

UNIVERSITY FOR DEVELOPMENT STUDIES

THE ROLE OF THE FAMILY AND CULTURE IN PROMOTING
MATERNAL HEALTH IN THE LAWRA DISTRICT OF THE
UPPER WEST REGION OF GHANA

KUUYEBR, LOUIS

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IN THE LAWRA DISTRICT OF THE UPPER WEST REGION OF GHANA

BY

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JULY, 2015



DECLARATION

STUDENT

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

Candidate's Signature Date.....

Name

SUPERVISORS'

I hereby declare that the preparation and presentation of the dissertation/thesis was supervised in accordance with the guidelines on supervision of dissertation/thesis laid down by the University for Development studies.

Principal Supervisor's Signature Date.....

Name



ABSTRACT

Although several indicators have been used to enhance maternal health including adequate health facilities and the number of health personnel to help provide quality healthcare in the facilities provided, the indigenous role of the family as well as cultural practices on maternal health seemed to be limited in the global literature especially the role of the family in maternal health in the Lawra District. In this regard, this study investigated the role of culture and the family in promoting maternal health in the Lawra District of the Upper West Region of Ghana.

The survey design was adopted in this study. In all, 251 respondents took part in the study. This comprised of 56 pregnant women, 103 women who have delivered and 73 family members (men and women) all of who responded to the study through questionnaires. Additionally, 19 key informants including Traditional Birth Attendants (TBAs), Director of Health Services and midwives also participated in the study through in-depth interviews. Quantitative data analysis was performed using the Statistical Package for Social Scientists (SPSS) Version 18, while the qualitative data were analyzed through data transcription.

The study concluded that men and women of the Lawra District held a relatively positive perception about maternal health, a significant number of births still occur in the homes of Traditional Birth Attendants and/or mother-in-laws in the District. Generally, the dominance of men in the household makes women in the Lawra District to have limited role in taking decisions that concern their maternal health care. Maternal health is significantly influenced by the cultural and family practices in the Lawra District. Extensive education on how to accurately use contraceptives should be carried out for the men and women of the Lawra District. Men of the Lawra District should be educated on the severer effects of their acts/actions on the maternal health of women.



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DEDICATION

I dedicate this work to my late dad Mr. Anslem Kuuyebr and all late family members. May their souls rest in perfect peace



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ACRONYMS

ABBREVIATIONS	MEANING
ANC	Antenatal Care
DHA	District Health Authority
GHS	Ghana Health Service
GDHS	Ghana Demographic and Health Survey
HBM	Health Belief Model
NFHS	National Family Health Survey
MM	Maternal Mortality
MMR	Maternal Mortality Rate
MNH	Maternal and Neonatal Health
PNC	Post Natal Care
TBA	Traditional Birth Attendance
UN	United Nations
UNICEF	United Nations Children Education Fund
US	United States
WHO	World Health Organization



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the most natural phenomena of human beings is pregnancy and childbirth. It is fundamentally necessary for human existence and capacity for continuance of the human race. However, Filippi et al. (2006) noted that over half a million women die each year due to complications during pregnancy and birth although the vast majority of these deaths are preventable. Globally, an estimated 287,000 women died during pregnancy and childbirth in 2010, a decline of 47 percent from levels in 1990 (WHO, 2012). WHO further indicated that globally, 800 women worldwide die every day from pregnancy or childbirth-related complications.

WHO (2012) defined maternal health as the health of women during pregnancy, childbirth, and the postpartum period. Generally, it can be deduced from the literature that maternal health is the health of women during pregnancy, childbirth, and the postpartum period as well as the health care dimensions of family planning, preconception, prenatal, and postnatal care in order to reduce maternal morbidity and mortality.

Maternal health is one of the main global health challenges and the reduction of maternal mortality ratio by three-quarters by 2015 is the target for the MDG 5. However, this goal is the one which the least progress has been made and complications during pregnancy and childbirth remain a leading cause of death and disability among women of reproductive age in developing countries. Less than one percent of the annual



maternal deaths occur in the developed world, while a large proportion of these occur in developing countries. Further, for every woman dying, at least 30 others suffer complications which often end up being long-term and devastating (Bailey et al., 2006).

For the purpose of this study, focus shall be placed on maternal and child death component of maternal health. Maternal mortality is defined by the World Health Organization as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration of the pregnancy, from any cause aggravated by the pregnancy or its management, but not from accidental or incidental causes.

According to Bailey et al. (2006), maternal complications are primarily direct obstetric complications occurring immediately before, during, or after childbirth and include hemorrhage (24 percent of maternal deaths worldwide), sepsis (15 percent), abortion-related complications (13 percent), pregnancy-related hypertensive disorders (12 percent), obstructed or prolonged labor (8 percent), uterine rupture (8percent), and ectopic pregnancy (8 percent). Moreover, the quality, availability, and accessibility of basic and emergency obstetric care vary widely around the globe, and rural, low-income areas face the most barriers in developing and implementing obstetric care facilities and services.

The first step towards maternal mortality is conception and delivery. Although these are biological events, they are significantly influenced by the cultural usages and nuances of the community. The choice of the women to control their own sexual health is challenged by social/cultural and economic factors that mitigate their ability to decide independently and freely on their reproductive and sexual choices. Utilization of



maternal health care in rural Vietnam, according to Duong, Binns and Lee (2004), was influenced by cultural norms that impeded the autonomy of women with regard to childbearing.

Awonodomo (2013) noted that there are many family and cultural practices on the Africa Continent that influence maternal health such as religious beliefs, beliefs towards the use of contraceptive, intimate partner violence, attitude towards the use of health facilities and traditional birth attendants among others. Globally, over 10 percent of all women do not have access to or are not using an effective method of contraception of which husbands' attitudes towards contraception strongly influence the willingness and ability of women to use contraception (UNFPA, 2012). According to Achonga (2010), some communities also frown upon the use of contraceptives or think it could later prevent the woman from giving birth. These practices have resulted in high adverse health consequences including elevated risks of pregnancy related and unsafe abortion complications and maternal death. In several villages on the Africa Continent, it is considered that the more children a woman has, the more fertile she is. However, Obeng-Kyereh (2011) noted that this indigenous belief has adverse effect on the women as it increases their chances of dying through giving birth.

In Ghana, Awonodomo (2013) disclosed that though pregnant women in Ghana are free to enroll in Ghana's National Health Insurance, many pregnant women prefer to deliver at homes and suffer complications since most of these women live in societies where some of the cultural and family practices are not helpful to their health. Furthermore, many of the women adhere to traditional birth practices which have several implications for the health of the child and the mother. In the Northern part of Ghana, Awonodomo



(2013) noted that women are considered to be strong and independent if they can deliver themselves without going to a health facility for safe delivering while others prefer the services of a traditional birth attendant. However, these beliefs at times lead to very dangerous health circumstances since the women delay assistance can often result in maternal and child death. It is also important to note that aside traditional birth attendants, mothers, mothers-in-laws and elderly female relatives in the communities have substantial influence on women's decision to seek delivery care during pregnancy.

Ghana seems to have made some progress in the reduction of maternal mortality. According to the World Health Organization, childbirth related deaths in Ghana between the beginning of 2011 and the end of 2012 was 2,700. The Northern Region of Ghana recorded the highest maternal mortality rates within the same period. Boadi (2013) disclosed that although Ghana's maternal mortality has declined by 44 percent since 1990, the current rate of 350 deaths per 100,000 live births is still very high. World Health Organization (2012) also indicated that 29 newborns per 1,000 live births die every year in Ghana ranking Ghana as the 41st on world maternal mortality rate index.

In Ghana, the Ministry of Health (MOH) through the Ghana Health Services (GHS) and Teaching Hospitals are making frantic efforts to reduce maternal deaths. These efforts include training of health professionals, construction of clinics and hospitals, the provision of logistics and equipment to enhance delivery services. In addition to these, there is an open policy for free maternity services for pregnant women over a year ago coupled with education on maternal health issues. Despite these efforts, maternal deaths are still persistent or are still high.



1.2 Statement of the Problem

Issues related to maternal health have generated a lot of empirical and theoretical information. However, despite the amount of work published on the topic, maternal and child mortality continues to occur at high rates while solutions to the problem are still not clear (Ronoh, 2005). Thus despite longstanding international commitments to enhancing maternal health by reducing maternal death, so far progress has been disappointing. The motivation for this research stems from the concern that although knowledge has been developing continuously for over a century within the field of maternal health, and sound knowledge now exists on how to prevent the vast majority of maternal deaths, there remains an extremely high prevalence of maternal mortality in the Upper West Region.

In the Lawra District in the Upper West Region, the following statistics are shown for maternal and child death from 2008 to 2013. In 2008 5 maternal deaths and 34 still births were recorded. In 2009 total maternal deaths stood at 3 with 15 still births recorded while in 2010, 3 maternal deaths and 31 still births were also recorded. In 2012 no maternal death was recorded with 7 total still births recorded within the period.

An assessment of the statistics above implies that although some gains are being recorded over the years, the impact has been marginal in spite of the gains made in the provision of adequate health facilities and the number of health personnel to help provide quality healthcare in the facilities provided.

Specifically, although several indicators have been used to enhance maternal health including adequate health facilities and the number of health personnel to help provide



quality healthcare in the facilities provided, the indigenous role of the family as well as cultural practices on maternal health seemed to be limited in the global literature. There is limited study carried out on the maternal health of Lawra people, especially focusing on sensitive issues like maternal health and indigenous family and cultural practices. This is essential in identifying the main indigenous family as well as cultural factors that lead to delays in seeking treatment by mothers and subsequently recommend methods to curb these problems.

Thus, although the Lawra District in Upper West region of Ghana implements and adheres to the policies and programme interventions of the Ministry of Health (MOH) and other agencies in relation to improving maternal health, some cultural practices are being observed in the District which have hugely contributed to loss of life among expectant mothers and newly born babies. Such customs/cultures include prohibiting a woman from attending antenatal clinics and refraining a pregnant woman from rushing to hospital when labour has started awaiting consent from an uncle for example.

Against these backgrounds, it is important to examine questions like the role of the family in enhancing maternal health, what family barriers do women encounter in enhancing their maternal health as well as the strategies which could enhance women reproductive health services . This is essential in modifying some of the cultural and family practices which contribute to the deaths among pregnant mothers and their newly born babies.



1.3 Research Questions

In relation to the stated objectives of the study, the following research questions are formulated to guide the study:

1.3.1 *Main Research Question*

What is the role of the family in maternal health in Lawra District of the Upper West Region?

1.3.2 *Specific Research Questions*

- i. What is the general perception of men and women of the Lawra District about maternal health?
- ii. What are the indigenous cultural and family practices that promote or hinder maternal health in the Lawra District?
- iii. What are the effects of indigenous cultural and family practices on maternal deaths in the Lawra District?
- iv. What are the relevant recommendations that can help promote maternal health in the Lawra District?

1.4 Research Objectives

1.4.1 *Main Research Objective*

The main objective of this study is to explore the indigenous role of the family in enhancing or hindering maternal health.



1.4.2 *Specific Research Objectives*

- i. To examine the general perception of men and women of the Lawra District about maternal health;
- ii. To identify the indigenous cultural and family practices in the Lawra District that promote or hinder maternal health;
- iii. To explore the effects of indigenous cultural and family practices on maternal deaths in the Lawra District; and
- iv. To make relevant recommendations that can help promote maternal health in the Lawra District.

1.5 **Hypothesis**

To further support the research objectives and formulated research questions, the following hypotheses are set:

110: There is no statistically significant relationship between indigenous family/cultural factors and maternal mortality

111: There is a statistically significant relationship between indigenous family/cultural factors and maternal mortality.

1.6 **Scope of the Study**

Population growth or increase comes about because of the interplay of three main demographic variables namely fertility, mortality and migration. This growth can be high, low or stable and all these have implications for a country's socio-economic development and the standard of living of the people. Of the three demographic



variables, focus shall be placed on maternal and child death by specifically examining the relationship between indigenous family and cultural practices that hinder or promote maternal health among women. This choice is informed by the fact that a woman's chance of dying during pregnancy and childbirth is closely connected to her social and economic status, the norms and values of her culture.

Of the main dimensions of maternal health (Maternal mortality and Morbidity), this study is more focused on maternal mortality and child death. Serious disease, disability or physical damage such as fistula and uterine prolapse caused by pregnancy-related complications are exempted from this study based on the fact that maternal morbidity is widespread, but not accurately reported.

Additionally, in recent years, there has been increased recognition that reducing maternal mortality is not just an issue of development, but also an issue of human rights. This study is not concerned about the cultural and family practices that necessarily violate the dignity and human rights of the women, but rather, those that have implications for their maternal health. Additionally, although a key component of maternal health involves examining the attitudes and behaviors of health care providers, which often reflect dominant cultural norms and gender attitudes, some of which can be discriminatory towards pregnant women, this study shall explore the two delays models which are attributed to non-medical causes of maternal deaths in Ghana.

1.7 Significance of the Study

Better empirical understanding of the role of the indigenous family in enhancing maternal health is essential in reducing maternal mortality. In this regard, this study will



fill the intellectual gap by providing empirical explanation of the roles of the indigenous family in determining maternal and child health as well as addressing social and cultural factors that may discourage some of the most vulnerable women from seeking care. It will also generate useful data that would prompt further research into the subject. This information could also help provide the basis for appropriate interventions as well as for creating opportunities for rural women and stakeholders such as the MOH to provide maternal health education policies and programmes to address the incidence of maternal mortality in the District. This is essential to enable the development of a more reality-based integrated programme to meet the total health needs of women with special emphasis on enhancing maternal health.

Thus, for policy making, the implications of this study for NGOs and other civil society organizations aside governmental agencies such as the Ministry of Gender, Children and Social Protection is that the results of this study could lead to the development of programmes to revitalize maternal health education, sensitization, mobilization and motivation for health as well as the redirection, strengthening and provision of maternal health information to sustain the motivation of women and children health based programmes. It would also serve as a strategic document for reviewing the educational campaign programmes of stakeholders in the health sector on the cultural and family practices and behaviors towards maternal health.

Furthermore, men's knowledge about danger signs of pregnancy and what to do about them is very relevant to their lifesaving role during pregnancy and childbirth. Although the emphasis in global reproductive health programming in developing countries has mainly focused on educating women about issues such as maternal health care and



family planning, this study could provide baseline information in involving men in maternal health care programmes. An analysis of the cultural practices in the context of this study could also help traditional leaders in the Lawra District as well as the country at large to modify some cultural practices that increase maternal and child mortality in order to make the safe motherhood initiative a success. Thus this study has implications for urging traditional leaders to play a very significant role in using their influence to change some of the practices for the betterment of women of child bearing age.

1.8 Limitations of this Study

Of the 11 districts that make up the Upper West Region, this study is limited to only the Lawra District. Limiting the sample to the Lawra District would affect the generalization of the research findings. However, appropriate sampling techniques were employed such that the findings gave some insight into the problems to help in decision making. Additionally, considering the fact that a greater number of women in the District are illiterate, some may be unwilling to open up to give information concerning their cultural and family practices that militate against their maternal health. Therefore, some important information could be withheld and this is expected to affect the outcomes of the study.

Additionally, data availability means that this study would only examine maternal deaths which occurred during the intrapartum period only, and could not include antepartum deaths due to abortion complications or ectopic pregnancy. The implication of this restriction is potentially limited as the large majority of maternal deaths take place in this period.



