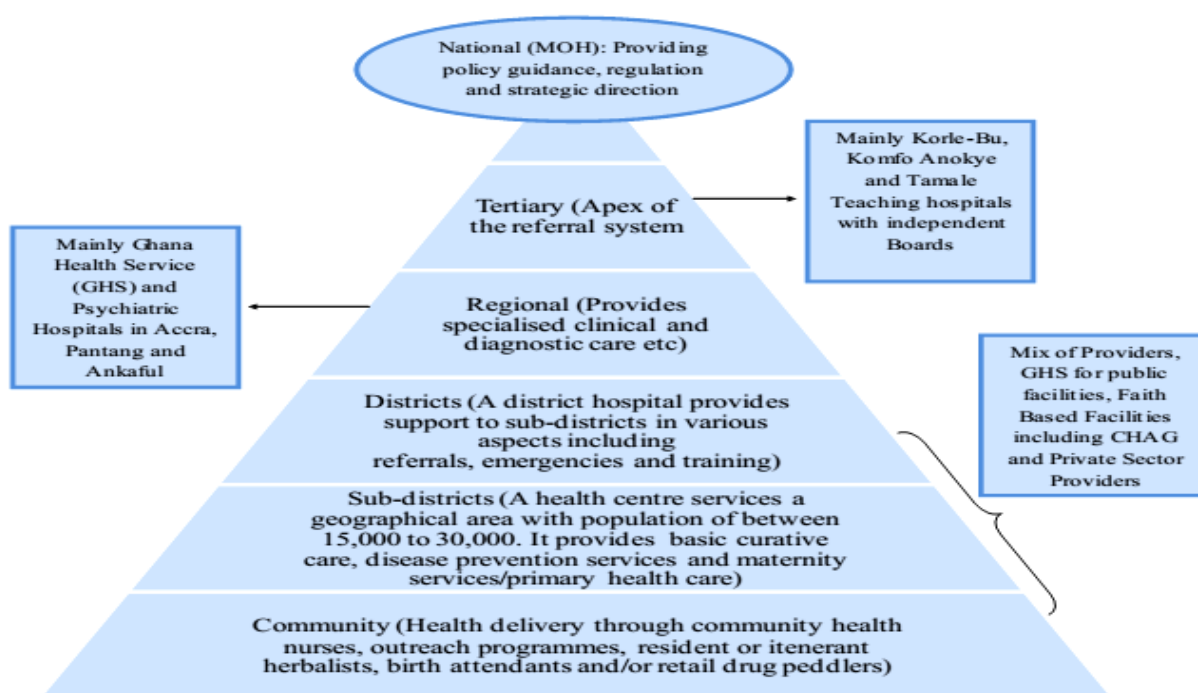
The Ministry of Health (MOH) is responsible for policy formulation, regulation, mobilization and training of health personnel. The Ghana Health Service (GHS), the tertiary hospitals, Private for-profit and not-for-profit non-governmental organizations (NGOs), faith-based organizations (FBOs) including Christian Health Association of Ghana (CHAG) and other Regulatory Authorities such as the Nurses and Midwives Council, the Physicians and Dental Council, the Pharmaceutical Council among others involved in the health service delivery (MOH, 2007).

The orthodox health service delivery system in the UER is a four tier operational system namely, Regional level, District/Municipal level, the Sub-district level and Community level. The district, sub-district and community levels are mainly involved in the implementation of health service activities and programmes. The Regional level offers administrative and technical support through coordinating, organizing,

monitoring and supervising district wide activities (MOH, 2007; GSS, 2014).

Bolga has no district hospital or poly clinic, but all its facilities also refer cases to the Regional Hospital. The Bolga Municipal Health Directorate (BMHD) supervises Nine (9) sub-districts with nine health centres and eighteen (18) CHPS compounds that offer preventive, promotional and curative services to the catchment population. There are four (4) private health facilities, including one maternity home in the Municipality. Two of the private facilities do not offer maternity services (GHS, 2015). Below shows the organization of the health system in the country;

Figure 1.2 The structure of the health system



Source: Seddoh et al., 2011

1.7 Health workforce

Nationally, the available health workforce has been improving especially for the nursing categories. The MOH targets for nursing per 1000 population in 2014 was 1:1000, and midwife to WIFA was 1:1,400 respectively. However, available data shows a nurse to population ratio of

1:959 (including Community Health Nurses) and midwife to WIFA ratio of 1:1,374 (MOH, 2014). These results might appear to fall within the WHO standard of 2.3 per 1000 population. However, there is the challenge of mal-distribution of health staff, especially midwives and professional nurses where the rural areas are disproportionately affected (MOH, 2014).

In Bolga, as of 2015, key staff offering health services in the sub-districts and community facilities (9 health centres and 18 CHPS compounds) include five (5) Physician Assistants; 24 Midwives; 24 Registered nurses and 136 auxiliary nurses (made up of 104 community health and 32 enrolled nurses) Considering the WIFA of the Municipal at 34,909, the midwife to WIFA population is 1 per 1,455 women (GHS, 2015; GSS, 2014).

1.8 Healthcare financing

One goal of the MOH National Health Policy is to improve its financial strategy and move towards universal health coverage. Ghana instituted a NHIS in 2005 to finance health services and provide financial protection to its population (MOH, 2007; NHIS, 2013). As of 2014, 38% of Ghana's population enrolled into the NHIS. About half of the estimated 8% of the population who are eligible for exemption from premium paying (such as pregnant women), have been registered (MOH, 2014).

Government national budget expenditure on health has been increasing over the past years, from 7.6% in 2012, to 9.9 in 2013 and 10.6 in 2014. These figures still fall short of the Abuja declaration made by developing countries to spend 15% of their total national budget allocation on health (MOH, 2014). The per capita expenditure decreased from \$47.1 to \$32.8 in 2014 due to population increases and substantial decrease of the value of the cedi to the dollar (MOH, 2014).

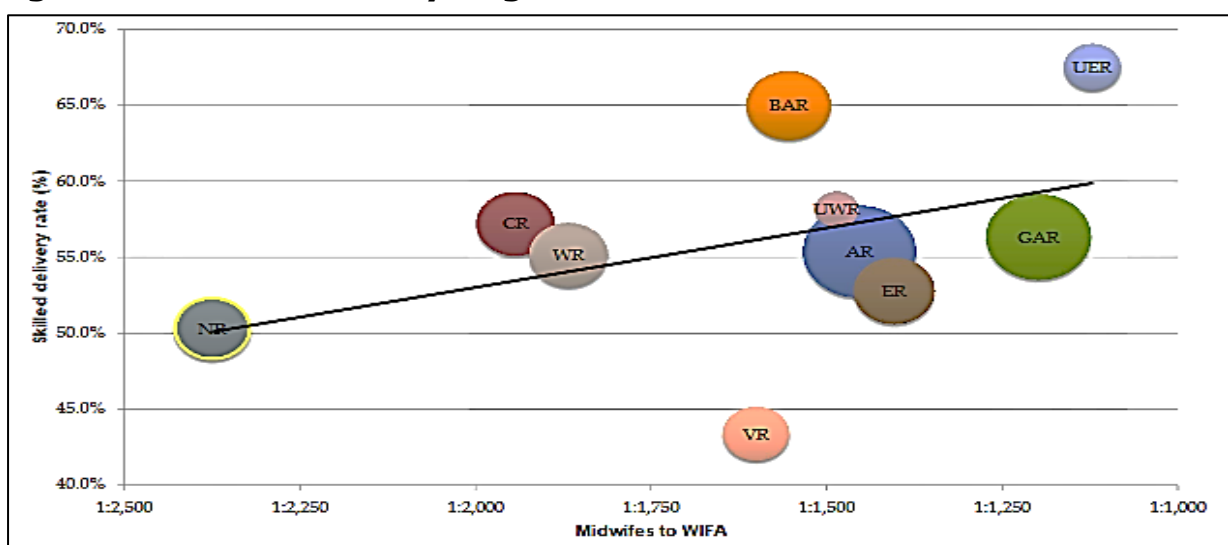
In 2014, about 11% of Government expenditure on health was spent on goods and services, out of which almost 60% came from the NHIS (MOH, 2014). As much as 87% of GOG was spent on employees' compensation and 2% was spent on assets. However, NHIS funds do not cover employee compensation (MOH, 2014).

1.9 SBA and obstetric care

Access to SBA and quality emergency obstetric care has been shown to be effective in reducing maternal mortality. SBA is defined as *"the availability of health professionals with midwifery skills (doctors, nurses or midwives) to promote utilisation, conduct normal deliveries in an enabling environment supported by health policies and regulations, appropriate drugs, equipment, supplies, transportation, and the required knowledge and skills to identify complications and refer to another level of professional care"* (WHO, 2004). One of the key indicators for monitoring progress towards the Millennium Development Goal (MDG) 5 is the proportion of births by skilled attendant (WHO, 2004). In Ghana, about two-thirds of women deliver with the assistance of skilled attendants, but uptake of SBA is higher in urban (88%) than in rural areas (54%). There is a wide disparity in the distribution of midwives further making access to midwives in rural settings worse (MOH, 2013; DHS, 2014).

The national target is to increase SBA coverage from 65% of WIFA per annum to at least 80% per annum, (GHS, 2014; Amoakoh-Coleman et al., 2015). While ANC coverage is between 85% and 97% nationwide (MOH, 2014; DHS, 2014) uptake of SBA is 54.8% (GHS, 2014). In the UER, SBA coverage was about 65% and 70% in 2013 and 2014 respectively (MOH, 2014). However, Bolga achieved 33.6% coverage in 2014 (BMHD, 2014).

Figure 1.3 Midwives to Women in Fertility Age (WIFA) ratio against SBA in Ghana by Region in 2013



Source: MOH (2013).

1.10 Maternal mortality

Maternal death is *"the death of a woman while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental cause"* (WHO, 2015a).

The WHO estimates that more than 80% of maternal deaths could be averted through uptake of SBA (WHO, 2004). According to the MOH, the trend of SBA uptake has been improving with a corresponding reduction in MMR. The UER has been unable to consistently hold onto the gains made. For example, in 2010, the UER recorded MMR of 138/100,000LB, which fell to 108/100,000LB in 2010 and rose again to 139/100,000LB in 2014 (see table 2.1). This should be interpreted with caution because these deaths represent only reported/institutional cases (MOH, 2014).

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2010	152	142	149	192	207	140	138	158	219	137	164
2011	197	127	124	207	242	171	127	160	201	101	174
2012	77	167	113	173	205	212	136	146	174	132	152
2013	125	138	122	200	198	174	108	193	161	153	155
2014	115	134	105	175	185	108	139	161	179	149	144

Table 1. 2 Trend of MMR by Region in Ghana (only institutional)

Source: MOH (2014).

CHAPTER TWO: PROBLEM STATEMENT, JUSTIFICATION, OBJECTIVES, RESEARCH QUESTIONS AND METHODOLOGY

2. Introduction

This chapter contains the problem statement, the justification for the study and the overall and specific objectives of the study. The chapter also includes the research question and methodology of the study.

2.1 Problem statement

Globally, the Maternal Mortality Ratio was estimated at 216 per 100,000 LB in 2015. The Sub-Saharan Africa region has a MMR of 546/100,000 LB, which represents 66.3% of the estimated 303,000 maternal deaths worldwide in 2015 (WHO, 2015a). Ghana's MMR is estimated at 380 deaths per 100,000 live births, which is about the same for the UER. The current MMR is almost twice the 2015 MDG target of 185 per 100,000 LB. However, the Sustainable Development Goals (SDG) target is 70 per 100,000 LB by 2030 (WHO, 2015b; Enuameh et al, 2016). Therefore reducing the MMR across Ghana remains a priority for the government.

