UNIVERSITY OF GHANA

LOCALIZING THE MILLENNIUM DEVELOPMENT GOALS (MDGs) IN GHANA:

AN ASSESSMENT OF GOAL FIVE IN THE DANGME WEST DISTRICT

BY

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DECLARATION

I hereby declare that this work is the result of my own research and has not been presented by anyone for any academic award in this university or any other. All references used in the work have been fully acknowledged.

I bear sole responsibility for any shortcomings.

……. …….

JOSEPH ADU **DATE**

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CERTIFICATION

I hereby certify that this thesis was supervised in accordance with procedures laid down by the university.

……. …….

DR. ALBERT AHENKAN DATE

(SUPERVISOR)

DEDICATION

This research is dedicated to all women in Ghana especially, my lovely wife, Mrs Ivy Adu and my three daughters Princess, Precious and Justine Ivy Adu.

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TABLE OF CONTENTS

CHAPTER TWO: LITERATURE REVIEW

CHAPTER THREE: RESEARCH METHODOLOGY

LIST OF FIGURES

ABREVIATIONS/ ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARV	Anti-Retroviral
CHPS	Community-Based Health Planning and Services
DHA	District Health Administration
DHS	Demographic Health Survey
DHMT	District Health Management Team
HRP	Development and Training in Human Reproduction
DWD	Dangme West District
EmOC	Emergency Obstetric Care
EOC	Essential Obstetric Care
FGDs	Focus Group Discussions
GHS	Ghana Health Services
GMHS	Ghana Maternal Health Survey
GSS	Ghana Statistical Service
HIV	Human Immunodeficiency Virus

ICPD	International Conference on Population and
IDI	In-depth Interview
IOM	International Organization for Migration
IPT	Intermittent Preventive Treatment
MAF	Millennium Development Acceleration Framework
MDG 5	Millennium Development Goal five
MDGs	Millennium Development Goals
MHC	Maternal Health Care
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
NAS	National Ambulance Service
NGOs	Non-Governmental Organizations
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
PHC	Public Health Centre
PMMP	Prevention of Maternal Mortality Programme
PNC	Post natal Care

PPH	Post-partum Haemorrhage
SPSS	Statistical Package for the Social Sciences
TBA	Traditional Birth Attendant
TBAs	Traditional Birth Attendants
UN	United Nations
UNFPA	United Nation Population Fund
UNICEF	United Nations Children's Fund.
WHO	World Health Organisation

ABSTRACT

Maternal health is not a woman's issue, but the integrity of communities, societies and nations, since the well-being of all humans depend upon healthy mothers. The MDGs adopted by world leaders in the year 2000 to make the world a better place for all, comprised eight goals. Goal five is improved maternal health which has two main targets. The study assessed maternal health targets in the Dangme West District. The study used a qualitative paradigm and a case study design. The qualitative methods include in-depth interviews with health professional in selected health facilities in the district and focus group discussions with pregnant women and women in pueperium. Primary and secondary sources of data were employed for the study. Twenty-nine participants were used to generate the primary data. Eleven health personnel were engaged in an in-depth interview whereas the rest were pregnant women and those in pueperium who formed two focus group discussions with nine members in each group. The data were collected by the help of an interview guide and analysed thematically. The results of the study indicate that the low maternal deaths over the years do not give a true reflection of maternal deaths in the district. The findings also indicate inadequate human resources and logistics for health care as the main maternal health challenges facing the district. Haemorrhage, pregnancy- induced hypertension, severe malaria and anaemia were the main medical conditions associated with pregnancy per the findings of the study. The majority of women in the district prefer to be delivered by a TBA or in the prayer camp after attending ANC in order to preserve their family tradition. Antenatal coverage in the district was high due to the increase number of CHPS compounds in the communities. Finally pregnant women who were referred to the district hospital for specialized care do not receive prompt, adequate or appropriate obstetric care which is sometimes due to the absence of the only obstetrician in the hospital.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

World leaders adopted the United Nations Millennium Declaration at the Millennium Summit of the United Nations (UN) in 2000 which captured the ambitions of the international community for the 21st century. The purpose was to ensure freedom from hunger and fear, equality, solidarity, tolerance, respect for nature and shared responsibility for development through global partnership (UNDP, 2010; UN, 2012). It spoke of a world integrated by common values and motivated with a renewed determination to achieve peace and decent standards of living for everybody. Derived from this Millennium Declaration are eight Millennium Development Goals (MDGs) directed at transforming the face of global development teamwork. The goals are:

1. To eradicate extreme poverty and hunger
2. To achieve universal primary education
3. To promote gender equality and empower women
4. To reduce child mortality
5. To improve maternal health
6. To combat HIV/AIDS, malaria and other diseases
7. To ensure environmental sustainability
8. To develop global partnerships for development

The global commitment to achieving the MDGs provides a unique opportunity to review, refocus, scale up resources and program efforts by donors, governments, and civil society to

improve the well-being of individuals and society at large. The MDGs determination to attain its objective will actually make the world a global village, which all and sundry will be proud of their environment (MDG Reports, 2012). Ghana together with one hundred and eighty-eight (188) countries in September 2000 committed to tracking these eight time-bound MDGs and their associated indicators to ensure economic growth and global development. The plan was for countries and development partners to work together to increase access to resources needed to reduce poverty and hunger, tackle ill-health, gender inequality, lack of education, lack of access to clean water, and environmental degradation (U N, 2008; WHO, 2009).

Health is at the heart of the (MDGs) of which Goals 4, 5 and 6 specifically focus on health. The entire MDGs have health-related characteristics and achieving the health goals will not be possible without advancement in food security, gender equality, the empowerment of women, wider access to education and better stewardship of the environment (Haines, 2004; Wagstaff et al., 2006; WHO, 2009). Thus, the achievement of the MDG 5 depends upon a nation's health system, access to health services both geographical and physical, human resources, level of household income and level of literacy of nations, among others, which is the focus of this study. Strengthening maternal and reproductive health services can also bring benefits to the overall health system, which can enhance access and use of a broad number of reproductive health care services thereby improving economic productivity for society and the nation at large. Finally, the lives and rights of women who constitute half of the world's population were touched on all the MDGs. None of these goals could be achieved without extra progress in promoting women's reproductive health and protecting maternal and new born health. But of all the MDGs, the fifth which is improved maternal health has made the least progress since it is the most underfunded among the health related goals (UNFPA, 2011). Therefore, in 2007 world leaders added a second

target under MDG 5, which is universal access to reproductive health to help save women. This was re-echoed in a global summit on the MDGs in September 2010, General Assembly. The UN Secretary-General Ban Ki-moon, Heads of State and Government, the private sector, foundations, international organizations, Civil Society Organizations and research organizations kicked off a concerted world-wide effort to save the lives of more than 16 million women and children. In an attempt to curb the said canker, the UN launched the Global Strategy for Women's and Children's Health where stakeholders pledged over $40 billion in resources for women's and children's health in a special UN event (UNFPA, 2011).

1.2 Statement of the Problem

No country sends its soldiers to war to protect their country without seeing to it that they return safe and sound, and yet nations for centuries has been sending women to battle to renew the human resource without protecting them. (Sai, 2000)

Maternal health is not a "woman's issue", it is about the integrity of communities, societies and nations, and the well-being of all humans whose own prospects in life depend upon healthy women and mothers. Despite the progress made in many wealthier countries on increasing the availability of maternal healthcare, the majority of women across Africa remain without full access. Women, thus, face a variety of impediments to accessing improved maternal health especially, the hard to reach areas where skilled attendants refuse to accept postings to. This makes expectant mothers to fall on relatives or traditional birth attendants, particularly where there are strong beliefs in the normality of childbirth or cultural preferences for certain practices or delivery environments (Campbell & Graham, 2006). Over 99 percent of maternal deaths occur in developing countries, with nearly half of this taking place in Sub-Saharan Africa of which

Ghana is included (UNICEF/WHO/UNFPA, 2010). Women living in Sub-Saharan Africa have a higher risk of dying while giving birth than women in any other region of the world (UNICEF, 2009). At the global level, maternal mortality decreased by less than 1 percent per year between 1990 and 2005, far below the 5.5 percent annual improvement needed to reach the MDG target. Northern Africa, Latin America and the Caribbean, and South-east Asia managed to reduce their maternal mortality ratios by about one-third during this period, though progress in these regions were insufficient to meet the target.

The achievement of MDG 5 depends upon the nation's health system, access to health services both geographical and physical, availability of human resources for health care and resource allocation. Nevertheless, level of household income, level of education, good roads and intersectoral collaboration as well as progress in MDG 6 and 7 are needed to make the attainment of MDG 5 a success. The World Health Organization (WHO) in 2005 reported the annual maternal mortality at 529000 with a global Maternal Mortality Ratio (MMR) of 400 deaths per 100,000 live births and the risk of death was highest in the WHO Africa region where there were 830 maternal deaths per 100, 000 live births compared to only 24 in the WHO European Region. In fact, half of all maternal deaths occurred in WHO African Region including Ghana. However, Ghana's target to reduce maternal mortality by three-quarters and achieving universal access to reproductive health care between 1990 and 2015 remains more of a challenge than a reality. This is because the results from the Ghana maternal mortality survey 2008 showed slow decline of maternal deaths from 503 per 100,000 live births in 2005 to 451 per 100,000 live births in 2008, which is an average estimate for seven year period preceding the 2008 survey (UNDP, 2010). This trend is supported by an institutional data, which suggest that maternal deaths per 100,000 live births has declined from 244 per 100,000 live births in 2007 to 201 per

100,000 live births in 2008 after an increase from 187 per 100,000 live births in 2004 to 197 per 100,000 in 2006. However, if the current trend continues, maternal mortality will reduce only to 340 per 100,000 by the year 2015 and Ghana at this point is unlikely to meet the MDG 5 target of 185 per 100,000 by 2015 (GHS, 2007,MOH, 2008). Besides the 2010 Population and Housing Census indicated that in 2009, 33,347 women died in Ghana and out of the above mentioned figure 3,026 were pregnancy related maternal mortality with a national average of MMR of 485/100,000 live births. The number of maternal death of women per the ten regions in Ghana in 2009 is as follows; Western 281, Central 307, Greater Accra 330, Volta 368, Eastern 365, Ashanti 524, Brong-Ahafo259, Northern 322, Upper East 193 and Upper West 77 (GSS, 2010). These figures shown by various regions even though not audited indicates that Ghana is far from meeting the MDG 5 target of 185/100,000 live births by 2015. This justifies the declaration of Maternal Mortality as a national emergency by the Minister of Health in July 2008. Following the declaration, the Ministry of Health/Ghana Health Service and Development Partners developed the MDG 5 Acceleration Framework (MAF) to identify the constraints to implementation of existing plans and strategies towards the achievement of the Maternal Mortality Goal and to explore the reasons why pregnant women continue to die in Ghana (MOH, 2008). Thus, prudent steps in Health management need to be ensured to increase the pace of maternal interventions in Ghana to increase both physical and geographical access to health care especially the availability of basic obstetric cares in all health facilities in Ghana. In Ghana, despite great interest in issues relating to health care especially maternal and child health, the road to achieving the MDG of improving maternal health has not been smooth. This study therefore seeks to assess the achievements and challenges of the MDG 5 in Ghana using the Dangme West District as a case study.

1.3 Definition of terms

Skilled attendance: Skilled attendance is the process by which a pregnant woman and her infant are provided with adequate care during pregnancy, labour, birth, the post-partum and immediate new born periods, whether the place of delivery is the home, health centre, or hospital but exclude traditional birth attendants.

Maternal Mortality: The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Maternal Mortality Rate: The number of maternal deaths in a given period per 100,000 women of reproductive age during the same time-period.

Obstructed labour: Pregnant women who go through prolonged labour during child birth and can die in the process if the situation is not reversed through caesarean section or assisted delivery.

Emergency obstetric care: The care given to pregnant women and their new born by skilled attendants equipped to perform functions like administration of emergency drugs to induce contractions and removal of entire retained placenta manually without caesarean section to avoid death.

1.4 Objectives of the Study

1.4.1 General objective

The overall objective of this study is to assess the achievements and challenges of MDG 5 (maternal health) targets in the Dangme West District.

1.4.2 Specific objectives

The specific objectives of the study are:

1. To examine the trends in maternal death in the Dangme West District between the year 2008 - 2012.

2. To find out the main causes of maternal death in the Dangme West District.

3. To assess the progress toward achieving the MDG 5 targets in the Dangme West District.

4. To identify the socio-cultural factors hindering the achievement of MDG 5 targets in the Dangme West District.

5. To recommend strategies for redressing maternal health challenges in the Dangme West District

1.5 Research questions

1.5.1 Major research question

What challenges confront the achievement of MDG 5 targets in the Dangme West District?

1.5.2 Specific research questions

1. What has been the trend in maternal death in the Dangme West District between the years 2008- 2012?

2. What are the main causes of maternal death in the Dangme West District?

3. What has been the progress toward achieving the MDG 5 targets in the Dangme West District?

4. What socio-cultural factors hinder the achievement of MDG 5 targets in the Dangme West District?

5. What strategies are needed to redress maternal health challenges in the Dangme West District?

1.6 The Significance of the study

The significance of this study goes beyond identifying the challenges hampering the attainment of the Millennium Development Goals. The study makes recommendations to address maternal health challenges in the district. Three principal groups, which are health professionals, researchers and policy makers may benefit from this study in the area of practice, research and policy. Concerning the importance to practice, the study provides strategies to healthcare professionals in the industry whose main job is to improve the health of expectant mothers to avoid postpartum complications. The findings and recommendations of this study will help update professionals' knowledge on basic obstetric care and cultural practices that contribute to maternal death since the study seeks to identify individual or client side as well as service provider side factors that contribute to poor maternal health.

This study will also inform policy makers and donor agencies on the current trend of maternal mortality as well as it determinants in rural Ghana. It will promote evidence-based policy making, which will help in addressing the challenges outlined to enable Ghana reach its target of reducing maternal mortality by three quarters and achieving universal access to reproductive health care by the year 2015.

This study again helps in identifying the roots cause of maternal mortality in Ghana since limited studies have been carried at the district level on this topic. Recommendation to ameliorate the maternal mortality ratio in Ghana by the year 2015 is made at the end of the study to the appropriate agencies in health sector.

This study finally serves as a reference material for future research on maternal health in Ghana.

1.7 Scope of the study

The study was conducted in the borders of Dangme West District. The Shai and Osudoku sub-districts health facilities were used to assess the achievement and challenges of the MDG 5 in the district.

1.8 Organisation of the study

The study was divided into six (6) chapters. Chapter one covers the introduction which comprises the background, problem statement, definition of terms, research objectives, research questions, significance of the study, scope of the study and organisation of the study. Chapter two deals with the review of related studies, concepts in relation to the research objectives and the conceptual framework. Chapter three presents the methodology, which considered the

research paradigm, study design, sources of data, population, sample size, sampling procedure, data collection method, administration of instrument, data management, limitations of the study, ethical consideration and profile of the study area. This was followed by the results of the study in chapter four. Chapter five entails the discussion of the study and chapter six the concluding chapter presents a general summary of key findings, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter involves related concepts of maternal health and a careful review of relevant literature in order to adequately address the issues under investigation. The review of literature is divided into four main sub-headings. The three main sub-topics to review the related studies are: the global trend of maternal death between the years 2007- 2012, the main causes of maternal death, and the socio-cultural factors hindering the achievement of MDG 5**.**

2.2 Concepts of Maternal Health

The International Conference on Population and Development (ICPD) in Cairo in September 1994 defined reproductive health as a state of complete physical, mental and social well-being and not simply the absence of disease or infirmity, in all issues involving the reproductive system and to its functions. Reproductive health thus implies that people are able to have a satisfying and safe sex life and that they have the ability to reproduce and the free will to decide if, when and how often to do so (ICPD, 1994).

Thus, motherhood should come with a positive and fulfilling experience for all women but not accompanied with suffering, ill-health and even death in the long run. Maternal health therefore comprised the health care dimensions of family planning, preconception, prenatal, and postnatal care in order to reduce maternal morbidity and mortality.

Preconception care can include education, health promotion, screening and other interventions among women of reproductive age to reduce risk factors that might affect future pregnancies.

The goal of prenatal care is to detect any potential complications of pregnancy early, to prevent them if possible, and to direct the woman to appropriate specialist medical services as appropriate. Postnatal care issues include recovery from childbirth, concerns about new born care, nutrition, breastfeeding, and family planning which is aimed at helping the woman to gain her normal strength. Having gone through the physiological stages of pregnancy to labour, the mother needs proper nutrition to fortify her for the care of the new born and other roles society require of her.

The 10th revision of the International Statistical Classification of diseases and related health problems, (ICD-10) describes maternal death as the death of a woman while pregnant or within 42 days of termination of pregnancy, regardless of the duration and location of the pregnancy, from any cause connected to or heightened by the pregnancy or its management but not from accidental or incidental causes (WHO, 2010). This definition allows identification of maternal deaths, based on their causes, as either direct or indirect. Direct maternal deaths are "deaths of women resulting from obstetric complications of the pregnant state (pregnancy, delivery and postpartum), interventions, omissions, incorrect treatment, or a chain of events resulting from any of the above. For example, deaths due to obstetric haemorrhage or hypertensive disorders in pregnancy such as a pre-eclampsia and eclampsia, or those due to complications of anaesthesia or caesarean section are classified as direct maternal deaths. Indirect maternal deaths on the other hand are deaths of women resulting from previously existing diseases, or from diseases that developed during pregnancy and that were not due to direct obstetric causes but aggravated by physiological effects of pregnancy. For instance, deaths due to aggravation of an existing cardiac, HIV/AIDS, Malaria, Diabetes, Rubella or renal disease are considered indirect maternal deaths.

The concept of death during pregnancy, childbirth and the puerperium is included in the ICD-10 and is defined as any death temporal to pregnancy, childbirth or the postpartum period, even if it is due to accidental or incidental causes. This alternative definition allows measurement of deaths that are related to pregnancy, even though they do not strictly conform to the standard "maternal death" concept, in settings where accurate information about causes of death based on medical certificates is unattainable or inaccessible. For instance, in maternal mortality surveys such as the sisterhood methods, relatives of a reproductive-aged woman who dies is asked about her pregnancy status at the time of death without eliciting any further information on cause of death. These surveys usually measure pregnancy-related deaths rather than maternal deaths because the death could occur accidently or incidentally. Complications of pregnancy or childbirth can also lead to death beyond the six weeks postpartum period owing to the increasingly availability of modern life-sustaining procedures and technologies. The existences of such facilities enable more women to survive adverse outcomes of pregnancy and delivery thereby delaying death beyond 42 days postpartum. This implies that such deaths even though caused by pregnancy- related events do not count as maternal deaths in routine civil registration systems.

Related to maternal death in ICD-10 definition includes: the death of a woman while pregnant or within 42 days of cessation of pregnancy, irrespective of the cause of death.

Late maternal death is the death of a woman from direct or indirect obstetric causes, more than 42 days, but less than a year after termination of pregnancy (WHO, 2010).

Methods most commonly used in the measurement of maternal mortality are maternal mortality ratio, maternal mortality rates and life-time risk of maternal death (WHO, 1996; 1999 &

Wardlaw & Maine, 1999). MMR is the number of maternal deaths per 100,000 live births. It is calculated as the number of maternal deaths during a given year per 100,000 live births in the same year. This measure indicates the risk of maternal deaths among pregnant women but has the tendency to inflate the ratios slightly since maternal death is included in the numerator whilst the denominator includes live births. Other important limitations of the maternal mortality ratio include the following: The maternal mortality ratio reflects only the risk of death once pregnant and misses the cumulative mortality risk associated with the number of pregnancies a woman has during her reproductive years. Again the maternal mortality ratio is very hard to measure as it has a large uncertainty bounds and must be interpreted cautiously, hence the need for real-time monitoring and surveillance of maternal deaths. The maternal mortality ratio focuses narrowly on mortality and may result in deficiency of attention to millions of women who suffer from "near miss" events and short- and long-term pregnancy related illnesses (Filippi, 2006).