1.9 Organization of the Study

The study would be structured into five chapters. Chapter One is the introductory chapter containing the problem statement research questions, objectives etc. Chapter Two will review related literature from the conceptual, empirical and theoretical perspectives. In this chapter, literature on the concept of maternal health among other related concepts or themes will be reviewed. Chapter Three discusses the profile of the Lawra District. The fourth chapter provides an in-depth explanation of the methodology of the study. It describes the study design including the qualitative and quantitative research designs (mixed design), study population indicating the unit of analysis, sampling technique and procedure (methods of sampling the study's population), research instruments (data collection instruments including structured questionnaire, focus group discussion and interview schedule), ethical consideration (ethical issues relating to the administration of questionnaires and conducting of in-depth interviews and focus groups discussion including respondents anonymity and confidentiality) and methods of data analysis (plan for analyzing the data obtained from the questionnaire, focus group discussion and interviews in relation to the research questions). Chapter Five presents the results and discussion of the findings. The discussion would be done in relation to the pertinent concepts discussed in the review of literature while Chapter six focuses on the summary, conclusions and recommendations. The major findings from the study will be presented in this chapter as well as the directions for policy making and future research.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section is divided into three parts. Part one looks at the overview of maternal health, the family, cultural and family practices which hinder maternal health, medical and non-medical causes of maternal mortality and strategies to promote maternal health, part two examines the theoretical framework for this study and part three identifies the gaps in literature.

2.2 Overview of Maternal Health

This part critically analyses the relevant literature in relation to the role of the indigenous family in enhancing maternal health. The part draws on the previous work of esteemed researchers and practitioners in order to enhance a unified health management framework suitable for use in the study. The review of literature is performed from the conceptual, empirical and theoretical perspectives.

2.2.1 The Nature of Maternal Health and Mortality

Maternal health is one of the main global health challenges and reduction of the maternal mortality ratio by three-quarters by 2015 is the target for the MDG 5. However, this goal is the one towards which the least progress has been made and complications during pregnancy and childbirth remain a leading cause of death and disability among women of reproductive age in developing countries.



Improving the health-care system overall is undoubtedly a critical component to reducing maternal mortality and improving the general health of a nation. However, accurately measuring the progress nations are making and evaluating programs is an unexpected challenge (Graham et al, 2008). In this regard, the World Health Organization (2005) report that reducing maternal mortality and reaching the MDG5 target by 2015 is proving a serious challenge for many countries, including Ghana. Generally, it can be deduced from the literature that maternal health in totality is the health of women during pregnancy, childbirth, and the postpartum period as well as the health care dimensions of family planning, preconception, prenatal, and postnatal care in order to reduce maternal morbidity and mortality.

On the other hand, maternal mortality is defined by the World Health Organization as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration of the pregnancy, from any cause aggravated by the pregnancy or its management, but not from accidental or incidental causes (Hovert, 2007).

Okeibunor, Onyeneho and Okonofua (2010) submitted that medical causes of maternal deaths include direct and indirect obstetric deaths. Thus maternal death is divided into two groups namely direct and indirect obstetric deaths:

- Direct obstetric deaths are those resulting from obstetric complications of the pregnant state (pregnancy, labour and the puerperium) from interventions omissions, incorrect treatment, or from a chain of events resulting from any of the above.



- Indirect obstetric deaths are those resulting from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but was aggravated by the physiological effects of pregnancy (WHO, 2004).

According to WHO (2005), indirect causes account for 20 to 25 percent of maternal deaths and are attributable to illnesses aggravated by pregnancy. They include anemia; malaria; HIV/AIDS; diseases of the heart, lung, liver, or kidneys; and ectopic pregnancies. Physical violence and accidents are not included in this group. The following terms have been operationalized as follows in the work:

Maternal mortality: When a woman dies due to pregnancy-related complications. This could be during pregnancy, at the time of delivery or even after delivery.

Maternal health: Health of women during pregnancy, childbirth and the postpartum period.

Antenatal care practices: The care of the mother before delivery.

2.2.2 Global Statistics on Maternal Health

Maternal mortality is unacceptably high. About 800 women die from pregnancy- or childbirth-related complications around the world every day. In 2010, 287 000 women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented (Patton et al., 2009). The maternal mortality ratio in developing countries is 240 per 100 000 births versus 16 per 100 000 in developed countries. There are large disparities between countries, with few countries having extremely high maternal mortality ratios of 1000 or more per 100 000



live births. There are also large disparities within countries, between people with high and low income and between people living in rural and urban areas.

Thus developing countries bear a disproportionate share of maternal deaths: 99 percent occur in developing countries compared to one percent in more developed nations. Sub-Saharan Africa and South Asia accounted for 87 percent of global maternal deaths in 2008 and 50 percent of all deaths occurred in six nations: India, Nigeria, Pakistan, Afghanistan, Ethiopia, and the Democratic Republic of Congo. For the poorest nations, such as Afghanistan and Somalia, the lifetime risk of dying as a result of pregnancy or childbirth is 1 in 11 and 1 in 14, respectively, whereas in the industrialized nations of Northern Europe, the lifetime risk ranges from 1 in 7600 to 11,400 (WHO, 2012).

2.2.3 Indicators for Measuring Maternal Mortality

According to Hill, Stanton and Gupta (2001), several indicators have been developed to measure maternal mortality. Four measures of maternal mortality are commonly used. First, the maternal mortality ratio is expressed as the number of maternal deaths during a given time period per 100,000 live births during the same period:

$$\text{Maternal Mortality Rate} = \frac{\text{No. of maternal deaths}}{\text{No. of women age 15-49}} \times 100,000$$

Source: Hill (2007)

The MMR represents a measure of the risk of death once a woman has become pregnant. As a ratio, it is not a true risk, as it involves two different populations, pregnant women and live newborns. The ratio can be influenced by the prevalence of



stillbirths as well as the prevalence of induced abortions. The maternal mortality rate is a cause-specific mortality rate for women of reproductive age in the presence of other causes of death.

The MMRatio was designed to express obstetric risk. The MMRatio may overestimate obstetric risk by excluding from the denominator pregnancies which do not terminate in a live birth but which may be responsible for a maternal death. Although in theory, it would be preferable to refine the denominator to include all pregnancies, in practice it is rare that suitable data on pregnancies not resulting in a live birth are available. Thus, care must be taken when comparing the MMRatio across countries as this indicator is not an age standardised measure.

Even though, the MMRate indicates the burden of maternal death in the adult female population, it conceals the effect of differing levels of fertility in cross-country comparisons. The relationship between the MMRate and the MMRatio is as follows:

$$\text{MMRatio} = \frac{\text{MMRate}}{\text{General Fertility Rate}}$$

Source: Hill (2007)

According to Hill (2007), a third indicator is the proportion of deaths of all women in reproductive age due to maternal mortality (PMDF) or simply number of maternal deaths / female deaths aged 15-49. This is a measurement expressing the share of maternal mortality in relation to all female deaths. This indicator is often used to



calculate the MMR as it is thought to be more reliable than a direct estimation of the MMR.

$$\text{PMFD} = \frac{\text{Number of maternal deaths}}{\text{Number of deaths among women 15-}}$$

49 Source: Hill (2007)

The fourth indicator of maternal mortality is the lifetime risk of maternal death (LTR). The LTR reflects the chances of a woman dying from maternal causes over the course of the woman's 35-year reproductive life span. This indicator considers the probability of a death due to maternal causes each time a woman becomes pregnant. A common way of calculating the LTR is:

$$\text{LTR} = 35 \times \text{MMRate}$$

Looking at the LTR gives a useful idea of the risk of maternal deaths throughout the life period of women in a specific population. The LTR reflects the chance of a woman to die from childbirth or pregnancy over her 35 years reproductive life span. The LTR is calculated from tables where age-specific deaths rates for reference periods are calculated and summed up. In doing so, it accounts for both the probability of a death due to maternal causes each time a woman experiences pregnancy and the number of times she is at risk (Stanton, Abderrahim & Hill, 1997). It is calculated as follows:

$$(1-\text{LTR}) = (1-\text{MMR}) \text{TFR (Total Fertility Rate)}$$

Source: Stanton, Abderrahim & Hill (1997)



2.2.4 Prevalence of Maternal Mortality in Ghana

The death rate of women at delivery is increasingly unacceptable in the country especially as the globe draws closer to the Millennium Development Goals (MDGs) of accessible, quality and affordable health care for all by 2015. Varied interventions have been made by the government, development partners and NGOs all aimed at meeting the target set for the MDGs (Kwode, 2010).

Ghana has persistently high maternal mortality ratios, estimated to range from 214 to 800 per 100,000 live births. In addition, Ghana has increasing social inequalities for this indicator (Witter, Arhinful, Kusi & Zakariah-Akoto, 2007). Demographic and Health Survey data shows that deliveries with health professionals increased from 85 percent in 1993 to 90 percent in 2003 for the richest quintile while deliveries with health professionals for the poorest quintile dropped from 25 percent to 19 percent. At national level, 45 percent of births were attended by a medical practitioner (79 percent in urban areas, 33 percent in rural areas), 31 percent were attended by traditional birth attendants (TBAs) and 25 percent were unsupervised. There were also significant regional variations. The three northern regions, for example, have the highest levels of poverty and maternal mortality and the lowest levels of supervised deliveries (Witter et al., 2007). In Ghana, maternal mortality data is collected by each individual institution, rather than compiled nationally (Ministry of Health/Ghana Health Service, 2011). Institutions are judged by their individual performance. Referral hospitals represent a particular problem in terms of collection of mortality data. In 2009, Ghana's national maternal mortality rate was 450/100,000 (Ghana Global Health Initiative, 2012).



Subsequently, Boadi (2013) disclosed that although Ghana's maternal mortality has declined by 44 percent since 1990, the current rate of 350 deaths per 100,000 live births is still very high. A 2012 World Health Organization report, 'Trends in Maternal Mortality: 1990-2010,' which made this known, also said 29 newborns per 1,000 live births die every year in Ghana, an avoidable situation that decision makers cannot brush aside. According to Senyo (2013), Ghana has been ranked 41st on world maternal mortality rate index.

According to the World Health Organization, childbirth related deaths in Ghana between the beginning of 2011 and the end of 2012 was 2,700. It also reported that the Northern Region of Ghana recorded the highest maternal mortality rates within the same period. The regions health directorate estimated a total of 250 women died during childbirth (Boadu, 2013).

2.2.5 Maternal Health in the Lawra District

The Ghana Health Service Regional Directorate according to UNDP (2010) reported of MMR per 100,000 births as 402 for 2007 in Lawra district. The Ghana Business News reported that the Upper West Region has recorded 28 maternal deaths from January to May, 2014, a figure it registered during the whole of 2012.

2.2.6 Medical Factors Accounting for Maternal Mortality

Seddoh, Adjei and Nazzar (2011) pointed out that the major causes of maternal deaths are excessive bleeding, hypertension-related disorders, infection and anemia. Contributing factors are high unmet need for family planning, malaria, complications of unsafe abortion and poor skilled attendance at birth. UNICEF (2012) further submitted



that Haemorrhage remains the leading cause of maternal mortality, accounting for approximately one third of deaths. Hypertensive disorders of pregnancy, especially eclampsia, as well as sepsis, embolism and complications of unsafe abortion claim further lives.

Similarly to UNICEF (2012), WHO (2014) noted that hemorrhage and hypertensive disorders together account for the largest proportion of maternal deaths in developing countries. Hemorrhage which is severe bleeding in pregnancy runs through as a leading cause of maternal mortality as outlined by all of the authors.

2.2.6.1 Hemorrhage

UNICEF (2008) defines hemorrhage as bleeding or the abnormal flow of blood and it may be "external" and visible on the outside of the body during and after delivery. Twenty five percent of all maternal deaths are caused by severe hemorrhage (WHO, 2005). Worldwide, the percentage is even higher than previously thought, ranging from 30–39% (Khan et al., 2006). Bleeding during pregnancy may indicate several conditions. In early pregnancy, it indicates threatened abortion. In later pregnancy, it suggests problems in placentation. The gravity of hemorrhage is that in anemic women, even a small amount of blood loss can be fatal. Postpartum hemorrhage is one of the most common reasons for blood transfusion, an intervention that has become dangerous with the advent of HIV/AIDS (Senah, 2003).

2.2.6.2 Anemia

UNICEF (2008) defines Anemia as when the number of red blood cells or concentrations of hemoglobin are low in a person. The patient gradually loses blood,



which means a loss of red blood cells and hemoglobin. According to Black et al. (2008), it is estimated that around half the pregnant women in the world suffer from some form of anemia, a common danger during pregnancy as the fetus absorbs the nutrients it needs for development. The condition can be exacerbated by infectious diseases, particularly malaria and intestinal parasites, and by low-quality diet. Anemia is treatable during antenatal care, but iron supplementation programmes have not been very effective in many developing countries. Pregnant adolescents – who are more prone to the condition than older women are at additional risk because they are often less likely to receive such care.

Additionally, Okeke (2011) submitted that anemia is a global public health problem affecting both developing and developed countries with major consequences for human health as well as social and economic development. It occurs at all stages of life cycle but is more prevalent in pregnant women and young children. It occurs when the concentration of hemoglobin falls below what is normal for a person's age, gender and environment, resulting in the oxygen carrying capacity of the blood being reduced. The majority of women in the developing countries start pregnancy with depleted body stores of these nutrients and this means that their extra requirement is even higher than usual. While less severe anemia may not be a direct cause of maternal death, it can contribute towards death from other causes particularly hemorrhage.

2.2.6.3 Sepsis

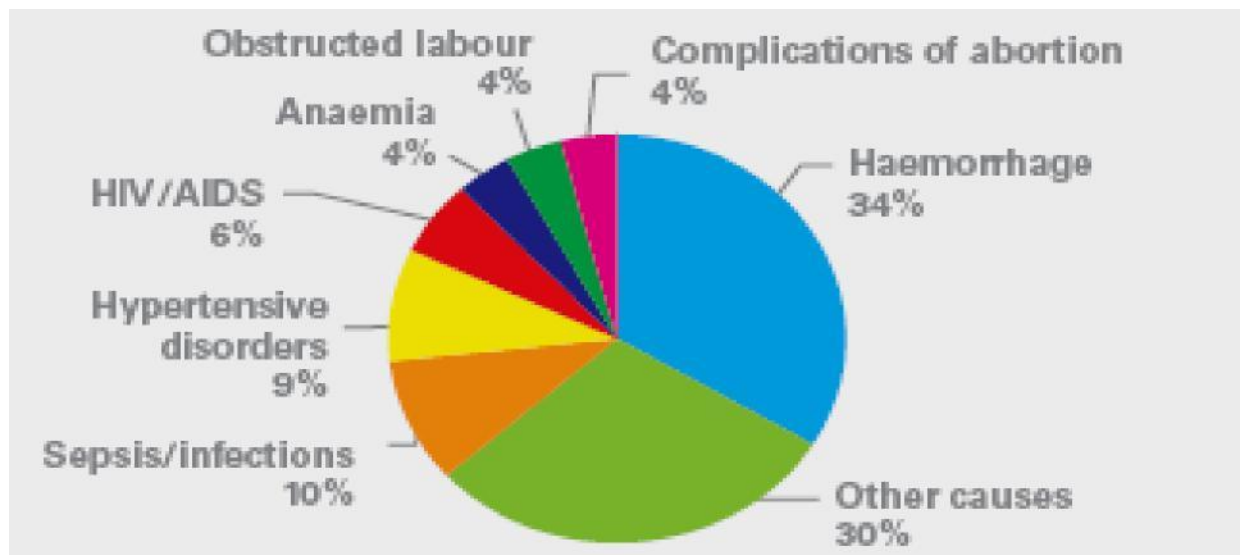
UNICEF (2008) defines Sepsis as a potentially life-threatening complication of an infection during pregnancy. Postabortal sepsis is worse in HIV/AIDS-infected women



(Mbaruku, 2005). Davis (2013) viewed sepsis as a potentially life-threatening medical condition that's associated with an infection; the infection's signs and symptoms must fulfill a minimum of two criteria of a systemic inflammatory response syndrome (SIRS). Blood poisoning is a nonmedical term that usually refers to the medical condition known as sepsis. Figure 1 shows the medical causes of maternal death (1997-2002) in Africa

Figure 1

Medical Causes of Maternal Death (1997-2002) in Africa



Source: UNICEF, 2008

2.2.7 The Family (Types and Structure)

The word family is used as a term to refer to both nuclear and extended family. The traditional Ghanaian family is more than the nuclear unit. The extended family system is often based on kinship and or lineage ties. On the basis of the lineage ties, two main family systems exist in Ghana: the matrilineal and patrilineal. Under the matrilineal



system, women exercise a great deal of power in contributing to the family including and not limited to decision making and inheritance. Members of the family include his mother, brothers and sisters and children of the sisters and mother's brothers and sisters.