The UER is one of the poorest regions in Ghana and majority of the poor are women. Majority of women in the Municipality also lack education, political participation and viable economic ventures, especially in the rural areas (Asamoah et al., 2014). As a result, most women are still unable to join the NHIS even though the FMHC policy exist (NHIS, 2013; Writter and Garshong, 2009). Though the introduction of the FMHC has been in place for the past 10 years maternal and infant deaths are still unacceptably high and improvements have stagnated, with rural communities bearing the largest burden (MOH, 2014; Asamoah et al., 2014). In the 1990's maternal deaths were so high in most rural communities that efforts were taken to train Traditional Birth Attendants (TBAs) to assist with deliveries and referrals (Bazzano et al., 2008). TBAs '*refer strictly to only traditional, independent (of the health system), non-formally trained and community-based providers of care during pregnancy, childbirth and the postnatal period*' (WHO, 2004). However, research shows that training TBAs to assist deliveries in rural areas have not reduced MMR (WHO, 2004). The Community Health Planning Services (CHPS) was also an intervention to bring skilled services close to rural communities as possible. Yet uptake of SBA has remained a challenge for the Bolga Municipal; fluctuating between 25% (in 2005) and 33.6% in 2014. The Region failed to achieve the WHO minimum SBA coverage

target of 80% (BMHD, 2014; GHS, 2014). It is for this reason that this study is conducted to explore the factors that influence uptake of SBA in Bolga.

2.2 Justification

Studies have shown that at least 80% of maternal and child deaths are preventable (WHO, 2004; Koblinsky et al., 2006). According to Campbell et al. (2013) uptake of SBA could prevent up to 90% of maternal mortality. However, preliminary literature review show that known factors that influence uptake of SBA include negative attitudes of midwives, limited access to maternal services, and poor quality of obstetric services (Mrisho et al., 2007; WHO, 2010; GHS, 2014). Studies by Lagarde and Palmer (2008) also suggest that even in areas where services are available and accessible, poor quality of services and user fees may still pose a barrier to SBA care, especially among the poor women. The crucial and main question this study seeks to answer is “how have the Free Maternal Health Care and other factors played together to influence the uptake of SBA in Bolga”?

2.3 Study objectives

The main objective of this research is to explore/describe the factors that influence uptake of Skilled Birth Attendance in Bolga and to make recommendations for decision makers to promote the uptake of SBA at the rural level.

2.3.1 Specific objectives

The specific objectives are as follows,

1. To identify the health system factors that influence uptake of SBA in Bolga
2. To explore the socio-cultural and economic factors that encourages or discourages expectant mothers from utilizing SBA care.
3. To identify evidence-informed interventions that promote uptake of SBA at the rural level

4. To make recommendations to the BMHD/GHS, MOH, NHIS and NGOs/Civil Society to incorporate in order to promote uptake of SBA in Bolga.

2.4 Methodology

The methodology of this study is a secondary data review. Published scientific articles were retrieved from PubMed, Cochrane library and VU e-library. Grey literature from the Ghana Health Service (GHS), the Ghana National Health Insurance Scheme (NHIS), the WHO and the UNFPA were retrieved from their respective websites. In addition, unpublished routine data from the District Health Information Management System (DHIMS2) and other unpublished reports (Annual reports of Bolga) were also reviewed for this study.

KEYWORDS: Table 2.1 below shows the key words used for searches, including Sub-Saharan Africa, Ghana in combination with Skilled Birth Attendants (SBA), maternal health, quality, accessibility, affordability, and obstetric care among others.

Delimiters in the electronic search were year of publications (2004 to 2016) and the language used was only English.

Table 2.1 Research Table

Objective	Published data and key words	Grey data and key words	Other unpublished data sets accessed in Ghana on
Objective one – Introduction to study background/area	Maternal health policy in Ghana; Human resource in Ghana; Maternal mortality in Ghana; SBA in Sub-Saharan Africa; maternal mortality in sub-Saharan Africa; SBA in Ghana; Basic obstetric care in Ghana	Maternal Health strategies in Ghana; Facility deliveries in rural and urban Ghana; Basic obstetric and new born care in Ghana; SBA in Ghana;	Skilled birth attendance in rural communities; Basic obstetric and new born care in rural communities; Skilled birth attendance in rural health facilities; Antenatal care in rural communities.
Objective two- Identify factors that encourage or discourage expectant mothers to access SBA	Factors influencing maternal health in Ghana; Socio-cultural factors influencing skilled birth attendance in Ghana; Socio-economic factors influencing skilled birth attendance; Socio-cultural factors influencing skilled birth attendance in Sub-Saharan Africa;	Quality of skilled birth attendants in Ghana; Availability of skilled birth attendants; Expenditure/cost of skilled birth; Acceptability of skilled birth; affordability of skilled birth; Accessibility of skilled birth;	Number of midwives in Bolga municipal; Percentage of CHPS compounds with midwives; Number of Community Health Officers (CHO) in Bolga municipal;
Objective three - Evaluate strategies that positively influence utilisation of SBA especially in rural areas	Best practices to increase maternal health services in Sub-Saharan Africa; Strategies to increase skilled birth attendance in rural settings in Sub-Saharan Africa; Quality improvements on maternal health in Ghana; Quality improvements on obstetric and new born care in sub-Saharan Africa.	Strategies to improve skilled birth attendance in rural Ghana; Best practices to increase skilled births in rural Ghana; Quality improvement on maternal and new born care in rural Ghana; Standard practices on skilled birth attendance in Ghana.	

2.5 Conceptual Frameworks

In search of a suitable frame work for this study, several models were reviewed including the Three Delay Model by Thaddeus and Maine (1994) and the Andersen Behavioural Model/Framework of Healthcare Utilisation (Andersen et al, 1995). The three phases of delay model (Thaddeus & Maine, 1994) works on the principle that when maternal complications occur, three phases of delays in access to healthcare might lead to mortality. The first phase of delay (in decision making) happens when the woman or the decision maker in the family delays in deciding to seek care. The reasons for this delay include ignorance of the danger signs and lack of funds. The second delay (in reaching the health facility), happens when there are difficulties in reaching the health facility in time. For instance due to long distance, bad roads, or lack of transport to health facility. The third phase of delay (in receiving appropriate care at the health facility) happens after the woman reaches the facility, but due to health service failures like absence of midwives, the woman does not receive the needed treatment in time leading to death. Thus, the theory concludes that about 75% of maternal deaths can be averted if these delays are removed (Thaddeus & Maine, 1994). This model though is useful in identifying major barriers to skilled delivery; it is typically desirable identifying barriers to accessing emergency obstetric care (Rominski, 2015). The model also appears to focus on the individual and the family; but places little emphasis on the influence of laws, policies and norms on access to obstetric services.

The Andersen model on the other hand, proposes that 4 broad factors – environmental, population level factors (predisposing, enabling and need), behavioural and health outcome factors influence health services utilisation.

The environmental factors are broad and include the health system and wider external factors such as the political, socio-economic and physical environment factors that influence service delivery and utilisation.

The population level factors include,

- The predisposing factors are demographic such as age, marital status, access to information or knowledge, social structure, gender norms and power relations, cultural beliefs and perceptions.

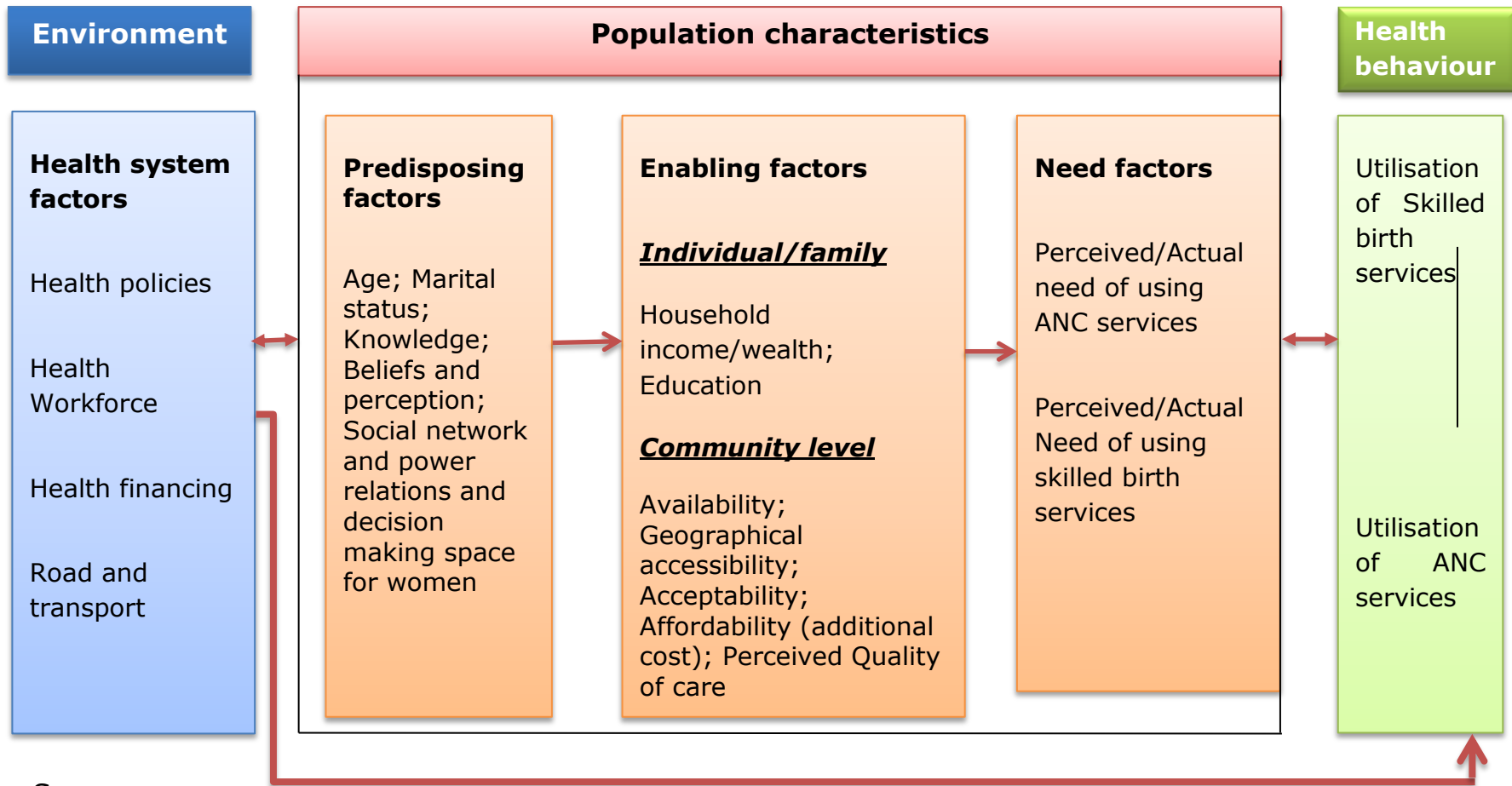
- The enabling factors which are individual/family or community related include household income, wealth, education, accessibility to health resources.
- The need factors include those perceived by the individual and those that are evaluated by the healthcare providers. These include perceived state of illness, signs and symptoms, benefits/harm for utilizing service by individuals; and then interpretation of signs and symptoms, diagnosis made and care given by health professionals.