Maternal mortality rate is the number of maternal deaths per 100,000 women aged 15 – 49 per year. It is calculated as the number of maternal deaths in a given period per 100,000 women of reproductive age (15 – 49 years). It measures both the obstetric risk and the frequency with which women are exposed to this risk. This statistic is influenced by a number of forces, including the risk associated with pregnancy, MMR and the proportion of women of reproductive age who give birth in a year. Thus, the maternal mortality rate can be lowered either by making childbirth safer or by reducing the fertility rate in a population. Lifetime-risk is a measure that reflects the probability of maternal death faced by an average woman over her entire reproductive life-span. This is influenced by the risk associated with pregnancy and by the number of times she becomes pregnant. Each time a woman becomes pregnant she runs the risk of maternal death again.

2.3 The global trend of maternal death

Pregnancy is the most prominent cause of death for young women within the ages of 15 to 19 worldwide with complications of childbirth and unsafe abortion being the major factors. Girls aged 15 to 19 are twice as likely to die in childbirth as those in their twenties for both physiological and social reasons. Girls under 15 are five times as likely to die as those in their twenties (WHO & World Bank, 2010). This happens in all developing regions of the World Health Organization, even though there has been a reduction in the number of births per 1,000 women aged 15 to 19 years between 1990 and 2000. However, the rate of decline has been slowed, which partly account for the high maternal mortality in the developing world especially Sub-Sahara Africa. The current birth rate among adolescents in Sub-Sahara African stands at 120 births per 1,000 adolescent women which is due to the fact that the uterus and the pelvic lack the necessary maturity for pregnancy, labour and birth (MDG Report, 2012). Again most Africans frown on teenage pregnancies which do not encourage expectant mothers at the supposed age to attend prenatal clinic making them to deliver at home and this together with poor maternal nutrition due to poverty especially if the partner refuses to accept the pregnancy result in maternal death (MDG Report, 2011).

Globally, 529,000 expectants mothers died from complications of childbirth and pregnancy in the year 2000 and Africa and Asia accounted for 95 percent of these deaths with only 4 percent occurring in Latin America and the Caribbean and less than 1 percent in the advanced regions of the world (WHO, 2004).

The issues contributing to maternal mortality need to be addressed in the regions with high maternal mortality figures, however maternal mortality ratio estimates cannot be credibly used to analyse trends for statistical reasons. The inadequacy of sample sizes, large confidence intervals

and changes in methods of measurement which is due to lack of a complete civil registration system with good attribution that can be used to track the progress in maternal health in the worst affected regions universally. For instance, WHO, UNFPA, and UNICEF evaluations reflect Kenya's MMR of 1,300 maternal deaths per 100,000 live births against the 590 maternal deaths per 100,000 live births reported by the DHS of Kenya. Again, WHO, UNFPA, and UNICEF estimate for Tanzania was 1,500 maternal deaths per 100,000 live births, compared with the DHS estimate of 529 maternal deaths per 100,000 live births (AbouZahr & Wardlaw, 2003). These discrepancies are enormous and have significant implications regarding the MDGs since this creates different pictures on the progress of the MDG 5 within the same country.

Nevertheless the definition and approach for estimating the 2005 lifetime risk of maternal death are in sharp contrast to those for 2000. The lifetime risk of maternal death for the 2005 estimates was defined as the probability of maternal death during a woman's reproductive period (15–50 years), taking into account other causes of death in women of reproductive age. Besides, the 2000 lifetime risk was defined as 1.2 times the probability of a new born female experiencing maternal death, assuming she is not at risk of death from other causes. The factor 1.2 in the latter definition was to account for non-live births but this appeared to be unnecessary since only live births are appropriate for the consideration of lifetime risk. On the contrary, the 2000 lifetime risk definition ignores other causes of female deaths during the reproductive period. Thus, the lifetime risk estimates in 2000 are higher than the 2005 estimates. Nonetheless, both estimates assume that the current rates of fertility and mortality will remain the same throughout the lifetime of the woman and that the risk of maternal death is independent of parity.

A more recent estimate of 287,000 maternal deaths occurred in 2010 worldwide which is a decline of 47 percent from the1990 maternal mortality figures. Sub-Saharan Africa is rated the

highest with 56 percent of these deaths followed with Southern Asia 29 percent, which together accounted for 85 percent of the global burden in 2010. The number of maternal deaths per 100,000 live births was also down from 440 in 1990 to 240 in 2010, for the developing regions as a whole. But the MMR in developing regions was still 15 times higher than in the developed regions with sub-Saharan Africa having an MMR of 500 and Eastern Asia having the lowest level at 37 deaths per 100,000 live births (MDG Report, 2012).

A study in 2010 by WHO, UNICEF & UNFPA also showed an improvement in the global trends in MMR from 1990 to 2010. Globally, the total number of maternal deaths declined from 543,000 in 1990 to 287,000 in 2010 and MMR dropped from 400 maternal deaths per 100,000 live births in 1990 to 210 in 2010 as indicated in all MDG regions. The highest reduction in a period of two decades occurred in Eastern Asia (69%) followed by Northern Africa (66%), Southern Asia (64%), Sub-Saharan Africa (41%), Latin America and the Caribbean (41%), Oceania (38%) and finally Caucasus and Central Asia (35%). Sub-Saharan Africa had the largest proportion of maternal deaths attributed to HIV infection which was at 10%, while the Caribbean had the second largest at 6%. Of the 19,000 maternal deaths due to HIV/AIDS worldwide, 17,000 (91%) are in sub-Saharan Africa, while 920 (5%) occurred in Southern Asia. Moreover countries in Southern Africa, such as Botswana, Lesotho, Namibia, South Africa and Swaziland, MMR increased from the year 1990 to 2000, mainly as a result of the HIV epidemic. The MMR in these countries have now wilted as a result of the increasing availability of antiretroviral therapy in the Africa region by the help of Global Fund and donor partners. For this success to be sustained, African governments need to be committed to the fight against HIV/AIDS by establishing funds purposely for the said course to ensure continued availability

of ARV's when donor partners and Global Fund withdraw their services. This could go a long way to reduce the higher maternal mortality figures in the Africa region**.**

2.3.1 The trend of maternal deaths in developing countries

The largest proportion of maternal deaths in developing countries results from haemorrhage and hypertensive disorders according to an UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Training in Human Reproduction (HRP) study in 2006. In a related study by the department of population and family health of the Columbia University of Public Health in 2005 on the causes of maternal mortality, an approximately 529,000 pregnancy-related deaths occur worldwide each year with the majority in developing countries especially Sub-Sahara Africa and Asia. Direct causes such as haemorrhage, sepsis (infections), hypertensive disorders, obstructed labour and unsafe abortion account for 80% of all maternal death. Haemorrhage account for 25% of these death and the single most serious threat to maternal health which is followed by sepsis which is approximately 15% with hypertensive disorders almost 12% and obstructed labour 8% with unsafe abortion accounting for roughly 13%. Indirect causes on the other hand accounts for about 20% of all maternal deaths globally with the greatest of these deaths occurring in Africa and Asia. These are pre-existing medical conditions of the maternal mother such as anaemia, malaria, hepatitis, heart diseases and HIV/AIDS. The aforementioned medical conditions coupled with the stressful nature of pregnancy make her weak and prone to infections (Lobis et al., 2005).

Pregnant women in Africa also have a much higher likelihood of anaemia (63%) compared to pregnant women in developed nations (14%). Anaemia increases the possibility of infectious diseases, blood loss and risk of death from pregnancy-related causes. Adding to the risk of

women is a shortage of properly staffed and equipped health-facilities, including hospitals, particularly for women in rural areas when pregnancy-related complications develop. In due course, there exist difficulties in evaluating the effects of induced abortion in most African countries as induced abortion is restricted or prohibited entirely. In countries such as Zambia and Burundi, induced abortions are allowed on social grounds, but lack the needed available data including South Africa where abortion was legalized in 1997. National statistics on the impact of induced abortion on maternal or pregnancy-related death in Africa is lacking which makes it very difficult to get actual estimates on abortion related deaths among women as compared to the advanced world (Thomas & Strahan, 1999).

However, an estimated 358,000 maternal deaths occurred worldwide in 2008, a 34% decline from the levels of 1990. In spite of this drop, developing countries continued to account for 99% (355,000) of the deaths and Sub-Saharan Africa accounted for 57% (204,000) of global maternal deaths. 42,000 of these deaths were due to HIV/AIDS infection among pregnant women in 2008 and the contribution of HIV/AIDS was highest in sub-Saharan Africa where 9% of all maternal deaths were due to HIV/AIDS (World Bank/UNICEF/WHO/UNFPA, 2010).

Notwithstanding, the prevalence of uterine rupture cannot be undermined globally when considering the proportion of women who die through pregnancy. Uterine rupture, or tearing of the uterine wall during pregnancy or delivery, often results in the death of the baby and sometimes of the mother. In this vein, the uterus suffers irreparable damage and therefore requires hysterectomy which is common with women who had had previous caesarean section. The review was based on 86 groups of women participating in 83 studies and developing countries had a higher prevalence rate than more developed countries. Reports from four developing countries—Bangladesh, Ethiopia, Ghana and Nigeria—showed that about 75% of

cases of uterine rupture occur in women with an unscarred uterus. They also found that in 1%–13% of cases of uterine rupture the mother dies (Hofmeyr & Gülmezoglu, 2005).

Furthermore, Asamoah et al (2011) confirm that the majority of women in Ghana die as a result of haemorrhage (22.8%) during labour which is followed by infectious diseases (13.9%), abortion (13.7%), miscellaneous (13.6%) and other non-infectious diseases (12.4%). The main infectious diseases that caused pregnancy-related deaths include malaria 53.6%, viral hepatitis 13.1%, unspecified infections 7.1% and tuberculosis 2.4%. Miscellaneous causes comprise mainly obstetric deaths of unspecified causes 26.8%, rupture of uterus 17.1%, complications of obstetric surgery 14.6%, embolism 9.8%, complications of anaesthesia 4.8% and other complications of pregnancy, labour and puerperium. The majority of these deaths occur as a result of poor health systems in Ghana together with lack of human resources for health to offer basic and emergency obstetric care for women during and after labour. This is very serious in rural Ghana where the absence of transport services coupled with poor road network that could hinder the smooth transfer of patients for surgical emergencies and blood transfusion.

Similarly, Gumanga, and others in 2011 studied the trend of maternal death in the Tamale teaching hospital between the year 2008 to 2010 and concluded that sepsis, hypertensive disorders and haemorrhage kill the majority of women during labour in the Northern part of Ghana in the percentage of 19.4,18.6 and15.8 respectively. This was followed by unsafe abortion11.5% and obstructed labour 5.7% for direct causes of maternal mortality. The indirect cause of maternal mortality on the other hand included anaemia, sickle cell diseases, malaria, HIV/AIDS and others in the percentage of 8.7, 5.7, 5.0 2.4 respectively. Sepsis was accorded mainly from puerperal genital tract infections most of which were outside health facilities,

following prolonged or obstructed labour, retained products of conception following vaginal delivery and infections after caesarean section.

2.3.2 MDG Five and Maternal Deaths in Ghana

Ghana's MMR continues to be excessively high despite efforts made in an attempt to meet the MDG 5 in the area of infrastructure and the training of nurses and midwives with basic obstetric knowledge to supervise activities in the numerous CHPS compounds built in rural Ghana and the expansion of other regional and district hospitals. The results of the 2007 Ghana Maternal Health Survey (GMHS) indicate that Ghana's maternal mortality is relatively high and is the second largest cause of death among females, with haemorrhage being the major cause of maternal death. The Ministry of Health has been called upon to treat maternal mortality as a national emergency (MOH, 2008). This national emergency is to ensure effective and efficient care of expectant mothers who go to various institutions for antenatal, delivery services and to tighten supervision in all institutions in order to reverse the maternal mortality ratio. Again the estimation of Maternal Mortality Ratio in Ghana varies widely by source and method of estimation. Figures from WHO, UNICEF and UNFPA for Ghana indicate 740 maternal deaths in 1990, 590 in 1995, 540 in 2000 and 560 in 2005 per 100,000 live births. This contrasts the lower estimation from the Ghana Statistical Service which was 214 in 1992 and 378 per 100,000 live births between 2000 and 2005 (Zakariah et al., 2006). This high level of uncertainty and discrepancy make MMR unsuitable for monitoring maternal mortality/maternal health trends in short term (Graham et al., 2008). By this development, if institutions do not cultivate the habit of generating accurate data to serve as a reference point for estimates, Ghana's progress in the MDG's will be off track especially the MDG 5 and this was confirmed by the Director General

of the Ghana Health Services in a statement that "clearly, Ghana has a long way to go towards achieving the MDG-5 target" (GMHS, 2007).

In the same vein, the Ghana Maternal Mortality Survey 2008 showed a slow decline of maternal deaths from 503 per 100,000 live births in 2005 to 451 per 100,000 live births in 2008, which is an average estimate for the seven-year period preceding the 2008 survey. The current maternal mortality ratio for Ghana according to WHO/World Bank, 2008 stands at 350/100,000 live births which is a progress and a 42% reduction of the 1990 figures. This trend is supported by institutional data which suggest that maternal deaths per 100,000 live birth declined from 224/100,000 in 2007 to 201/100,000 in 2008, after an increased from 187/100,000 in 2004 to 197/100,000 in 2006.

On the contrary, institutional maternal mortality ratio at the regional level decreased by up to 195.2/100,000 in Central and Upper East regions; 141/100,000 in Northern and Western Regions; 120.1/100,000 in Volta and Eastern Regions; and 59.7/100,000 in Upper West, Brong Ahafo and Ashanti regions between the year 1992 and 2008. The only region where institutional maternal mortality rate worsened over the same period was the Greater Accra by 87.6 / 100,000 (MOH, 2008 & 2009). Ghana therefore has seen diverse results in its struggle to address MDG goal 5 and whereas the national Maternal Mortality Survey suggests that maternal deaths have been declining, results have been slow to appear. In 2005, the survey recorded 503 deaths /100,000 live births, which dropped to 451 deaths/100,000 live births in 2008. There are also significant geographic variations in these statistics, with the northern and rural areas of the country most affected. Though meeting MDG 5 requires Ghana to obtain a 75 percent reduction of the 1990 level of maternal mortality, institutional data suggests that the rate has actually

increased in some years. In 1990 there were 216 deaths/100,000 live births, while in 2007 there were 224, which only came down to 201 in 2008 within health care institutions (Dixon, 2012).

This evidence suggests that improvement in Ghana's maternal mortality since 1990 has been negligible. Unfortunately, these figures must not be regarded as optimistic as they are likely to underestimate the number of women from rural communities who die from maternal causes but are not reported in a health institution are not captured in the survey (GSS, 2004).

Institutional data on maternal mortality is just the tip of the iceberg especially in developing nations like Ghana since the majority of maternal deaths occur outside the institutions which are not recorded. The death of an expectant mother in the community is considered a taboo among some cultures and therefore they are buried quickly after passing on and this is not different from teenagers who indulge in criminal abortion and die in the process (Senah, 2003). It is therefore not all deaths that are recorded since we lack resource persons to be going to the communities to take records of women who die while pregnant and this underestimate the maternal mortality figures in Ghana and other developing countries.

The recent 2010 Population and Housing Census in Ghana showed MMR of 485 across all ten regions in Ghana with Upper East, Volta, Eastern, Northern and Central regional figures far above the national average with 802, 706, 538, 531 and 520 respectively. The rest are Upper West 466, Western 435, Greater Accra 335, Ashanti 421, and Brong- Ahafo 422 (GSS, 2010) which does not augur well for Ghana, even though, these figures have not been audited. However, the establishment of the Ghana College of Physicians and Surgeons in 2002 in Accra to run local postgraduate programme for medical doctors has increase the numbers of specialised doctors in Ghana. This has also contributed to the reduction in migration of doctors as the

majority of doctors are compelled to do their specialities in Ghana since they are no more given the funding to read such courses in the western world which make them to stay on and work after the programme (IOM, 2011; Moellering et al, 2011).

Again there has been an increase in the nurse population ratio in Ghana through the implementation of the human resource allocation quota system which was complemented by the establishment of nursing training colleges in all regions to ensure that every region has access to nurses. Additionally, the entire nation's public universities and a number of private universities together with private nursing colleges have been given accreditation to train general nurses and other health professional to argument the human resources for health in Ghana (GHS, 2009). Moreover, UNFPA in 2011 through its thematic fund for maternal health in collaboration with Kwame Nkrumah University for science and Technology opened a bachelor of science degree in midwifery to help scaled up the number of midwives in Ghana (UNFPA, 2011). With regards to CHPS implementation every region in Ghana has seen a tremendous increased in its functional CHPS compounds. The number of functional CHPS compounds increased from 409 in 2008 to 868 in 2009 which is being resourced with community health nurses to ensure service delivery to women during pregnancy, labour and post natal period at the community level (MOH, 2009). Besides, a number of regional and district hospitals have been given a face lift and equipped with ultramodern machines according to the GHS reports. The Temale regional hospital has been upgraded to assumed the status of a teaching hospital to serve the people of the three Northern regions and assist in the training of health personnel's who study at the university of development studies.

According to the review team of the Health Summit Report 2011, several service delivery indicators continued the positive trend documented in the 2010 review. The coverage of supervised deliveries increased at (48%) and institutional maternal mortality decreased.

The National Health Insurance Scheme, now the National Health Insurance Authority (NHIA) established in 2004 has grown in strength to exempt pregnant women from paying the NHIS premium after the minister for health declared maternal mortality as a national emergency in July, 2008 (MOH, 2008).

Another key strategy to increase access to emergency health care services is the availability of transport. The establishment of the National Ambulance Service (NAS) which is tasked to reduce the delay between deciding to seek care and reaching care for women with obstetric emergencies. This has call for a great number of ambulances to link communities with sub districts, districts and regional level health facilities to reduce travel time and avoid undue delays when seriously ill patients are referred for expert treatment (MOH, 2008).

Subsequently, Ghana has several initiatives in place to deal with the issue of maternal mortality but the results have not led to desirable improvement in MDG 5 due to funding and other cross-cutting constraints hampering the full implementation of some of the initiatives. Particular initiatives put in place to address the high levels of maternal deaths include the Safe-Motherhood Initiative, Ghana Vitamin A Supplement Trials (VAST) Survival Programme, Prevention of Maternal Mortality Programme (PMMP) and Making Pregnancy Safer Initiative. Others are Prevention and Management of Safe Abortion Programme, Intermittent Preventive Treatment (IPT), Maternal and Neonatal Health Programme and the Roll Back Malaria Programme (MOH, 2011).

2.4 The causes of Maternal Death

Pregnancy is a normal phenomenon which if accompanied with obstacles can lead to maternal mortality. Globally there are countless sources of maternal death, but the majority of these deaths take place after labour mostly within 24 hours. The deaths that occur during pregnancy are 25% whereas that of delivery is 15% (Starrs, 1998). This is due to the fact that when a woman is pregnant her immunity goes down and worsens when she lacks proper nutrition. This predisposes her to any kind of infection such as malaria, hepatitis, pneumonia and so on which can result in death. Thus pregnancy may be natural, but that does not mean it is problem-free (WHO, 2005). Again during labour when women lack the services of skilled personnel who have knowledge in basic obstetrics emergencies, she can easily die in case of minor complications. Some of which is post-partum haemorrhage (PPH), retained placenta, obstructed labour and others which happens as a result of human resource constraints (UNDP, 2010).