In contrast to the matrilineal system is the patrilineal system where decisions are made by male household heads among others. This has implication on maternal health especially regarding the two delay models which are attributed to non-medical causes of maternal deaths in Ghana among others. Under the family system, kinship tiers is more than classification, they involve rights, obligations and relationships.

The family serves as the centre for most societies especially in Ghana. The family is sustained through a series of kinship network and marriages and is acknowledged as the bedrock to social life. The family is not only the basis of Ghanaian social organization but it is also the main source of support and care taker of the young and social security during old age (emotionally and financially).

2.2.7.1 Marriage, Family Formation and Child Bearing (Family Roles)

According to Caldwell (1982) carried by <http://family.jrank.org/pages/703/Ghana-family-structure-family-formation-family-life.html>>Ghana-family, indicated that studies within the Sub Region of West Africa indicate that men are expected to marry. Marriage therefore is nearly universal. Marriage life is very important to many Africans including Ghanaians because it is the basis for assigning productive, economic and noneconomic roles to individuals. Not only are Ghanaians expected to marry but it is usually unthinkable for married couples to be childless unless for medical reasons. Men are expected to provide the basic needs of the family while the woman plays the child



bearing, domestic roles and assistance in carrying out work e.g. farm work among others. In addition, studies also show that because Africans value child bearing, they tend to have larger families. This has an implication for maternal health as the more children women have, the greater the chances or risk of maternal health including death (Santrock,1998), Abdullah, 2014)

In traditional Ghanaian society, different ethnic groups and lineages built alliances through the institution of marriage. Marriage is supposed to serve the need of the extended family members as well. As a result, the choice of marriage partner is not left to the bride or groom alone. In some cases marriage was arranged to serve the needs of the extended family.

2.2.8 Indigenous Cultural and Family Practices that Hinder Maternal Health

The issue of culture brings us to a further critical point in understanding patterns of rural health, which is the role of cultural attitudes towards health and community interaction. It is well known that rural identities, especially among males, are shaped around ideals of individualism and stoicism. In many societies, it is culturally regarded immodest to show early signs of pregnancy until it is visible (Arhin, 2001).

2.2.8.1 *Attitude towards Contraception/Family Planning*

The first step towards maternal mortality is conception and delivery. Although these are biological events, they are significantly influenced by the cultural usages and nuances of the community. The choice of the women to control their own sexual health is challenged by social/cultural and economic factors that mitigate their ability to decide independently and freely on their reproductive and sexual choices. The Macmillan



Dictionary (2013) defined a contraceptive as a drug, method, or object used for preventing a woman from becoming pregnant. Stacey (2013) expanded the Macmillan Dictionary's definition by indicating that contraception is the intentional prevention of pregnancy through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures. This means that something (or some behaviour) becomes a contraceptive if its purpose is to prevent a woman from becoming pregnant. Specifically, contraception (birth control) prevents pregnancy by interfering with the normal process of ovulation, fertilization, and implantation.

Before the introduction of the modern contraception like birth control pill, women ate or drank various substances to prevent pregnancy. The seeds of Queen Anns lace, pennyroyal giant fennel, and many other concoctions of plants and herbs were used as oral contraceptives. However, such folk remedies can be dangerous or fatal (Encarta, 2006). According to Santrock (1998), difficulty in using contraceptive has resulted in high adverse health consequences including elevated risks of pregnancy related and unsafe abortion complications, and maternal death.

In the same view Santrock (1998), Abdullah (2014) noted that short birth intervals are associated with increased risk of adverse maternal and neonatal health (MNH) outcomes. Improving postpartum contraceptive use is an important programmatic strategy to improve the health and well-being of women, newborns, and children. Family planning can reduce maternal mortality by preventing unwanted pregnancy and unsafe abortion and by promoting healthy pregnancies. Globally, over 10 percent of all women do not have access to or are not using an effective method of contraception



(UNFPA, 2012). It is estimated that satisfying the unmet need for family planning alone could cut the number of maternal deaths by almost a third.

Male attitudes towards contraception strongly influence the willingness and ability of women to use contraception. Ten percent of married women with unmet need for contraception in Latin America and the Caribbean, and 22 to 25 percent of married women with unmet need in Sub-Saharan Africa and Asia, do not use contraception because “their husbands or someone else close to them oppose the use of contraceptives. This poses an enormous challenge to women in Sub-Saharan Africa, where spousal consent for females to receive contraceptives is often required by health care providers (Guttmacher Institute, 2010).

The Ghana Health Service (GHS) has expressed worry about poor patronage of contraceptive and family planning methods across the country, saying that it was the major cause of maternal mortality ratio of which 20 to 30 percent were due to unsafe abortions. Thus Ghana suffers from high maternal mortality and morbidity partly due to high rates of unwanted fertility and relatively low use of modern contraception. Contraceptive prevalence (% of women aged 15-49) in Ghana was last measured as low (34.30) in 2011, according to the World Bank. Ghana’s Demographic and Health Survey (2008) reported that, over 98% of men and women know about at least one method of contraception. This knowledge is however at its lowest among poor and rural women. As is often the case, the gaps between knowledge and use is huge with only 50% of women reporting having used one method at some time with 42% using a modern method, commonly male condom, and 25% using a natural method, commonly rhythm method.



In northern Ghana, Adongo et al. (1997) found that women who chose to practice contraception risked social ostracism or familial conflict while in some areas; women need their husband's permission to visit a health facility or to travel unaccompanied, which may result in either clandestine or limited use of contraceptives. This explains the decreasing acceptance rate of 31% in 2009 to 24.9% in 2010 and relatively the same in 2011 among women (GHS, 2012)

2.2.8.2 Attitude towards Health Care by Pregnant Women

Utilization of health services is a complex behavioral phenomenon. Empirical studies of preventive and curative services have often found that the use of health services is related to the availability, quality and cost of services, as well as to social structure, health beliefs and personal characteristics of the users. However, for the purpose of this study, focus shall be on health beliefs and personal characteristics of the user.

Utilization of maternal health care in rural Vietnam, according to Duong, Binns and Lee (2004) was influenced by cultural norms that impeded the autonomy of women with regard to childbearing. For instance, the low utilization of delivery care was associated with disadvantaged position of women in family where women had to abide by the decision of their husbands and parents-in-law. In India, data from the National Family Health Surveys (NFHS 3) conducted in 2005-2006 showed that although majority of men think that husband and wife should make decisions jointly, the husband should have the final word (International Institute for Population Sciences and Macro International, 2009). This has implications for the health-seeking behaviour of women, who may be dependent on their husband's permission to access health services. In



Gambia, a study by Secka (2010) indicated that women mostly initiated to seek antenatal care, however, men eventually decided. Decision making power of men was grounded in religious obligations, cultural and traditional factors and the conventional view of husbands being providers and custodians of monies. Traditional birth attendants, mothers, mother's in-laws and elderly female relatives in the communities had substantial influence on women's decision to seek delivery care from a health facility during pregnancy. In Nigeria, Ewa et al. (2012) investigated the supposed factors apart from socio-economic factors influencing the choice of antenatal care and delivery centres among childbearing women in Ibadan North Local Government Area of Oyo State. It was noted that husband's decision or preference of antenatal care and privacy constituted the prominent factors that influenced the choice of antenatal care as well as place of delivery.

Awonodomo (2013) disclosed that though pregnant women in Ghana are free to enroll in Ghana's National Health Insurance, many pregnant women prefer to deliver at homes and suffer complications. They are not aware that delivering at a health facility is free, and that delivery with trained personnel is important and can be life-saving. These women live in societies where some of the cultural practices are not helpful to their health. Women in these communities with low or no education adhere to very bad traditional birth practices. A common birth practice is for a woman to give birth completely alone and the pregnant mother alone is the one who decides if outside help is needed. Women are considered to be strong and independent if they can deliver themselves without external help. These beliefs at times lead to very dangerous



circumstances as the women delay assistance, which can cost them their lives or the life of the baby.

Boadu (2013) conducted a study on the factors causing maternal death in the northern region of Ghana where it was found out that Traditional Birth Attendants (TBAs) were mostly the first point of call for most women in rural communities. Similar findings were also noted by Abotzabire (2008) examining factors that account for high maternal mortality in the Bawku West District in the Upper East Region of Ghana. The results revealed that more than half of the maternal deaths occurred after the women had delivered. On health seeking behavior, it is demonstrated that maternal death cases (47.2%) did not use antenatal care services because they were prevented by their compound heads.

2.2.8.3 *Violence against Women (Intimate Partner Violence)*

In some cultures, women may not be able to choose when to have sex, and may be subjected to violence if they resist their partners (Heise et al. 1995). The high mortality rate among pregnant women, according to WHO (2014) can be attributed to violence against women. It is estimated that one in four women worldwide is physically or sexually abused during pregnancy, usually by her partner. Violence against pregnant women is associated with a risk of miscarriage.

A study of 400 villages in Pune, India showed that 16 percent of all deaths during pregnancy were as a result of partner violence (Gantra, Coyaji & Rao, 1998). Homicide is a leading cause of traumatic death for pregnant and postpartum women in the United States, accounting for 31 percent of maternal injury deaths (Jeani, Berg, Saltzman &



Herndon, 2005). Additionally, Martin, Macy, Sullivan and Magee (2007) indicate that intimate partner violence accounts for a substantial proportion of deaths among pregnant women in the United States. In the UK, over 14 percent of maternal deaths occur in women who have told their health professionals they are in an abusive relationship (Taskforce on the health aspects of violence against women and children, 2010).

In Ghana, Zeim and Gyebi (2010) noted that despite the massive awareness being created about the harmful effects of domestic violence, it is believed that deeply entrenched socio-cultural practices and systems held by men still remain. This therefore gives men the edge to perpetuate violence against women thereby increasing the mortality rate of women during pregnancy.

2.2.8.4 *Religious Belief*

Sociocultural norms and religious beliefs influence people's reproductive health choices. An empirical study by the Population Council (1997) in Pakistan found that 76 percent of husbands and 66 percent of wives feared that God would become angry if they practiced family planning.

In Ghana, Mensah (2011) noted that religious beliefs make some Ghanaian women to go to priests for prayers or/and rituals when they are sick and during pregnancy. They only seek medical assistance when these prayers fail. Thus during pregnancy, they prefer going to priests and Baraka to pray for protection from witchcraft than going to clinics, or sometimes do both. Thus there are embedded cultural and traditional barriers to accessing maternity services in the country. They are the use of soothsaying, libation,



consultation with ancestors and use of herbs for pregnant women before orthodox services is contacted.

2.2.8.5 *Women Fertility Debate*

According to Obeng-Kyereh (2011), in the villages, it is considered that the more children a woman has, the more fertile she is; but this has adverse effect on the women as it increases their chances of dying through giving birth. Similarly, Awonodomo (2013) also mentioned that it is considered that the more children a woman has, the more fertile she is but this also increases her chance of dying through childbirth. Many families may not want to practice family planning because they want to produce more children who can help them on their farms.

2.2.8.6 *Taboos*

The most prevalent restrictions on pregnancy relate to dietary taboos. In some societies, pregnant women 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. Among the Kassena and Nankana of the Upper East Region, pregnant women are restricted to vegetarian diet; they must not eat meat and groundnut lest they give birth to "spirit children" (Senah 1993).

Darko (1992) also observed in Akwapim that expectant women were forbidden to buy 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. Similar taboos and restrictions have been found among the people of Anyamtan in the Dangme - West District (Arhin 2001). Clearly, while some



of these taboos may help to check foeto-pelvic disproportion, a very fatal condition, they may exacerbate the already deficient nutritional and anaemic status of pregnant women and subsequently affect the growth and development of the child.

2.2.9 None - Medical Factors Accounting for Maternal Mortality.

2.2.9.1 *Delays (delay in deciding to seek care, delay in reaching care in time, and delay in receiving adequate treatment)*

Maternal mortality in resource-poor nations has been attributed to the “three delays”: delay in deciding to seek care, delay in reaching care in time, and delay in receiving adequate treatment (GHS, 2006). The first delay is deciding whether to seek care. Lack of information and inadequate knowledge are responsible for the delay in responding to initial warning signs of complications of pregnancy and danger signals during labor. Certain traditions and cultures maintain that women must wait for approval from male relatives before seeking help further compound the situation (GHS, 2006). The second delay is linked to the constraints that women face in accessing health facilities. Weak referral linkages exist between community, health centers and district hospitals making it difficult for women in emergency situations to get the care they need (GHS, 2006). The situation is made worse by poor road and communication networks, distant health facilities, and a lack of transportation and inadequate community support. The third delay occurs between the time the woman arrives at the health facility and the facilities response in providing appropriate care (GHS, 2006). At health centre’s, preparedness to respond to obstetric emergencies is generally inadequate in terms of skilled attendants, equipment, supplies and drugs, and motivated staff.



Additionally, Boredison (2011) disclosed that there exists a fourth delay which is the delay in recognizing the problem. This fourth delay is an additional delay from the standard three delays. It includes lack of knowledge on the part of the woman and her family with regards to maternal health complications.

2.2.9.2 Long Distance to Health Centres (Lack of Health Centres)

In Ghana, one of the causes of maternal deaths is lack of sufficient medical care (centres) and the long distance of some of them. The availability of medical care (centres) is one of the factors that determine the treatment that a patient seeks. Many towns and villages in Ghana, until recently, did not have health centres. This lack of health centres and the long distances of health, forces many of the women to turn to traditional birth attendants, some of whom are not skillful enough, and result in maternal mortality. The distance that those who decide to go to health centres have to travel and the bad road conditions also lead to many deaths in times of emergency (Mensah, 2011).

2.2.9.3 Poverty

Poverty is also another cause of maternal mortality in Ghana. Although many of the women in Ghana now seek prenatal care during pregnancy, poverty makes it difficult for them to purchase the food they need and live in conditions better for their health and nurturing of the fetuses. Poverty, again, prevent most of the women from getting education that will let them understand their medications, nutrition and proper care of themselves during pregnancy. Until the User Fee Exemption Policy was implemented for pregnant women, the cash-and-carry system operated by the Ghana health sector



also prevented many of the women from accessing professional perinatal care and services during labour (Mensah, 2011).