The health behaviour factors include the individual response/desire to use health services and practice healthy living or not.

Finally the health outcome component includes such factors as perception of being cured and consumer satisfaction with services provided (Andersen et al, 1995).

Unlike the 3 Delay Model, the Andersen Model is better suited for this study because it allows for the examinations of broader factors relating to demand and supply side of health utilisation. Moreover, the 3 delays Model was not adopted because the objective for this study was not to reduce delays in obstetric emergencies, but to prevent the emergencies from arising in the first place by improving uptake of SBA. The Andersen model was adapted (figure 2.1) to suit the study objectives. First, Ante Natal Care (ANC) was reviewed under health behaviour since it has direct relationship with uptake of SBA. The need factors was also reviewed for perceived need of SBA care; because SBA is already recommended (evaluated/actual need) for all pregnant women irrespective of risk factors. The health outcome part of the model (which include outcome of health status and assessing clients satisfaction) was not considered as part of this study since the study is limited to utilisation of skilled birth care.

Figure 2.1 Modified Andersen Behavioural Model of Health Care Utilisation



Source:
Andersen, R.M. (1995)

2.6 Limitation of the study

The data used in this study was largely from secondary sources and as such within the Bolga Municipal, there might be some contextual variations. Additionally, majority of the study literature is accessed online, which means documents that are not published online may not be fairly represented.

CHAPTER THREE: FACTORS INFLUENCING UTILISATION OF SKILLED BIRTH ATTENDANTS

3. Introduction

This Chapter contains the findings on factors influencing uptake of SBA in Bolga, presented in accordance with the Modified Andersen Behavioural model. The factors include environmental factors, population characteristics (predisposing, enabling, and need factors) as well as the health behaviour factors.

3.1 Environmental Factors

The environmental factors include the health system, the socio-economic system, political system and the physical environment. For the scope of this study, only the health system factors will be reviewed.

3.1.1 The Health System

A responsive health system is crucial to improving maternal health and reducing maternal mortality. The way the health system is organised to provide maternal health services including the policies, workforce, facilities and financing are known to influence uptake of SBA as discussed below (WHO, 2015a).

3.1.1.1 Health Policy

As part of increasing support to achieve the MDG 4 and 5 many developing countries have to put in policy measures to strengthen the health care system by introducing reforms to improve access to basic health care and reduce MMR (UNFPA, 2012). There are different policies and strategies mapped out to improve basic health care utilisation and to reduce the high maternal deaths in Ghana (MOH, 2014). The National Health Policy (NHP) of Ghana, (2007) emphasised on five key strategic objectives for implementation across the country to improve the health status of citizens. They include increasing geographical and financial access to basic care services; ensuring better quality of care in all health facilities through improving efficiency at all levels; fostering closer collaboration with communities; enhancing private sector and other stakeholders participation and lastly, increasing overall resources, which should be equitably and efficiently distributed. This policy lays the foundation for implementing the needed health care activities across the

country. The National Strategic Plan on safe motherhood in the past decades (MOH, 2007) and recently, in 2013, the president of Ghana launched a follow-up campaign on Accelerated Reduction of Maternal Mortality (ACRMM) programme, adopted from the Africa Accelerated Reduction of Maternal Mortality, an Africa Policy (UNFPA, 2012; GHS, 2014), all feeds into the National Obstetric and New born Health Strategy and Action Plan. This plan strives to improve the provision of quality maternal health services to all mothers which begun in 2014 through to 2018 (GHS, 2015; Ghana National Obstetric and New born Health Strategy and Action Plan 2014 – 2018). Notable to improve universal access to care and to bridge the inequities in service utilisation significantly in Ghana, is the introduction of the National Health Insurance Policy since 2005 and subsequent introduction of the FMHC policy under the insurance scheme, in a bid to achieve MDG 4 and 5. Since 2008, all pregnant women are being enrolled free onto the scheme so that they can seek SBA care in all health insurance accredited health facilities including all public facilities and some private facilities across the country, without paying user fees (MOH, 2014; NHIS, 2013). Though these policies and strategic plans have generally improved maternal health (HERA, 2012), the MMR remains unacceptably high, at about 380 per 100,000 live births (WHO, 2015a).

3.1.1.2 Availability of Health Workforce for SBA care

Available health workforce with the requisite skills for health is important to improving maternal health. The WHO requirement is 23 health staff per 10,000 populations (WHO, 2010). The MOH (2014) reported a nurse population of 1 per 959 and that of midwives at 1 per 1,374. These figures shows progress made towards the WHO target of 2.3 (nurses, midwife, doctors) per 1,000 population (MOH, 2014). Though the MOH suggests that this has improved uptake of SBA over time, there are clear disparities in rural and urban distribution of health staff, (MOH, 2014; Enameh et al., 2016). WHO estimates shows that globally, almost 62% of nurses' work in urban areas serving only 50% of the population (WHO, 2010). This situation is similar in Ghana as close to 65% of health staff is in urban areas where only 51% of the population resides (GSS 2013; MOH, 2013). The MOH Assessment report, (2013) and DHS (2014) both report that the mal-distribution (not shortage of midwives) has led to between 88% and 90% of deliveries conducted in urban areas as compared to 54% and 58% in rural areas across the country.

The MOH report also showed that the UER has improved midwife per WIFA population of 1 per 1000 due to the Region taking advantage of the National Human Resource policy on training and retention introduced in the early 2000 (MOH, 2013). However, only 30% of CHPS compounds in the region have midwives due to the urban–rural mal-distribution of staff and low motivation for staff to stay posted at the rural level (MOH, 2014). Another study report by Koblinsky et al. (2006) on areas with high MMR, indicated that where midwives worked alone without assistants, they achieved fewer results than those working in teams (such as in hospitals). Working in teams could achieve between 32 % and 40% coverage of SBA as compared 5% - 10% with a solo worker who even conducts domiciliary midwifery.

In Bolga the general midwife per WIFA population is 1:1,456 women and although most communities have functional CHPS compounds to bridge geographical access, the centres lack midwives; an indication that women have to travel longer distance to access skilled delivery. The current midwife performance is also 54 deliveries per annum as compared the WHO standard of 170, showing a low coverage and under-utilisation of SBA care in Bolga, which could be attributed to mal distribution of midwives and low motivation for staff to stay at the rural level as indicated by the MOH (WHO, 2004; MOH, 2014; BMHD Report, 2014).

3.1.1.3 Health Care Financing and the FMHC Policy

Health system strengthening requires adequate investment and sustainable financing in order to improve the health status of all people and to reduce maternal deaths (WHO, 2004; UNFPA, 2012). Ghana largely finances health service delivery (goods and services) excluding employee compensation through funds from the National Health Insurance Scheme. The NHIS funds are made by prepaid contribution from both the formal (compulsorily deducted from payroll) and informal (voluntary contributions) sectors and through a special taxation. The current insurance premium is less than US\$5 per year for the informal sector. Children less than 18 years also are exempted from paying premiums (Writter and Garshong, 2009). The NHIS report shows that over 60% of the population are not enrolled on the scheme (NHIS, 2013). An evaluation of the scheme showed that about a third of current enrollments were actually contributing to the scheme financially; thus,

posing a challenge to sustainability of the scheme (Writter and Garshong, 2009).

Maternal health services are free under the scheme and the NHIS reports that all pregnant women who register under the scheme immediately pregnancy is confirmed are provided with health services through to six weeks after delivery by accredited health facilities across the country (NHIS, 2013). But, a research conducted into the performance of maternal health services in light of the FMHC, found that most pregnant women were unable to register because under the table payments exists and the registration process is cumbersome especially for rural women. The MOH Holistic Assessment Report (2014) also shows that only 32% of the expected pregnancies were registered across the country in 2014 and about 23% in 2013, contributing to the low uptake of SBA.

While the NHIS principle is that every women in labour, whether registered or not should still enjoy free delivery service under emergencies (NHIS, 2016), the NHIS only reimburses maternal services rendered to those registered; thus, putting the burden of getting the women to register after services on the GHS. The implication is that health providers find this process to be time consuming and therefore might make the clients pay outright instead (Wombeogo, 2014). Several studies also indicate that health facilities demand fees for some supplies such as disinfectants, pads, disposable pails and mackintosh at the labour units despite the FMHC policy and this undermines uptake of SBA (Bazzano et al., 2008; Asamoah et al., 2014). The GHS report shows that the scheme is irregular in reimbursing service providers and therefore affecting the timely provision of supplies and basic equipment for smooth service delivery (GHS, 2014).

3.1.1.4 The Community Health Planning Services (CHPS)

The principle of CHPS programme is based on increasing access to basic maternal and child health services at the community level (National Health Policy, 2007). The CHPS programme is implemented by the GHS, but with collaboration from the local community to provide local resources such as land and labour for building the compounds and community health volunteers to assist with community mobilisation for service delivery as well assist with health education. The staff strength at the CHPS compound is at least one Community Health Officer (CHO) (GHS, 2014; Sakeah et al., 2014). Reports form the MOH (2014) show that almost 47% of skilled deliveries occurred at health centres and CHPS

compounds attributable to the upgrading of the CHPS strategy in the UER, where CHO-midwives are deployed to CHPS compounds. “A *CHO-midwife is an auxiliary nurse, but trained in midwifery to provide basic health services including skilled birth care in rural areas*” (MOH, 2014). In a study conducted by Sakeah et al. (2014), findings show that the UER has one of the highest uptakes of SBA in the country of about 70%, suggesting that the CHPS programme is effective in promoting uptake of SBA as it bridged geographical and socio-economic barriers at the rural level. In Bolga however, the 2014 annual report shows that the CHPS compounds contributed less than 10% to the total deliveries of about 34%. This low performance could be due to the staff shortage in the rural facilities, poor attitude of staff and inadequate quality of services (BMHD, 2014; GHS, 2014). Bazzano et al. (2008) and Asamoah et al. (2014) noted that the uptake of SBA at the community facilities can further be increased if healthcare challenges such as inadequate staff, lack of equipment and poor quality of services are adequately addressed.

3.1.2 Road and Transport

Exemption from user fees and access to health staff alone does not guarantee utilisation of SBA care. Physical barriers such as poor roads and unreliable transport are also known to prevent uptake of SBA in low income countries (Lagarde and Palmer 2008; Mrisho et al., 2007). Huq et al. (2015) noted that poor road network and inadequate transportation contributed to low uptake of SBA in rural Bangladesh. Similarly, Enuameh et al. (2016) found that in Ghana, cost of transport is a crucial barrier for most women of lower economic status in rural communities of Northern Ghana. As public transport, which is often irregular due to poor roads is used at the community level; it becomes difficult for labouring women to get to a health facility especially at night (Enuameh et al., 2016). Another study revealed that transport cost to NHIS registration centres contributed to low enrolment of pregnant women and therefore affecting uptake of SBA across rural Ghana (HERA, 2012). According to the Bolga Municipal Assembly (BMA) (2015) about 19% of the 518.30 kilometres of road network in the urban areas are paved. The rural areas have fewer road networks and although the BMA estimates more than half of rural roads to be ‘good’, in the rainy season (July-October), most rural roads are deplorable and communities are cut off from health facilities by flooded rivers, making midwives and emergency vehicles unable to reach mothers who need assistance (BMA, 2015).