According to WHO report 2005, the majority of maternal deaths are attributable to direct cause that follows complications of pregnancy and childbirth or by any interventions, omissions, incorrect treatment and events that result from complications including that of unsafe abortion. The direct causes of maternal death include haemorrhage, infection/sepsis, eclampsia and obstructed labour.

Globally the levels of maternal mortality depend on whether these complications are dealt with adequately and in a timely manner which is dependent on the nation's health system. Consequently the rise and fall of both the direct and indirect causes of maternal death depends on the health systems in place to timely deal with the complications (WHO, UNFPA, & UNICEF, 1999). This brings out a vivid picture between the developed and developing world in terms of maternal mortality figures. The health systems in the advanced world is well structured and

equipped with modern facilities with the needed human resources for health to reduce the above mentioned complications to it minimum (WHO, 2004a). This is directly opposite to that of the developing world as the health systems in place lacks the needed facilities with the majority of communities among many nations are without health facilities. The non-existence of modern health facilities contributes to the absence of the availability of EmOC which is the panacea to curb minor complications in maternal death. The most common cause of maternal death among the lot is severe bleeding which pertains in both developing and developed countries (AbouZahr, 2003: cited in WHO, 2005).

Severe bleeding during labour and after labour can kill even a healthy woman within two hours, if unattended. It is considered as the fastest of all maternal deaths which can only be reversed by skilled attendants through the use of oxytocin injection given immediately after childbirth and other intervention such as manual removal of the placenta. Moreover, some women may need surgical intervention or blood transfusion, which requires hospitalization with appropriate staff, equipment and supplies and the non-availability of this can result in maternal death which is very common in Sub-Sahara Africa (WHO, 2005; Bates et al., 2008).

AbouZahr (2003) indicated that 500,000 to 600,000 women develop complications as a result of infections in a year. This was again highlighted in a World Health Report in 2005 that sepsis /infections are the next most common direct cause of maternal death accountable for the greatest number of late postpartum deaths. Sepsis is an important threat to women in many third world countries which can result in pelvic inflammatory diseases (PID), tubal occlusion, and secondary infertility as well as maternal tetanus in the long term. Sepsis if not given the needed attention can be fatal. Sepsis ensues if aseptic techniques are not adhered to, rapturing of amniotic sac long before labour, too much of vaginal examination or when prolonged labour occurs and

improper personal hygiene of the women within pueperium. But on the contrast the introduction of sterile methods brought a remarkable decrease in the developed world Adriaanse et al., (2000) which when the developing world adapt will save a lot of women from developing morbidity or dying in the process of giving birth.

A more recent study by El-Gharib et al. (2010) found that direct causes are responsible for 85.71% of all maternal deaths in Tanta University Hospital compared to 80% of maternal deaths worldwide. The only problem with their study was that a hospital-based study such as maternal mortality generally under- or overrates real levels, subject to the patient population and coverage. The findings of the said study also shows that the majority of maternal deaths in developing countries are caused by five major direct obstetric complications namely hemorrhage, infection, unsafe abortion, hypertensive disorders of pregnancy and obstructed labor. Obstetrical hemorrhage represents 30% of all causes of maternal death, and hypertensive crises are the origin of another 15%. This was confirmed by a study in France where direct obstetric causes largely dominate (73%) the causes of maternal death mostly haemorrhage, sepsis, eclampsia, amniotic embolism and others (Saucedo et al., 2010).

Similarly, it has been estimated that approximately 25% of maternal deaths are caused by hemorrhage, 15% by infection, 13% by unsafe abortion, 12% by pregnancy- induced hypertension, 8% by obstructed labour and 8% by other direct causes. Twenty percent are attributed to indirect causes, including malaria and iron deficiency anaemia, HIV/AIDS infections (WHO, UNFPA, 1999; WHO 1997; 2000) cited in (El-Gharib et al., 2010).

Again, a cross sectional study at Madina Teaching Hospital Faisalabad within a two year period by Tabassum and others in 2010, indicated that hypertensive disorders of pregnancy are a major

cause of maternal morbidity and mortality all over the world. Eclampsia a known complication of hypertensive disorders of pregnancy very uncommon in developed countries like UK, but very common in developing countries like Zimbabwe, Ghana, Burkina Fasso and others. Pre-eclampsia and Eclampsia are considered very serious and life-threatening in pregnancy, but eclampsia carries a much higher risk of death and serious morbidity for the woman as well as her baby. For instance in the UK, 1 in 50 of the women who have eclampsia dies. Eclampsia even though rare, it accounts for 50,000 maternal deaths a year (Duley, 2003). Women with pregnancy-induced hypertension by and large have a good outcome. The threat to them and their baby increases only when they progress to pre-eclampsia, or has very high blood pressure. This when managed carefully in a well-established health system will save the majority of women from dying. This is seen late in pregnant women due to lack of antenatal services coupled with inadequate skilled attendants at the few community clinics for early detection and treatment which makes it very difficult to reverse it especially in areas where emergency caesarean cannot be conducted on mothers. In a related study by Greer (2001) proved that, out of the estimated 600,000 women who die globally each year of pregnancy related causes more than 50,000 die of pre-eclampsia or eclampsia and 99% of these deaths occur in developing countries. This is synonymous with the figures of the 2010 Population and Housing Census which reported that in 2009, 33347 women died in Ghana and out of this figure 3026 are as a result of maternal causes (GSS, 2010).

Unsafe abortion is another form of direct cause of maternal mortality world-wide specifically in countries where there is non-existence of abortion laws. A study conducted by WHO in 1999 shown that unsafe abortions contributed 18% to maternal death, haemorrhage 34%, infections 21% hypertensive disorders 16% and obstructed labour 11% of the total direct causes of maternal

death. According to Ransom and Yinker 2002 about 13% of maternal deaths worldwide are due to complications related to unsafe abortion even though the figure in some area is as high as one-third. The majority of these deaths transpire in countries where abortion is legitimately restricted, leading to events performed under treacherous conditions. This is however supported by World Health Organization estimates in the year 2000 that 19 out of every 20 unsafe abortions occur in developing regions of the world which may be undervalued, since unsafe abortion is probably responsible for many deaths that are attributed to non-maternal causes as cited in (Ransom & Yinker, 2002; WHO, 2004b). Post abortion care has the likelihood of reducing maternal mortality and morbidity by providing emergency treatment of abortion complications, but in countries where abortion is seen as unlawful and lacks such provision in their health systems will see more women dying through such complications. This is prevalence among the rural poor and the adolescence that as a result of lack of finances make it impossible for them to seek comprehensive abortion. This was also confirmed by the 2007 Ghana Maternal Health Survey that induced abortion resulted in more than one in ten maternal deaths and the obstetric risks from this are the highest among young women age 15-24 (GHS/MOH, 2009).

Indirect causes accounted for 20 to 25% of maternal deaths and are attributable to illnesses aggravated by pregnancy. This included anaemia, malaria, HIV/AIDS, diseases of the heart, lung, liver, or kidneys; diabetes, ectopic pregnancies etc. Any of the above mentioned condition, a combination of any two or more put the pregnant women in a risk category group in obstetrics and thus increased the probability of women dying in pregnancy when the needed attention is not accorded them (WHO, 2005).

Globally, nearly 50 million women living in malaria-endemic countries become pregnant and about 10,000 of them die as a result of malaria infection with severe malarial anaemia

contributing to more than half of these deaths. Malaria in pregnancy again increases the danger of stillbirth, spontaneous abortion and neonatal death which can result in maternal death and disability if the maternal mother does not fall in skilled hands. The peril of severe malaria is increased in pregnant women co-infected with HIV due to reduced immunity with high viral load (World Health Report, 2005; Asamoah et al., 2011). The state of the mother in the aforesaid situation becomes so serious when the health systems in the said locality do not screen pregnant women for malaria and HIV/AIDS infections for the needed prophylaxis to be given to reduce the infection rates.

The mortality from HIV/AIDS during pregnancy is very weighty in areas where prevalence is high. Statistics on women living with HIV in low- and middle-income countries estimated to be 1.5 million were pregnant in 2011. The target of halving the number of mothers dying among these women requires that all the estimated 620,000 pregnant women living with HIV who are eligible for treatment receive it. This is particularly crucial in sub-Saharan Africa, where AIDS is the leading cause of the death of mothers. The number of women dying from AIDS-related causes during pregnancy or within pueperium was estimated to be 37,000 in 2010, a reduction from an estimated 46,000 deaths in 2005 (UNAIDS, 2012).

Anaemia is one of the most serious global public health problems and a leading cause of disability affecting nearly half of pregnant women in the world. The majority of women in the developing world suffer from anaemia as compared to women in the developed world which is estimated to be 52% and 23% respectively. Poor nutrition, iron deficiency in addition to micronutrient deficiencies, malaria, hookworm, HIV infection and haemoglobinopathies are the commonest cause of anaemia among maternal mothers (WHO/UNICEF, 2001; Van et al., 1998 as cited in WHO, 2005). Decreasing the burden of anaemia is essential to achieve the MDG of

maternal health because anaemia directly causes 20% of maternal deaths in India and indirectly accounts for another 20% of maternal deaths which is contingent on a nation's health system and literacy level as well as food productivity (Kalaivani, 2009). Efficient emergency interventions for complications are very keen to saving women's lives and this is exemplified in industrialized countries where women can count on skilled attendants and emergency obstetric care at delivery. This however does not exist in most developing countries, hence the high maternal mortality reflecting a failing health system as well as a lack of social and political commitment to the said issue (UNFPA, 2004). Several studies in Africa have indicated deficiencies in the quality of maternal health services at health facilities, which can have an impact on obstetric outcomes. This is supported by Ghebrehiwet et al. (2010) that failures in the health service delivery system are implicated in maternal deaths among women who do reach health facilities with an unproductive workforce due to inadequate or poorly trained personnel, the lack of drugs and equipment, administrative delays, and clinical mismanagement of patients. Nevertheless, universal access to reproductive health care is one of the targets of MDG 5 and all the 189 nations who signed the declaration are compelled to achieve it by the year 2015 (UNFPA, 2011). According to WHO (2003), accessibility to healthcare services include financial accessibility, geographical accessibility and cultural accessibility. Accessibility to healthcare in this work refers to the ability of using healthcare services in terms of distance from the service, transportation to get to the service centres, cost and affordability. Hence access is measured in terms of utilization which is dependent on the affordability, physical accessibility and acceptability of services and not merely adequacy of supply. Access to healthcare services is important in helping to modify people's risk behaviours and promote positive health practices which should be accessible to all irrespective of social status, age, race or level of education and

HIV status, and should provide an environment full of trust and confidentiality (Kluge, 2006). By this the entire population in a community will be zealous in patronizing the facility for basic care including preventive services that will help reduce the incidence of diseases and death among expectant mothers as well as individuals with other forms of ailment.

Magadi et al. (2002) also argued that, long distance to healthcare facility is a hurdle to access healthcare services on time. They cited some of the factors that prevent individuals in under developed countries from getting healthcare services as: cost (direct fee, as well as the cost of transportation, drugs and supplies); poor quality of services; multiple demands on an individual's time and women's lack of decision making power within the family. Thus if an expectant woman requires an emergency care and lacks the physical, geographical as well as financial accessibility and the spouse does not see the need for such swift services, the woman's life will be endangered (WHO, 2005).

However Ikamari (2004) indicated that, the majority of individuals might not be able to afford the fees that are charged at the healthcare centres because most of them have financial limitations. The alleged high fees might encourage some individuals to resort to the services of traditionalist and quack doctors which are cheaper and can be paid in kind or even refuse to access prompt healthcare services when needed. This could aggravate the already existing condition which can result in an emergency thereby putting pressure on the few existing health facilities and in the case of pregnant woman, the delay can consequently take her life or leave her with a disability.

Again a study conducted by Magadi and others in 2000 concluded that prompt utilization of health services is undoubtedly influenced by the characteristics of the health delivery system

such as the availability of the services. In a related study by Borghi et al. (2003), as well as Claeson et al. (2001), it was found that household poverty, poor allocation of resources, and the control of those resources also influence maternal mortality. Delivery of infants is not free of charge in many African countries and indeed it is never without cost in traditional societies either, therefore lack of money in a household can result in woman's death in labour. In countries where delivery is declared to be free in public facilities, the cost of accessing care, both direct and indirect, can be prohibitive. According to Hussein et al (2009), clinical quality of care in health facilities are poor and health centres are not functioning as they should to provide basic intrapartum care. Such cares include effective treatment of obstetric complications and lacks techniques to stabilize women before transporting them which results in complicated deliveries in the hospitals and death of mothers. The lack of availability of such essential services may prevent clients from visiting the facility as they could lose confidence in the organization, thereby quitting other equally important services and rendering the facility inactive.

The heavy dependence on primary care as witnessed in the mid to late 1970s has very little to do in reducing maternal death in recent times per the obstetric emergencies world-wide. Nations need to build adequate and appropriate emergency response systems, including referral systems and facilities that can deal with all types of medical emergencies, specifically obstetric emergencies to bring down the high maternal mortality ratio (Razzak, 2002). Human resources in health who are well equipped with the knowledge of midwifery skills, such as midwives, doctors and nurses who have been trained and are knowledgeable to manage normal pregnancies, child birth and instantaneous post- delivery period. Skilled attendants of the supposed calibre can identify, manage, offer basic emergency obstetric care or refer the expectant mother to a

more resource facility to avoid undue complications or death having stabilized her condition (WHO, 2005).

Countries who build the needed infrastructure for health without the needed attended resource persons cannot make any progress in the care of mothers and this is common among countries in Sub Sahara Africa, hence the reason for the high MMR (MDG Report 2011) . For instance in the early twentieth century, maternal mortality levels in Western Europe and North America were similar to those in the developing countries today. Countries such as Sweden, Norway, The Netherlands, Denmark and others who achieved notably low maternal mortality very quickly were unable to show marked reductions in very high maternal mortality until they focused their efforts on providing skilled care to women (Loudon, 1997, 2000). This was done by mainly strengthening the skills of community midwives, nurses, doctors and other health personnel who attend to women in basic obstetric care.

More recently, countries such as Cuba, Egypt, Iran, Jamaica, Bangladesh (although only in Matlab district), Thailand, Sri Lanka and Malaysia have successfully lowered maternal mortality and demonstrated that maternal mortality can be reduced using a variety of different models of care Ronsmans et al.,1997 & Pathmanathan et al., 2003).

The achievements in these countries are as a result of their commitment to train sufficient human resources for health and ensuring that skilled personnel attend to the majority of births. This was reiterated in the 2012 MDG Report that skilled health professionals (doctor, nurse or midwife) can administer interventions to prevent and manage life-threatening complications such as heavy bleeding, or refer the patient to a higher level of care.

In developing regions, the overall proportion of deliveries attended by skilled health personnel raised from 55 percent in 1990 to 65 percent in 2010. The regions with the highest maternal mortality, sub-Saharan Africa and Southern Asia are those with the lowest coverage of births attended by skilled health personnel. The African region presents the largest intra-regional disparities in terms of coverage of basic maternal health interventions such as antenatal and post natal care. While Southern Africa reported almost universal coverage of antenatal in 2010, West Africa had about one third of pregnant women not receiving antenatal care visits hence the high MMR in the sub- region. That is, such reductions are possible, even when other resources are limited and adequate human resources for health exist to offer expectant mothers antenatal care which is a recommendation of WHO, that all pregnant women should have a minimum of four antenatal visits before term. This aids in the screening and treatment for infections and identification of warning signs during pregnancy (MDG Report, 2012). Besides, in countries where antenatal and delivery services are not free or affordable, expectant mothers who are not financially sound will not access such services which can reverse a nation's success in maternal health. Ghana is among a number of countries in Africa addressing the shortage of human resources for health and equity challenges through a comprehensive strategy that involves the placement of health workers at the community level (Phillips et al., 2006). The shortage is heightened by uneven geographical distribution within the nation which is partly due to the exodus of health workers travelling abroad for greener pastures especially nurses and doctors and others leaving their core profession to explore other areas in life (IOM, 2011). Even though, Ghana is striving in the area of community health care, a lot more need to be done to train more medical personnel to ensure the availability of emergency care in all community hospitals (Martey et al., 1994; Global Campaign Report, 2010). The lack of human resources for health

contributes to quality gaps in care before, during and immediately after childbirth which offer opportunities for the provision of effective interventions that can prevent illness and save lives (GHS, 2009 & UNPFA, 2011). This was also confirmed in the MDG progress report for Africa in 2011 that early antenatal care increases the chances of a woman given birth with a skilled healthcare attendant present. This improves maternal outcome especially in Africa where physical and cultural barriers continue to pose a challenge to healthcare delivery because the majority live in peri-urban areas.

2.5 Socio-cultural factors hindering the achievement of MDG 5

Globally the achievement of MDG5 targets remains a significant challenge. In 2008, the maternal mortality ratio in the developing regions was 290 maternal deaths per 100,000 live births, representing a 34 percent decline since 1990 (UN, 2010). Despite this important progress, the average annual percentage decline in the global maternal mortality ratio was 2.3 per cent, short of the 5.5 percent annual decline necessary to meet the MDG 5 targets of reducing maternal mortality by three-quarters and achieving universal access to reproductive health care between 1990 and 2015 remains a challenge than a reality. Developing countries continue to bear the greatest burden of maternal deaths compared with the developed world which is attributed to a lot factors that hamper the achievement of the MDGs specifically the goal five (MDG Report, 2012). For the purpose of this study socio-cultural factors are going to be considered and reviewed.

Socio-cultural factors are subject of great concern in addressing the problem of maternal mortality worldwide mainly in developing countries. These are social or cultural characteristics, values, beliefs and attitudes that serve as barrier to accessing basic health care services.

Maternity is regarded differently in cultures and according to Malin & Gissler (2009), the health of the pregnant woman is managed traditionally based on several pre-determined and experienced beliefs within specific cultural settings. The necessity for health care and the approach in which decisions are made vary which results in conflict among couples in a household and this can affect maternal morbidity and mortality. This could affect the outcome of the pregnant since the woman who is voiceless is compelled to act per the instructions of the husband or the in-laws even if such decisions put her life in danger (WHO, 2005). This was further confirmed by Mace and Colleran (2009), who identified the effects of kin in reproductive health issues including the management of pregnancy. The role of mothers and sisters of the pregnant woman and that of the in-laws provide considerable influence on the health of the pregnant woman. In patriarchal societies the pregnant woman has to be taken through social learning issues about pregnancy. For this reason, the pregnant women abide by and follow specific instruction meted out by their in-laws so as to ensure continuity of the culture and practices and beliefs associated with it. This contributes to the disproportionately low use of health facilities for delivery care services which is a testimony to strengthen these beliefs which results in the high maternal mortality figures in developing countries (Ghebrehiwot, 2004). However this is invariably not the case since many women prefer to access antenatal services despite their cultural and religious beliefs but sometimes faced with the problem of accessibility and availability of services. The lack of access and availability to the antenatal and delivery services coupled with poverty, unavailability of transports and poor road networks in the rural areas make women end up dying through labour or develop complications during child birth (Mantey, 2013). Poverty hampers women's ability to use otherwise available maternal care services. For instance, lack of resources to pay for transportation could frustrate access to quality

care at critical moments. Many women have problems because they are poor and providers mistreat them. The poor treatments received by poor women when they attend hospital reportedly also push them to use less efficacious services at their disposal (Izugbara & Ngilangwa, 2010).