Awonodomo (2013) disclosed that many women, because of illiteracy and ignorance, rely on myths, rumors and misconceptions that discourage them from using reproductive health services, particularly family planning. Some communities also frown upon this or think it could later prevent the woman from giving birth. The majority of the rural women who go for antenatal care (ANC) do not have or have had very little education on health issues, like this, while others feel too shy to ask questions because they are not comfortable asking questions in public. Most times, the clinics are full of nursing mothers and pregnant women with only one or two nurses attending to them. No education is given them for that month.

2.2.9.4 *Unsafe Abortions*

It has also been acknowledged that some mothers resort to unorthodox means of terminating their pregnancies because some of the pregnancies were unplanned and the ability to take good care of the pregnant woman and the unborn child is often a headache resulting in all measures to terminate the pregnancy at the earliest stage. Some try and fail to succeed resulting in other complications which could affect the mothers and the unborn contributing to the maternal mortality (Achonga, 2010).



2.2.10 Strategies to Promote Maternal Health Outcomes

2.2.10.1 *Postpartum Care*

A postpartum period (or postnatal period) is the period beginning immediately after the birth of a child and extending for about six weeks. During the postpartum period (after delivery), physical, social, and mental problems can emerge, indicating a need for strategies that encompass both preventive and curative intervention packages. For life-threatening disorders during or after childbirth, strategies that encompass emergency obstetric care packages are the most effective and efficient approaches. The risk of death, however, decreases steadily by 2 days postpartum, and so the optimum means and timing of the distribution of routine postpartum care during the entire 6-week period is unclear, beyond recommendation that intrapartum-care strategies need to cover the very high-risk period up to 24 weeks (Campbell & Graham, 2006)

2.2.10.2 *Family Planning*

Primary prevention according to Campbell and Graham (2006) is often touted as the ideal public-health measure, yet its use in reducing maternal mortality is either under-emphasized (for family planning), politically unpalatable to certain governments and donors (for induced abortion), or uncertain in effectiveness (for intervention on general health). Most discussions of strategies to reduce maternal mortality concentrate on detection of problems early and provision of treatment to prevent them becoming life-threatening, or on treatment of life-threatening complications to prevent death. Adverse outcomes in pregnancy are conditional on pregnancy itself, so prevention can be



separated into prevention of pregnancy and prevention of risk factors for complications and disease.

Thomas (2007) further disclosed that donors, UN organizations, and governments have made great strides in promoting family planning and contraceptive use. Due to this effort, millions of maternal deaths have been prevented. However, contraceptive use in many resource-poor nations is still not at optimal levels.

2.2.10.3 *Safe Abortion*

Campbell and Graham (2006) further submitted that failing to prevent unwanted pregnancy leads some women to induce abortion. Mortality associated with medical termination of pregnancy in a safe environment is lower than that associated with delivery at term. By contrast, mortality owing to unsafe abortion can be substantial, and is estimated globally to be 330 per 100 000 induced abortions, contributing to about 13% of maternal deaths. Safe technologies for inducing abortion are available, including medical abortions (e.g. with mifepristone or misoprostol), vacuum aspiration, and curettage.

Where legally, politically, and culturally acceptable, medical abortions could potentially be delivered at the household level, and attain high coverage, thereby averting a substantial proportion of maternal deaths. Mulama (2008) also disclosed that given the high rate of maternal death due to unwanted pregnancies, some countries, such as South Africa, Tunisia, and Cape Verde, are recognizing the importance of developing wider access to safe abortions. In countries such as Mali, Sudan, Benin, and Burkina Faso, where legally, politically, and culturally access to abortion creates internal dispute,



governments have allowed women access to safe abortions under specific circumstances, such as in cases of rape or fetal malformation. There are still some countries where women's access to safe abortions is nonexistent and medical communities face resistance when advocating policy change. Women who seek help may be ostracized.

2.2.10.4 Education

According to the University of North Carolina (2012), a scientific analysis of 50 years of maternal mortality data from Chile has found that the most important factor in reducing maternal mortality is the educational level of women. Educating women enhances women's ability to access existing health care resources, including skilled attendants for childbirth, and directly leads to a reduction in her risk of dying during pregnancy and childbirth.

2.3 Theoretical Framework: Health Belief Model (HBM)

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels working in the U.S. Public Health Services.

The model was developed in response to the failure of a free tuberculosis (TB) health screening program. It has subsequently been used to guide the design of interventions to enhance compliance with preventive procedures (Janz, Champion VL and Strecher, 2002.). Since then, the HBM has been adapted to explore a variety of long- and short-



term health behaviors, including sexual risk behaviors and maternal mortality (Glanz, Rimer & Lewis, 2002).

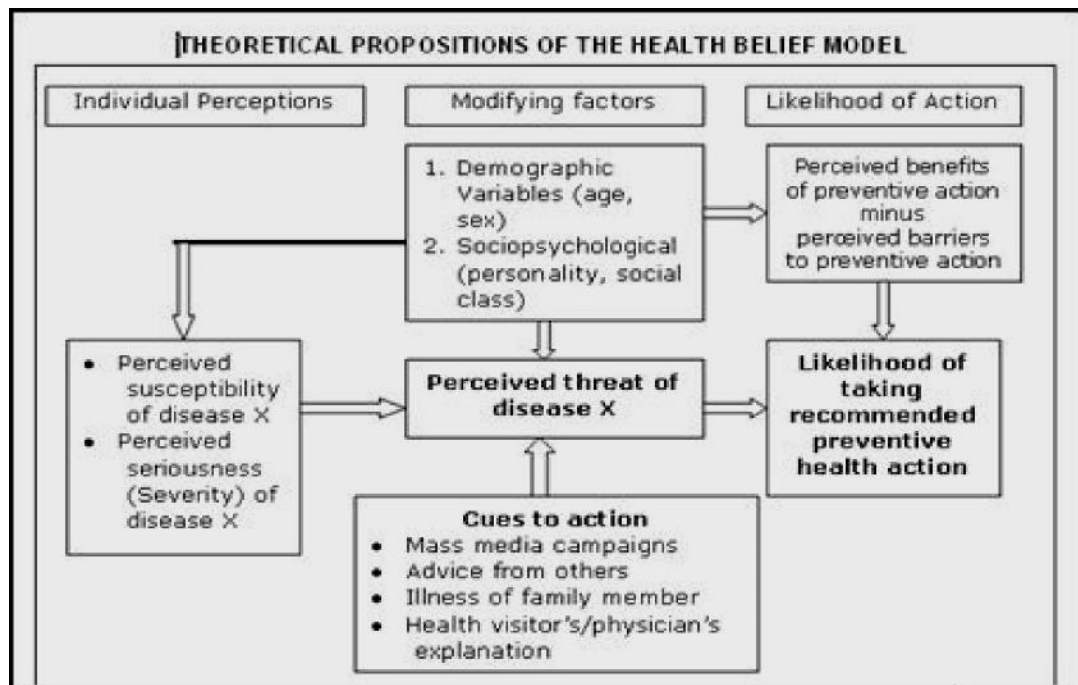
The Health Belief Model has been used to develop effective interventions to change health-related behaviors by targeting various aspects of the model's key construct.

There are six major concepts in HBM as illustrated in Figure 2.

1. Perceived Susceptibility, 2. Perceived severity, 3. Perceived benefits, 4. Perceived costs, 5. Motivation, 6. Enabling or modifying factors. The figure below shows the Health Belief Model

Figure 2

Health Belief Model



Source: Werner (2003)



In the HBM, the likelihood that a person will follow a preventive behavior is influenced by their subjective weighing of the costs and benefits of the action; the perception involves the following elements:

- *Perceived susceptibility*: The person's judgment of his or her risk of contracting the condition. This might be measured by questions such as "Taking all factors into account, what do you think are your chances of getting the disease (maternal or child death?"
- *Perceived seriousness of the condition*: The severity of the condition (its clinical consequences, disability, pain or death) and its impact on life style (working ability, social relationships, etc.). Questions might include "If you develop a complication during pregnancy, how serious would that be?"

Rosentock noted that the combination of perceived susceptibility and severity provide motivation for action (Rosenstock, 1974). The comparison of perceived benefit to perceived barriers provides the pathway to action. Thus, the stronger the perception of severity, susceptibility and benefit, the weaker the perception of barriers, the greater the likelihood that health protective action would be taken.

HBM is identified as the ideal framework for this study as maternal mortality should be seen as a reflection of the health belief system (HBS) of the family and the society as a whole (Werner, 2003). The HBM, which has been demonstrated to have application in the areas of preventive health behavior and compliance with medical regimens, is offered as a potentially useful conceptual framework for family planning research.

Specifically, the model is applied in this study as the theoretical framework on the basis that the Model is a framework for motivating people to take positive health actions that



uses the desire to avoid a negative health consequence as the prime motivation. In this instance, maternal mortality which is a negative health consequence can best be explored using the HBM. Table 1 shows the specific implications of the theory for this study using the six major concepts in HBM:

Table 1: The Six Constructs of HBM and Maternal Health

Constructs	Concept
Perceived Susceptibility	Women believe they can die or get a disability during pregnancy
Perceived Severity	Women believe that the consequences of maternal death or child death are significant enough to try to avoid.
Perceived Benefits	Women believe that the recommended action of using contraceptives/family planning would protect them from maternal death or child death
Perceived Barriers	Women identify their family and cultural barriers to enhancing their maternal health (attitude of husbands towards contraceptives, not attending health centers, violence against women etc)
Cues to Action	Women receive free cues for action in the form of incentives (free maternal health through NHIS)
Self-Efficacy	Women receive training in maternal health

Source: Researcher's Construct 2014

The HBM postulates that a person's or community's health-related behaviour depends on the perceived risk of outcome (whether a woman or a family member perceives women at risk for maternal and perinatal deaths if skilled care is not sought during childbirth), the perceived severity of the outcome, the perceived benefits of engaging in preventive action and the perceived barriers to taking that action (Hounton, Carabin & Henderson, 2005).



Specifically, the study employs the health belief model as the theoretical framework on the following basis: Applying constructs from the HBM can inform individual women health behaviors which may contribute to a woman's risk of perinatal death, The theory could help analyze the individual behaviors and habits which are influenced by family and cultural factors towards maternal health, The cultural beliefs of a community shape healthcare practices and local ideas about illness, Any health intervention for community members must be made sensible in the context of local beliefs and practices.

2.3.1 *Limitations of the Health Belief Model*

The available evidence indicates that the HBM has only a weak predictive power in most areas of health related behavior. This is in part a result of poor construct definition, a lack of combinatorial rules and weaknesses in the predictive validity of the HBM's core psychological components (Armitage and Conner 2000). Notwithstanding components like perceived barriers and demographic and socio-economic descriptors, as normally applied, this model may be taken implicitly to assume that people are rational actors, driven by their conscious perceptions of the world. This may misleadingly suggest that health behaviors can always best be understood as being under volitional control, rather than in a large part determined by combinations of circumstantial reality and individuals' habitual, emotional, unconscious and/or otherwise non-rational reactions to the external world. The research identified provides evidence that the overall explanatory power of the HBM is limited. However, the theory is found as the most appropriate for their study in spite of its few limitations.



2.4 Gaps in the Literature (Gaps in Current Maternal Health Research)

Although there is a general consensus that violence occur more often than other times, maternal deaths and child deaths that are due to homicide and suicides are excluded from most current maternal mortality definitions even including WHO definition. Specifically, the following gaps were noted from the literature based on the desk-based research:

- There are few studies that focus on indigenous family and cultural based deliveries and pregnancy and delivery outcomes.
- While there is a growing evidence base focused on facility based outcomes, there is limited research into the contribution of family based interventions for maternal health



CHAPTER THREE

PROFILE OF THE STUDY AREA

3.1 Introduction

This chapter discusses the location of the study area, its population, health facilities and other services and background on family types, culture - marriage and tradition of the people of Lawra and their various development implications

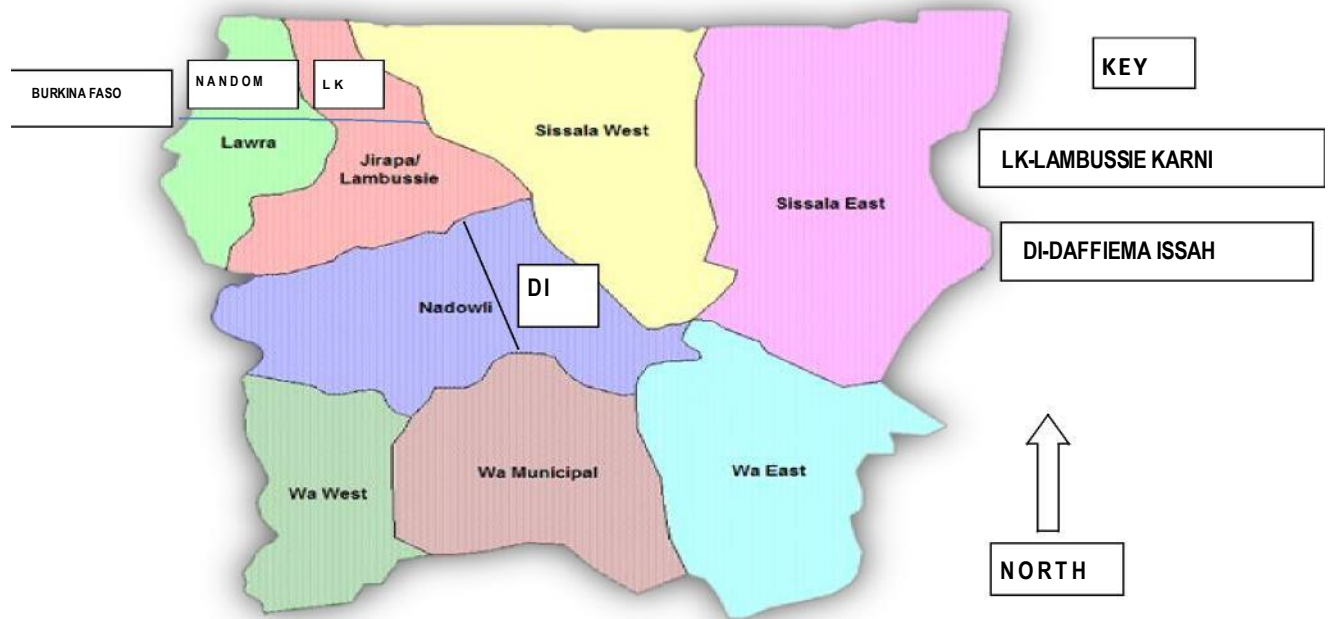
3.2 Location

The Lawra District is one of the Eleven (11) Districts that make up the Upper West Region and derives its legal existence from Legislative Instrument (L.I) 1434 of 1988. It lies in the North Western corner of the Upper West Region in Ghana between Latitudes 20° 25'W and 20° 45'W and Longitudes 10° 20'N and 11° 00'N. The District has its Administrative capital at Lawra and shares boundaries with Nandom District to the North, to the south with Jirapa District, to the west with Burkina Faso and to the East with Jirapa District. The development implication of the district location is that there is cross cutting of people seeking health services in other close districts. Example, some people in Downine prefer to seek health services or referral services in Jirapa Hospital instead of Lawra Hospital. This does not in any way put any pressure on any of these health facilities. There is however no record showing the incidence of people from Burkina Faso seeking services in Lawra Health Centres. This is so partly because of the dominant use of the Health Insurance Scheme Cards to seek health care in all health facilities in the district which people in Burkina Faso do not have. Figure 3 shows the Lawra District in Upper West.