3.2 Population Characteristics

The findings associated with the predisposing factors, the enabling factors, and the need factors influencing uptake of SBA in Bolga will be reviewed. Predisposing factors reviewed include, age, marital status, Knowledge and awareness, social network, beliefs and decision making space for women on SBA care. The enabling factors are classified under individual/family and community level factors. Individual/family level factors are reviewed on education and wealth/income, while community level factors are reviewed on affordability, acceptability, availability, accessibility and perceived quality of care. The need factors are reviewed on perceived/actual need of SBA care.

Finally health behaviour is reviewed for perceived/actual need of ANC services.

3.2.1 Predisposing Factors

3.2.1.1 Age

Studies show relationship between maternal age and uptake of SBA (Sakeah et al., 2014; Enuameh et al., 2016). The DHS report showed that uptake of SBA among women aged less than 25 years was high (and majority of pregnancies also occur in this age group) with a proportion of almost 60% as compared 54% of women aged 35 plus years (DHS, 2014). Similarly Bazzano et al. (2008) and Enuameh et al. (2016) found uptake of SBA to range between 46% and 57% for those aged less than 25 as compared about 40% and 54% for women aged 35 plus years respectively. Additionally, in their study report on rural Ethiopia, Bayu et al. (2015) found that older women (35+ years) might be more inclined to traditional practices/values and as such will prefer TBA deliveries that make them comfortable.

3.2.1.2 Marital Status

Studies found no significant association between married and unmarried women uptake of SBA in Ghana (Sakeah et al., 2014; Amoakoh –Coleman et al., 2015). However, one study in the UER found almost 58% of married and 64% of unmarried women using SBA care respectively (Enuameh et al., 2016). Another study suggested that women who are single but educated and financially independent had facility deliveries

across many communities in Ghana since they have no husband interference in making decisions concerning their health (Asamoah et al., 2014).

3.2.1.3 Knowledge and Awareness

Several studies have shown that knowledge, awareness of women including partner's educational level have significant influences on uptake of SBA (Enchill, 2010; Asamoah et al., 2014; Wombego, 2014).

In a study conducted in three districts of the Upper East Region, 93% of women were aware of the Community Health Officers (CHOs) working in their locality. About 83% of respondents had knowledge that skilled delivery services in their community was provided by CHO-midwives; while 2% mentioned the CHOs. Another 10% mentioned midwives/nurses, doctors in the health centres/clinics, and district hospitals and 5% mentioned the TBAs in their communities (Sakeah et al., 2014). This study also reported that where community health volunteers assist the CHOs to provide health talks, it influences awareness and knowledge of mothers towards uptake of SBA. As such the majority of women, who sought skilled services during their last birth, were as a result of the increased awareness through health education from health volunteers, CHOs and the presence of CHO-midwives in their communities (Sakeah et al., 2014).

3.3 Social network, beliefs and women's decision making space on place of delivery

Men play a major role in decision making on reproductive health across many cultures in Sub-Saharan Africa (UNFPA, 2012). A UNFPA report on male involvement in ANC care in Ghana showed that men are decision makers largely due to sociocultural reinforcement of masculinity and male dominance in society (UNFPA, 2012). In a study conducted in the rural settings of Northern Ghana, Bazzano et al. (2008) also found that women considered childbirth at home as a social value of being faithful to her husband and also to be accorded with a higher social respect among her peers. The study elaborated that these beliefs, coupled with older women making decisions on childbirth and the presence of TBAs (who respect cultural practices/values) make most women prefer home deliveries. Similarly, in the UER, the role of older women such as mother/mother in

laws in decision making during childbirth was found in a study. The study showed that husbands were not the only key decision makers during childbirth. Thus, in certain cultures like the Kassena-Nankanas (in UER), decisions on place of delivery was the primary duty of a compound head, who could be an older woman (or mother in law) of the family or a senior male in the family. This leaves most women very little space to make decisions on their place of childbirth (Sakeah et al., 2014).

3.2.2 Enabling Factors

3.2.2.1 Individual/Family Level

I. Education

Several studies consistently show that a woman's educational level is highly linked to uptake of SBA in many settings (Bayu et al., 2015; Amoakoh-Coleman et al., 2015; DHS, 2014; WHO, 2015b). The DHS and other studies in UER showed that women educated to at least a senior high school level had almost 93% to 99% chance of SBA uptake as compared primary or no education women with uptake of 54% to 57% (DHS, 2014; Amoakoh-Coleman et al., 2015). Asamoah et al. (2014) also found that the three Northern Regions has the highest number of women with low education and uptake of SBA as compared to their counterparts in the south largely due to socioeconomic differences. Low education contributes to the inability of women to be gainfully employed and to earn meaningful income to take care of their own health (Asamoah et al., 2014). In a study in rural Ethiopia, women with higher education were 12 times more likely to deliver at health facilities as compared those with low education. Additionally, women with educated partners are trice more likely to use SBA than those with uneducated husbands (Bayu et al., 2015). Similarly, Sakeah et al. (2014) showed that among the Nankana ethnic groups in the UER, women with uneducated and unemployed husbands were less likely to access skilled birth and tend to prefer home deliveries.

II. Wealth/Income

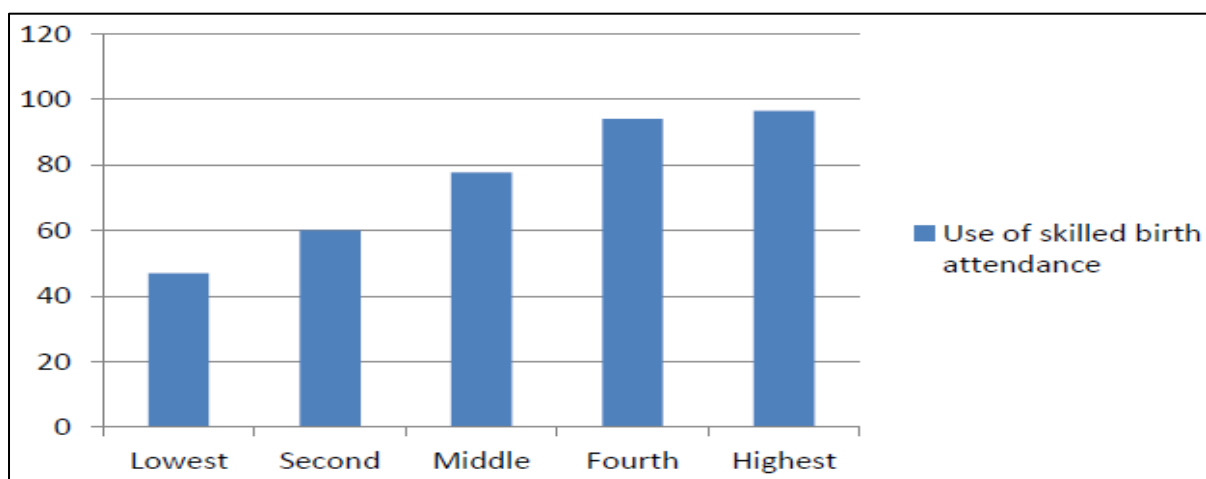
Several studies and documented reports show that uptake of SBA and wealth or income status of women or family are intrinsically linked. In their study findings in rural Liberia, Lori et al. (2013) reported that women and families with low income status used less facility deliveries

and had more home deliveries. Similarly the DHS (2014) report in Ghana showed that SBA uptake among the wealthiest was 96% as compared 46% among the least wealthy.

Additionally, in a study conducted across Ghana, uptake of SBA among women of low income status also demonstrated inequalities that varied between women of low economic status in northern and southern Ghana because of high poverty linked with poor education and employment opportunities in northern Ghana (Asamoah et al., 2014). For instance findings show that in Northern Ghana including the Upper East Region, under half (46.3%) of women could afford to possess a valid health insurance card, and only 43.5% had funds available at home to seek healthcare, especially to meet the transport and feeding costs of using birthing facilities (Asamoah et al., 2014). In another study by Enuameh et al. (2016), it was found that in the UER, the top two wealthy quintiles were 7 and 3 times more likely to use SBA care than the bottom poorest.

The graph below shows the general uptake of SBA by wealth quintiles in Ghana.

Figure 3.1 Uptake of SBA by Wealth Quintiles



SOURCE: GSS, DHS, 2014

3.2.2.2 Community Level

I. Accessibility and Availability

According to the WHO a 5 kilometre radius to a health facility will increase geographical access to health services (WHO, 2010). Studies estimate that if the right human resource, essential drugs, equipment and adequate referral processes involving timely decision to refer and transport are available, 80% of maternal mortality could be averted through uptake of SBA (WHO, 2004). In a systematic review by Wild et al. (2012) on the tranny of distance in rural communities, they found that where women lived more than 5 km to 25 km away from a health facility, uptake of SBA was low.

The MOH report in Ghana show that there are over 2,100 CHPS compounds across rural areas and some are within 5 kilometre reach by the population (MOH, 2014). A study by Asamoah et al., (2014) conducted across Ghana found that the Upper East Region has one of the shortest travel time to a health facility. Thus, 45 minutes as compared to 45 to 90 minutes in the Upper West Region, 180 to 360 minutes in the Northern Region, and more than 360 minutes in the northern parts of Volta Region. However, studies also found that the availability of skilled birth services was affected by medical equipment, supplies and the requisite human resource needed to make basic skilled services available at the facility level (Amoakoh-Coleman et al., 2015; HERA, 2012). In the UER, there are similar findings that basic equipment and supplies for maternity services are lacking especially at the rural facilities making access to skilled birth care distant from communities (Wombeogo, 2014).

II. Acceptability

Community acceptance of maternal services offered could largely be influenced by the quality of health services provided and the existing cultural practices (UNFPA, 2012). Studies in Ghana show that poor quality of SBA care at the community level could lead to rejection of skilled care and eventually low patronage of services (Asamoah et al., 2014; Enameh et al., 2016). The MOH reports that uptake of SBA has stagnated and still close to 30% or more of deliveries occurs at home, partly because of unacceptable quality of care issues (MOH, 2014; GHS, 2014). Also, Sakeah et al. (2014) revealed that in the UER, disrespectful health staff at the maternity units and disregard for cultural

practices/values could lead to poor uptake of SBA in rural communities. These findings are consistent with findings in rural South Africa where the lack of respect from health staff towards clients influenced home deliveries and inequalities to SBA care. Most rural women complained about the quality of care they received from nurses. One woman lamented that *"nurses "hurl insults at us", mocking women who did not understand what they were saying, "if a woman walked a little bit slow then they scream at you in front of the people", and not being patient or sympathetic to the pain that you are in"* (Silal et al., 2012). This demonstration of a disrespectful health staff is similar with findings by Bazzano et al. (2008) in rural Northern Ghana where high home deliveries was also attributed to some nurses being abusive of clients at the maternity units.

III. Affordability

In Ghana, poverty is widespread and about 1 in 3 people in UER are poor, living below the poverty line of less than two dollars per day (DHS, 2014). Findings show that though maternal health services are free once a pregnant woman is enrolled under the NHIS, more women are unable to afford transport cost to NHIS registration centres and birthing facilities, especially where there is no midwife in a near facility and clients have to be referred (HERA, 2012). Similarly, Silal et al. (2012) found that in rural South Africa many women could not afford transport and feeding costs especially during emergencies when private vehicle cost could be as high as \$ 55 USD. This led to high home deliveries in rural areas 3 times more as compared those in urban areas.