Vaginal delivery is considered the normal channel through which a woman should bring forth a baby and any other form of delivery is considered abnormal in many communities globally which demands clinical justification (Adamson, 2007). For example women who go through prolonged labour are blamed of being unfaithful in their marital home. This according to Abass et al (2010), occurs in some parts of Ghana where prolonged labour is seen as a sign of infidelity and instead of the family members calling for emergency care in such conditions, the elders rather appease the gods to help with the delivery which can result in the dead of the woman or living her in a disability. It is therefore not amazing if family members or community members refuse to assist pregnant women when the need arise to visit the hospital for caesarean or normal delivery. This attitude of some husbands and the undue delay caused by community and family members contribute to maternal mortality and morbidity which may hinder the progress of the MDG 5. This was further stressed by Joana Mantey in January 23, 2013 in a related article "Maternity Mortality Remains High in Ghana" that the father who has the responsibility in consulting the soothsayer comes back and says the gods have decreed that, this delivery should not be done outside the house which is so dangerous for the mother who is voiceless.

In patrachial societies, men play important role in determining the health of the entire household including pregnant women. This role is duly respected with disregard to the knowledge of the men about pregnancy and pregnancy management (Lawonyin, et.al, 2007). The economic means

for seeking health services by pregnant women was also identified as a major factor that accounts for high maternal mortality in Nigeria (Lawonyin, et.al, 2007).

In due course, a qualitative survey on women in Somalia highlighted the need for an in-depth understanding of the socio-cultural and political dimension of maternal mortality (Furuta and Mori, 2008). The study emphasizes the predictive factors that society is based on which affects the decision making processes of pregnant women to access maternal health services especially when they developed complications. Religious beliefs also make some women go to priests for prayers and rituals when they are sick and during pregnancy and only seek medical assistance when these prayers fail with their conditions aggravated. The majority of women when sick or not getting pregnant attribute it to witchcraft which makes them consult fetish priests, pastors (Christianity) or Baraka (Islam) for prayers rather than going to medical experts for checks and cure which is synonymous with Africans (Mensah, 2011). Women during pregnancy prefer going to priests and Baraka to pray for protection from witchcraft than going to clinics, or sometimes do both which creates problems in the process. Childlessness is considered a stigma among women in many African societies including Ghana and women are thus obliged to have children by hook or crook to gain societal respects which sometimes result in the death of the woman (Mensah, 2011). Again religious beliefs and other traditional groups prevent both men and women from practicing family planning including the usage of condoms especially among Muslim women and members of the Catholic Church. This prevents women from enjoying their reproductive right which allows them to plan the size of their family and makes sure the uterus gains it potency before the next pregnancy as well as protecting themselves against HIV/AIDS and other STI's among couples who are into polygamous marriages (Dixon, 2012). This limits Ghana's strength in reaching the goal of reducing maternal mortality figures to 185 per 100,000

live births, since Family planning through contraceptive usage and a reduction in HIV/AIDS infection is very keen in meeting the MDG 5 by the year 2015. Women who are deprived of such rich food and are poor may be mal nutritious which can result in anaemia, a life-threatening complication for women during pregnancy (Kalaivani, 2009). This put them at the risk of dying from even small amounts of blood loss during delivery and postpartum periods. This is very common in countries where women are deprived of eating snails, eggs and other nutritious food as result of their cultural beliefs. Women with this status if survive the pregnancy through labour give birth to children with low birth weight with the majority dying by age one and the mothers themselves looking unhealthy (Lule et al, 2005). Similarly, Patil et al in 2010 saw that Pregnancy imposes the need for considerable extra calorie and nutrient requirements in a study in Pondicherry, a community in Asia. This confirms the supreme importance of balanced and adequate diet during pregnancy and lactation to meet the increased needs of the mother, and to prevent "nutritional stress" which food taboos create for pregnant mothers due cultural beliefs worldwide. This is also synonymous to a study by Olivia Kwapong in 2008 that sees eating nutritious and healthy foods as a health-promoting lifestyle and therefore negative traditional practices and dietary rules affect women in Ghana. Food related superstitions and taboos and other food restrictions on women of childbearing age, pregnant and lactating mothers. Again, the traditional practice of serving the best part of the meal to the male members of the household worsens the already vulnerable health situation of the majority of women especially the expectant mother. Statistics indicate that approximately 65 percent of pregnant women and percent of non-pregnant women in Ghana are malnourished which could increase the probability of some women dying as a result of anaemia and this can augment the MMR in Ghana. This was confirmed in 2013 by Joana Mantey, that Pregnant women are not allowed in some communities

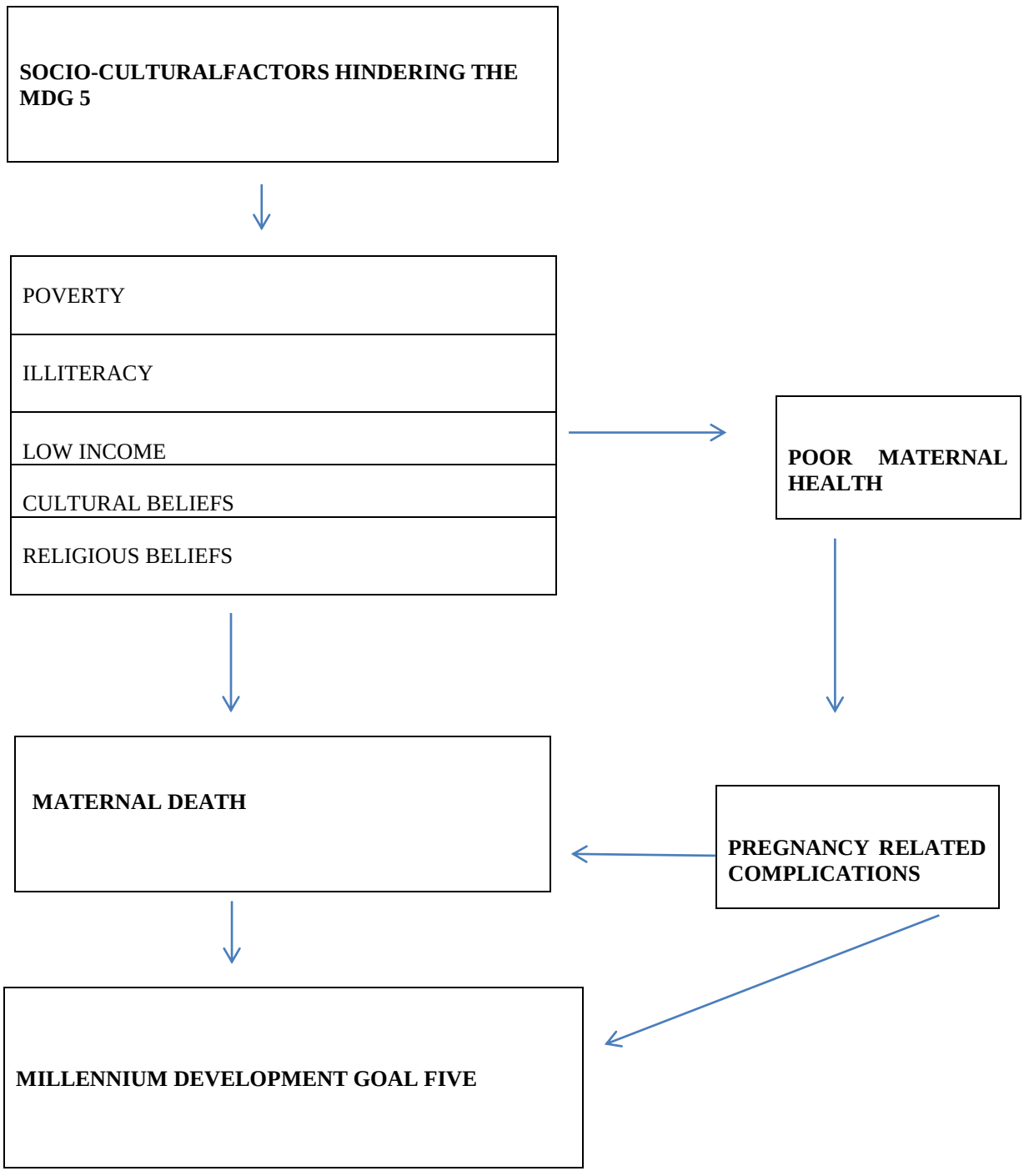
to take eggs because of the belief that when you eat eggs and give birth, the child can become a thief in future and in some communities women are not allowed to take chicken.

The above mentioned observations are not different from that of Kodjo Senah in 2003 that the most prevalent restrictions on pregnancy relate to dietary taboos in Ghana. In Ghana pregnant women in many societies are not expected to eat snail lest the child may be born drooling, they must not eat eggs lest the child grows to become a thief and these deprive the mothers from very essential nutrients which intends affect the foetus. More so, among the people of Kassena and Nankana of the Upper East Region, pregnant women are restricted to vegetarian diet and are not allowed to eat meat and groundnut lest they give birth to 'spirit children'. He also observed among the Akwapims that expectant women were forbidden to buying tomatoes, pepper, okro and garden eggs from the market. If they did, it is believed that their children will be infected with severe rashes and will consequently suffer from some form of disability. These and other cultural beliefs prevent expectant mothers from practising what they are taught at the antenatal clinic which exposed them to pregnancy related conditions such as anaemia, infections due to poor nutrition (Senah, 2003).

Again a study by Abotzabire in the Upper East region of Ghana in 2008 indicated the existence of very strong social and cultural bonding in the Bawku West District which is derived from the patrilineal lineage, which gives male dominance over females. These values especially those relating to pregnancy and its management have well pervaded through health seeking behaviour among pregnant women and their families. The decision not to use any care orthodox is resolute by the male household head that is described as the chief, the father or the one with authority. These social and cultural bonding is not only common in the Upper East region in Ghana, but almost every community in Ghana particularly the less privilege communities. The

indecisiveness of the man does not only result in delays that could contribute to the death of pregnant women, but also the use of soothsaying coupled with local treatment could also be factors leading to high maternal mortality in Ghana. That is, women do not and probably often cannot embark on care-seeking paths even when they know that they have a life-threatening condition due cultural constraints (WHO, 2005; Mantey, 2013)

2.5. **CONCEPTUAL FRAME WORK**



AUTHOR'S CONSTRUCT, 2013

Fig1: A conceptual frame work showing the link between socio-cultural factors and MDG 5

Figure 1 above demonstrates the link between some socio-cultural factors and maternal health outcomes which has negative impact on the achievement of MDG 5 targets in Ghana. The frame work does not capture all the objectives outlined in the study, but only one which is the socio-cultural factors hindering the achievement of the MDG 5 in the Dangme West District. Socio-cultural factors such as poverty, illiteracy, low income, cultural and religious beliefs have the tendency to affect the health status of a pregnant woman which can result in maternal death in the long run. Poverty can prevent a pregnant woman from attending ANC even if the services are free in the health facility due to lack of funds for transportation. This will make it very difficult for health experts to examine her to know the progress of her pregnancy which is very dangerous for the mother and the unborn child more especially when she ends up delivery in the community by a TBA. Illiteracy which has a direct link with poverty could affect the health status of pregnant women. Poor women are likely not to be educated formerly as compared to the rich and thus likely to have a poor health seeking behaviour due to her inability to acquire knowledge on the dangers of pregnancy and labour without good ANC. Low income which can result from both poverty and illiteracy can affect a woman badly while pregnant. A woman who is not economically empowered without a husband or with a husband who is jobless will find it very difficult to attend ANC and buy drugs which are not covered by the NHIS as well as getting good nutrition for the pregnancy to thrive well. This has poor outcomes for the pregnancy which can result in maternal death or maternal morbidity which slows down the progress of the MDG 5. Cultural and religious beliefs have great leverage on the outcome of maternal health, more especially pregnant women. In communities where women are engrained in their cultural and religious beliefs have the tendency not to attend ANC while pregnant and would not deliver at the hospital unless the worst is about to happen in some cases. Culturally, some women are not

allowed to eat certain food items while pregnant and these are foods highly nutritious to make the woman and the unborn baby very healthy, but seen as taboos which makes them anaemic. This is more common with individuals whose income levels do not permit them to get replacement from the supermarket which make them prone to infections such as malaria, upper respiratory infections and others which could result in poor maternal health and eventually brings about maternal death. In a nutshell, the conceptual frame work emphasizes how issues relating to the incidence of maternal deaths are networked by factors of individual characteristics which affect the progress of the MDG 5 in developing countries such as Ghana.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents in detail the methodology used for the study and the profile of the study area that provides an insight into the social context of the study.

It presents specific steps needed in conducting the study. This includes the research paradigm, study design, pre-testing, population and sample size, sources of data, sampling methods, administration of instruments, methods of data collection, data management, limitation of the study and ethical consideration.

3.2 Research Paradigm

The research was conducted using a qualitative approach. Qualitative research starts with assumptions, a worldview, the likely use of a theoretical lens, and the study of the research problems inquiring into the meanings individuals or groups assign to a social or human problem. In qualitative study, the data are collected in a natural setting sensitive to the people and places understudy and the data analysis is inductive and institute patterns or themes. The ultimate report in a qualitative study is usually made of voices of human subjects, the reflexivity of the researcher and a multifaceted description and interpretation of the problem that signals a call for action (Creswell 2007). Qualitative methods were used to explore the views of the subjects to get a better understanding of maternal healthcare in the district. Qualitative techniques such as in-depth interviews (IDI) and focus group discussion (FGD) were used to gather the qualitative data. The study even though was mainly qualitative, the first objective was analysed using a

quantitative approach through the review of archives on maternal health in the district to examine the trend of maternal death in the district for a period of five year.

3.2.1 In-depth interview

In-depth interview helps a researcher to access the emic perspective of respondents by collecting verbatim transcripts in order to understand people's views in their own words. It is normally a face-to-face interview with a single participant and a researcher with an assistant who pose questions in an unbiased manner and learn from the participant's response while asking follow up questions and taking notes. In-depth interviews afford the researcher the opportunity to interview participants who have special knowledge on the topic under consideration. In this study in-depth interviews were used to access participants' views and understanding on maternal health and how it can be improved. An interview guide was used to keep participants within the confines of the objectives of the study. This was to ensure that vital questions were asked while respondents brought out their thoughts and perception on the topics.

3.2.2 Focus group discussion

Focus group discussion (FGD) is a unique qualitative research technique in which participants are informally interviewed in a group of 6-12 in a room with a moderator who ensures a free, open discussion by all group members. Members of the group should be homogenous excluding close friends and relatives (Neuman, 2007). FGD has advantages when gathering information on people's talk, exploring opinions, norms, values, experiences and practices, wishes and concerns. The social interaction of people and group dynamics help people in a FGD to build on each other's answers and give new insights on the topic to the researcher. Because participants build on each other's ideas and question each other, they generate more data within the same time than

individual interviews (Beyeza-Kashesya, 2010). The hallmark of focus group discussion is the clear-cut use of group interaction as data to explore insights that could otherwise remain hidden. The interaction is based on a carefully planned series of discussion on topics set up by the researcher who takes notes and record information given out by the participants during the group interaction. Participants are encouraged to talk to one another, ask questions, exchange anecdote and comment on one another's experiences and points of view. Although the moderator initiates the topics for discussion and thus exercises a certain control over what is to be discussed, she does not offer any viewpoint during the talk-in-process session (Krueger, 2002; Debbie, 2006).

A total of two FGDs were conducted for the study, each consisting of nine (9) members lasting for sixty minutes. The participants were pregnant women and women who have delivered within six weeks because the study focused on maternal health. This together with the IDIs and records on maternal health in the district provided adequate information for the study.

3.3 Study Design

The research design was a case study. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. This allowed the researcher to have a detailed study of the entire district as a unit for an extensive data. A case study method was particularly useful in this study to explore and validate the study area in its natural environment. A case study design again allowed the researcher to carefully select a few key informants to study them in detailed and in a specific context to obtain good qualitative data to achieve the aims of the study. This approach is valuable for health science research to develop theory, evaluate programs, and develop interventions because of its flexibility and rigor (Yin, 2003). One of the advantages of this approach is the close collaboration between the researcher

and the participant, which enables participants to tell their stories. Through these stories the participants are able to describe their views of reality and this enables the researcher to better understand the participant's actions (Lather, 1992: cited in Baxter and Jack, 2008).

3.4 Sources of data

The study made use of both primary and secondary data to efficiently address the aims of the study. The secondary data was to organize a quantitative data to analyse the first objective of the study which is: to examine the trends in maternal death in the Dangme West District between the year 2008-2012. The primary data were taking from a sample of eleven (11) participants who were engaged in an in-depth interview in the Dangme West District. The participants were health personnel of diverse background from selected health facilities. This included the district director of health services, district public health nurse, a public health nurse at the integrated health unit of the Dodowa Hospital, and three midwives from the Dodowa Hospital, two from the Ayikuma CHPS compound, two from the Agomeda CHPS zone and the last one from Osuwem CHPS compounds all of Shai and Osudoku sub-districts.

The participants were selected purposively since the researcher's the intention was to interview participants who work in the area of maternal health to get specific results or outcome. Participants were identified after obtaining a written consent from the district health administration to the various units where the participants work. A verbal consent was sought from each participant, which was followed with an interview guide to prepare them for the interview.

Two focus group discussions were conducted to generate more primary data for the study which involved women who were pregnant and those in peuperium. Each of the focus group discussion

consisted of nine members who were pregnant women and women who were in their peuperium. The eighteen participants for the two FGDs were selected by the use of the purposive sampling techniques. The women were identified and selected by the head midwives of the Dodowa Hospital and the Agomeda CHPS zone, having received tutelage from the principal investigator. The two midwives recruited the participants after explaining the purpose of the study to them and seeking their consent. The secondary data were generated through archives/reports on the trend of maternal mortality in the District between 2008 -2012 to complement the primary data for better analysis. The data was collected within a period of five weeks. Records of maternal mortality before the inception of the MDG 5 were also understudied and this data was used as a baseline situation of maternal mortality cases within the district. These were used as a stand point against the present situation (2007-2012) to determine whether there are trends, achievements, and challenges of the MDG 5 in the district or otherwise.

3.5 Pre-testing

The interview guides were pre-tested on participants who fell within the criteria for the study at Oyibi clinic to identify any ambiguity and complexity in the content and language and adjusted accordingly. This is due to the fact the Oyibi community has almost the same characteristics like those of the communities designated for the study. The ethical review board of the Dodowa Health Research Centre also made corrections to the instruments during the proposal review to avoid ambiguities.

3.6 Population, Sample and Sampling Procedure

The population of the study included all Health personnel, pregnant women who attended antenatal clinic and women who attended post natal clinic within the Dangme-West District.

Samples of twenty-nine (29) participants were selected from the population by means of purposive sampling technique. The purposive sampling technique was appropriate for the selection of the health personnel and pregnant women as well as women in their pueperium because the researcher intention of using them to achieve the purpose of the study.

Out of twenty-nine participants used for the study, eleven (11) were involved in the in-depth interview who were health personnel working in the area of maternal health in the Dangme West District.

Eighteen (18) participants were selected to form two focus group discussions. Each group was made up of nine members who were pregnant women and women within six weeks of delivery to take their views on the topic understudy. Besides, the participants were homogeneous and have a fair knowledge on maternal health and death therefore with good judgement the head midwives could handpick respondents from the selected facilities for the study.