Figure 3

Map of Upper West Showing Lawra District



Source: LDA Profile 2014 and Researchers Construct

3.3 Population

According to the Ghana Statistical Service as carried by the District Assembly Repository (profile) of Lawra (2010) Lawra had a total population of 54,889 - 2010. This represents a total of 26,346 (48%) males and 28,547 (52%) females. The male female sex ratio is 1:1.08 with a growth rate of 1.9% per annum. The development implication(s) of the growth rate to the maternal health is that there is a gradual rise in the child birth rate in the district. This may have implications on maternal health. This according to the Health Directorate will not have any pressure on health facilities.



Majority of the population are illiterates. This has implication for maternal health as the level of education of mothers and fathers determine maternal health outcomes.

The settlements in the district are basically the rural type. While the rural settlements are basically agrarian, the urban settlements are commercially oriented with emphasis on income-generating activities. There are four major settlements which are nucleated in nature due to lack and or inadequate physical planning and non-compliance to building regulations.

In the rural settlements however, houses are scattered with compound farms around them. This poses problems of meeting the threshold population criterion for providing development projects including health facilities.

3.4 Health Facilities

In the Lawra District, the District Health Administration serves as the highest implementing agency and the headship of the Ghana Health Services in the District. The District is zoned into five Sub-Districts which offers comprehensive Public Health. The Five (5) sub-Districts are being served by Health Centers. (Lawra District Assembly, 2013).

The District has a district hospital at Lawra, five sub-district hospitals (Babile, Dowine, Eremon, Lawra and Zambo), one polyclinic (Babile Polyclinic) and 11 CHPS compounds with one health staff per each CHPS compound. These health facilities provide clinical and public health services. The Lawra main hospital serves as a referral centre for the sub districts. Community based workers comprise 104 trained traditional Birth Attendants and 115 community based volunteers located in various communities.



Health service at the community level is done through the extension of services from the sub-district health facilities with an integrated package of services. The **18** health facilities in the District are expected to be managed by a Health Team comprising the following: Medical Assistant/ Public Health Nurse, Midwife, Technical Officer - Nutrition, Field Technician, Community Health Nurse, and Clinic attendant. Table 2: shows the distribution of the number of personnel across the health teams

Table 2: Personnel across Health Teams

Personnel	No. of personnel
Local Doctors / External Doctors	3/2
Medical Assistants and PHN	11
Midwives	14
Community Health Nurses	42
Technical Officer Nutrition	4
Field Technicians	5
Health Assistants Nurses	66
Clinic/Hospital Assistants	20
Total	171

Source: Lawra Health Directorate, 2014

Appendix 5 Tables 3 show the Human Resource Position of the Lawra District



However, due to inadequate staff in the Region and District, most health facilities in the District do not have the requisite staff numbers to manage them. The critical staff requirement for the health facilities are Medical Assistants, Public Health Nurses, midwives, Community Health nurses, Disease Control Officers and Nutrition Officers.

3.5 Background of the Family Types, Culture - Marriage and Tradition of the People of Lawra

The nuclear and extended family types both coexist exist in the district. According the Ghana Statistical Service, 2010 Population and Housing Census Report, the majority of the population practiced the extended family system – mostly common in rural communities and a few in towns across the district including the district capital. A number of nuclear families form a compound or household. Men are heads of households and for that matter they are the final decision makers in the family and community for that matter. They are the bread winners of the family. Women play the role of family care and child bearing and assist with household work. The patrilineal lineage inheritance system is practiced among the people in Lawra. Marriage is defined as civil, traditional, and common law/consensual union between a man and a woman. The people in Lawra inter marry among different houses (“yiri”) in the district. People of the same house/”yiri” (e.g.” Naa Yiri,” etc) can however not marry. Various clan groups exist in the district. They include “Kpogda, Somee,” etc. Majority of the people are subsistence farmers whilst a few along the banks of the Black Volta engage in fishing. Most of the women engage in “pito” brewing, petty trading, fuel wood business and shea butter extraction. Common food eaten in the area include “tuozaafe” and fresh or dry vegetables and “dawadawa”, beans cakes and vegetables, “sawele” (vegetables



“sawele”) beans among other foods which are known to be rich in nutrients like protein, vitamins, iron etc which are necessary for the health of pregnant women and children.

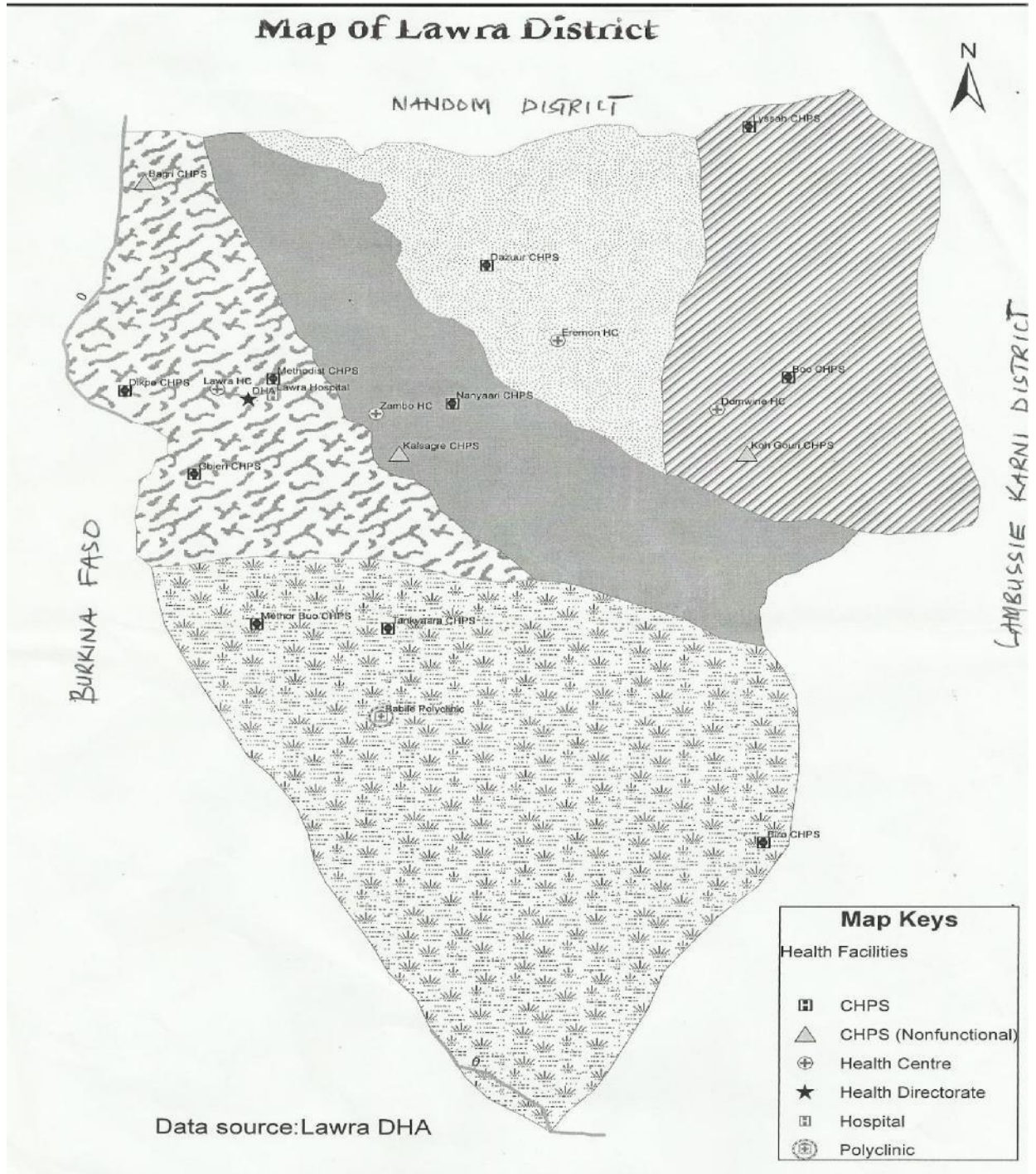
The most predominant tribe in the District is the “Dagaaba” with dialectical variations. There are other minor tribes such as the “Hausa, Ewe, Asantes” etc. They co-exist peacefully and inter-marry. According to the Ghana Statistical Service (2010), there are 9,200 households in the district. This represents 1,453 (15.8%) for urban and 7,747 (84.2%) for rural. Average household size is 4.5 for urban and 6.2 for rural.

The composition of a household in terms of the relationship of members of the household to one person they recognised and accept as the head. The head of the household is generally a person identified by members of the household as the one responsible for the upkeep and maintenance of the household, including the exercise of authority over household resources.



Figure 4

Lawra District Health Map showing Health Centres



Source: Lawra DHA, 2014

3.6 Reproductive Health

There are free medical services for pregnant women in all the 18 health facilities. This has resulted in high coverage of supervised delivery. The acceptance rate for family planning is improving but it is still unacceptably low in the district especially among the males. There is the need to target and involve men in family planning education programmes. The major activities carried out under the reproductive health programme are maternal death audits, stock of family planning devices, training of fifteen TBAs sponsored by CRS, sale and treatment of ITN, celebration of safe motherhood week and training and distribution. Table 3 in Appendix 1 shows the maternal mortality and still birth statistics in the District from 2008 to 2012.



CHAPTER FOUR METHODOLOGY

4.1 Introduction

This chapter presents the elements of methodology that was applied in this study. The methodology is carved out to meet the research objectives and address data gathering problems imminent in research. The major components of this chapter are the research design, study population, sample and sampling technique, data collection including sources of data, data collection instruments and procedure for data collection and the methods and statistical tools used for analyzing the data from the field are also discussed in this chapter.

4.2 Research Design

To meaningfully conclude and answer the formulated research problem and its related sub-questions in relation to the objectives, this study employed the survey design. According to Best and Khan (1998), survey is concerned with the conditions or relationships that exist, such as determining the nature of prevailing conditions, practices and attitudes; opinions that are held; processes that are going on; or trends that are developed.

Some of the main advantages of using the survey design to collect primary raw data from respondents according to Tannor (2010) are ability to accommodate large sample sizes, generalizability of results; ability to distinguish small differences between diverse samples groups; ease of administering and recording questions and answers; increased



capabilities of using advanced statistical analysis; and abilities of tapping into latent factors and relationship.

The survey design is found to be the most appropriate research design for this study because it has the potential to provide a lot of information from the sample of individuals within a short period. Thus the survey design is considered the most appropriate for this study on the basis of its advantages of economy of design, the rapid turnaround in data collection and the ability to identify attributes of the population from a sample derived from that population.

4.3 Study Population

Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions (Castillo, 2009). The units of analysis for this study are women who are pregnant, women who have given birth (preferences were given to those within one year of birth), family members (Household Heads) as well as the management of MOH (District Health Director and Midwives) and traditional birth attendants. The study included men to provide baseline in maternal health.

The study is limited to these women because they have better experience of any family or cultural practice which could hinder or promote their maternal health. Women who are pregnant, women who have given birth and family members (household heads) will help in unearthing and answering the research questions.



4.8 Sample and Sampling Techniques

Castillo (2009) indicated that due to the large sizes of populations, researchers often cannot test every individual in the population because it is too expensive and time consuming. Thus even if it is possible, it is not necessary to collect data from everyone in the target population in order to get valid findings. This informed the choice of relying on sampling techniques in this study. To effectively sample the study population, the study employed the multi-stage sampling and the purposive sampling techniques

The purposive sampling method was used in the sampling of the key informants (the management of MOH (including the District Health Director and Midwife) as well as Traditional Birth Attendants (TBAs). According to Boachie-Mensah and Seidu (2012), purposive sampling technique allows the study to choose subjects that will best serve the purpose of the study. Thus purposive sampling allows for the selection of subjects who provided the right information for the study.

Regarding the sampling of the key informants, a sample size of 19 key informants is considered for the study in relation to Crouch's (2006) suggestion that, in the case of qualitative research, thus, for interview-based research, small samples of less than 20, enhances the validity of fine-grained and in-depth inquiry. Therefore, a researcher should always aim at having at least samples by obtaining more referrals in case some of those approached do not participate.

However, Leedy and Ormrod (2001) indicates that purposive sampling can be highly prone to researchers' bias since it has been created based on the judgment of the



researcher, especially when compared with probability sampling techniques that are designed to reduce such biases. In this regard, probability sampling is also applied using the multi-stage sampling techniques so as to benefit from the strengths of probability sampling methods in order to eliminate the biases associated with the non-probability sampling (purposive sampling).

Multi-stage sampling was adopted for the study. Thus in multi-stage sampling, the sample is selected in stages, often taking into account the hierarchical (nested) structure of the population. Three stages of sampling were performed in all.

The first stage involved cluster sampling by zoning the District into the five health facilities (zones) which offer comprehensive Public Health Services. The 5 health facilities/zones served as clusters for this study.

Based on the fact that the units of analysis are homogenous in terms of traditional and cultural practices as well as maternal health practices as indicated by the District Repository (2010), stratified sampling was performed in the second stage to identify and select elements in each of the stratum (women who are currently pregnant, women who have given birth, family members (household Heads)).

Stratified sampling is a method of sampling that involves the division of a population into smaller groups known as strata. The method permits the researcher to identify sub-groups within a population and create a sample which mirrors these sub-groups. Appendix 3 shows the sample size calculation for each stratum.



The final stage of sampling involved accidental sampling of households where elements in each target population within each selected household were selected randomly

Such a sample is more representative of the population across the sub-groups and zones than a simple random sample would be. This stage accidentally selected the final households/respondents in each target population/strata across the 5 zones. However, it is important to note that in the selection of the respondents (households), focus was placed on the status (income) of the residents in the household by general intuitiveness. This is to ensure that respondents across all the income brackets form part of the study population. Figure 5 shows stages in multi-stage sampling.

Figure 5:

Multi-stage sampling

<p style="text-align: center;">Stage One</p> <p style="text-align: center;">Zoning of District into 5 Health facilities/zones using cluster sampling</p>
<p style="text-align: center;">Stage Two</p> <p style="text-align: center;">Stratified Sampling to Select target population (Pregnant women, women who have delivered and Household Heads) from each cluster/zone</p>
<p style="text-align: center;">Stage Three</p> <p style="text-align: center;">Accidental sampling/selection of households to select each Unit/respondent</p>

Source: Researcher's Compilation, 2014



The sample size of any research has a significant impact on the accuracy and precision of the results obtained, where larger sample sizes are perceived to produce more accurate results. Though, larger sample size positively affects the accuracy of a research finding, the accuracy is further determined by how representative the sampling technique employed in sampling respondents (Tannor, 2011). Thus as the sample size is a critical question in practice, the decision about the size of the sample needs to consider the time and the cost, the need for precision, and a variety of further considerations.

The formula below was used in determining the sample sizes for each of the stratum. The margin of error of 0.13, 0.09, and 0.11 for each stratum (women who are pregnant, women who have given birth and family members) respectively was used in the calculation based on the formula below.

$$SS = \frac{Z^2(p)(1-p)}{c^2}$$

Source: Umar, 2004

Where:

Z = Confidence level at 95% (Standard value at 1.96)

P = Estimated women of child bearing age Of 40% (0.40) according to the Lawra District Health Directorate according to the District repository was used in the calculation of the Sample size.