Comparatively in UER, women who could not afford additional cost (transport/feeding costs) possessed no valid NHIS card and used birthing facilities less than those with valid cards (Sakeah et al., 2014). Similarly, Enuameh et al. (2016) reported that women with a valid health insurance card were almost twice more as likely to deliver in a health facility as compared to those without. Another study also conducted in the UER showed that majority of the lowest income women who could not afford transport cost and the additional cost of supplies at maternity rooms avoided facility deliveries (Wombeogo, 2014).

IV. Perception of Quality of Service

Studies show that uptake of SBA in Ghana is affected by quality of services rendered. Studies show that inadequate equipment and supplies at especially the lower facility levels leads to poor quality of services provided by health staff (also discussed under acceptability). Koblinsky et al. (2006) in their study on areas with high MMR reported that only 17% of deliveries at the primary level in Ghana met good clinical practice using a WHO checklist. This translates to insufficient competence/skills to manage cases and inadequate standard of care practices at the primary levels (Koblinsky et al., 2006). The MOH (2014) reports that lack of regular supportive supervision and monitoring at the lower health facilities leads to poor adherence to standards of care and low performance of staff, which affects the quality of care given to clients. Several studies equally found that perceived poor quality of care by clients at maternity units in Northern Ghana is increased by a disrespectful health staff, poor adherence to clinical procedures performed on clients such as the same procedure repeated several times by different staff on same client and ridicule of clothing of clients (Bazzano et al., 2008; Enuameh et al., 2016). Similarly, Sakeah et al. (2014) in their study in the Upper East found that lack of basic supplies at the community facilities, unnecessary referrals and poor management of cases could lead to perceived poor quality and low use of birthing facilities.

3.2.3 Need Factors

3.2.3.1 Perceived Need/Actual Need of SBA Care

The WHO estimates that 20% of all pregnancies are likely to result in birth complications. Thus, there is actual need for uptake of SBA to save lives as the evidence show that some pregnancies are at risks and need special care. These risks are associated with older women at first pregnancy, (35 years and above) and births with mal presentation of the fetus/baby (WHO, 2015a). Studies also show that women who have had previous complication during childbirth or witnessed a community maternal death are more likely to perceive SBA as a need and use services subsequently (Amoakoh-Coleman et al., 2015; Enuameh et al., 2016). Additionally, a study in rural Ethiopia showed that where pregnant women had more ANC services, were given information and they perceive complications during childbirth, they were 3 times more likely to deliver at a health facility than those who were not informed of any consequences

(Bayu et al., 2015). Similarly in the UER, uptake of SBA among women was found to be influenced by the amount of information given by health workers to women on birth complications (Enuameh et al., 2016).

3.2.4 Health Behaviours

3.2.4.1 Perceived Need for ANC Services

Women perceive pregnancy as a normal occurrence across many cultures in Ghana, thus uptake of regular ANC is influenced by this perception. For instance early ANC attendance is still delayed in some rural communities due to cultural belief of perceived harm to the unborn baby if early rituals are not performed (Bazzano et al., 2008). However, ANC utilisation of 4 plus visits is a need as this has shown increases in uptake of SBA (WHO, 2015a). Studies also found that about 80% of regular ANC attendance (4 plus visits) in Ghana used skilled birth care (Amoakoh-Coleman et al., 2014). Moreover, community outreach ANC services and health education generally gives health staff the opportunity to improve on clients' perceived need for ANC service and uptake of SBA (Amoakoh-Coleman et al., 2015). In Ethiopia, where women perceived ANC as beneficial to have a healthy baby, their behaviour towards regular ANC visits improved (Bayu et al., 2015). Similarly, the majority of women in rural communities in Ghana who use regular ANC services tend to use facility deliveries as compared those who had once or none of ANC services (Asamoah et al., 2014). Although the GHS and Bolga Health Directorate report shows over 85% ANC 4+ visits, this has not translated to high uptake of SBA (GHS, 2014; BMHD, 2014).

CHAPTER FOUR: INTERVENTIONS/BEST PRACTICES FOR IMPROVING UPTAKE OF SBA AT THE COMMUNITY LEVEL

4. Introduction

The review of best interventions is done based on the literature findings of some factors that highly influence uptake of SBA and are also considered based on their applicability to local conditions, feasibility for the health system resources to adapt including provider skill to perform (Bhutta et al., 2009). Using the conceptual framework as a guide also, intervention packages/best practices reviewed are aimed at improving the enabling factors and the health system factors as they can be considerably modified (according to the model) to influence the uptake of SBA at the rural level.

Health System Interventions

4.1 Intervention to improve availability and affordability of services: team work and basic medical supplies

Evidence by the WHO supports that interventions that yield results for uptake of SBA include the availability of adequately skilled staff; the provision of essential drugs equipment, supplies and suitable work environment (good state of building and running water) to provide 24 hours service (WHO, 2010). Studies also show that midwives working as teams or with assistants at the facility level also achieve far greater SBA coverage than a solo worker, who conducts home based deliveries (Koblinsky et al., 2006).

Lassi et al. in a systematic review concluded that Nurse/midwives-based home visit programmes did not report any significant impact on birth outcomes, hospital admission for complications and neonatal morbidity and mortality (lassi et al., 2014). In rural Bangladesh, however, where an intervention of the required trained number of midwives, known as Community Skilled Birth Attendants (CSBAs) were deployed at the community level, about 1 birth attendant per 8000 population area (not WIFA), significant results of skilled births were achieved. This intervention also equipped the basic levels with appropriate supplies and drugs to offer basic emergency care to prevent seizures, bleeding and sepsis prior to referral to the next level. The midwives at this basic level were given regular support and worked in close connection with the team at the next

level to ease the referral process for quick management of complications. Thus, the intervention provided an integrated team work between nurses at the basic and next levels of care. This improved the availability of quality midwifery services at the community level and addressed the geographical and affordability issues and increased uptake of SBA from 12.6% prior to intervention to 38.3% post intervention. (Huq et al., 2015). Similarly, Quayyum et al. (2013) concluded that where the right medical supplies are available and appropriate treatment is started on time, (even at the very remote area) by trained health professionals in an adequate environment, it improved availability of SBA care and prevented majority of maternal deaths in rural communities (Quayyum, et al., 2013).

In Ghana, the CHPS strategy has shown significant impact to bridging availability and affordability issues of skilled services through midwives being posted to rural areas. For example, although only 30% of CHPS facilities in the UER have midwives, they contribute to about 40% of skilled births in the region (Sakeah et al., 2014; GHS, 2014).

Similarly in a systematic review on improving community skilled care, task shifting to lower cadres of staff was concluded as a strategy that improved availability of skilled services across many rural communities (Elmusharaf et al., 2015). It is feasible to implement task shifting in Bolga because there are CHNs in almost all CHPS compounds who could be trained to work as teams with the next level facility midwives to improve service availability and uptake of SBA.

4.2 Supportive supervision and continuous staff education as a tool to improve staff performance

Evidence by WHO supports that continuous provision of quality maternal services at the lower level can be achieved through motivation of staff in the form of supportive supervision and continuous staff education (WHO, 2010). In rural Bangladesh, supportive supervision at the primary care level was associated with improved skills of midwives and quality of care that lead to a reduction in birth complications (Huq et al., 2015). Regular supportive supervision also provides the supervisors with information to make practical decisions on staff redeployment and provision of equipment and supplies to enhance staff performance (WHO, 2010). Additionally, a systematic review on community health intervention show

that upgrading skills of staff, motivating them with continuous education and health systems strengthening (including transportation for referrals), improved the quality of care and significantly reduced perinatal and maternal mortality in rural areas (Elmusharaf et al., 2015). In South Africa, where health authorities used continuous education as a non-monetary motivation for workers in rural areas, it attracted more youthful staff, which contributed to improved availability of skilled services at the rural level (Reid, 2004). Though the UER has taken advantage of further learning introduced by MOH/GHS, the focus has not been well placed on rural areas to attract retention. The context has to change to give rural staff more priority.

4.3 Maternity waiting homes as an intervention to reduce geographical barriers

A Maternity Waiting Home (MWH) is a temporal facility within easy reach of a hospital or health centre, which provides emergency obstetric care (EmOC). Women at the end of their pregnancy stay at a MWH to await labour and subsequent transfer to the nearest facility when labour begins. Studies show that in most contexts, MWH bridges the geographical barriers to skilled birth care in remote areas. MWHs has been implemented in many countries differently; those that include free feeding, regular supervision by midwives and free transport to referral facilities recorded increased uptake of SBA in rural communities. In Cuba, for instance, the implementation of MWH increased uptake of SBA from 63% to 99% within a period of 20 years. In the same period the MMR due to haemorrhage dropped from 32/100,000LB to 2/100,000LB (Lonkhuijzen et al., 2012). In rural Liberia, uptake of SBA in areas with MWH increased from 11% to almost 95% compared to areas without MWHs (from 21% to 70%) in the same period (Lori et al., 2013). Though the effectiveness of MWHs has been described in general terms as successful to improving SBA care, the successful ones often include multiple interventions rather than a standalone project (Wild et al., 2012).

In Ghana, the UER has the shortest travel time to a birthing facility (45 minutes' by walking), which has been attributed to the physical availability of CHPS compounds (Asamoah et al., 2014). Therefore the implementation of MWH is not likely to be feasible because of the current policy priority of providing CHPS centres within 5 kilometer reach in every

community. In addition, the challenge of ensuring adequate midwife supervision at the MWHs is also eminent (due to inadequate staff at the rural areas). What might be feasible, in Bolga specifically is a modification of the CHPS facilities to include a maternity waiting wing, with free food for clients. The provision of transport and mobile communication system could also be added to facilitate prompt referrals in case of emergencies. This will likely attract women, and reduce the geographical and cost barriers to SBA care.

Community Level Interventions

4.4 Community participation as a tool to reduce cultural barriers and influence behaviour change

Families and communities could be mobilised to demand for quality care through empowerment activities including health education efforts by local cadres of health workers. Uptake of SBA is low in areas where community involvement by health staff is lacking (WHO, 2004). The WHO proposes that TBAs should be involved as community advocates to reduce cultural barriers and improve local trust, which could lead to improved uptake of SBA. This however needs tactical collaboration as TBAs also earn income for providing unskilled deliveries (WHO, 2004). In a systematic review, Lassi et al. (2014) noted that the involvement of TBAs and community based health workers yielded high referral of pregnant women to the health facilities and reduced maternal morbidity.

In rural Bangladesh where communities also selected their own volunteers who were trained on maternal and new born care, it indicated health workers respect for local values and local trust for services improved. Subsequently, the demand for maternal services increased and with notable improvement of SBA uptake especially among the poor. However, it is also noteworthy that this intervention also included support for transport fees for the very poor pregnant women (Quayyum et al., 2013).

Additionally, the WHO states that community engagement and dialogue with health workers could further address local quality issues by enabling local quality standards to be added to standard care, which could help increase uptake of SBA (WHO, 2004). For instance, in the UER, through

community dialogue, it was revealed that women deliver at home because they cannot access hot water for bathing and local beverage called 'Zoom koom' (said to increase breast milk) soon after delivery at the health facility. When these two practices/interventions were incorporated into standard care, uptake of SBA in the community doubled (from 22.6% to 44.2%) post intervention. This intervention was replicated in the Bawku West District (also in the UER) and the uptake of SBA also doubled in 3 years (from 36% in 2005 to 62% in 2008) (Wombeogo, 2014).