3.7 Administration of instruments

The face-to-face interviews, focus group discussions, and archival analysis were the tools for data collection. Three sets of interview guides were used for the data collection. One set was used to interview the district director of health services, the district public nurse and the public health nurse at the integrated health unit at the Dodowa Hospital. The second set of interview guide was used to recruit midwives for the study at the selected facilities in the district namely; Dodowa hospital, Agomeda CHPS zone, Ayikuma and Osuwem CHPS compounds. The last set was used for the two focus group discussions involving women who attended ANC and PNC at Dodowa hospital and Agomeda CHPS Zone. The administration of the research instrument was done immediately a letter of introduction was obtained from the University of Ghana Business

School and an ethical approval issued by the Institutional Review Board of the Dodowa Health Research Centre to the Dangme West District director of health services. An introductory letter was given by the district director of health services permitting the researcher to use any of the facility within the district for the study. The consents of the participants were sought before the start of the interviews. The data were collected from the 20th of February, 2013 to the 28th of March, 2013. Five weeks were used for the entire process of which one week was used for the two focus group discussions and three weeks were used in conducting the eleven (11) in-depth interviews. The last week was used to review the archives on the trend of maternal health in the district.

3.8 Methods of data collection

The eleven (11) face-to-face interviews and the two focus group discussions were done with an interview guide designed to keep participants within the confines of the objectives of the study. Purposive sampling technique was used to recruit human subjects since the intention was to interview particular participants to get specific results or outcome. The purposive sampling technique was employed to recruit the participants for the entire study. That is the said technique was for the selection of participants for the IDI that involved Health personnel and the two FGDs with women who attended antenatal and post natal in the selected facilities. This was done purposively at the various health facilities where the research took place to enable the researcher to have diverse views among pregnant women and those in peuperium as well as the health professionals concerning maternal health care in the district. The IDIs were by appointments with the various officers after the purpose of the study has been explained and a copy of the instrument given to them. Each of the eleven (11) participants was quizzed for an average of forty-five minutes. The interviews were recorded by means of an audio recorder and notes were

also taken alongside by the research assistants who were trained by the researcher to assist in the data collection. The principal investigator was the moderator for all the IDIs conducted for the study. This was followed by the two FGDs at the antenatal unit of the Dodowa Hospital and Agomeda CHPS Zone. The head of midwives of the afore-mentioned health facilities recruited the pregnant women and those in pueperium for the study after a detailed explanation of the entire process to them and given them a written informed consent to sign to be part of the study. Appointments were then booked for the FGDs at the two facilities with a moderator who is vested in the local dialect of the study area which is Ga Dangme, a public health nurse at the Dodowa Hospital. The Akan language was also allowed during the discussion. Participants were allowed to voice out their views on maternal care in the two facilities in turns to avoid only a few dominating the discussion. This was done for sixty minutes in each of the two FGDs, which were recorded. Note were taken alongside by the research assistants who also speak Ga Dangme to complement the audio recordings. The first FGD was held at the Agomenda CHPS Zone and the medium of communication was Ga Dangme and the second FGD took place at the Integrated Health Unit of the Dodowa Hospital and the Akan language was the medium of communication. The audio recordings were played and transcribed accordingly after the discussions. The fifth week was used to review the annual reports of the Dangme West District now (Shai-Osudoku and Ningo Prampram) districts to examine the trend of maternal deaths from 2008-2012. The review of the reports took five days where the researcher read through the annual reports to study the trend of the maternal death. It was found out at the end of the review that there were no records on maternal deaths in the district since all complicated cases of labour were referred outside the district due to the absence of a district hospital until the year 2008 when a district hospital was built.

3.9 Data Management

The data generated from the IDIs and FGDs from the field were transcribed and translated from the local language to English language based on the interview guide, audio recordings as well as notes taken by the principal researcher and research. Relevant information from the transcription was categorized into themes based on the objectives of the study and analysed descriptively. The secondary data from the archives were analysed using Statistical Package for Social Sciences (SPSS) version 20 after data entry.

3.10 Limitation of the Study

The study was limited by the time period. The time was inadequate and therefore did not permit the researcher to recruit more people into the study. It was also limited by the use of only non-probability sampling since it makes it difficult for more people to be part of the study. The study however could not be generalized since it is an in-depth study of only the Dangme-West District and the design also did not allow for generalization. Again the researcher had a challenge concerning ethical approval before the used of the various health facilities designated for the study. This is because the Dangme West District health directorate and the Institutional Review Board of the Dodowa Health Research Centre did not accept the introduction letter issued by the department of Public Administration and Health Services Management of the University of Ghana Business School. This delayed the entire process of data collection since the above mentioned institution spent almost seven weeks to review the proposal before allowing researcher to use the said facilities for the study. This was the main reason why only five weeks were used for the data collection. Another challenge during the review of archives was the absence of records on maternal deaths in the Dangme West District from the 1990s to 2008 due

to the absence of a district hospital. This therefore made the researcher to change his initial objective of examining the trend of maternal death in the district for a period of ten years to five years. Again, the study was limited by financial constraints of the researcher since the researcher did not receive any funding for the study, but paid money to recruit participants for the FGDs. Finally, language was a barrier since the researcher could not speak the local dialect of the people who were used for the first FGDs. The language barrier was overcome by employing a colleague researcher who speaks Ga Dangme to transcribe the Agomenda FGD in accordance with the interview guide and audio recordings and the notes taking by the research assistant.

3.11 Ethical consideration

Ethical approval for this study was obtained from the Institutional Review Board of the Dodowa Health Research Centre. Permission was also sought from the District Director of Health Services of the Dangme West District, the heads of the selected health facilities in the Dangme West District, the Chiefs and various opinion leaders in the entire district where the study was conducted. Besides, verbal consent was sought from IDIs participants before the data collection instruments were administered and confidentiality was ensured. In addition an informed written consent was considered among pregnant women before engaging them in the study.

3.12 PROFILE OF THE STUDY AREA

The study took place in the Dangme West District of the Greater-Accra Region.

3.12 GEOGRAPHICAL FEATURES

3.12.1 Location and size

Dangme-West District lies in a strategic location close to Accra and Tema which house the nation's only international airport and a seaport respectively. The Dangme-West District is located in the South-Eastern part of Ghana with a total land area of 1552.6 kilometres and population of 122.836 people (GSS, 2010). The land is flat and at sea level with isolated hills. Among the hills are the ancient "Shai hills," Dodowa Forest, Chenku Falls, Coastal Beaches and Adumanya Apiary, which are tourist areas within the district. The district is one of the two districts in the Greater Accra Region, which are purely rural and have not yet been caught up by the rapid urbanization of the peripheral areas surrounding the city of Accra. The district is divided into four administrative sub-districts; namely Dodowa (Shai) which is the district capital, Prampram, Great Ningo (formerly Old Ningo) and Osudoku. The administrative sub-districts correspond to a large extent, the four traditional areas of the district. These are the Shai, Prampram, Ningo and Osudoku traditional areas. There are seven area councils, two at the Dodowa sub- district (Dodowa and Ayikuma), one at Prampram, two at Ningo (Ningo and Dawa) and the last two at Osudoku (Asutsuare and Osuwem). The health directorate has allocated a few communities to neighbouring sub districts for expedient delivering of health services to the people in the community. The administrative sub-districts, therefore, are not the same as the health sub- district (DWD/DHMT, 2010). For the purpose of this study, the researcher made used of the Dodowa and Osudoku sub districts now the Shai- Osudoku District which was carve out of the Dangme West District in 2012. This was due to time constraint as a result of delayed ethical clearance at the district. The Shai-Osudoku District, a newly created district that has no profile, hence the profile of the entire Dangme West district was used, but the entire data for the study were collected in the Shai-Osudoku District. The Dangme-West District is boarded to the North-West by the Yilo-Krobo District, North-East by North-Tongu, and West

by the Akuapem-North, South-West by Tema and on the East by the Dangme-East District. It is the largest district in the Greater Accra Region which occupies 41.5% of the Greater Accra Regional land area and it is predominantly rural. The greater majority of the people in the district are engaged in agriculture with a few being traders as the district is more rural than urban. The distribution of socio-economic services and infrastructure is very poor since the district depicts that of most rural area in Ghana, despite it closeness to Accra the capital of Ghana.

3.12.2 Climate

The climatic condition of an area is very critical as it plays a key role with regards to the health of a given population. This is because a variety of diseases could be associated with the climatic condition of a place. The district experiences rainfall of about 762.5 millimetres to 1220 millimetres. The major rainfall season in the district is between April to July and the minor is between Septembers to November. The temperature of the district ranges from thirty to forty degree Celsius with the hottest months from November to March, and the coldest July to August. The district is endowed with light forest with tall trees along the foothills of the Akuapim ridge and tall swampy grass with tall grass savannah in the Volta flood plain. Malaria is very common in the tropical regions, and the district is of no exception, the first among the ten top diseases in the district. This has serious implications on the health of the people especially pregnant women, their unborn babies and children under five.

3.12.3 Population

The entire population of Dangme West District has increased over the years. According to the 1960, 1970, 1984, 2000 and 2010 population census reports, the population of the Dangme West District has increased from 42,837 (in 1960) through 63,125 (in 1970), 70,369 (in 1984) 96,809 (in 2000) and 122,836 (in 2010). A greater proportion of the population lives in scattered small communities of less than 2000 people. Being deprived poverty is wide spread, and therefore has most people migrating to find jobs in Accra, Tema and other cities in Ghana.

The Age-Sex Distribution according to the 2000 population and Housing Census in the district indicate that, 48.2% and 51.8% are males and females respectively with a sex ratio of 93 males to 100 females. This notwithstanding 76.4% of them is located in the rural areas with only 23.6% staying in the urban centres (GSS, 2000). Nevertheless, the 2010 Population and Housing Census indicated a growth rate of 3.1% from the 2000 census figures and the number of males and females have increased to 58806 and 64030 respectively. Moreover, the Dangme West District has a household population of 118542 and a household number of 26489 with a household size of 4.5. The district has an urban and a rural population of 41629 and 81207 with a population of 18+ of 68197, which 31416 are males and 36781 are females (GSS, 2010). The district has about 231 settlements and the major settlement areas include; Dodowa, Old Ningo, Prampram, Asutsuare, Dawhenya, Afienya and Ayikuma.

3.12.4 Health

The Dangme West District has only one hospital, a district hospital which is situated at Dodowa. The rest are health centres as well as community Health planning and services zone and compounds, which is supported by a number of private clinics and maternity homes. The health

centres are located at Prampram, Old Ningo, Osudoku and Asutuare, whereas the maternity homes are located at Afienya and Dodowa. There are also private clinics located at Prampram and Dawhenya, with one private medical centre at Mataheko. In addition to the above mentioned health facilities are two quasi- government institutions namely Afienya youth leadership clinic and St. Andrews clinic at Kordiabe. There are about Twenty –three CHPS facilities in the Dangme West District of which thirteen are functional, and ten non-functional. This implies that thirteen of the CHPS compounds operate 24 hours a day because the staff stays at the clinic, whereas the other ten are CHPS zones where clinic are run on daily basis since the staff stay outside the facilities. The district also has an Integrated Service Unit, which runs preventive health care services to the people that include Reproductive health services, treatment of sexual transmitted diseases, care of people living with HIV/AIDS, which saves them from discrimination and stigmatization. One of the three Health Research Centres of the Ghana Health Service, tasked with the responsibility of conducting research within the health sector is located in the Dangme West District. The research centre has a close working relationship with the Dangme West District health administration. The Dodowa health research centre is of international standard and serves as a resource centre for students pursuing master's degree in the area of health for technical support. The Dodowa health research centre has carried out a number of research/training activities since its inception in the district and outside the district, some of which include Deployment of Rectal Artesunate in the Dangme West District for severe Malaria in children under five, Gender and cultural differences in attitudes towards family planning in the Dangme West District of Ghana, Barriers to the utilization of maternal health services in the Dangme West District of Ghana, Pilot study to assess the feasibility of medicines in pregnancy registry, Perceptions of health provider's on quality of care under the Dangme

West District health insurance scheme, Individual randomized trial of rapid diagnostic test in rural Ghana and many more. The 2012 annual DHMT report indicates that the DWD recorded no maternal death with a very high antennal and post natal coverage. The Health Insurance coverage at the DWD stands very high which suggest that a large percentage of the population can access healthcare freely hence the high antenatal and post natal coverage in the district.

The major diseases in the district are Malaria, Acute Respiratory Infections, Skin diseases and Ulcers, Hypertension, Diarrhoea, Rheumatism and Joint Pains, Anaemia, Intestinal Worms, Homes accidents, Acute Eye Infection and others. The district needs more health personnel and facilities as well as logistics now that it has been split into two namely Shai-Osudoku and Ningo Prampram Districts to help the DHA keep up their good records in the area of maternal health. At the moment DWD has three hundred and sixty –three staff mining its public health facilities which include both technical and non-technical staff. Technically the DWD has six medical doctors, sixty-three nurses, thirty-two midwives, one hundred and twenty community health nurses, fifty-two health care assistants, three biomedical scientist, two biostatistics assistants, one dental technician, three pharmacist, eleven physician assistant, eleven technical officers and others.

3.12.5 Water and sanitation

There are five major sources of water in the district and these are pipe borne, well, river water, bore hole and rain water. Water is said to be life and therefore a potable source of water is needed in order to make inhabitants of a district healthy. Pipe- borne and bore-holes as a source of water supply to the inhabitants of the Dangme West District form about 72% and other sources form about 28%. This suggests that a substantial number of people are prone to diseases

especially as the district is mountainous geographically with lots of chemicals and more especially as a large number do not treat their water before use. There should, thus be more bore holes in the communities as water shortages have become chronic in the Greater Accra Region, and for that matter the district to reduce diarrheal diseases since access to potable water is skewed towards the urban dwellers to the detriment of the majority who live in the rural area.

Sanitation facilities in the district are very poor since few people have access to improve sanitation in the area, due to its poor housing state. The majority of people used household latrines with few using Water Closet toilets that are needed to meet the sanitation needs of the people. Hygiene and environmental education is to be intensified to address the behaviour of the people especially in the area of open defecation which the inhabitants practice since that can lead to the outbreak of diseases.

3.12.6 Vegetation

The vegetation is predominantly coastal savannah with a small transitional zone along the foothills of the Akwapim Range. There is a dense thicket/ wood with forest trees in Dodowa sub-district (Dodowa Forest), another tourist attraction. The soil type is mainly of the heavy Akuse series with sandy and sandy-loams in certain areas. There are also tall swampy grass and tall grass savannah in the Volta flood plain.

3.12.7 Agriculture/Non agriculture activities

The main agricultural activities undertaken are livestock and crop production, fish production, fishing and fish processing and other agro-processing activities. Total cultivable land consists of 129,600 hectares and a coastline stretch of about 37kms and land acquisition in the district is by family head, inheritance or private lease. Most of the inhabitants are subsistence farmers or

fishermen and thus very poor. Some of them engage in crops, cassava, maize, rice and pepper, whereas others produce fruits such as mangoes, pineapple, cashew, watermelon with fresh vegetables. The widespread of poverty in the district affects the health of the majority of the inhabitants resulting in a vicious cycle of poverty causing poor health and poor health keep people in poverty. Even though the district holds most of the commercial cattle farms in the Greater Accra Region, it belongs to outsiders and not indigenes. Non-agricultural activities in the Dangme West District are vehicle repairs and maintenance, construction and building, charcoal production, salt production, mining and quarrying, agro-based and wood related business.

3.12.8 Education

Education forms one of the topmost priorities in every nation's development and the Dangme West District directorate of education holds this view, which is spearheaded by the district director of education in close collaboration with the District Assembly.

The Dangme West District Directorate of Education is one of the fifteen (15) decentralized departments under the Dangme West District Assembly. The district has seventy-nine (79) Primary Schools, fifty-six (56) Public Junior Secondary Schools with fifteen (15) Junior High School and six (6) Senior Secondary Schools of which three are private school with the other three being public. It has sixty-nine (69) Public Pre-Schools and sixty-three (63) Private Pre-Schools. There is also a number of Technical and commercial schools in the district some of which serve as centres for employable skills. Dipo Vocational School at Kordiabe and Afienya Youth Leadership Training Centre are two of those institutions.

For easy management and supervision of the schools, the district is divided into seven (7) circuits. Four (4) out of the seven (7) circuits are very deprived and parents find it extremely

difficult to provide their children and wards with basic school needs like stationery, school uniforms, to mention but a few. Each circuit has about thirteen (13) schools with Dodowa being the largest while Nyigbenya is the smallest.

The district possesses good classroom structures with the support of the District Assembly, World Vision - Ghana, and Social Investment Fund, which are still not adequate, as Government Capitation Policy has brought about significant increase in enrolment and attendant. This has created insufficient furniture at all levels of education in the district. DANIDA with the support of Community Water and Sanitation has provided toilet facilities in most of the schools. However, most of the deprived communities lack potable water and good infrastructural facilities for both pupils and teachers. There are ninety-four (94) unit teachers' quarters for teachers in the deprived areas of the district which are woefully inadequate and therefore, discourage teachers from accepting postings to such areas.

3.12.9 Social infrastructure

The district has a broad road network linking its major towns together. This include Accra – Aflao –Lome International Highway which runs through the district providing easy access to such major towns as Dawhenya, Prampram, New Ningo, and Old Ningo. The Akosombo– Ho trunk road provides links with Afienya, Doryumu, and Asutsuare. The road linking the district capital Dodowa through Adenta to Accra has been upgraded into a first class trunk road. The district has more than 28 Feeder Roads spanning 456 kilometres that link various communities and farming areas as well as major trunk roads. Generally the entire road network of the DWD is very poor especially the Osudoku sub- district which the researcher observed during the data collection period. Most of the key towns in the district are supplied with electricity from the national grid. These include Dodowa, Prampram, Asutsuare, Dawhenya, Afienya, Dorymu, Old

Ningo, Kordiabe, New Ningo and Agomede. However, only about 30% of the 231 settlements in the district are hooked to the national grid. Telecommunication services are available in some parts of the district, but mainly through mobile phone networks. It is estimated that 90% of the district is covered by one or more of the three major service networks in the country, namely; Ghana Telecom (Fixed lines, Radio phone and GSM), MTN (GSM), Tigo (GSM), Kasapa (GSM) and Airtel (GSM). Also the district has two post offices at Dodowa and Prampram and four postal agencies at Ayikuma, Agomeda, Old Ningo, and Duffor.

3.12.10 Ethnicity and Religion

The ethnic groups in the Dangme West District are the Dangme, Ewes, Akans and Northern descents. The dominated ethnic group is the Dangme who are the indigenes. The common languages spoken in the district are Dangme, Akan, and Ewe.

Christianity, Islam, and Traditional beliefs form the three main religions practiced in the district and the dominated religion is Christianity. Christians who dominate in the district in terms of religion belong to different denominations, which include Pentecost, Methodist, Catholic, Anglican, Presbyterian, Assemblies of God and other spiritual churches, which a lot of women in the district visit while pregnant and during labour.

3.12.11 Conclusion

This study aimed at assessing the achievements and challenges of MDG5 in the Dangme West District, and to realize this general purpose, a case study design was employed to come out with a qualitative data for the study. Both the primary and secondary data were sought by the use of IDIs among key health personnel, review of archives on maternal health in the district and FGDs

among pregnant women as well as women in pueperium. Data collection commenced immediately an ethical approval was granted by the institutional review board of the Dodowa Health Research Centre.

CHAPTER FOUR

PRESENTATION OF RESUSLTS

4.1 Introduction

This chapter is devoted to the presentation of primary and secondary data from the field of study. It covers the analysis of data obtained from the IDIs, FGDs and the review of secondary data on the trend of maternal deaths in the district between the years 2008 to 2012.