C = Margin of error

SS = Sample size

Appendix 3 shows the calculations of the sample sizes for each stratum.

Tables 4: Sample and Sampling Technique across the Various Units of Analysis.

Probability Sampling

Unit of analysis	Margin of error	Sampling technique	Sample size
Women who are currently pregnant	0.13	Stratified sampling	56
Women who have delivered	0.09	Stratified sampling	103
Family members (House hold Heads)	0.11	Stratified sampling	73

Source: Researcher's Construct, 2014

Purposive Sampling across the Units of Analysis

Unit of analysis	Sampling technique	Sample size
The District Health Director and Midwives	Purposive sampling	8
Traditional birth attendants	Purposive sampling	11

Source: Researcher's Construct, 2014



4.4 Data Collection

Data gathering is crucial in research, as the data is meant to contribute to a better understanding of the research (Bernard, 2002). In undertaking a research of this nature, it is most beneficial to use multiple sources of data to build a sound picture of the situation. In this study, both quantitative and qualitative methods (data) were used which is becoming the norm in development studies as it tends to show better results (Mikkelsen, 2005).

4.5 Sources of Data

This study employed both primary and secondary sources of data (multiple sources of evidence). The primary sources of data were obtained directly from the study's unit of analysis through the use of interview schedules, focus group discussions and structured questionnaires. The primary data collection method is to provide original data directly from the study population and un-biased information, although the method is time consuming in gathering data.

Secondary data on the other hand was obtained through desk based research using library research of books, journals, and the internet and publications on maternal health. Specifically, the secondary data would be obtained from the Ghana Demographic and Health Survey (GDHS) while information on the demographic and health characteristics, pregnancy, delivery and maternal and perinatal outcomes (up to discharge) of individual women of the Lawra District would be obtained from medical records at the District Health Directorate.

Secondary sources are economical because they save efforts and expenses; help to make primary data collection more specific since with the help of secondary data, the study would be able to make out what are the gaps and deficiencies and what additional information need to be collected. On the other hand, the disadvantage of secondary data is that the accuracy of secondary data is not known while data may be outdated. However, this study ensured that it includes only data that is current.

These multiple sources of data offered the study the opportunity of viewing many facets. This advantage is of particular interest to the study as it is noted in the literature that multiple sources of evidence provide for better empirical studies (Yin, 2003).

4.6 Instrumentation

Since the study is making use of both the qualitative and quantitative research methods, to improve the validity and reliability of the result, different instruments are used for gathering data relevant to achieving the research questions. Structured questionnaires guide were used to obtain quantitative data while in-depth interviews and focus group discussions would be used for gathering qualitative data.

4.6.1 Questionnaire

Structured questionnaires guide were used as the main tool for data collection from the study population. Specifically, the questionnaire was used as the main data collection instrument for collecting data from the respondents because of its cost effective manner, a large amount of data could be collected from a lot of the respondents within the shortest possible time and as compared to other forms of data collection instruments, questionnaires could be more objectively analyzed.





According to Creswell (2002), questionnaires have certain disadvantages. It is usually time consuming to administer among others. These limitations are addressed by providing open-ended items on the questionnaire as well as complementing the questionnaire with the focus group discussion as well as conducting key informant interviews with management to enable the respondents explain, opine, and make elaborations.

To ensure that the questionnaire contains relevant questions that can answer the research questions and objectives, the instrument is structured into sections with each section focusing on one of the objectives of the study. The first section however elicits the demographic characteristics of the respondents. These demographics are relevant in exploring how they relate to the objectives of the study.

The second section focuses on the general perception of the men and women of the Lawra District about maternal health while the third section identified cultural and family factors that influence maternal health outcomes. The fourth section investigates the effect of cultural and family factors on maternal health. The third and fourth sections of the questionnaire are designed around a four point likert scale. A four-point scale is used as against the traditional five-point scale due to the tendency for individuals to select responses in the centre of the scale if an odd number response scale is used. The questionnaire ends by eliciting the views and suggestions of the respondents on the relevant recommendations that can be made to promote maternal health in the Lawra District.



The key to getting the right data depends on the questions that are asked. Every well-structured questionnaire contained either close-ended, open-ended or both types of questions (Sanders, 1997). This questionnaire shall contain both closed-ended and open-ended items to make data analysis easy. Regarding the close ended items, respondents are provided with a set of options (multiple choices) to a question and are to choose among them.

The questionnaire was administered to the respondents using structured interviews. In this case, the data is collected by an interviewer rather than through a self-administered questionnaire where the Interviewer read the questions exactly as they appear on the survey questionnaire. The choice of the structured interview is based on the fact that most of the women of the Lawra District are either totally illiterate or partially illiterate of which this has implications for the respondents' understanding of the content of the questionnaire to adequately respond to the items on their own without an interviewer. Considering the geographical dispersion of the District and the efforts needed to administer the questionnaires as well as conduct interviews, five research assistants who have some experience in data collection was recruited to assist the researcher in the field work. To adequately perform the field work, the research assistants were trained by the researcher on the purpose of the study, the sampling technique as well as the items on the survey instruments.

4.6.2 *In-depth Interviews*

This study used open-ended interviews to collect data from the key informants using an interview schedule. Open-ended interviews, are a data collection method that are usually

conducted face to face between the interviewer and the participants allowing the researcher to control the process, and allowing freedom for respondents to express their thoughts (O'Leary, 2004). In this case, the schedule is designed using open-ended questions to allow for further probing and discussions.

The purpose of undertaking interviews for this research is to acquire more in depth and specific knowledge about the area of maternal health from people actively involved in it and to get a better understanding of the indigenous family and cultural practices that promote or hinder maternal health. The purpose is not to base the study or analysis on the interview data, but rather, to supplement the data from the questionnaire and the focus group discussion.

Prior appointments with the key informants were secured. At the meeting with each interviewee, the purpose of the study was explained, and all questions in this regard was answered. The interviews were tape-recorded with the permission of all the key informants and supported with notes taken by the study. Each interview is expected to averagely last between 20-30 minutes. This is necessary to eliminate the boredom often associated with long interviews.

4.6.3 Focus Group Discussion

Three Focus Group Discussions (FGDs) was held with women who are currently in their third trimester, women who have given births for at most three months. The FGD f was made of between 6-10 participants. This is to give every participant the opportunity to express her opinion, while providing diversity of opinions and clarifications. The researcher shall seek for the service of a co-moderator who would assist the researcher



in the taking and recording of notes to ensure that the groups are given the opportunity to participate in a lively and natural discussion amongst themselves.

The FGDs in this study is to help explore the meanings of the survey findings via the questionnaire which cannot be explained statistically, the range of opinions/views on maternal health. Since the study involves different target population, the FGDs can be useful in providing an insight into different opinions among the different parties involved in the maternal health process.

4.7 Validity and Reliability

An instrument is valid if it measures what it is intended to measure and accurately achieves the purpose for which it is designed (Patten, 2004; Wallen & Fraenkel, 2001). Patten (2004) emphasizes that validity is a matter of degree and discussion should focus on how valid a test is, not whether it is valid or not. According to Patten (2004), no test instrument is perfectly valid. The researcher needs some kind of assurance that the instrument being used will result in accurate conclusions. These principles would be addressed when designing the questionnaire, focus group discussion and interview guide through the pre-testing of the instrument. This is against Moser and Kalton (1985) assertion that however experienced the questionnaire designer may be, any attempt to shortcut these preparatory stages will seriously jeopardize the quality of the questionnaire.

To ensure the validity of the instruments, the questionnaire would be given to the supervisor for scrutiny, since validity is determined by expert judgment (Tannor, 2011). Apart from this, the instrument would be pre-tested in determining how reliable it is for





data collection in the main survey. Pretesting of the survey instruments is to help identify potential challenges during the main study by improving the interview questions, avoid repetition and to identify key issues to be investigated. Few revisions are expected to be made to the instruments after the pre-test. Specifically, the pre-test is conducted to: Develop and test adequacy of the research instruments, assess the feasibility of the survey instruments; and assess whether or not the research protocol is realistic and workable.

Since the questionnaire employs the likert scale, internal consistency of the items would be performed using the Cronbach Alpha Coefficients where a "high" value of alpha is often used (along with substantive arguments and possibly other statistical measures) as evidence that the items measure an underlying (or latent) constructs. Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability. According to Sekaran and Bougie (2010), if the Cronbach's alpha is less than 0.5, then the indication is that the instrument being used has a low reliability, and that not all the items meet reasonable standards of internal consistency and reliability.

4.8 Ethical Consideration

Ethical matters or considerations are very important for every research adventure or study (McNamara, 1994). This is most important for studies that involve the use of human subjects. Participants have a right to know what the research is about, how it will affect them, the risks and benefits of participation and the fact that they have the right to decline to participate if they choose to do so. Therefore, the policy of voluntary

participation would be strictly adhered to during the data collection phase for the purpose of ensuring the privacy as well as the safety of the participants.

Specifically, the significant ethical issues that would be considered in this research process include respondents consent and confidentiality. To secure the consent of the selected participants, the researcher shall relay all important details of the study, including its aims and purpose, while confidentiality of the participants would be ensured by not disclosing their names or personal information in the research. Only relevant details that would help in answering the research questions shall be included.

According to Creswell (2005), gaining access involves obtaining permission to sites and individual and negotiating approval with these individuals at a site who can facilitate the collection of research data. To gain access into the key informants, a letter of introduction was obtained from the University to the management of the District Health Directorate and the Heads of the selected health facilities. This letter was to explain to the key informants that the researcher is a student of the University who is on academic research assignment and should be accorded the needed assistance.

4.9 Data Analysis

The data obtained from the field was processed before analysis. The data processing involves cleaning the data. This was done at the data entering stage. At this stage, the data was inspected, and erroneous data was corrected. The audio recording helped in that regard. The Statistical Package for Social Scientists (SPSS), version 18 was used in analyzing the data (analyzing response percentages among others) while the results are



presented using percentages and frequencies. Thus both descriptive and inferences statistical analysis was performed in answering the research questions.

The inferential statistics was used include the chi-square test of independence, Pearson correlation and the Multiple Regression analysis. The chi-square test of independence is used to explore the research questions across the demographics of the respondents while the Multiple Regression analysis is used to determine the effect of indigenous family/cultural practices on maternal death. In undertaking the regression analysis, the following variables served as the independent variables (perception on the use of contraceptives, attitude towards health facilities during pregnancy, the use of traditional birth attendants, intimate partner violence) while maternal outcomes (deaths) was used as the dependent variables. All inferential statistical analysis would be performed at a 95 percent confidence interval.

Specifically, to test the hypothesis that there is no statistically significant relationship between indigenous family/cultural factors and maternal mortality, the multiple regression analysis was performed as indicated. In this case, if the significance value of the test-statistics (p-value) obtained is less than 0.05, then the null hypothesis is rejected. In other words, the researcher would fail to accept the null hypothesis if the corresponding p-value obtained is less than the tested alpha value (0.05).

In statistical terms: if

- P-value \leq 0.05 \Rightarrow Reject H0 at 0.05
- P-value $>$ 0.05 \Rightarrow Do Not Reject H0 at 0.05



Qualitative data obtained from the interviews and focus group discussions as well as the open-ended questions on the questionnaire was analyzed through thematic analysis. This involved the categorization of data from interviews and field notes into common themes. Table 5 shows a summary of the statistical techniques as well as the statistical tools was used in the data analysis phase across each research question. Appendix 4 Table 5 Show Statistical Analysis and Techniques across Research Questions



CHAPTER FIVE

RESULTS AND DISCUSSION

5.1. Introduction

The results of the data analyzed and the discussion of the findings are presented in this chapter. The discussion involves the possible implications of the findings. The discussions were done in relation to the objectives of the study as well as the pertinent issues discussed in the review of related literature. The study investigated the role of the family in promoting maternal health in the Lawra District of the Upper West Region of Ghana.

The results of the study are presented in four sections in relation to the research questions and hypotheses. However, the first section analyzed the demographic characteristics of the respondents. The second section analyzed the general perception of men and women of the Lawra District about maternal health while the third section analyzed the indigenous cultural and family practices in the Lawra District that promote or hinder maternal health. The last section of the chapter examined the effects of indigenous cultural and family practices on maternal health in the Lawra District.

5.2. Demographic Characteristics

This section presents the analysis and discussions of the demographic characteristics of the respondents. In all, 251 respondents took part in the study. This comprised of 56 pregnant women, 103 women who have delivered and 73 family members (Household heads) all of which responded to the study through questionnaires. Additionally, 19 key informants including Traditional Birth Attendants (TBAs) and midwives also

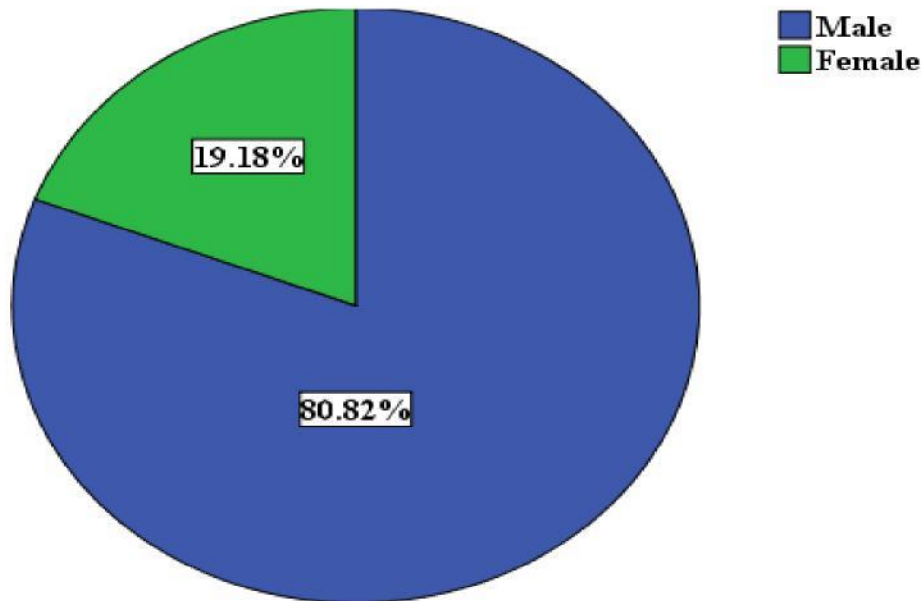


participated in the study through in-depth interviews. Variables analyzed in this section of the study included: gender of family members, age, marital status, educational background, religion, employment status and occupation.

The gender of the family members was analyzed with the results presented in Figure 6

Figure 6:

Gender of Family Members



Source: Fieldwork, 2014

Majority (80.8%) of the family members who responded to the study were males. It was further noted that the male family members were higher by 61.2 percent which is very huge. In other words, the study deliberately sampled more men from the context of the family in order to obtain a balanced view on the study and also because men are household heads.



Descriptive statistical summary of the ages of the pregnant women, those who have delivered and the family members was examined with the results presented in Table 6.

Table 6: Descriptive Statistical Summary of Ages (years) of Respondents

	Mean	Minimum	Maximum	Std.Deviation
Pregnant women	32.04	18	55	9.844
Women who have delivered	29.91	12	50	7.970
Family members	45.70	20	80	14.039

Source: Fieldwork, 2014

The results in Table 6 show that the mean age of the pregnant women was 32 years, while that of women who have delivered was 30 years. For the family members, an average age of 46 years was obtained. It is however surprising to obtain minimum ages of 12 years and 18 years respectively among the pregnant women and those who have delivered. This suggests that there is teenage pregnancy in the Lawra District. Further analysis of the ages of the respondents is presented in Table 7 based on the minimum and maximum ages obtained.