Similarly, mobilizing male support at the community level has shown significant results at reducing cultural barriers of decision making by only men (husbands). A study in Ghana found that male involvement (using couple counselling) increased the decision making space of women. It also improved community perception of the benefits of ANC and SBA care, with notable increases in male participation in ANC attendance (28%) and ANC 4 plus visits (UNFPA, 2012). Studies also show that up to 80% of pregnant women who have had 4 plus visits are likely to receive counselling and ultimately use SBA care (Amoakoh-Coleman et al., 2015).

4.5 Community based emergency transport to improve access

Local community transport availability is crucial for access to skilled care and ultimately the improvement of maternal health (WHO, 2004). Lassi et al. (2014) found that communities with locally-initiated and funded transportation for maternal services were associated with lower neonatal deaths and increased referrals for skilled interventions. Lonkhuijzen et al. (2012) also found that community initiated and financed emergency transport contributed to improved uptake of SBA. However, the study noted that such interventions are often challenged by irregular contributions from households especially among the poorest households. In another intervention in rural Bangladesh, where the cost of medication and emergency transportation for the poor was absorbed by an NGO, a post intervention evaluation found that ANC four plus visits increased to 69% from 15% while comparison areas only increased to 25% from 22% same period. However, the researchers concluded that such intervention may not be sustainable without local funding since outside financiers will eventually pull out (Quayyum et al., 2013).

Similarly, in Ghana, an NGO funded community-based ambulances (canopied Motorised tricycles) and exchange of mobile phone contacts

between midwives and pregnant women, resulted in significant reduction in maternal mortality in intervention areas. For instance, one intervention community (Bongo district), recorded zero (0) institutional maternal deaths in the first two years following the intervention (GHS, 2014; Wombeogo, 2014). This kind of intervention was also noted by Elmusharaf et al. (2015) in their systematic review which revealed that community based transport and working communication system could record almost a 100% increase in referrals in intervention areas at the rural level (from 36% at baseline to 75% post intervention).

4.6 Social watch approach to promote accountability for maternal health service

The United Nations Development Program (UNDP) indicates that the mobilisation of communities to demand for accountable services from government, and other stakeholders will strengthen the health system to be responsive in addressing community needs (UNDP, 2013). Accountability offers citizens' right to demand fair and responsive services from government. Social accountability as described by the UNDP, *"emerges through actions by citizens and civil society organization aimed at holding the state to account, as well as efforts by government and other actors (media, private sector, donors) to support these actions"* (UNDP, 2013). Communities, the media, civil society and NGO's could mobilise to demand accountable maternal health service to be provided according to the set standards. In rural India, an international and community watch alliance on maternal health (The White Ribbon Alliance) found deficits in the number of staff needed to provide quality maternal services. Through sensitisation, the communities were mobilised to advocate for adequate health staff. As a result, the number of trained midwives deployed to the rural areas improved, from 46% to 48% in two years. Basic logistical supply to health facilities also improved from 20% to 50%. In the same period, knowledge of current Maternal, New born and Child Health (MNCH) policies increased from 64% to 88% and uptake of SBA also improved across several facilities (Futures Group, 2010). Similarly, in rural Bangladesh an NGO (The Bangladesh Rural Advancement Committee) and community members advocated for additional Community Based Health Workers in remote areas in order to create demand for maternal and child health services. As a result, over 500 trained community workers were deployed to visit homes and refer clients to health facilities. Following the interventions, utilisation of skilled

births among the poor doubled (Quayyum et al., 2013). In Ghana and in the UER, social demand interventions are not only feasible but are also likely to lead to increased awareness of the free NHIS package and subsequent demand for compliance by service providers. There are civil society organisations and Community-based NGOs who work in the area of maternal health in the UER and could facilitate communities to carry out advocacy for accountable healthcare financing and services (SEND Ghana, 2015).

CHAPTER FIVE: DISCUSSIONS ON FINDINGS

5. INTRODUCTION

This chapter discusses the findings and the feasibility of the reviewed interventions.

5.1 Inadequate implementation of health policy and funding

The findings show that a number of health policies are in place in Ghana to ensure that basic and comprehensive maternal health care is provided equally and utilized by both rural and urban communities. However, the current implementation of the policies has been a challenge. The NHIS is beset by low premium contributions as majority of citizens are below 18 years and as such do not contribute to the scheme. The DHS report show that almost half of the population in Ghana is below 15 years. In addition, the NHIS premium contribution of less than US\$ 5 per adult (more than 18 years) per year may be inadequate. All this contributes to the NHIS inability to reimburse service providers timely. The FMHC policy, which was introduced to bridge financial barriers and increase access to skilled services especially for the rural poor, has not yielded maximum results yet. Less than 35% of the expected pregnant women across the country were registered under the NHIS in 2014. In the UER, findings are similar as less than half of women are registered under the NHIS, which could be attributed to the financial barriers such as transportation cost and illegal charges associated with the registration process. This contributes to the wide disparities in uptake of SBA between the urban and the rural areas; and between the rich and the poor. Though the FMHC also technically covers women even not registered at the time of delivery, findings show that payments are made at the health facility level contrary to what the policy stipulates. Furthermore, Government investment in health infrastructure and equipment is inadequate, barely 2% and 11% of the overall health budget is spent on health assets, and goods and services respectively. This affects the health service delivery in terms of the availability of basic equipment and supplies at the primary care level. Health workers may also exploit the supply gap by charging clients for delivery materials (some of which may be genuinely needed). It is unclear in the findings of this study which supplies are covered or not covered by the NHIS, although the policy is clear that facility deliveries are free. Hence, the issue of exploitation must be interpreted with caution, as a further study is needed to draw informed conclusions. The findings also show that 80% of government's expenditure on health is used for staff

remuneration. This also limits further employment opportunities for new staff and the ability to expand on infrastructure. This call for efficient redistribution of health staff in Bolga especially midwives to increase performance from the current 54 deliveries per midwife per year as compared the standard of 170 deliveries per midwife per year. However, in order to improve access to skilled service, it is evident that government needs to invest in health as per the Abuja agreement of about 15% of total national budget. The reviewed interventions showed that community advocacy for accountability from government could lead to improvement in both human resource deployment and increase in health financing. Similarly, pressure from communities can lead to improvement in the NHIS registration process for pregnant women and timely reimbursement to service providers. This could significantly minimise the illegal charges that may exist at maternity units in Bolga.

5.2 Low availability of skilled workforce and adequate skills

The findings show that there are inequalities in skilled staff distribution and services between rural and urban areas leading to poor quality maternal health services at the rural level. In Ghana and in Bolga, almost 70% of the CHPS compounds do not have midwives to offer skilled births (MOH, 2014). An intervention in rural Bangladesh showed that where the required number of midwives is available at the community level and working as teams with the next level staff, uptake of SBA improved and maternal complications also well managed. This intervention was also successful through regular supportive supervision, which also enhanced midwives competence at providing quality services. The non-monetary motivation with continuous education for rural staff will not only improve knowledge and skills, but also retain and attract additional staff. In Bolga, the GHS has trained auxiliary nurses as midwives and deployed them to provide skilled births to women in rural areas. However some rural communities are yet to benefit fully from this intervention. The maldistribution of staff and poor customer care issues are also common in areas with midwives, which is partly responsible for the low uptake of SBA in Bolga. The reviewed interventions show that supportive supervision and task shifting with career development opportunities will help improve staff performance and retention at the rural areas.

5.3 Unacceptable quality of care provided

The quality of maternal health care at the rural level in several developing countries is generally challenged by the inadequate basic technical equipment and supplies and also low professional attitude towards clients. Findings show that poor management of births or simply turning away pregnant women or offering unnecessary referrals due to lack of basic supplies could lead to perceived poor quality of services at the rural level. In addition, low professional attitude such as being disrespectful to clients, undertaking repeated clinical procedures without explanation to clients or ridicule of clients' leads to perceived poor quality of care at maternity units. Similarly, under-the-table charges also constitute a barrier to SBA care for most poor women. As the study in rural South Africa revealed, high home deliveries occurred because women complained about the poor quality of care they received from health staff at the maternity unit. Clients described midwives attitude as disrespectful and unnecessarily critical of clients. Though the findings in Bolga show that ANC 4 plus visits is high, as women may have perceived ANC to be beneficial in avoiding birth complications, these findings do not necessarily promote uptake of SBA. This can be attributed to poor quality of SBA care at the health facilities. Interventions where skilled health professionals engage the community to address local quality issues could lead to improved uptake of SBA. For instance, the "zoom koom" and hot water for bathing initiative can be adapted to suit the context of other communities as it has proven to increase uptake of SBA. In addition, regular local level supervision is necessary to ensure staff adherence to clinical standards and allow managers to also get first-hand information to address issues like staff redistribution and medical supplies efficiently.

5.4 Socioeconomic and sociocultural issues at the rural levels

5.4.1 Geographical accessibility and transportation

Health facilities within reach of pregnant women influences uptake of SBA according to the findings. Where rural women have to walk long distances or have to pay for transport and feeding costs, uptake of SBA declines. The findings show that most facilities in the UER are close to clients. However, the unavailable skilled midwives in most rural facilities would increase the geographical (travel time) access to skilled services. The reviewed interventions show that reducing geographical barriers can make SBA care more affordable at the rural level. The introduction of

MWH for rural women to stay nearer to the health facility at the final days of their pregnancy in Liberia for instance, helped to reduce home deliveries significantly. Community based transport arrangements are also known to bridge the access barriers and promote uptake of SBA. In rural Bangladesh for instance, the availability of community transport (through NGO support) increased timely referrals and reduced birth complications among women in the lower socio-economic group. However, this intervention might not be sustainable in the context of Bolga unless local communities initiate their own payment mechanism to sustain the intervention. In Ghana and in Bolga especially, the lack of community transport arrangements have hindered uptake of SBA at the community level. However, the evidence is that in a few districts in the UER where community transport was available, it showed improvements in access to emergency obstetric care and reduced maternal deaths in the intervention areas. Many studies in rural Ghana also indicate that the CHPS programme is effective in bridging the geographical, affordability and cultural barriers that limit uptake of SBA. Combining these interventions will likely improve uptake of SBA in Bolga.

5.5 Low levels of literacy and poverty

As the findings shows there is high illiteracy among women in rural areas than in urban areas. In the UER, more than 60% of rural women are illiterate. Poverty is associated with low education of women and low job opportunities, which leads to a vicious cycle of poverty. This might also explain why 1 in 3 people in the region are poor, with women constituting over half. Since rural women are most deprived in terms of education or income, they are less able to afford the additional cost (of transportation and feeding) to birthing facilities and NHIS registration centres. The findings show that women with higher education have increased opportunities to employment, to earn income and have autonomy to their own care. Inevitably, the majority of women of higher socioeconomic status use skilled birth care more than those of lower economic status. Equally, in rural Ethiopia, women with higher education were 7 times more likely to use SBA care than those with low education. Furthermore, women whose husbands are educated were 3 times more likely to use skilled birth care. In the UER, findings show that women whose husbands are not educated and unemployed preferred their wives to deliver at home; and possibly to confirm that their wives are faithful in marriage.

This could however be attributed to high illiteracy and fear of the indirect cost associated with skilled births.