4.2 Demographic characteristics of respondents

This section covers the demographics and views of respondents on maternal health in the district in relation to the objectives of the study.

The age of the respondents engaged in the IDI ranged between twenty four (24) to fifty-nine (59) years old. Among the eleven (11) health personnel chosen for the IDIs, five (5) of them were less than thirty (30) years of age with at least three (3) years working experience. One of them has eleven years working experience, whereas three (3) of them have more than fifteen (15) years working experience and the last two have thirty (30) years of experience and the oldest among them. The levels of education among the IDI respondents ranged from two year post-secondary in auxiliary nursing to master's degree in public health. They were nurses and midwives with one medical doctor who was the district director of health services and holds a master's degree in public health. This was followed by two public health nurses who have advanced diploma in public health nursing. The rest were midwives, community health nurses and one health care assistant (clinical).

Of the eighteen (18) participants who participated in the two FGDs at Agomenda CHPS Zone and Dodowa Hospital ANC and PNC, eight (8) of them were between the ages of twenty (20) to thirty (30) years and the rest were of the age range between thirty-one (31) and thirty-six (36) years with only one of them above forty (40) years. The majority of the participants were self-employed in the area of farming, hair dressing, and petty trading with one (1) housewife.

4.3 Trend of maternal deaths

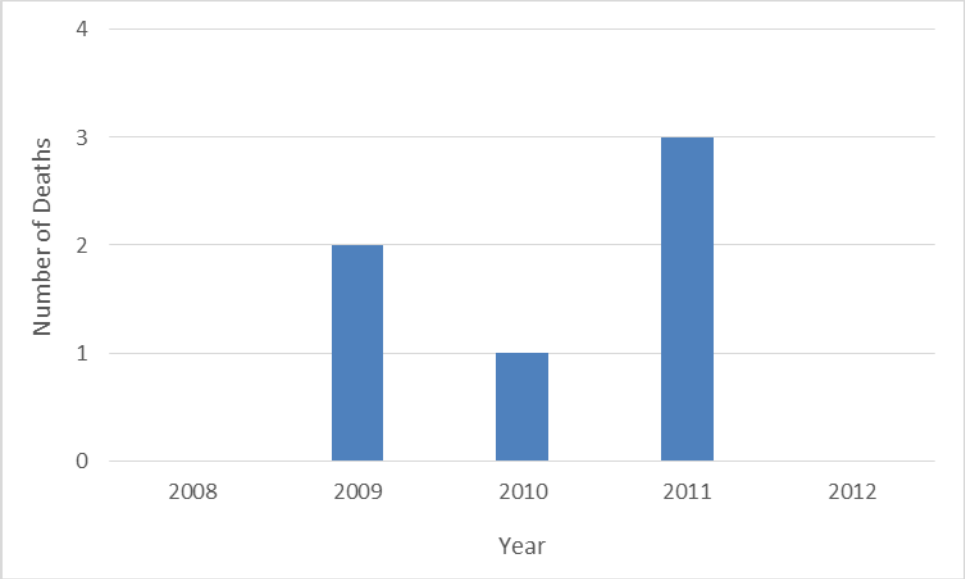


Figure 2: The trend of maternal deaths in DWD between 2008 - 2012

FIELD DATA, 2013

The result in figure 2 indicates the trend of maternal mortality in the Dangme West District from 2008 to 2012. The figure shows that in 2008 and 2012, there was no maternal death, but in 2009, 2010, and 2011 there were 2, 1, and 3 deaths respectively.

On the contrary, there were no baseline data to compare the current trend of deaths with due to the absence of records on maternal deaths in the district until the year 2008 when the Dangme West District Hospital was built in Dodowa. Consultations with the public health respondents of the district revealed that record on maternal death was not kept because all serious cases in pregnancy in the district were referred to nearby hospitals for specialized attention. These referrals were not followed by the DHA to know the exact outcome of the cases.

4.4 Maternal Health Challenges

The study reveals a lot of maternal health challenges through the IDIs with the district director of health services, public health nurse, midwives, nurses as well as pregnant women involved in the focus group discussion. Maternal health challenges affecting the achievement of the MDG 5 by 2015 were many. One of the challenges is the inability of NHIS to re-imburse the district health facilities. IDIs indicate that there are delays in reimbursement of moneys owned to health facilities by the NHIS. There is also a challenge with human capital, especially technical staff such as pharmacist, laboratory technicians among others. This is what a respondent said about the NHIS:

"From the data I am using at the moment since I started working, there has been an increase in enrolment to the scheme. But the biggest problem from my annual review is the inability of the scheme to pay the facility to ensure continuity of work. Because if the facilities after treating the clients do not get their money back it becomes difficult to run the facility, but enrolment on the scheme is very high especially on the part of pregnant mothers since the midwives encourage them to enrol on the scheme" (Public Health Respondent, IDI).

The discussion reveals NHIS has significantly improve access of women to ANC, post antenatal and deliveries for free, although some prefer to deliver at home which is a problem.

4.4.1 Poor Road Network

Two respondents among the public health experts complaint bitterly on the poor road network in the district which hinders maternal health care services especially in the Osudoku area:

"It's very difficult to move from one community to the other as well as moving from one facility to the other for outreach programmes. This makes accessibility a problem as the roads are very bad and staff do use motor bicycle (Okada) before reaching some facilities to serve clients. This is because when staff goes with vehicle, they do stack on the road and the Okada is also expensive to use.

..... as the district is sparsely populated with poor road network hence the need for the CHPS compounds in all communities. Without the CHPS compounds clients will find it very difficult to access health care" (Public Health Respondents, IDI).

4.4.2 Inadequate Logistics

On the part of midwives and nurses involved in the study lack of logistics and inadequate personnel were the dominant challenges mentioned:

"For maternal health care to improve in the X CHPS compound, we need more staff especially midwives and logistics to work with"(Midwife Respondent, IDI).

"A CHPS compound of this status does not have certain logistics within its set up and this creates problems sometimes"(CHN Respondent, IDI).

In additions to logistics, is the inadequacy of ambulance in part of district to refer serious cases to the district hospital and out of the hospital when the need arise. Lack of blood for patients, especially pregnant women and inadequacy of transportation for pregnant and post natal women as well as long distance between home and health facility are some of the different challenges found by this study:

"One of the delays is distance especially those who stay outside the community and no vehicle to convey them from their village to community on time" (CHN Respondent, IDI).

Again, the majority of midwives and nurses engaged in the IDIs mentioned lack of funds on the part of mothers to pay for transport fares to the health facilities and overdependence on husbands for decision making in times of emergencies to attend ANC and during labour as well as advice from old women in the communities as challenges:

"Poverty is one of the factors that prevent clients from coming early to the facility during labour especially those who stay far away from the facility due to lack of money for transport and others also complain of lack of money for transportation. Clients gave excuse of husbands not around to give them money, despite education given them by midwives to save money for emergency purposes" (Midwives and HCA Respondents, IDI).

4.4.3 Inadequacy of In-Service Training for Staff

Inadequacy of in-service training/workshops for staff at post to update their skills on the care of pregnant women during ANC, labour, and PNC especially, those who are not midwives in order to help women with such skills in the absence of the midwives at post. This is another challenge voiced by CHN respondent, since the lack of in-service training affects the work of nurses in their line of duty:

"Community health nurses and enrolled nurses in the facility can be given on the job training to equip them in the area of delivery to stand in when the midwife travels out of the facility. This in-service training can be done in connection with DHA and the obstetrician in the district hospital" (CHN Respondent, IDI).

Another challenge raised by one of midwives, who took part in the IDI is the absence of surgical services for women who need emergency surgery during labour, due to the presence of only one obstetrician in the district hospital and his absence creates a vacuum:

"... patient/client with a very high blood pressure who goes into labour and has to go through caesarean section, the absence of surgical service can lead to death of the person or leave her with a disability" (Midwife Respondent, IDI).

"The facility has only one Gynaecologist and his absence from the facility means emergencies cannot be attended to if caesarean section is required and this does not augur well for midwives on duty" (Midwife Respondent, IDI).

4.4.4 Delay in Reporting at Health Facility

Midwives and nurses complained on time waste at home by pregnant women during labour. This is to avoid referrals to bigger facilities because of signs of pre-eclampsia, eclampsia, and anaemia. Some delay are due to time wasting with the traditional birth attendants and in the prayer camps to deliver which occurs any time clients are referred from the CHPS compounds to the hospital to deliver particularly, the primids and multiple pregnancies. During labour, some women prefer to squat to deliver instead of lying on the labour bed, which is more appropriate for conducting labour and this prevents them from reporting early to the health facility:

"In the CHPS compounds we are not permitted to deliver primids, women with multiple pregnancies and women with high blood pressure (pre-eclampsia). Such people will therefore delay to come to the facility late when they are in labour to avoid referrals thereby forcing the midwives to deliver them when they arrive in the facility in an advanced stage of labour. They do this to avoid referrals from the communities where they stay.

Some clients also delay because they do not want to lie on the delivery bed for a long time for the nurse to continuing examining them per vagina. Some do not also like to lie but squat during labour and make them reluctant to deliver in a health facility….., they attend antenatal at the CHPS facility, when they are referred to bigger facilities to deliver they attend to the TBAs to deliver….. Most clients again prefer delivering in the prayer camps and TBAs and this delay them in coming to the facility very late or when complications have set in"(Midwives and CHN Respondents, IDI).

4.4.5 Attitude of Health Professional to Clients

The negative attitude of some midwives and nurses were lamented upon among some respondents who participated in the IDI. Furthermore, the majority of participants who participated in the FGDs also grieved on the negative attitude of some nurses and midwives who attend to them during ANC, labour and PNC, which sometimes scare mothers from visiting the facility for above mentioned care:

"Some also complain on the attitude of Nurses at the facility. The attitudes of some health staff also scare pregnant women from attending ANC. Some of the staff does not respect clients and do complaint on trivial issues that occur at the CHPS compound" (Midwives Respondent IDI).

"To me the attitude of the midwives and nurses towards pregnant women sometimes is not fair, especially to those who are pregnant for the first time and those visiting the facility for the very first time. Instead of the health personnel's directing them on what is expected of them they rather shout and frown at them……. Some of the nurses normally compare one client to the other so far as pain containment is concerned but individuals have different threshold so labour pains are concerned. Even though one has given birth to so many children each pregnancy comes with its own labour pains. Therefore during labour if you compare me to another person, I would not be happy"(FGD 2).

Nevertheless, some of the nurses and midwives are good and will do all that requires of them to make you comfortable:

"To be frank with you some of the health personnel here are good and show respect to clients they handle. If you don't know something and you ask them, they explain things perfectly to you. Some of them go an extra mile to organise health talks for new registrants to school them"(FGD2).

4.4.6 Ignorance of Labour Signs by Pregnant Women

Nonetheless, a greater number of midwives and nurses see ignorance of labour signs by pregnant women as a huge challenge in the district:

"Again some clients end up saying that they did not know it was labour until it advances" (Midwives Respondent IDI).

"Most mothers also do not know the signs of labour especially the primid, causing them to deliver at home when the head of the baby is seen in the vagina"(CHN Respondent, IDI).

4.4.7 Financial Resource Constraints among Clients

Women who participated in the two FGDs mentioned lack of transportation, lack of money for transportation, lack of money food and scan as well as lack of money to buy items requested by midwives during labour as major challenges in maternal health care in the district:

"Sometimes, our husbands do not give us enough money so accessing health care during pregnancy and after delivery is difficult most of us do not work. These sometimes prevent people who don't have money not to attend ANC. On some occasions, you will not have money for transport and when it happens like that we do not attend the hospital. During these seasons we are forced to deliver at home. This is because the doctors and the nurses prescribe some items like powder, pomade and toiletries to be brought to the hospital before delivery. When I am in severe pains and there is no money on me I will be compelled to go to a clinic nearby instead of a distant facility where the best of care can be given but cannot afford" (FDG 1).

"Inadequate of transport /vehicle to convey the expectant mother from her community to the health facility can make others to attend to the TBAs nearby to deliver them. Some of the men are very stingy in giving money to the wives to attend hospital and where the woman is not empowered there is no way she can go to hospital"(FDG2).

A section of the respondents in the two FGDs delineated their inability to pay for laboratory investigations, when referred outside the facility where they attend ANC. The inadequacy of money for scan, stinginess of husbands to give them money to attend ANC, and buy dresses to wear to ANC and PNC were some of the views of participants. Again, the non-existence of hostels to host mothers when they are due for labour as well as items demanded by midwives and nurses during labour were mentioned as maternal health challenges:

"Lack of financial access hinders us in several ways. When you are going for scan, an amount of GH 20.00 or GH 30.00 will be charged and when you don't have this amount the process will be boycotted. This affects us because you would not know the exact condition of your baby which is sometimes worrying. There are times when we are referred to other places for lab test and when we don't have money, we don't even go at all let alone do the lab test. This makes us to miss the rest of the ANC clinic and even find it difficult to visit the facility when labour sets in which makes some of us go to the TBAs to deliver, but are referred to the hospital when complications set in"(FGD 1 and 2).

…".the nurses prescribe some items like powder, pomade, toiletries to be brought to the hospital before delivery and we cannot afford. We will be happy if the nurses stop taking such items from pregnant women before and after delivery/ labour"(FGD 1).

They however, suggested that nurses and midwives should be sent to communities to attend to them and health facility drivers should be sent into the communities to convey pregnant women for care. Others also advocated that health facilities should provide accommodation for pregnant women and their relatives:

"Some of the nurses must be sent into those communities which are far away from the hospital. This will reduce long distance travel when a pregnant woman is in labour. This will stop women from going to the TBAs to deliver……. . health centres should provide accommodation facilities to host them then after delivery they will go to their various homes. Since this will help prevent minor complications that women face when they are discharged home 12 hours after normal labour"(FGD 1 and 2).

4.5 Maternal Health Medical Conditions

Medical Conditions associated with Maternal Health in the district, according to Public health personnel interviewed during the IDI include antepartum haemorrhage, postpartum haemorrhage, pregnancy induced hypertension, severe malaria and anaemia:

"The main medical conditions associated with maternal health in the district are ante partum haemorrhage, postpartum haemorrhage, pregnancy induced hypertension, severe malaria, anaemia" (Public Health Respondent, IDI).

The majority of midwives and nurses mentioned Ante partum haemorrhage, postpartum haemorrhage, pregnancy induced hypertension, severe malaria, anaemia, eclampsia, upper respiratory tract infection and vaginal infections as Medical Conditions related to Maternal Health in the district. Others also outlined bleeding, vomiting, lower abdominal pains, heart burns, dizziness and waist pains as the medical conditions connected with pregnancy in the district. The most outstanding conditions pregnant women report with are pregnancy induced hypertension, severe malaria, anaemia and bleeding as well as dizziness.

4.6 Socio – Cultural factors hindering Maternal Health

This section presents the socio – cultural factors hindering maternal health in the district.

4.6.1 Delivery at Prayer Camp / TBAs

The three public health personnel who participated in the IDI complained of pregnant women delivering at the prayer camps and with the TBAs after attending ANC because, that is more of a tradition in some families or communities. All three respondents grumble on poor dietary habits among pregnant women in the district, due to their cultural beliefs. Again, the three public

health personnel lamented on the culture of the majority of men preventing their wives from attending ANC, and the use of family planning to space out their children:

"Going to the TBA to deliver and some going to the prayer camps to deliver. These are all due to the fact that family members frequently make use of those areas" (Public health respondent, IDI).

"Due to small nature of the communities, they know each other and if there are TBAs in the communities they are aware of them and will always go to them when they are referred for further care outside the community facilities. This is commonly, where instructions have been given by the district that primids are not to be delivered at the CHPS compounds. When they are referred to bigger facilities they go to the TBAs for such services which make people to resort to their services instead of going for skilled delivery as they lose confidence in our system"(Public health Respondent, IDI).

"Culturally the belief of women not to attend ANC because their mothers never attended ANC or skilled delivery in the hospital, because of this delivery is sometimes done at home by the TBA or an older person in the family. Again, some pregnant women refused to eat nutritious diet because they consider it as a taboo such as eggs, snails, fish etc. Religiously some pregnant women do go for prayers at the prayer camps instead of ANC and men also do not see why their wives should attend clinics or do family planning" (Public health Respondents, IDI).

Religion and cultural beliefs among ANC and PNC client in the district were considered as a source of delay in attending to clinic on time, according to the majority of midwives and nurses in the study:

"Cultural beliefs play a role in the delay during labour. Community members such as the old men and women at home prevent them from attending the facility on time during labour so that labour can take place at home. This is because they want to keep a tradition their forefathers left behind" (CHN Respondent, IDI).

However, one midwife opined that it is high time pregnant women forgo the belief that, women in labour who visit the facility early will be seen as going through prolonged labour which requires Caesarean Section and avoid undue delays that bring them complications:

"Clients should again be educated on poor cultural practices and beliefs, and the need to avoid unnecessary delay when they are in labour" (Midwife Respondent, IDI).

A CHN stated that, husbands should be educated to be part of antennal care in order to understand their wives when they are due for labour and why the need to deliver in a health facility:

"More outreach programmes to encourage the men to understand the importance of antenatal care during pregnancy so that they can accompany their women to attend if not all, the majority of the appointments" (CHN Respondent, IDI).

Besides, a midwife among the respondents appealed that, midwives and nurses should stop the cultural of taking detergents and other items from pregnant women during labour in order not to prevent others from coming to the facility, but rather demand those items from the DHA:

"Midwives and Nurses at the various facilities should desist from taking detergents such as Parazone, soaps deltol and others from clients during labour as it deter expectant mothers who

do not have those items from coming to the facility to deliver unless the worse is about to happen"(Midwife Respondent, IDI).

Participants of the two (2) FGDs, added their voice to the engrained cultural practices that hinder the progress of maternal health in the district. They lamented on the consultation and visitations to traditionalist by pregnant women to check the progress of their pregnancy instead of ANC and others going to prayer camps thereby obeying rules given by priest on the care of the pregnancy:

"...pregnant women also go to the prayer camps for prayers and upon the directions of the priest they end up going into labour at the prayer camp, which is sometimes fatal"(FGD 1)

"Some women go to the prayer camp alright but will go back to deliver at the hospital where the pregnancy matures and labour sets in. This is because not all the pastors speak the truth nowadays"(FGD 2).

The majority of members in the two FGDs expressed opinions on certain cultures practice by some pregnant women such as squatting during labour instead of lying on the delivery bed, following the traditions that pertain to their family and pregnant women feeling uneasy when delivery is done by men. Some also complained about food items considered as taboos when consume by pregnant women:

"Women also do not deliver at hospitals because they do not feel comfortable during vaginal examination especially by the opposite sex and sometimes by same sex..... Many pregnant women attend all antenatal appointment but prefer to deliver at home or by a TBA because that has been the routine in their family" (FGDs).

Again, the women suggested that cultural issues could affect the use of Maternal Health Services and outcome of pregnancy:

"Women prefer to deliver at TBAs because of the mother did so" (FGD 2)

4.7 Progress of Work toward the Achievements of MDG 5

The general view of all three (3) public health respondents on the progress towards attaining MDG 5 targets in the district during the IDI were very positive. The most cogent point among their views was the upgrading of the Dodowa health centre to a district hospital in 2008 with an obstetrician/Gynaecology at post. Again all three respondents spoke on high antenatal coverage at the district and the increase number of CHPS compounds and zones built in the community, to bring health to the door steps of the people especially pregnant women and those in pueperium:

"The main achievement made in the district since the inception of the MDGs is the upgrading of the Dodowa health centre to a District hospital with an obstetrician at post to see to obstetric emergencies and the numerous CHPS built in the communities. There has also been high antenatal and post natal coverage in the district since the coming of the MDGs"(Public health Respondents, IDI).