Table 7: Age (years) of Respondents

Age	Pregnant women		Women who have delivered		Family members	
	No.	%	No.	%	No.	%
12-20	7	13.0	13	12.9	1	1.4
21-30	22	38.9	44	42.6	9	12.3



31-40	15	27.8	38	36.6	20	27.4
41-50	8	14.8	8	7.9	18	24.7
51-60	3	5.5	0	0.0	14	19.2
61-70	0	0.0	0	0.0	10	13.7
71-80	0	0.0	0	0.0	1	1.4
Total	56	100.0	103	100.0	73	100.0

Source: Fieldwork, 2014

It is noted in Table 7 that the most prevalent age among the pregnant women was 21-30 years (38.9%) while there was no pregnant woman aged 61-80 years. However, having about 13.0 percent of the pregnant women being aged 12-20 years further gives the indication that there is teenage pregnancy in the Lawra District. Among women who have delivered, the most prevalent aged was noted for 21-30 years (42.6%) followed by those aged 31-40 years (36.6%). However, there were no respondent among women who have delivered and was in the age group of 51-80 years. Generally, it can be concluded that the women who participated in the study were young (aged between 12-40) and that the fertility rate of women in the District could be high. This supports the Lawra District Profile (2014) that there is a gradual rise in the child birth rate in the District. However, majority (59.0%) of the family members were aged more than 40 years.

The marital status of the respondent was also examined as this plays a key role in maternal health. Table 8 presents the results on the marital status of the respondents.



Table 8: Marital status of Respondents

Marital Status	Never married		Married		Widowed		Total	
	No.	%	No.	%	No.	%	No.	%
Pregnant women	0	0.0	54	96.4	2	3.6	56	100.0
Women who have delivered	4	3.8	94	91.3	5	4.9	103	100.0
Family members	4	5.5	65	89.0	4	5.5	73	100.0
Total	8	3.5	212	91.8	11	4.8	232	100.0

Source: Fieldwork, 2014

The results in Table 8 show that majority of the pregnant women (96.4%), women who have delivered (91.3%) as well as the family members (89.0%) were respectively married. None of the pregnant women had never been married which shows that although there could be teenage pregnancy, some of the girls married in their teen ages. In relation to maternal health, having the majority of the respondents being married would help to explore the extent to which husbands influence the maternal health of women in the Lawra District.

The educational background of the respondents was analyzed with the results shown in Table 9



Table 9: Educational Background of Respondents

Marital Status	Pregnant women		Delivered		Family members	
	No.	%	No.	%	No.	%
Second Degree	0	0.0	0	0.0	1	1.4
First Degree	2	3.6	2	1.9	0	0.0
HND/Diploma	3	5.4	1	1.0	0	0.0
Secondary	6	10.7	0	0.0	3	4.1
Basic	16	28.6	40	38.9	11	15.1
No Education	29	51.7	60	58.3	58	79.5
Total	56	100.0	103	100.0	73	100

Source: Field work, 2014

Interestingly, more than 60 percent (62.8%) of the respondents had no formal education. This supports the GSS; Population and Housing Survey 2010; District Analytical Report. Further disaggregation of the data shows that more than half of the pregnant women (51.7%), those who had delivered (58.3%) and family members (79.5%) respectively had no formal education. Furthermore, none of the pregnant women as well as those who had delivered had a second degree, while only one of the family members had a second degree. Generally, it can be concluded that majority of the women did not have formal education and that a significant proportion of the population were illiterates.





Further analysis on the educational background of the respondents (family members) show that there was no statistically significant difference ($\chi^2 = 1.515$, $df = 3$, $p = 0.679$) in the educational background of the respondents across their gender. This meant that the low educational background of the respondents is independent of their gender and that both male and female residents of the Lawra District do not have formal educational backgrounds.

The low educational background among the respondents has several implications for maternal health as the level of education of mothers and fathers determine maternal health outcomes (Lawra District Profile, 2014). In other words, the low educational background of the women has several implications for maternal health based on Awonodomo (2013) assertion that most women in rural Ghana with low or no education adhere to very bad traditional birth practices.

According to the Population Council (1997) in Pakistan, religious beliefs influence people's reproductive health choices. In this regard, the religious affiliation of the respondents was analyzed with the results shown in Table 10.

Table 10: Religion of Respondents

Marital Status	Pregnant women		Delivered		Family members	
	No.	%	No.	%	No.	%
Christian	48	85.7	77	74.8	38	52.8
Muslim	3	5.4	4	3.9	0	0.0
Traditional	5	8.9	22	21.4	35	47.2

Total	56	100.0	103	100.0	73	100.0
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Source: Fieldwork, 2014

Table 10 shows that majority of the pregnant women (85.7%), those who have delivered (74.8%) and family members (52.8%) were Christians. Although Islamic and Traditional religions were uncommon religious affiliations among pregnant women and those who have delivered, quiet a significant proportion of the family members (47.2%) belonged to the traditional religion. This could influence the use of traditional herbal medicines for pregnant women and their family members.

The employment status of those who were pregnant and those who had delivered was examined with the results shown in Table 11.

Table 11: Employment Status of Pregnant and Women who had delivered

Category	Pregnant		Delivered		Tota	
	No.	%	No	%	l No.	%
Employed	38	67.9	55	53.4	93	58.5
Unemployed	18	32.1	48	46.6	66	41.5
Total	56	100.0	103	100.0	159	100.0

Source: Fieldwork, 2014

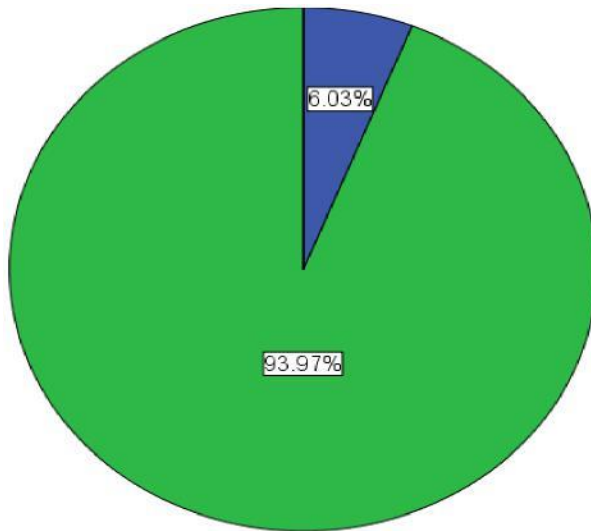
Table 11 shows that more than half (58.5%) of the women were employed. Thus the proportion of the women employed was about 17 percent higher than those unemployed. This meant that a greater proportion of the women had to depend on their husbands and other family relations for their up keep including prenatal and antenatal



care. In this regard, the occupation of the respondents was analyzed with Figure 7 depicting the results.

Figure 7:

Occupation of Respondents



Source: Fieldwork, 2014

Figure 7 shows that almost all the respondents (93.4%) were employed in the informal sector. This was expected considering the fact that majority of the respondents had no formal education. Further analysis shows that farming was the commonest occupation (49.5%) among the respondents followed by trading/pito brewing (43.3%).

5.3. Type of Health Facility Used

This section of the chapter analyzed the type of health facility patronized by the pregnant women as well as those who have delivered. This section also examined



whether the women patronized health facilities or traditional birth attendants as well as the extent of patronage of these facilities. In this regard, the study inquired from both categories of women which type of facility they patronize. This variable was treated as a multiple response variable since a respondent could patronize more than one facility. The results are presented in Table 12

Table 12: Type of Facility Patronized

Category	Pregnant		Delivered		Total	
	No.	%	No.	%	No.	%
Traditional birth attendant	27	48.2	39	38.2	66	41.5
Hospital/clinic	54	96.4	91	89.2	146	91.8

Source: Fieldwork, 2014

Generally, it is noted that over 90 percent (91.8%) of the respondents used hospitals/clinics. Although less than half (41.5%) of the women used the services of TBAs, it can be deduced that in spite of the fact that majority of the women used hospitals/clinics for their antenatal and post-natal services, a significant proportion still use the services of TBAs. Further disaggregation of the findings shows that although a significant proportion of those pregnant used the services of hospitals, almost half (48.2%) also used the services of TBAs. However, it was noted that there was no statistically significant differences ($\chi^2 = 1.368$, $df = 1$, $p = 0.242$) in the use of traditional birth attendants among those pregnant as well as those who had delivered. Similar results were also noted for the use of hospitals/clinics among the women ($\chi^2 = 2.479$, $df = 1$, $p = 0.118$).



The interviews conducted with the TBAs indicated the following as major reasons for which women patronize their services:

- i. Closeness of their services to the indigenes: It was noted that some of the health facilities were distant away from the rural communities. They had to travel several miles to seek for maternal health services, hence some of the women resort to the services of the TBAs

This view is consistent with Mensah (2011) that in Ghana, one of the causes of maternal deaths is lack of sufficient medical care (centres) and the long distance of some of them.

- ii. Attitude of some health workers detract women from accessing hospital services
- iii. Ignorance: lack of knowledge of free maternal health care services on the NHIS
- iv. Poverty: The lack of funds to buy basic needs to the health centre and for hospital bill. One of the TBAs indicated:

“Although they say delivering is free now in our hospitals, women are expected to buy certain basic needs to the health centre and also some complications are not covered by the NHIS. For the fact that most of our women here do not have any gainful employment and are bedeviled with extreme poverty, they come to us for services.”

This meant that although the User Fee Exemption Policy implemented by the Ghana health sector is operational, many pregnant women are unable to access professional perinatal care and services during labour as noted by Mensah (2011) as a result of extreme poverty.



v. Cultural and family beliefs

An assessment of the results above suggests that apart from the cultural and family practices, there are other socio-economic as well as institutional factors that affect the maternal health of women. The study also explored whether or not the use of a particular facility (TBAs or hospital/clinics) statistically differed across the demographics of the women with the results show in Table 13.

Table 13: Use of Health Facilities (hospital/clinic) across Respondents' Demographics

Demographic	Chi-square (1^2)	Degree of freedom (df)	Significance level (p)
Education	2.439	4	0.650
Age	1.312	6	0.971
Religion	4.638	2	0.098
Occupation	1.060	1	0.303
Marital status	9.893	2	0.007

Source: Fieldwork, 2014

The results in Table 13 show that in the exemption of the marital status of the respondents, none of the demographic variables of the respondents had an influence on their use of hospitals/clinic. In other words, of the demographic characteristics of the respondents, the use of health facility was statistically dependent ($1^2 = 9.893$, $df = 2$, $p = 0.007$) on their marital status. Thus since $p < 0.05$, the study concluded that the use of health facility was statistically dependent on the marital status of the respondents and



that those married used health facility more than those who have never been married/widowed.

In similar vein, the study also explored whether or not the use of traditional birth attendants facility statistically differed across the demographics of the women with the results show in Table 14.

Table 14: Use of Health Facilities (TBA) across Respondents Demographics

Demographic	Chi-square (x^2)	Degree of freedom (df)	Significance level (p)
Education	16.066	4	0.003
Age	9.830	6	0.132
Religion	4.390	2	0.111
Occupation	1.330	1	0.249
Marital status	0.132	2	0.936

Source: Fieldwork, 2014

The results in Table 14 show that with the exemption of the educational background of the respondents, none of the demographic variables of the respondents had an influence on their use of traditional birth attendants. In other words, of the demographic characteristics of the respondents, the use of TBA was statistically dependent ($x^2 = 16.006$, $df = 4$, $p = 0.003$) on educational background. Further standardized residual analysis shows that women who have no formal education patronized TBA more than those with formal education. This implies that education plays a critical role in the type of health facility used by women for prenatal as well as post natal clinics. This finding



is also meant that women with no or low educational background adhered to very risky traditional birth practices as suggested by Awonodomo, (2013).

In this regard, the study found out among the women the extent to which they patronize hospital/clinic as well as traditional birth attendant facilities. Table 15 shows the results.

Table 15: Extent of Patronage of Health Facilities

Category	TBA				Hospital			
	Pregnant		Delivered		Pregnant		Delivered	
	No.	%	No.	%	No.	%	No.	%
Very High	1	1.9	5	5.3	0	0.0	6	6.3
High	18	32.1	30	28.7	40	71.7	84	81.0
Low	8	15.1	18	17.1	15	26.4	8	7.6
Very Low	29	50.9	50	48.9	1	1.9	5	5.1
Total	56	100.0	103	64.8	56	100.0	103	100.0

Source: Fieldwork, 2014

It is noted that majority (66.0%) of those pregnant and those who had delivered respectively rated their patronage of TBA as low. In other words, about 34.0 percent of the respondents in this regard patronized the services of traditional birth attendants. Generally, it can be deduced that although majority of the women do not largely use the services of TBA, the proportion that patronize their services is high. On the other hand, it is noted that health facility use dominated among the women to a large extent (Pregnant = 71.7%, Delivered= 87.3%).



In exploring the extent of use of TBA and hospital facilities, the study also examined the number of times the respondents (only women who have given birth) used these facilities.

Table 16: Descriptive Statistical Summary of Use of TBAS and Health Centres

	Mean	Minimum	Maximum	Std.Deviation	Skewness	Kurtosis
TBA	1.29	0	9	1.719	3.136	1.558
Hospital	7.230	0	9	2.319	-1.044	-0.126

Source: Field Work 2014

For TBAs, on the average, the respondents visited or patronized their services once during their pregnancy periods while for hospital; seven periods of visitations were noted. This gives the indication that the patronage for health facility is almost symmetrical while the negative kurtosis indicates that the period of patronage of hospital facility among the women is almost showing a flat distribution. Interestingly, it is noted that on the maximum, about nine visits were made to TBAs during the pregnancy. This supports the ANC, PNC and Institutional Delivery from 2009-2013 as attached in appendix 2

Furthermore, the stage of pregnancy under which the pregnant women patronized the traditional birth attendants and hospitals were also examined with the results shown in Table 17.



Table 17: Stage of Pregnancy at which Health Facility was used

Times	Traditional Birth attendant		Hospital	
	No.	%	No.	%
First trimester	0	0.0	1	1.0
Second trimester	3	6.5	14	13.6
Third trimester	41	89.1	23	22.3
At all stages	2	4.3	65	63.1

Source: Fieldwork, 2014

Among those who patronized the services of TBAs, it was noted that a greater proportion (89.1%) used their services in the third trimester of the pregnancy, while for the services of clinics, majority used them at all stages of the pregnancy. It is interesting to note that the services of TBAs are used in the third trimester of the pregnancy since this stage can be the most challenging and therefore needs the services of more professional medicals. However, having none of the women used TBAs in the first trimester is inconsistent with Boadu (2013) empirical finding that in the northern region of Ghana, Traditional Birth Attendants (TBAs) were mostly the first point of call for most women in rural communities for deliveries.

5.4. General Perception in the Lawra District about Maternal Health

This section of the chapter examined the perception of the people of the Lawra District on the maternal health of women. In this regard, the study inquired from the respondents who should decide on the need for women to seek antenatal/postnatal care. The results are presented in Table 18. This question was applicable to all the respondents.