The FMHC policy under the NHIS is therefore the right intervention to make maternal health care affordable and to promote utilisation of skilled services among the poor. However majority of women in UER do not hold a valid NHIS card as the findings show. In addition, even those who possess valid NHIS registration cards still may pay illegal fees or buy items (disinfectants, sanitary pads, rubber sheets and others), which the providers claim, are not covered under the NHIS, but are necessary for clean delivery services. This deters poor women from using birthing facilities. While some basic supplies at the rural level might be insufficient due to erratic reimbursement by the NHIS, a further enquiry is needed to determine what must be included under the NHIS package, to prevent additional charges. Interventions aimed at promoting community participation and engagement could promote awareness of the FMHC package, decrease unfair charges and increase of uptake SBA in Bolga. Similarly the evidence shows that well-resourced health facilities at the community level often reduce the socioeconomic barriers in service utilisation among the poorest and should therefore be the focus of the Bolga DHMT.

5.6 Cultural Practices and Values

In many cultures in UER, men are family heads as the patrilineal system of inheritance is practiced, thus making men to have a lot of control including being primary decision makers on all health issues. The DHS report shows that over 70% of households are headed by men. This means more men control a lot of resources as compared women. Findings in the region also indicate that in some cultural context, not only men are primary decision makers, but mothers-in-laws and fathers-in-laws of pregnant women are also key decision makers. This leaves majority of rural women little space to make their own decisions and choice to use a birthing facility. Findings also show that the cultural values for women in some rural areas to be seen as faithful to their husbands; and also to be accorded with higher social respect among their peers, makes some women prefer home deliveries. In rural Ethiopia, women preferred home deliveries because they were comfortable with the TBAs who often respect cultural values of the society. However, several findings have shown that health education by health staff have reduced some cultural beliefs

significantly as many women now perceive SBA care as beneficial to avoid birth complications. The WHO estimates that involving TBAs as advocates for uptake of SBA could reduce cultural barriers and promote coverage at the rural level. Equally, findings suggest that male involvement in ANC services is important to bridge the problematic cultural perception of male dominance and allow couples to make decisions together. Interventions at the community level aimed at couple counselling increases awareness and regular ANC attendance. The findings in Ghana show that majority of women who had regular ANC visits also received SBA care as compared those with one or no visit. This may be attributable to the fact that regular ANC clients receive more information on dangers of home deliveries, which enables them make informed decision to use SBA care.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Both demand and supply side factors contribute to the low uptake of SBA in Bolga. Therefore multiple interventions at the community level as well as health service level could improve SBA care at the rural areas.

The supply side factors show that there is ineffective implementation of health policy, inadequate investment in health, as well as unclear charges at maternity units or unrealistic pricing of the FMHC package. Therefore government needs to invest more in health and possibly expand the FMHC package at the rural level to ensure smooth health delivery. Further studies are also needed to understand why a lot of pregnant women are charged at maternity units and are also unable to enrol onto the NHIS. This study did not uncover all the information on the reasons for the unclear/illegal charges at the maternity units.

Secondly, the findings show that the demand for SBA care at the community level in Bolga has been affected by the inadequate/unavailable health staff/midwives who are also not motivated to perform at optimum level. The lack of transportation and additional costs of services is a barrier to uptake of SBA. There is also perceived lack of quality in SBA care either due to lack of medical supplies or poor staff attitude. Intervention such as the deployment of the required staff to rural health facilities, provision of adequate basic equipment and other medical supplies and combined with supportive supervision and continuous staff education are relevant to improve quality, professionalism, midwives knowledge and competencies as well as attracting retention of staff at the rural level.

Finally, in Bolga, at the community level, the low patronage of health facilities is complicated by poverty, low education and cultural practices/values. Therefore engaging communities including health volunteers and TBAs to act as SBA advocates as well as promoting male involvement in ANC sessions could address cultural and local quality issues (such as the provision of hot water and *zoom koom* at the health facility initiative). Also engaging the community to promote a sustainable community transport scheme as well advocating for accountability (of maternal entitlements) from health implementers could increase uptake of SBA in Bolga.

6.2 Recommendations

The recommendations made for improving uptake of SBA in Bolga are for the policy, healthcare and community levels, and further health research.

Policy Level Recommendation

To the MOH, GHS and NHIS

- Ensure that government honours the Abuja declaration by releasing timely and adequate budget allocations to the health sector.
- Conduct a feasibility survey into the possible review of current NHIS premium and consider an upward adjustment to expand resources and to ensure quality services that reflect current health cost

Healthcare level Recommendation

To the GHS/DHMT

- Redistribute midwives to all CHPS compounds.
- Implement task-shifting by training community health nurses on deliveries in order to increase the availability of services at the rural facilities.
- Strengthen monitoring and supervision at the lower level and ensure rural staff are prioritised on opportunities for continuous education and career development.
- Equip facilities with basic equipment and regular supplies to reduce illegal service charges and increase quality of services.
- Additionally, train TBAs and health volunteers to serve as advocates for uptake of SBA and assess the feasibility of a fair incentive package for TBAs who refer pregnant women to birthing facilities.
- Strengthen Male involvement in ANC to increase awareness and uptake of SBA.
- Engage community members to address quality issues and responsiveness, including provision of hot water for mothers to bath, and a hot local beverage at health facilities as done in Bongo district.

Community level

To the NGOs and Civil Society Organisation

- Set up and implement a community watch approach to create awareness for maternal health entitlements for the rural poor and advocate for accountability.
- Support/Mobilise communities to create a community-based transport to ease the additional costs of transport on poor women.

6.1.3 The Health Research Level

- Further research work is needed to understand the low enrolment of pregnant women on the NHIS.
- Additionally, further research is needed to unveil the reasons behind the apparent illegal/unclear charges on basic supplies for deliveries to inform policy. This will offer the opportunity to determine whether to expand the FMHC package for rural facilities.

REFERENCES

- Amoakoh-Coleman, M., Ansah, E., Agyepong, A. I., Grobbee, D. E., et al. (2015). Predictors of skilled attendance at delivery among antenatal clinic attendants in Ghana: A cross-sectional study of population data.
- Andersen, R. M. (1995). Revisiting the Behavioral Model and Access to Medical care: Does it matter? University of California, Los Angeles. *J Health Social Behavior* 1995; 36:1-10.
- Andersen, R. M., Yu, H., Wyn, R., Davidson, P. L., Brown, E. R., Teleki, S. (2002). Access to Medical Care for Low-Income Persons: How Do Communities Make a Difference? University of California, Los Angeles.
- Asamoah, B. O., Agardh, A., & Cromley, E. K. (2014). Spatial Analysis of Skilled Birth Attendant Utilization in Ghana. *Global Journal of Health LaborScience*, 6(4), 117–127.
- Bayu, H., Adefris, M., Amano, A., & Abuhay, M. (2015). Pregnant women's preference and factors associated with institutional delivery service utilization in Debra Markos Town, North West Ethiopia: A community based follow up study. *BMC Pregnancy and Childbirth*, 15, 15.
- Bazzano, A. N., Kirkwood, B., Tawiah-Agyemang, C., Agyei, O. S., and Adongo, P. (2008). Social Costs of Skilled Attendance at Birth in Rural Ghana. *International Journal of Gynecology and Obstetrics*, 102, 91–94
- Bhutta, Z. A., Darmstadt, G. L., Haws, R. A., Yakoob, M. Y., & Lawn, J. E. (2009). Delivering interventions to reduce the global burden of stillbirths: improving service supply and community demand. *BMC Pregnancy and Childbirth*, 9(Suppl 1), S7.
- Bolgatanga Municipal Assembly. (2015). The composite budget of the Bolgatanga Municipal Assembly for the 2015 fiscal year. UER.
- Bolgatanga Municipal Health Directorate. (2014). The Annual Report of the BMHD for 2014. UER, GHS.
- Campbell J, Dussault G, Buchan J, Pozo-Martin F, Guerra Arias M, Leone C, et al. (2013). A universal truth: no health without a workforce.

Forum Report, Third Global Forum on Human Resources for Health, Recife, Brazil. Geneva: Global Health Workforce Alliance and World Health Organization.

Elmusharaf, K., Byrne, E., & O'Donovan, D. (2015). Strategies to increase demand for maternal health services in resource-limited settings: challenges to be addressed. *BMC Public Health*, 15, 870.

Enchill, C. E. (2010). Factors influencing skilled delivery in the Asante Akim North Municipality of Ghana. [Online]. Available from: <http://dspace.knust.edu.gh:8080/xmlui/handle/123456789/703>. [Accessed on 26/5/2016].

Enuameh, Y. A. K., Okawa, S., Asante, K. P., Kikuchi, K., Mahama, E., Ansah, E. ... Ghana EMBRACE Implementation Research Project Team. (2016). Factors Influencing Health Facility Delivery in Predominantly Rural Communities across the Three Ecological Zones in Ghana: A Cross-Sectional Study. *PLoS ONE*, 11(3), e0152235.

Futures Group. (2010). Health Policy Initiative: Promoting Accountability for Safe Motherhood. The White Ribbon Alliance's social watch approach. *Popline K4 Health*. [Online]. Available from: <http://www.popline.org/node/227588> [Assessed on 07/07/2016].

Ghana Statistical Service. (2014). Ghana Demographic and Health Survey (DHS): Country Report. Accra, GSS.

Ghana Statistical Service. (2014). Population and Housing Census: District Analytical Reports. UER. Accra, GSS.

Ghana Statistical Service. (2013). Population and Housing Census: Country Analytical Report. Accra, GSS.

Ghana Health Service. (2014). The Annual Report for 2014. Accra, GHS.

Ghana Health Service. (2015) Ghana National Obstetric and New born Health Strategy and Action Plan 2014 – 2018. Accra, GHS.

Ghana Health Service. (2015). DHMIS2 Data Base: Bolgatanga Municipal Health Directorate. UER, GHS.

HERA, Belgium and Health Partners Ghana. (2012). Ghana: Evaluation of the free maternal health care initiative in Ghana. [Online] Available from:

http://www.unicef.org/evaldatabase/index_70025.html [Accessed 27 /07/ 2016].

Huq, N. L., Ahmed, A., Haque, N. al, Hossaine, M., Uddin, J., Ahmed, F., & Quaiyum, M. (2015). Effect of an integrated maternal health intervention on skilled provider's care for maternal health in remote rural areas of Bangladesh: a pre and post study. *BMC Pregnancy and Childbirth*, 15, 104.

Joint UNFPA/GHS Report. (2012). Campaign for Accelerated Reduction of Maternal Mortality in Africa-Regional Report, Rising to Meet the Challenge of Reduction of Maternal Mortality in Ghana.

Koblinsky, M., Zoë, M., Hussein, J., Mavalankar, D., Mridha, K. M., Iqbal, A., Endang, A., Adjei, P. S., et al. (2006). Maternal Survival 3 Going to scale with professional skilled care. *Lancet* 368: pp 1-9

Lagarde M, Palmer N. (2008). The impact of user fees on health service utilization in low-and middle-income countries: how strong is the evidence? *Bulletin of the World Health Organization*. 86(11): p. 839-848C.

Lassi, Z. S., Das, J. K., Salam, R. A., & Bhutta, Z. A. (2014). Evidence from community level inputs to improve quality of care for maternal and newborn health: interventions and findings. *Reproductive Health*, 11(Suppl 2), S2.

Lori, J. R., Munro, M. L., Rominski, S., Williams, G., Dahn, B. T., Boyd, C. J., ... Gwenegale, W. (2013). Maternity waiting homes and traditional midwives in rural Liberia. *International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics*, 123(2), 114-118.