In addition, the increase in the number of staff in the hospital, the development of protocol guidelines for treating emergency in maternal health in all facilities by the district obstetrician as well as the organization of workshops for staff to advance their skills in the modern trend of care especially, midwives are identified as achievement:

"The region has been organizing training on safe motherhood for midwives in the district. Some have also attended training in the area of maternal health care at the Ridge hospital. The

gynaecologist at the DWD hospital does organize training programmes for midwives and other staffs in the area of maternal care after which protocols are given out to them for guidelines has gone a long way to improve maternal health care in the DWD…….

"the watro project which was in line with the MDG 5 enabled midwives to undertake refresher courses at the Ridge hospital. Also those in the community, health centres, CHPS compounds and zones were trained at Dodowa hospital for the same purpose" (Public health Respondents, IDI).

Another issue that an informant raised was the low maternal mortality ratio in the district. This was however, disputed by another key informant that the presence of only one obstetrician in the district made it impossible to get a true maternal mortality ratio in the district, since the majority of serious cases in pregnancy are referred outside the district any time the obstetrician is not at post:

"Because there is only one hospital and one doctor doing the surgeries on complicated cases of pregnancy, we do refer a lot of maternal cases outside the district. Therefore for us to see the true picture of maternal death we need to do facility follow-up to see whether referred cases return to the district or they die in the process of obtaining care. This is something we need to recommend for the year 2013. The district embarking on more outreach programmes to health educate the community" (Public health Respondent, IDI).

4.8 Solution to Challenges of Maternal Health

The key informants in the area of public health in the district postulated a number of solutions to the challenges raised during the study. Prominent among them are lobbying for more skilled personnel especially, nurse and midwives to be posted to the district and providing them with the needed logistic to work with. Again, upgrading of health centres to hospitals as well as CHPS compounds to health centres and the construction of more CHPS compounds to embark on more outreach programmes in the district was recommended the respondents:

"To build more CHPS compounds to serve the people in the various communities, we also need to upgrade our facilities and to have more CHPS compounds with skilled staff to be in all facilities. The upgrading of one of the health centres to a hospital which is a long term project which will help a lot in the care of expectant mothers in the area of obstetric emergencies…..The upgrading of some of the CHPS compounds to health centres especially in areas where the CHPS compounds have vast land with extra rooms that can be converted into wards to care for patients" (Public health Respondents, IDI).

Once more, respondents indicated that, massive health education in the various communities will help in curbing some of the challenges confronting the district in the area of maternal health care. Others suggested that, the DHA should recruit more obstetricians to support the only one in the Dogowa hospital. However, one respondent among the Public health personnel orated that, a follow up be made on all referral cases involving labour in the district:

"To ensure intensive health education on maternal health in the communities…,the district embarking on more outreach programmes to health educate the community".

"For us to see the true picture of maternal death we need to do facility follow-up to see whether referred cases return to the district or they die in the process…… due to the presence of only one obstetrician in the district hospital who cannot see to all the women at ago. Hence there is the need to get more specialists to operate in the district hospital. The district embarking on more outreach programmes to health educate the community"(Public health Respondents, IDI).

Nonetheless, one of the key informants at the DHA talked on the provision of staff accommodation to enable technical staff to stay in the district and the involving of men in maternal health issues as they are the family heads:

"The district lacks technical staff all because of accommodation. It is the plan of the health personnel's to include the male /husband in the care of the pregnant women and reproductive health care in general since they are the decision makers in the home"(Public health Respondents, IDI).

The views of midwives and nurses on the solutions to challenges confronting the district in the area of maternal health care were not different from that of the public health respondents in the IDIs. The majority of midwives and nurses engaged in the study suggested the following solutions to the problems: upgrading some facilities from CHPS zones to CHPS compounds with the needed staff and logistics, workshops should be organised for health staff to upgrade their skills and midwives and nurses should be advised to stop taking detergents from the women in order not to prevent others from coming to the health facility during labour:

"The DHA should also organise workshop to upgrade their skills to be in line with current standards….. Their recruitment should be geared towards midwives……. also upgrade this facility from a CHPS zone to a CHPS compound" (Nurses and mid wives Respondent, IDI).

Moreover, some midwives and nurses pronounced that, mothers should be educated on the importance of ANC and PNC. Education on cultural beliefs and ANC should be intensified especially; delays during labour and staff should be sensitive and friendly to clients who visit the facilities to motivate them:

"Enough health education on the importance of ANC to the community……. Community health nurses should explain the importance of ANC to mothers in the in the communities…… Midwives and providers should be friendly and very sensitive to clients

. ….the DHA should motivate the few staff at the facility to continue to work hard to save the lives of expectant mothers" (Nurses and mid wives Respondent, IDI).

Furthermore, a community health nurse among the respondents of the IDIs indicated that, the DHA should plan to join the various communities for outreach programmes with their information van and encourage community members to visit the health facilities for care:

"Once a while the DHA should visit the facility with their information van to join the staff of the facility to do outreach clinic as well as a medical doctor coming to the facility do clinic with them to encourage community members to attend to the facility for the purpose for which it was built for"(CHN Respondent, IDI).

Likewise, the participants in the two (2) FGDs, involving ANC and PNC propose three prominent solutions to the challenges confronting maternal health care in the district. These are the provision of incentives to antenatal clients who attend all clinic appointment before term, nurses and midwives treating clients with decorum and the inclusion of mothers who deliver successfully in the various facilities for others to emulate them:

"The only thing that will make pregnant women to attend ANC and post natal in this facility is change in the attitude of nurses and other health staff. When they care we will feel happy and be attracted always to the facility when our appointments are due……. I also travel all the way from Adenta to Dodowa because of the way pregnant women are handled in the facility. It was a friend who introduced me to the facility and I have come to testify.

But the attitude of nurses towards expectant mothers speaks volume on why some pregnant women refuse to deliver at the facility after attending antenatal clinic in the facility. When the midwives and nurses are found insulting and beating pregnant women during labour it will scare others from attending the facility for delivery"(FGD2 Respondents)

"For those of us who have ever delivered at the hospitals and clinics, we should inform the others about the good things and the benefits we get from using the facilities to deliver … There are some of the midwives who beat the pregnant women during the delivery and so this this thing must stop to encourage other people to deliver at the hospitals and clinics….. Incentives (rewards) in terms of money were initially given so if it can be restored" (FGD 2 Respondents).

CHAPTER FIVE

DISCUSSION OF RESULTS

5.1 Introduction

This chapter evaluates the results of the study to appreciate the achievements and challenges of the MDG 5 in Ghana using Dangme West District of the Greater- Accra Region. The discussions are presented on eight themes, namely: Demographic characteristics of respondents, trend of maternal deaths, maternal health challenges, maternal health medical conditions, socio – cultural factors hindering maternal health, progress towards MDG 5, solution to challenges of maternal health and conclusions.

5.2 Demographic characteristics of respondents

The results of the study indicate that the majority of respondents engaged in the IDI were well vested in the area of maternal health care. Therefore their opinions reflected the true situation of maternal health in the district. On the other hand, most of the women who took part in the two FGDs were from the low income group per their occupation; hence their views could depict the actual challenges confronting women in the district in the area of maternal health care.

5.3 The trend of Maternal Deaths

The trend of maternal deaths in the Dangme West District for the years (2008-2012) under review according to the findings was very low. The highest number of maternal death among women for the period was three which occurred in 2011, but one was as a result of food poisoning detected after maternal audit and the least was zero which ensued in 2008 and 2012. The low maternal death in the district was attributed to the high antenatal coverage chopped over

the years, which was realized during the desk review of the district annual reports. This is in consonance with the MDG Report (2012), which states that such reductions are possible, even when other resources are limited and adequate human resources for health exist to care for expectant mothers. This is a recommendation of WHO that all pregnant women should have a minimum of four antenatal visits before term. On the contrary, there were no records on maternal death in the entire district to serve as a baseline due to the absence of a district hospital till the year 2008 when the Dodowa hospital was built for that purpose. Again, the low maternal death does not give a true reflection of maternal deaths in the district due to presence of only one obstetrician/gynaecologist who attends to serious labour cases and perform surgeries where necessary. Thus his absence from the facility means such cases are referred outside the district for expert care. No follow ups are made on such referrals by the DHA to find out whether those women returned safely to the district or not. This was declared by key informants in the district:

"… The facility has only one Obstetrician/Gynaecologist and his absence from the facility means emergencies cannot be attended to if caesarean section is required and this does not augur well for midwives on duty"(Midwife Respondent, IDI)

This assertion corresponds with the views of Zakariah et al (2006) that MMR in Ghana varies widely by source and method of estimation, which makes it very difficult to track the progress of the MDG 5 in Ghana. This is not different from WHO, UNFPA, and UNICEF evaluations of Kenya's MMR of 1,300 maternal deaths per 100,000 live births against the 590 maternal deaths per 100,000 live births reported by the DHS of Kenya (AbouZahr & Wardlaw 2003). Discrepancies of figures within the same country pose problems regarding the achievement of MDG 5 targets.

5.4 Maternal Health Challenges

The information obtain from the interviews concerning maternal health challenges in the district among public health respondents seem to agree with UNDP (2010) that the main causes of postpartum haemorrhage are retention of the placenta after delivery, failure of the uterus to contract after expulsion of the placenta, and trauma to the genital tract. Any one of the above put a mother's life in danger unless the situation is reversed by a team of experts, combined with a functioning health facility.

"For maternal health care to improve in the X CHPS compound, we need more staff especially midwives and logistics to work with….A CHPS compound of this status does not have certain logistics within its set up and this creates problems sometimes"(Respondents, IDI).

This means that, the majority of health facilities in the district are constraint with inadequate skilled labour coupled with inadequate logistics to save women who go through complicated delivery. This is synonymous with WHO (2005); Bates et al (2008) and Ghebrehiwet (2004), which stipulate that the non-existence of modern health facilities with an unproductive workforce contributes to the absence of the availability of EmOC, which is the panacea to curb minor complications in pregnancy. However, this is in sharp contrast to the situation in the advanced world, where complications of the sort are reduced to its minimum, due the nature of the health systems in place (WHO, 2004a). The inadequacy of transportation for pregnant and post natal women and long distance between home and health facility as well as lack of funds for transportation were some of the different challenges posed by respondents:

"One of the delays is distance especially those who stay outside the community and no vehicle to convey them from their village to community on time ……Again the majority of midwives and

nurses engaged in the IDIs itemized lack of funds on the part of mothers to pay for transport fares to the health facilities"(Midwives and Nurses Respondents, IDI).

This implies that some women in the district are confronted with the problem of transportation to health centres for ANC, PNC, and labour causing a lot of delay, which sometimes compel them to attend to the TBAs for their services especially, when the individual is very poor. This is what a pregnant woman said:

"Inadequate financial access hinders us in several ways. This makes us to miss the rest of the ANC clinic and even find it difficult to visit the facility when labour sets in which makes some of us go to the TBAs to deliver, but are referred to the hospital when complications set in". Some of the nurses must be sent into those communities which are far away from the hospital. This will reduce long distance travel when a pregnant woman is in labour. This will stop women from going to the TBAs to deliver (FGD 1 and 2).

The statement indicates that, all is not rosy for pregnant women in receiving maternal health care despite, the excellent records kept by the district on maternal health over the years. This affirmation is in line with Magadi et al. (2002); WHO (2003) and UNFPA (2011) that "long distance to healthcare facility is an obstacle to access healthcare services promptly" and accessibility to healthcare refers to the ability of using healthcare services in terms of distance from the service, and transportation to get to the service centres. In addition, the suggestion by Borghi et al (2003); Claeson et al (2001); GHS (2009) and Martey (2013) support the statement in contention, since household poverty, poor allocation of resources and the control of those resources also influence maternal mortality.

Similarly, many of the women who participated in the study grieved on the negative attitude of some nurses and midwives, who attend to them during ANC, labour and PNC, which sometimes scare mothers from visiting the facility for the said care. Nevertheless, other participants in the two FGDs concluded that some nurses and midwives are good and will do all that is required of them to make clients comfortable:

"To me the attitude of the midwives and nurses towards pregnant women sometimes is not fair, especially to those who are pregnant for the first time and those visiting the facility for the very first time. Instead of the health personnel's directing them on what is expected of them they rather shout and frown at them……. Some of the nurses normally compare one client to the other so far as pain containment is concerned but individuals have different threshold so labour pains are concerned" (FGD 2).

"To be frank with you some of the health personnel's here are good and show respect to clients they handle. If you don't know something and you ask them, they explain things perfectly to you. Some of them go an extra mile to organise health talks for new registrants to school them."(FGD2).

The proclamation of respondents that, women have problems because they are poor and providers mistreat them is confirmed by Izugbara and Ngilangwa (2010) that, poor treatments are meted out to poor women when they present at the hospital, which pushes them to use less efficacious services. Nonetheless, the second claim by respondents on the good attitude of some health experts in the district was not supported by any of the related studies reviewed by the researcher, but observed by the researcher during the data in the various health facilities used for the study.

5.5 Maternal Health Medical Conditions

Medical Conditions associated with Maternal Health in the district, according to Public health respondents interviewed during the IDIs include ante partum haemorrhage, postpartum haemorrhage, pregnancy induced hypertension, severe malaria and anaemia:

"*The main medical conditions associated with maternal health in the district are ante partum haemorrhage, postpartum haemorrhage, pregnancy induced hypertension, severe malaria and anaemia" (Public Health Respondents, IDI).*

All these conditions are pregnancy related ailments, which put the lives of pregnant women in danger especially, in areas where the health systems lack the needed logistics and human resources to treat such conditions. This is consistent with WHO (2005), and Bates et al (2008), that severe bleeding during labour and after labour can kill even a healthy woman within two hours, if unattended to. It is considered as the fastest of all maternal deaths, which can only be reversed by skilled attendants through the use of oxytocin injection given immediately after childbirth and manual removal of the placenta, which is dependent on how robust a nation's health system is. Again, the views of public health and midwives respondents are consistent with the study by El-Gharib et al in 2010, whose findings show that the majority of maternal deaths in developing countries are caused by five major direct obstetric complications namely; hemorrhage, infection, unsafe abortion, hypertensive disorders of pregnancy and obstructed labor. Obstetrical hemorrhage represents 30% of all causes of maternal death, and hypertensive crises are the origin of another 15% and infections 15%. Also the opinions of the respondent agree with the study of Tabassum and others in 2010, which indicates that hypertensive disorders of pregnancy are a major cause of maternal morbidity and mortality all over the world, but very

common in the developing world such as Zimbabwe, Ghana, Burkina Fasso and others. The views of Geer (2001) and Duley (2003) again, support the pronouncement by the public health and midwives respondents in the district that pregnancy- induced hypertension by and large have a good outcome if only it is carefully managed in a well-structured health system.

Anaemia, one of the most serious global public health problems and a leading cause of disability affecting nearly half of the pregnant women in the world was stated by the public health respondents as a condition that affects pregnant women in the district. This is consistent with the findings of WHO in 2005, that the majority of women in the developing world suffer from anaemia as compared to women in the developed world, which is estimated to be 52 and 23% respectively. Poor nutrition in addition to micronutrient deficiencies, malaria, hookworm, HIV infection and haemoglobinopathies are the commonest cause of anaemia among maternal mothers. This has serious clinical implications on pregnancy, including the risk of maternal death particularly, from haemorrhage during labour which is common in the hard-to-reach areas in the developing world. This goes to confirm the assertion by Kalaivani (2009), which says decreasing the burden of anaemia is essential to achieve the Millennium Development Goals of maternal health. Anaemia directly causes 20% of maternal deaths in India and indirectly accounts for another 20% of maternal deaths, which is contingent on a nation's health system and literacy level of women as well as food productivity.

5.6 Socio – cultural factors hindering Maternal Health

Socio-cultural factors are cited as a great hindrance to maternal health care by all three groups of respondents used for the study namely: Public health personnel, nurses and midwives and

women who attended ANC and PNC in the facilities. The majority of the public health respondents lamented on the aforesaid subject:

"Going to the TBA to deliver and some going to the prayer camps to deliver, these are all due to the fact that family members frequently make use of those areas……. Due to small nature of the communities, they know each other and if there are TBAs in the communities they are aware of them and will always go to them when they are referred for further care outside the community facilities. More commonly where instructions have been given by the district that primids are not to be delivered at the CHPS compounds. When they are referred to bigger facilities they go to the TBAs for such services which make people to resort to their services instead of going for skilled delivery as they lose confidence in our system" (Public Health and FGDs Respondent).

This means that some community members are so engrained in certain traditions and will therefore, do all things possible to keep them even if, individuals lose their lives for such traditional beliefs to be kept. These views are in consonance with that of Malin and Gissler (2009), the health of the pregnant woman is managed traditionally based on several pre-determined and experienced beliefs within specific cultural settings. This goes to suggest that, the voiceless woman ends up obeying the instructions of the husband or whoever considered the head of the family to endanger her life (WHO, 2005). Health education needs to be intensified by the district health administration to rule out these deep-seated cultural practices within the various communities in the district. In communities where expectants mothers are always attended to by TBAs and old women during labour, instead of skilled personnel per their tradition, are likely to develop pelvic inflammatory diseases or diseases of the uterus in future. This is because TBAs know little about aseptic techniques and may end up introducing infections into the womb. This can also result in the death of women within pueperium and beyond

especially in areas where the health system is not well structured which bring about increase in nation's maternal mortality ratio. Again the issue of primid not allowed to be delivered at the CHPS compounds in the district should be re-considered so that those who are roomy will be attended to. This will prevent them from going to the TBAs to deliver, and instead go to hospitals as directed by the midwives at the CHPS compounds, in order for the health facilities to assume its supremacy over the TBAs in the communities. The above can only be done when such facilities are well-equipped with structures that can be used to assist the primid during labour, which agrees with Razzak (2002) that nations need to build adequate and appropriate emergency response systems. By this development, the community will see the CHPS compounds as the first point of call anytime one is sick especially, when a pregnant woman is in labour, thereby serving the purpose for which those structures were created in the community.

However, a nurse stated that husbands should be cultured to be part of antennal care, in order to understand their wives when they are due for labour and why the need to deliver in a health facility:

"More outreach programmes to encourage the men to understand the importance of antenatal care during pregnancy so that they can accompany their women to attend if not all, the majority of the appointments"(Nurse Respondent, IDI).

Maternal health is not a woman's issue, but the integrity of communities, societies and nations, and the well-being of all humans whose own prospects in life depend upon healthy mothers. Therefore, it is very vital for men in Ghana to be educated on issues pertaining to women's health during pregnancy, as seen in advanced countries like United Kingdom, United States and Canada, in order to understand and support them when necessary. This in a way will help avert

the problem stated by WHO (2005); Abotzabire (2008) and Martey (2013) that women do not, and probably often cannot; embark on care-seeking paths even when they know that, they have a life-threatening condition due cultural constraints. Similarly, the said declaration is synonymous with Abass et al. (2010) that in some parts of Ghana troubled labour is seen as a sign of infidelity, and instead of family members calling for emergency care in such conditions, they rather rely on elders to appease the gods to help with the delivery. A lot of delays are caused in the process, which can result in the death of a woman or live her in a disability. Men who are knowledgeable in the care of pregnancy to term will resist such cultural practices to avoid delays to the woman and her unborn child and this can help reduce mortality in Ghana.

Moreover, some respondents amid the two FGDs complain on food items considered as taboos when consumed by pregnant women in some communities. Food items such as eggs, groundnuts, meats, chicken, snail and others, which are very nutritious and important in the lives of pregnant women and forbidden these create problems such as anaemia, thereby compromising her immunity. The opinions of these respondents correspond with the study conducted by Senah (2003); Lule et al, (2005); Kwapong (2008); Patil et al (2010) and Mantey (2013). Thus, malnutrition in women contributes to complications and death during pregnancy and childbirth especially, in societies where expectant mothers are prevented from eating certain nutritious food items per their cultures. Women who are deprived of such rich food and are poor may be malnourished, which can result in anaemia, a life-threatening complication for women during pregnancy (Kalaivani, 2009). This put them at the risk of dying from even small amounts of blood loss during delivery and postpartum periods, which is very common in countries where women are deprived of eating snails, eggs and other nutritious food as result of their cultural beliefs.

5.7 Progress of work towards the achievements of MDG 5

The views of respondents regarding the progress of work toward the achievement of the MDG 5 in the district are enormous. The most dominant point among them was the upgrading of the Dodowa Health Centre to a District Hospital in 2008 with an obstetrician/Gynaecology at post and the high antenatal coverage at the district. Again, the increase number of CHPS compounds and zones built in the communities to bring health to the door steps of the people especially, pregnant women and those in pueperium were considered a success story toward the achievement of the MDG 5, due to the sparse nature of communities in the district.

"The main achievement made in the district since the inception of the MDGs is the upgrading of the Dodowa health centre to a District hospital with an obstetrician at post to see to obstetric emergencies and the numerous CHPS built in the communities. There has also been high antenatal and post natal coverage in the district since the coming of the MDGs"(Public health Respondents, IDI).

The opinions of respondents indicate that, well equipped hospitals and health centres within communities and districts are very essential in reducing a nation's MMR and the avoidance of morbidity among women, which form the basis of the MDG 5. The absence of a hospital in the entire district, made it impossible for maternal death records to be kept in the district making it very difficult track the progress of the MDG 5 in the district. The obstetrician at post helps the hospital through emergency caesareans on pregnant women whose lives are threatened, due to haemorrhage, preeclampsia and eclampsia to save them from dying. The assessments above are in line with WHO (2005), and Bates et al (2008), that conditions like severe bleeding, preeclampsia and eclampsia before labour, during labour and after labour can kill even a healthy

woman. Secondly, the issue of the increase number of CHPS compounds in the communities goes to affirm the second target of the MDG 5, which ensures access to reproductive health services in the rural communities. This is also in congruence with GHS/MOH (2009); UNPFA (2011) and MDG Report (2012) that early antenatal care increases the chances of a woman giving birth with a skilled healthcare attendant present and also, helps in the screening, identification of warning signs and treating infections during pregnancy.

Subsequently, the achievement of the MDG5 in the district according to respondents is likewise, due to the increase number of staff in hospital and the development of protocol guidelines for treating emergencies in pregnancy in all facilities by the district obstetrician which is complemented with workshops.

"The region has been organizing training on safe motherhood for midwives in the district. Some have also attended training in the area of maternal health care at the Ridge hospital. The gynaecologist at the DWD hospital does organize training programmes for midwives and other staffs in the area of maternal care after which protocols are given out to them for guidelines which is going a long way to improve maternal health care in the DWD……. " (Public health Respondents, IDI).

This perhaps explains the advocacy by the 2012 MDG Report, that skilled health professional (doctor, nurse or midwife) can administer interventions to prevent and manage life-threatening complications, such as heavy bleeding and pre-eclampsia or refer the patient to a higher level of care when needed. Human resources for health care are thus, vital in reducing mortality in a country especially, in the area of maternal health, but without workshops to update their skills they will not be abreast with modern trends in the care of pregnant women.

Once more, the above statement is compatible with the standpoint of GHS (2009) and UNFPA (2011) to assist in the training of more health professional in Ghana for the above mentioned purpose, which has gone a long way to increase supervised deliveries at (48%) and institutional maternal mortality decreased per the Health Summit Report 2011.

5.8 Solution to challenges of Maternal Health

The three groups of respondents who participated in the study propose a number of solutions. Noticeably among them include: increasing the number of skilled personnel especially, nurses and midwives in the district with the needed logistic to work with, upgrading health centres to hospitals as well as CHPS compounds to health centres and a fellow up of all referred labour cases outside the district.

"We also need to upgrade our facilities and to have more CHPS compounds with skilled staff to be in all facilities. The upgrading of one of the health centres to a hospital ……care of expectant mothers and the upgrading of some of the CHPS compounds to health centres especially in areas where the CHPS compounds have vast land with extra rooms that can be converted into wards to care for patients. Therefore for us to see the true picture of maternal death we need to do facility follow-up to see whether referred cases return to the district or they die in the process…… due to the presence of only one obstetrician in the district hospital who cannot see to all the women at ago"(Public health and midwives Respondents, IDI).

In the same vein, other respondents put forward cogent solution to challenges mentioned in the findings of the study, which were not different from the aforementioned.

"More over some midwives and nurses pronounced that mothers should be educated on the importance of ANC and PNC, increase in education on cultural beliefs and ANC especially

delays during labour, staff should be sensitive and friendly to clients who visit the facilities and both staff and clients should be motivated in cash and kind where necessary" (Nurses and mid wives Respondent, IDI).

Finally, the respondents of the FGDs identify the under listed solutions to the challenges confronting maternal health in the district that nurses and midwives should treat them with decorum.

"The only thing that will make pregnant women to attend ANC and post natal in this facility is change in the attitude of nurses and other health staff. When they caring we will feel happy and be attracted always to the facility when our appointments are due….."For those of us who have ever delivered at the hospitals and clinics, we should inform the others about the good things and the benefits we get from using the facilities to deliver" (FGD 1 and 2 Respondents)

In accordance with the recommendations from the participants engaged in the study, health education stands tall among the lot, since it has the ability to persuade women to seek care from experts in health facilities during pregnancy, labour and after labour, instead of visiting TBAs and prayer camps. The realization of this is dependent on the health care system within the community and district as well as the attitude and calibre of health professions, who attend to the women anytime they visit the facilities. The availability of care with the needed human resources and logistics for health care will invariably, attract clients to the facilities especially, when professionals embark on vigorous outreach programs to educate clients in the communities on the importance of ANC, labour and PNC. This account is analogous to the claim of WHO (2003); MOH (2009) and Ghebrehiwet. (2004), that failures in the health service delivery system are implicated in maternal deaths among pregnaant women particularly, those who delay unduly

and develop complications before visiting the facilities. Access to healthcare services is important in helping to modify people's risk behaviours and promote positive health practices to all, irrespective of social status, age, race or level of education and should provide an environment full of trust and confidentiality (Kluge, 2006). By this women's strong preferences for obtaining birthing support from TBAs, rather than midwives /nurses that emerges from their poor relationship with expectant mothers during labour in the district, according to respondents will be a thing of the past.

5.9 Conclusion

This chapter discussed the results of the study. The findings of the study generally indicate that, the study area depicts that of most rural district in Ghana in terms of maternal health challenges, despite its closeness to the nation's capital. The challenges pertaining to maternal health care in the district mentioned by the majority of respondents, who participated in the two focus group discussions, are not different from those stated by the public health and midwives respondent. Poor road networks, poverty, illiteracy, inadequate transportation and cultural beliefs were cited as the main problems that make pregnant women and those in peuperium to develop disabilities or die. Inadequate human resources, logistics and the bad attitude of some nurses were however stated as challenges. For instance, pregnant women who are unduly delayed by the TBAs and the prayer camps do not normally get the appropriate obstetric care, due to the absence of the only obstetrician in the district hospital and thus, need to be referred to another facility outside the district which goes a long way to aggravate her condition. The study also reveals that the achievements of the MDG 5 in the district per the MMR do not reflect the actual maternal deaths in the district, since complicated cases of labour referred outside the district facilities were not followed to know its outcome. Regardless of the challenges pertaining to the care of expectants

mothers in the district, the existence of the Dodowa hospital and the numerous CHPS compounds built will bring improvement in the care of women, if the needed human resources and logistics are obtained. Finally, the study brought to the fore problems of maternal health care and the fact that human resources for health care alone cannot solve them, but through an integrated approach as well as intersectoral collaborations with the needed political will.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

The concluding chapter presents the results of the study based on the data collected from the field of study. It also covers the conclusion and recommendations for improving maternal health as well as propositions for future research.

6.2 Summary of key findings

The study assessed the achievements and challenges of the MDG 5 (maternal health) targets in the Dangme West District of the Greater-Accra Region in Ghana. The study sought to: examine the trends in maternal death in the Dangme West District between the year 2008 -2012, find out the main causes of maternal death in the district, assess the progress towards achieving the MDG 5 targets in the district, identify the socio-cultural factors hindering the achievement of MDG 5 targets in the district and to recommend strategies for addressing maternal health challenges in the Dangme West District. A case study design was employed using qualitative data collection methods for the study. Primary data were collected through the use of IDIs among key health personnel and FGDs with pregnant women as well as women in pueperium in the district. Secondary data were generated through the review of archives on maternal health in the district. The first objective of the study was analysed quantitatively, whereas the IDIs and FGDs were analysed by themes created by the researcher.

6.2.1 The trend of Maternal Deaths

The results of the study indicate that the low maternal deaths over the years do not give a true reflection of maternal deaths in the district, due to presence of only one obstetrician/gynaecologist who attended to serious labour cases, and performed surgeries where necessary. Thus, the absence of the gynaecologist from the facility means such cases are referred outside the district for expert care and no follow - ups are made on such referrals by the DHA to know its outcome. Secondly, there are no records on maternal death in the entire district before 2008 to serve as a baseline for any meaningful analysis, due to the absence of a district hospital till the year 2008 when the Dodowa hospital was built.

6.2.2 Maternal Health Challenges

The study reveals a lot of maternal health challenges in the entire district which could hinder the achievements of the MDG 5 which included:

- Poor road networks and inadequacy of transportation.
- Inadequate human resources for health care and logistics.
- Inadequate in-service training for health personnel at post.
- Delays in reporting to health facilities.
- Bad attitude of health professionals.
- Ignorance of labour signs/illiteracy.
- Inability of NHIS to re-imburse the district health facility for continuity of work.

The above mentioned challenges show that although, the district has had high antenatal coverage over the years, expectants mothers find it very difficult to access health care.

6.2.3 Maternal Health Medical Conditions

The study again, discover antepartum haemorrhage, postpartum haemorrhage, pregnancy-induced hypertension/eclampsia, severe malaria and anaemia as the main medical conditions associated with pregnancy which is not different from other parts of Ghana.

6.2.4 Socio-cultural factors hindering Maternal Health

Also, the study discloses that the majority of women in the district prefer to be delivered by a TBA or in the prayer camp after attending ANC in a health facility, simply because their mothers and grandmothers did the same. The issue of poor dietary habit among pregnant women in the district was realized, since certain food items were seen as taboos per their cultural beliefs. Another social problem reveal by the study was that some pregnant women prefer squatting on the floor during labour, instead of lying on the delivery bed, which even prevents them from going to hospitals on time to deliver.

6.2.5 Progress of work toward the achievements of MDG 5

The upgrading of the Dodowa Health Centre to a District Hospital in 2008 with an obstetrician/gynaecology at post was identified as a great achievement. Again the findings reveal a high antenatal coverage in the district over the years. Also the increase number of CHPS compounds and zones built in the community to bring health to the door steps of the people especially, pregnant women and those in pueperium as well as the development of protocol guidelines for treating emergencies in maternal health in all facilities by the district obstetrician

were all seen as great achievements. Finally, the study reveals a low MMR in the district which is the hallmark of the MDG 5.

6.3 Conclusions

It can be inferred from the research that the Dangme West District is confronted with enormous maternal challenges and it's achievement of the MDG 5, depends upon the district's health system and access to health services as well as a change in the belief system of the populaces. From the view point of respondents, antenatal care is very encouraging in almost all health facilities in the district, but supervise delivery is on the low side since most pregnant women prefer to be delivered by TBAs. The high antenatal coverage in the district is as a result of the NHIS and the increased number of CHPS compounds to provide ANC in the communities. Despite the aforesaid achievements, pregnant women are faced with the problem of transportation and this sometimes prevents them from going to the health facilities to deliver. Again, most women in the district are not economically empowered and thus, remain indecisive in their quest to seek supervised deliveries, which sometimes endanger their lives. However, pregnant women who are referred to the district hospital for specialized care do not receive prompt, adequate or appropriate obstetrical care, due to the absence of the only obstetrician in the hospital. Finally, the problems of maternal health care confronting the district can be minimised when solutions such as the provision of more skilled personnel and logistics, upgrading of Health Centres to Hospitals, the provision incentives to antenatal clients, and the treatment of clients with decorum by health personnel as enumerated by respondents are adopted by the DHA and implemented.

6.4 Recommendations

The study adds a broader understanding of obstacles to rural women's access to and utilization of maternal health services, which has implications for health policy makers and implementers as well as future research.

There is an overwhelming need for changes in the attitude of health professionals toward women in the district, since they are considered vulnerable during pregnancy, labour and after labour, therefore needs all the necessary care and attention from providers. This when practiced will attract more expectants mothers to deliver in the various health facilities in the district, instead of going to the TBAs and prayer camps for the same purpose, which normally brings them complications as suggested by respondents.

Again, respondents indicated that the DHA needs to adopt a mechanism to follow-up all serious labour cases referred outside the district hospital for specialized care to know its outcome. This will enable them to know the actual MMR in the district, since the findings of the study indicates that records on maternal deaths over the years in the district reflected that of only the hospital.

Also general medical practitioners in the district hospital should be trained by the resident obstetrician/gynaecologist in caesarean section operations in order to do emergency surgeries pertaining to labour any time he is not at post.

However, policy makers and implementers need to resource all health facilities in the district with the needed logistics and personnel to work with so that the issue of primids not allowed to deliver in the CHPS compounds can be re-considered to stop women from attending to TBAs and prayer camps to deliver instead of the health facilities.

In addition to above mentioned recommendation, men who are decision makers in the family should be educated on the essence of ANC, labour and PNC in order to avoid undue delays at home when labour is due which sometimes brings them complications.

Moreover, some of the health centres in the sub-district according to respondents need to be upgraded by the Ministry of Health to hospital, with a medical doctor to care for the people in the remotest part of the district to reduce travel time during referrals.

More so, women in the district should be empowered by appropriate agencies nationally and locally to assist their husbands in the best possible ways to care for themselves while pregnant.

Furthermore, the DHA should provide accommodation to retain technical staff such as pharmacist, laboratory technologist, nurses and midwives, and to develop incentive scheme for rewarding hard working staff and committed antennal clients to encourage others to put in their best.

Finally, the DHA should join staff in the various communities in the district for outreach programmes with an information van to intensify education on the need for expectants mothers to attend antenatal clinic, and encourage community members to visit the health facilities for care on time.

6.5 Suggestions for further research

This study did not exhaust all critical issues in maternal health care in the Dangme West District. Future research should therefore, be directed at the link between Socio-cultural factors and the attainment of MDG 5 in the Dangme West District, the determinants of the usage of maternal health services among rural women in the Dangme West District and the quality of care among

health professionals and its impact on pregnancy outcomes in the Dangme West District as well as the role of Family Planning in achieving the MDG 5 among men and women in the Dangme West District.

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APPENDICES

UNIVERSITY OF GHANA BUSINESS SCHOOL

Department of Public Administration and Health Services Management

(Interview Guide for Data collection)

My name is Adu Joseph, a master of philosophy student in Health Services Administration of the University of Ghana Business School in the Department of Public Administration and Health Service Management. I am conducting a research on ***Localising the Millennium Development Goal (MDG) five in Ghana: The achievement and challenges in the Dangme West distric***t in partial fulfilment of the above mentioned degree. Your views are highly important in identifying the achievement and challenges of the MDG 5 and the way forward in the district. Participating in this study is expected to enhance the knowledge of maternal health in the district. This knowledge will inform decisions at the managerial level to improve maternal care in the district. **Responses** from anyone who takes part in this study will be treated highly confidential as it would be used purposely for the study and your names would not be required. Please the interview will not take more than an hour and all discussions during the period would be recorded in order not to omit any vital point made by the respondents. This will be backed by note taking by my research assistant. Thank you very much for accepting me into your offices and facilities for the purpose of this research.

Consent: I have read or listened to the above information and I have decided to participate in the study. The researcher has explained the study to me and answered my questions. I understand that the purpose of study is to help improve maternal health care in the Dangme West district. If I

do not participate, there will be no penalty or loss of right. I can stop participating at any time, even after I have started.

I agree to give permission for my participation in the above mentioned study. My signature below also indicates that I have received a copy of the consent form and have adequately understood the implications of the study.

---------- ---------- ----------

Signature of Participants Date Place

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Signature of Researcher Date Place

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Signature of Witness Date Place

INTERVIEW GUIDE FOR PREGNANT WOMEN IN THE DANGME-WEST DISTRICT: FGDs

1. Why should pregnant women attend antenatal and postnatal clinic?
2. How difficult it is for pregnant women to access care in this facility?
3. How would you describe the attitude of midwives/nurses towards pregnant women?
4. In your own opinion, what should be done to attract pregnant women and women who are in their postnatal to all health facility in the district?
5. How does long distance travel hinder pregnant women from accessing health care during antenatal and labour?
6. Why do you consider antenatal care important in the life of the pregnant woman?
7. How can lack of financial access hinder ones antenatal care, labour and postnatal in the life time of a woman in this district?
8. In what ways can cultural/ religious belief contribute to the death of the pregnant woman in the district?
9. How do you describe the issue of maternal death in the Dodowa hospital?
10. Who in the family decides on the antenatal care and place of delivery of the pregnant women?

INTERVIEW GUIDE FOR THE DISTRICT DIRECTOR OF HEALTH SERVICES, DISTRICT PUBLIC HEALTH NURSE AND A PUBLIC HEALTH NURSE AT THE INTERGRATED HEALTH UNIT OF THE DANGME WEST DISTRICT HOSPITAL

1. How would you describe the maternal mortality situation in the Dangme West district?

2. How rich is the Dangme West district health directorate in the area of human capital to ensure quality of care in its catchment area?

3. To what extent is the Dangme West district resourced with health facilities to bring health care to the door steps of its people especially maternal health?

4. In your own opinion, how efficient is the national health insurance scheme in offering the financial access to all expectants mothers in the Dangme West district?

5. What are the main causes of maternal deaths in the district?

6. What are some of the achievements made in the area of maternal health since the introduction of the MDGs in the Dangme West District?

7. What strategies has the district health directorate put in place to improve upon maternal health in the district?

8. What cultural factors in your own view hinder the district in its quest to achieve the MDG 5?

9. In your own opinion, do you think the Dangme West district would meet the target for the MDG 5(Maternal Health) by 2015?

10. What is the way forward in addressing the issue of maternal health in the district?

INTERVIEW GUIDE FOR THE HEAD MIDWIVES /NURSES

1. To what extent do the human resources for health and logistics in your facility complement your skills as a Midwife/ Nurse in the care of expectant mothers?

2. How does the lack of availability of care in health facilities contribute to the death of pregnant mothers?

3. What contribute to the delay of pregnant mothers in attending clinic during labour in your facility?

4. What are the main causes of maternal death in this facility/district?

5. What medical conditions do pregnant women report within your facility and what are you doing to remedy the situation?

6. What do you think can be done to improve the usage of antenatal care by pregnant women in your facility?

7. What do you expect the district health directorate to do to enhance maternal care in this facility?

8. In your own opinion how can the maternal health care services be improved in your facility?