Ministry of Health. (2007). Ghana National Health Policy: Creating Wealth through Health. Accra, MOH

Ministry of Health. (2013). Holistic Assessment Report of the Health Sector Performance for 2013. pp 8-24. Accra, MOH

Ministry of Health. (2014). Holistic Assessment Report of the Health Sector Performance for 2014. pp 11-36. Accra, MOH

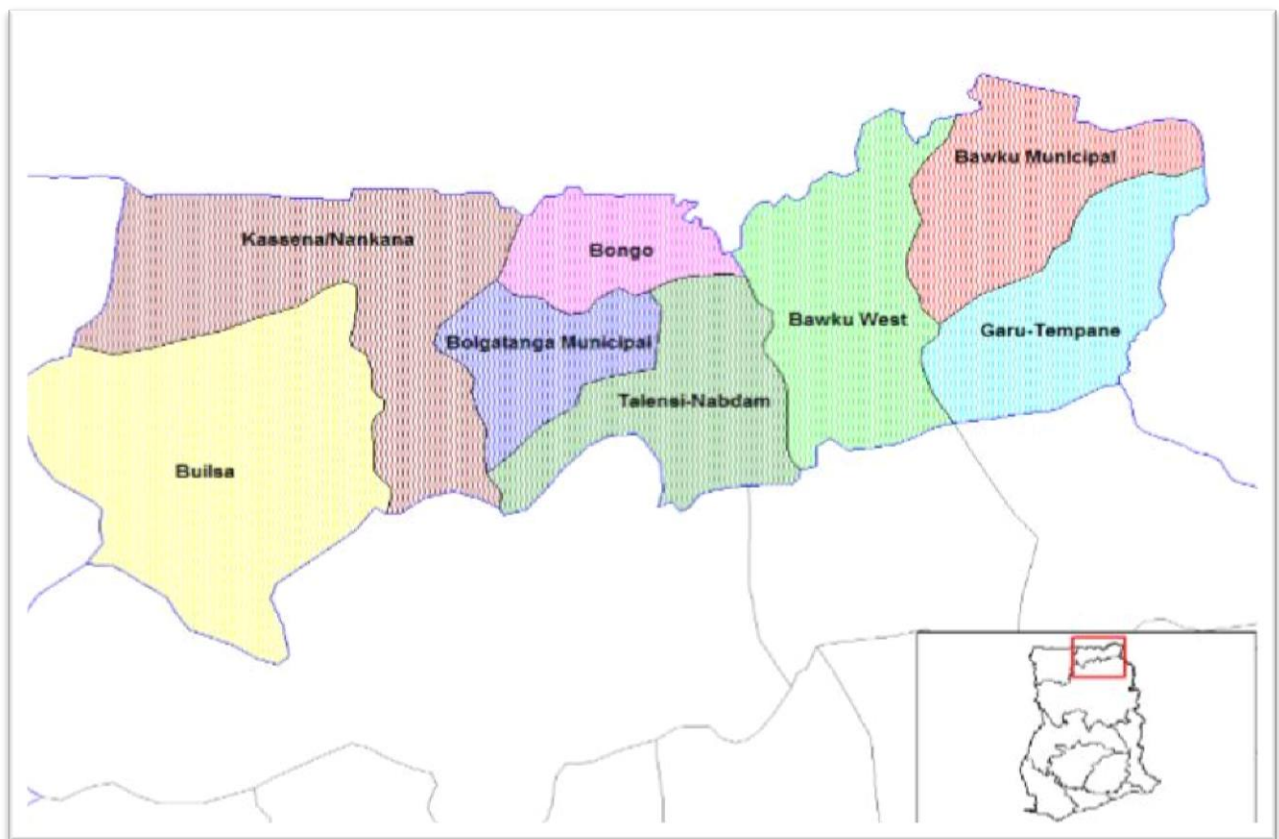
- Ministry of Health. (2015). Health financing strategy. [Online] Available from:<http://www.moh-ghana.org/UploadFiles/Publications/Health%20Finance%20Strategy160203045304.pdf> [Accessed on 25/06/2016]
- Mrisho, M., Schellenberg, JA., Mushi, A. K., Obrist, B., Mshinda, H., Tanner M., et al. (2007). Factors Affecting Home Delivery in Rural Tanzania. *Med Int Health*. Pp 862 – 870.
- National Health Insurance Authority. (2013). The Annual Report of NHIS 2013. Accra, NHIA
- NHIS. (2016). Benefits Package. [Online] Available from <http://www.nhis.gov.gh/benefits.aspx> (Accessed 7 August 2016).
- Quayyum, Z., Khan, M. N. U., Quayyum, T., Nasreen, H. E., Chowdhury, M., & Ensor, T. (2013). "Can community level interventions have an impact on equity and utilization of maternal health care" – Evidence from rural Bangladesh. *International Journal for Equity in Health*, 12, 22.
- Reid, S. (2004). Monitoring the effect of the new rural allowance for health professionals', Durban: Health Systems Trust, pp.1–7.
- Rominski, S.D. (2015). Social and Cultural Norms of Abortion Seeking in Ghana. Doctoral dissertation. University of Michigan.
- Sakeah, E., Doctor, H. V., McCloskey, L., Bernstein, J., Yeboah-Antwi, K., & Mills, S. (2014). Using the community-based health planning and services program to promote skilled delivery in rural Ghana: socio-demographic factors that influence women utilization of skilled attendants at birth in Northern Ghana. *BMC Public Health*, 14, 344.
- Seddoh, A., Adjei, S., & Nazzar, A. (2011). Ghana's National Health Insurance Scheme Views on progress, observations and commentary, Centre for Health and Social Services, Accra.
- SEND GHANA. (2015). Making Safe Motherhood a Reality-The Issue of Financing. [Online] Available from: <http://www.sendwestafrica.org/index.php/publications/category/17-health-policy-budget-monitoring> [Accessed on 11/07/2016]

- Silal, S. P., Penn-Kekana, L., Harris, B., Birch, S., & McIntyre, D. (2012). Exploring inequalities in access to and use of maternal health services in South Africa. *BMC Health Services Research*, 12, 120.
- Thaddeus, S., & Maine, D. (1994). Too far to walk: maternal mortality in context. *Social science & medicine*, 38(8), 1091-1110.
- UNDP. (2013). Reflections on Social Accountability-Catalyzing Democratic Governance to Accelerate Progress towards the Millennium Development Goals (page 1-10).
- UNFPA. (2012). Good Practices – Male involvement in Sexual and Reproductive Health. Ghana country Office 5th Country Program (CP5) 2006 – 2011. Evidence and Action, Special Issue.
- Van Lonkhuijzen, L., Stekelenburg, J., & van Roosmalen, J. (2012). Maternity waiting facilities for improving maternal and neonatal outcome in low-resource countries. *The Cochrane Database of Systematic Reviews*, 10, CD006759.
- WHO. (2004). Making Pregnancy Safer: the critical role of the skilled attendant. Department of Reproductive Health and Research. WHO Geneva. PP 1-18.
- WHO. (2010). Increasing access to health workers in remote and rural areas through improved retention. Global policy recommendations.
- WHO. (2015a). Trends in maternal mortality: 1990 to 2015-Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.
- WHO. (2015b). Towards a monitoring framework with targets and indicators for the health goals of the post-2015 Sustainable Development Goals.
- Wild, K., Barclay, L., Kelly, P., & Martins, N. (2012). The tyranny of distance: maternity waiting homes and access to birthing facilities in rural Timor-Leste. *Bulletin of the World Health Organization*, 90(2), 97-103.
- Witter, S., & Garshong, B. (2009). Something old or something new? Social health insurance in Ghana. *BMC international health and human rights*, 9(1), 1.

Wombeogo, M. (2014). Best Practices in Reducing Maternal and Child Mortality in the Upper East Region of Ghana –International Journal of Innovative Research and Studies. pp 1-28.

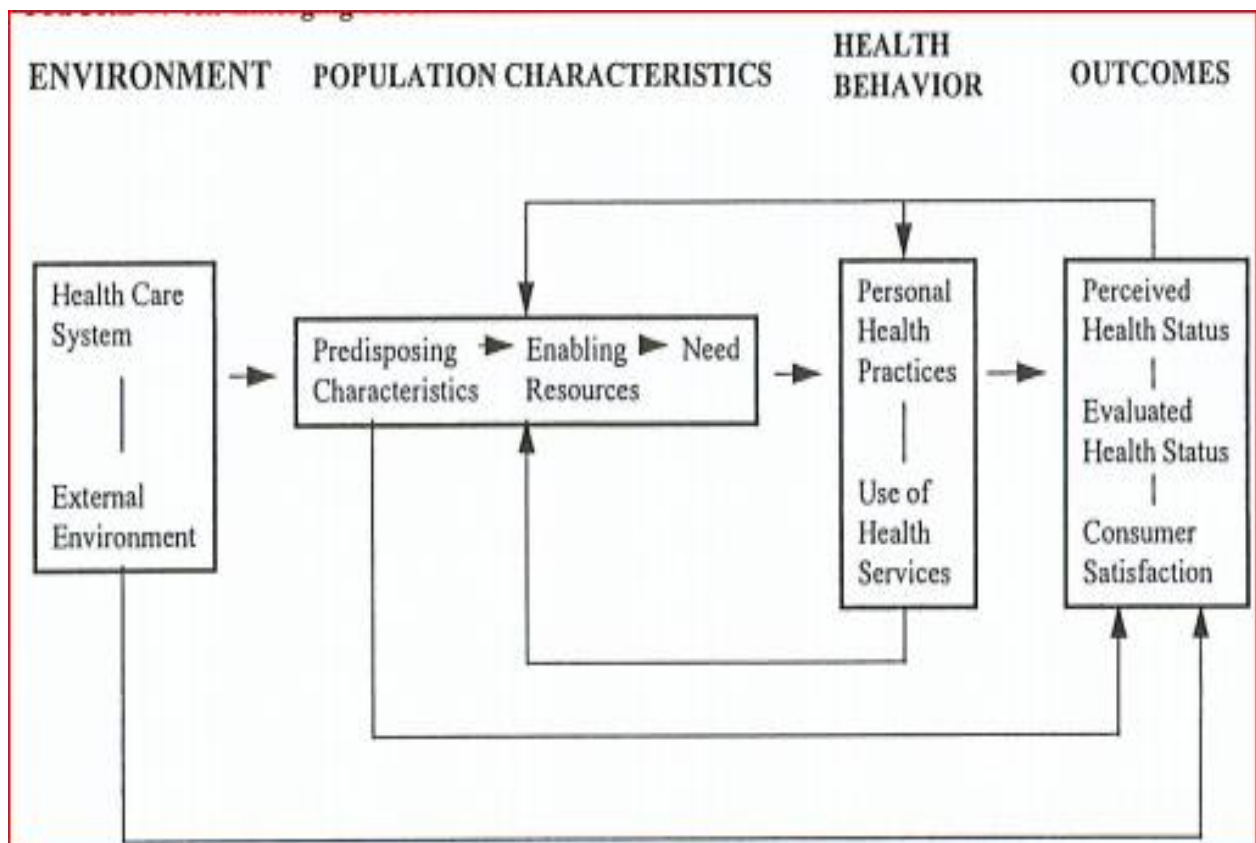
APPENDICES

Map of the Upper East Region showing Bolgatanga Municipal (in sea Blue)



Source: NHIS (2013)

Appendix 2: Anderson Behavioural Model/Framework of Healthcare Utilization



Source: Andersen (1995)