Table 18: Decision on Antenatal/Postnatal care

Response	Frequency	Percentage
Men only	156	66.4
Women only	15	6.5
Joint decision by men and women	63	27.1
Total	232	100.0

Source: Fieldwork, 2014

In Table 18, it is noted that majority (66.4%) of the respondents were of the view that only men should decide on the need for women to seek antenatal/postnatal care. Interestingly, it is noted in Table 18 that women constitute less than 10 percent (6.5%) in the decision making process of seeking antenatal/postnatal care. The major reason for which majority of the respondents believed that the decision on seeking antenatal/postnatal care should be made by only men was that men are the head of the family. According to one of the midwives:

“Generally, most of the women especially the uneducated held the perception that men are head of households and for that matter, they are the final decision makers in the family and community for that matter even on matters that concern their maternal health”

This gives an indication that the dominance of men in the household makes women in the Lawra District to have limited role in taking decisions that concern their maternal health care.



The study also explored the perception of the respondents on who should decide on the need for women to seek antenatal/postnatal care across the demographics of the respondents using the chi-square test of independence.

Table 19 Perception on Seeking Antenatal/Postnatal Care across Respondents' Demographics

Demographic	Chi-square (χ^2)	Degree of freedom (df)	Significance level (p)
Gender	13.784	2	0.001
Education	23.732	10	0.008
Age	5.545	6	0.476
Religion	2.321	4	0.111
Occupation	15.300	1	0.001
Marital status	15.564	4	0.004

Source: Fieldwork, 2014

A review of the results in Table 19 show that the major demographic variables which statistically influenced the perception of the respondents as to who should decide on the need for women to seek for antenatal/postnatal care included gender ($p=0.001$), occupation ($p=0.001$), marital status (0.004) and educational background (0.008). In other words, the age and the religious affiliation of the respondents did not have any influence on their perception on who should decide on the need for women to seek for antenatal/postnatal. The educational background of the respondents being one of the



significant factors that affects the perception of the respondents towards maternal health is consistent with the views of one of the midwives who noted during the interviews that:

“Some men of the District take maternal health important especially among the educated; however, most of the illiterates do not see the importance of maternal health and would rather resort to TBAs”

Education being a major factor in this regard is consistent with Awonodomo (2013) that for many women, because of illiteracy and ignorance, rely on myths, rumors and misconceptions that discourage them from using reproductive health services.

In exploring the perception of the respondents on maternal health, four variables were used as shown in Section C, item 14 on the questionnaire using a four point likert scale with 1=Strongly agree, 2= (Agree), 3=Disagree and 4 =(Strongly agree). Descriptive statistics analysis shows the perception held on maternal health among the respondents.

Table 20: Perception on Maternal Health

Mean	Minimum	Maximum	Range	Variance	N of Items
2.804	2.062	3.214	1.152	1.559	4

Source: Fieldwork, 2014

Generally, it can be concluded in Table 20 that the respondents held a relatively positive perception (Mean= 2.804) towards maternal health. This is necessary considering Filippi et al. (2006) observation that over half a million women die each year due to



complications during pregnancy and birth although the vast majority of these deaths are preventable.

Specific views of the respondents were sought on their perception on maternal health care based on the four items. In this regard, the study inquired from the respondents whether a partner or husband has to grant permission for the women to access maternal health services. The results are presented in Table 21.

Table 21: Granting of Permission by Husband before Access to Maternal Health Care

Category	Pregnant		Delivered		Family members		Total	
	No.	%	No.	%	No.	%	No.	%
Strongly Agree	1	1.8	5	4.9	18	24.7	24	10.3
Agree	43	76.8	91	88.3	46	63.0	180	77.6
Strongly Disagree	1	1.8	5	4.9	7	9.6	13	5.6
Disagree	11	19.6	2	1.9	2	2.7	15	6.5
Total	56	100.0	103	100.0	73	100.0	232	100.0

Source: Fieldwork, 2014

Generally, it is noted in Table 21 that over eighty percent (80%) of the respondents specifically (87.9%) agreed that husbands or male partners have to grant permission to their female partners before they access maternal health care services. This further confirmed the results in Table 21 that the majority of the respondents were of the view that only men should decide on the need for women to seek antenatal/postnatal care.



Further disaggregation of the results across the unit of analysis shows that majority of the women pregnant (78.6%), those who have delivered (93.2%) as well as the family members (87.7%) respectively agreed that husbands or male partners have to grant permission to their female partners before they access maternal health care services. This trend of accessing maternal health services by women in the District according to the International Institute for Population Sciences and Macro International (2009) has implications for the health-seeking behaviour of women, who may be dependent on their husband's permission to access health services. However, the results in Table 21 supports Secka (2010) empirical finding that in the Gambia, women mostly initiate to seek antenatal care, however, men eventually decided.

Table 22 shows the views of the respondents on whether women are considered to be strong and independent if they can deliver by themselves without going to a health facility for safe delivery.

Table 22: Women Considered being Strong when they give Birth by themselves

Category	Pregnant		Delivered		Family members		Total	
	No.	%	No.	%	No.	%	No.	%
Strongly Agree	1	1.8	3	2.9	14	19.2	18	7.9
Agree	23	40.0	14	13.6	15	20.5	52	22.1
Strongly Disagree	2	3.6	20	19.4	17	23.3	39	16.9
Disagree	30	54.5	66	64.1	27	37.0	123	53.2
Total	55	24.1	103	44.4	73	31.5	232	100.

Source: Fieldwork, 2014



Majority of the respondents (70.1%) disagreed that women are considered to be strong and independent if they can deliver by themselves without going to a health facility for safe delivery. However, it is interesting to note that about 29.9 percent of the respondents held the perception that women are considered to be strong and independent if they can deliver by themselves without going to a health facility for safe delivery. Although this finding somehow supports Awonodomo (2013) observation that in Northern Ghana, women are considered to be strong and independent if they can deliver themselves without going to a health facility for safe delivery, it can be deduced that this perception is defacing and could be as a result of Kwode (2010) explanation that varied interventions have been made by the government, development partners and NGOs all aimed at meeting the target set for the MDGs.

Further disaggregation of the results in Table 22 shows that majority of the women pregnant (58.1%), those who have delivered (83.5%) and family members (60.3%) respectively disagreed that women are considered to be strong and independent if they can deliver by themselves without going to a health facility for safe delivery. However, it is interesting to note that a significant proportion of those pregnant (41.8%) as well as some family members (39.7%) held the perception that women are considered to be strong and independent if they can deliver by themselves without going to a health facility for safe delivery. These beliefs at times lead to very dangerous health circumstances since the women's delay in self-assistance can often result in maternal and child death (Awonodomo,2013). Further analysis shows that the differences in the views of the respondents was statistically significant ($\chi^2 = 43.043$, $df = 6$, $p = 0.000$) and that women who are pregnant believed that they would be considered to be strong

and independent if they can deliver by themselves without going to a health facility for safe delivery as compared to those who have delivered. There is therefore the need for more education for pregnant women in this regard.

The perception that the more children a woman has, the more fertile she is was also examined with the results shown in Table 23.

Table 23: More Children is an Indication of Fertility

Category	Pregnant		Delivered		Family members		Total	
	No.	%	No.	%	No.	%	No.	%
Strongly Agree	3	5.5	2	1.9	18	24.7	23	10.0
Agree	33	60.0	44	42.7	25	34.2	102	44.2
Strongly Disagree	3	5.5	13	12.6	9	12.3	25	10.8
Disagree	17	29.0	44	42.8	21	28.8	82	35.1
Total	56	24.1	103	44.4	73	31.5	232	100.

Source: Fieldwork, 2014

Generally, more than half of the respondents (53.89%) held the perception that the more children a woman had, the more fertile she was supports Obeng-Kyereh (2011) assertion that in several villages on the Africa Continent, it is considered that the more children a woman had, the more fertile she was. This indigenous belief has adverse effects on women as it could increase their chances of dying through giving birth. Further disaggregation of the results show that majority of the pregnant women (65.5%) and family members (58.9%) were respectively in agreement that the more children a



woman has, the fertile she is. This perception has an implication for maternal health as the more children women have, the greater the chances of risk of maternal health including death (Santrock, 1998; Abdullah, 2014). However, more than half (55.4%) of those who have delivered held a different view in this regard. Further analysis shows that the differences in the views of the respondents was statistically significant ($\chi^2 = 33.440$, $df = 6$, $p = 0.000$) and that women who are still pregnant had a greater believe that the more children they have, the more fertile they would be considered as compared to those who have delivered. This Santrock (1998) and Abdullah (2014) explain could have severe implications for the maternal health of the women as short birth intervals are associated with increased risk of adverse maternal and neonatal health (MNH) outcomes.

The perception on contraception was also analyzed by exploring whether or not the use of contraceptives could later prevent a woman from giving birth.

Table 24: The Use of Contraceptives could Prevent Child Birth

Category	Pregnant		Delivered		Family members		Total	
	No.	%	No.	%	No.	%	No.	%
Strongly Agree	1	1.9	6	6.0	6	8.5	13	5.6
Agree	16	28.3	18	17.0	30	40.7	64	27.6
Strongly Disagree	2	3.8	12	12.0	7	10.2	21	9.1
Disagree	37	66.0	67	65.0	30	40.7	134	57.8
Total	56	100.0	103	100.0	73	100.0	232	100.0

Source: Fieldwork, 2014

More than 60 percent (66.9%) of the respondents disagreed that the use of contraceptives could later prevent a woman from giving birth. However, the proportion of the respondents who believed that the use of contraceptives could later prevent a woman from giving birth (33.1%) was equally higher. This meant that a higher proportion of local people held the perception that the use of contraceptive could later prevent women from giving birth as also noted by Achonga (2010). This was supported by the results from the interviews with the midwives. One of the midwives indicated:

“Some of the local people hold the belief that when they use contraceptives, they would become impotent and infertile and can no more give birth if they wish to.”

Further disaggregation of the results in Table 24 show that majority of those pregnant (69.8%), delivered (77.0%) and family members (50.9%) respectively held the belief that the use of contraceptives could later prevent a woman from giving birth. Further analysis shows that the differences in the views of the respondents was statistically significant ($\chi^2 = 18.064$, $df = 8$, $p = 0.021$) and that family members had a greater belief that the use of contraceptives could later prevent a woman from giving birth as compared to those pregnant and had delivered.

The study further tried to determine which of the variables; I think husbands or male partners have to grant permission to their partners before they access maternal health services (A), women are considered to be strong and independent if they can deliver themselves without going to a health facility for safe delivery (B), the more children a woman has, the more fertile she is (C) and the use of contraceptives could later prevent



a woman from giving birth (D) had significantly impacted on the perception of the respondents on maternal health. In this instance, a multiple regression analysis was performed where the four independent variables were used to predict the perception of the respondents on maternal health with the dependent variable being who should be sought on the need for women to seek antenatal/postnatal care. Table 25 shows the summary of the model

Table 25: Model Summary

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	0.399	0.159	0.143	0.818

Source: Fieldwork, 2014

The R-square analysis presented a co-efficient of determination value of 0.159 which implies that 16.0 percent of the variation on who should decide on the need for women to seek antenatal/postnatal care has been explained by the five independent variables. Further analysis shows that the model in Table 25 is significant ($F = 9.704$, $df = 4$, $p = 0.000$) and that at least one of the regression coefficients in the model is not equal to zero.

The study also analyzed the contribution of each of the four independent variables to the perception on who should decide on the need for women to seek antenatal/postnatal care. The regression coefficients and their significance are presented in Table 26.



Table 26: Parameter Estimate for Perception on Maternal Health

Variables	Beta	t	Sig
A	0.264	4.014	0.000
B	-0.350	-4.398	0.000
C	0.153	2.016	0.045
D	-0.024	-0.348	0.728

Source: Fieldwork, 2014

The results in Table 26 show that with the exception of the view that the use of contraceptive could later prevent women from giving birth, the perception that husbands or male partners have to grant permission to their partners before they access maternal health services ($b=0.264$, $p=0.000$). Women are considered to be strong and independent if they can deliver themselves without going to a health facility for safe delivery ($b=-0.350$, $p=0.000$) and the more children a woman has, the more fertile she is ($b=0.153$, $p=0.045$) were all significant perceptions that affect the maternal health of women in the Lawra District

5.5. Indigenous Cultural and Family Practices in the Lawra District that Promote or Hinder Maternal Health

This section of the chapter analyzed the cultural and family practices that obstruct or promote the maternal health of women in the District. In this regard, respondents



indicated a number of indigenous family and cultural practices that promote maternal health. They include:

- Support given by the extended family: Women in the family who have given birth are helped by their mothers, siblings and other relations.
- Local food given to pregnant women: Pregnant women as well as those who have delivered are given nutritious local food to improve their health. These foods nourish the woman and the baby.
- Support given by the immediate family: Women are given a helping hand by their husbands and children if they have one.

The respondents also indicated a number of indigenous family and cultural practices that hinder maternal health in the District. These included:

- Heavy work load on women: Women in the District are burdened with heavy workloads. For instance, women who are heavily pregnant still go to farm to perform more energetic tasks
- Delay in seeking health care: The delay of some women to access health care during pregnancy and after birth hinders their maternal health. This happens when their husbands do not give them the permission to access maternal health care. One of the pregnant women indicated:

“Some of the pregnant women go to the health centre only when they are just about to give birth”



□ Intake of herbal concoction

The study further analyzed the most important factor (family or cultural) that promote or hinder maternal health in the Lawra District using the relative importance index (RII).

Relative importance index (RII) = ———

Where w is the weighting given to each factor by the respondents, ranging from 1 to 5, A is the highest weight (i.e. 5 in the study) and N is the total number of respondents (232). The scale include very high (VH=5), High (H=4), Low (L=3), Very Low (VL=2), Not at all (NA=1)

Table 27: Important Factor that Promote or Hinder Maternal Health

Factor	Weights				
	VH 5	H 4	L 3	VL 2	NA 1
Culture	1	20	178	33	0
Family	1	18	181	32	0

Source: Fieldwork, 2014

Table 27 shows the calculation of the relative important index where a higher RII value means the factor that had the most significant hinder on maternal health in the District.



Table 28: Factors that Significantly Affect the Maternal Health of Women in the District

Factor	Relative Important Index (RII)	Rank
Culture	0.591	1
Family	0.590	2

Source: Fieldwork, 2014

It can be concluded in this regard that cultural practices in the district hinders maternal health more as compared to family practices. This meant that maternal health is significantly influenced by cultural and family usages and nuances of a community as noted by Duong, Binns and Lee (2004).

Specific analysis was also done in this regard in relation to the extent to which cultural and family practices in the District promote maternal health.

Table 29: Practices that Promote Maternal Health

Category	Cultu e		Family	
	No.		No.	%
High	27	11.6	25	10.7
Low	163	70.3	172	74.1
Very Low	42	18.1	35	15.2
Total	232	100.0	232	100.0

Source: Fieldwork, 2014

Generally, it is noted that about 88.4 percent of the respondents were of the view that cultural practices in the District promoted maternal health to a low extent. Similar trend is noted for family practices where about 89.3 percent were of the view that family practices in the District promote maternal health to a low extent.

The study also analyzed the indigenous cultural and family practices that affect the maternal health of the respondents. This variable was treated as a multiple response variable hence a respondent could choose more than one option. The results are shown in Table 30.

Table 30: Cultural Practices that Affect Maternal Health

Response	Frequency	Percentage
Belief about the use of contraceptives	230	99.1
Culturally immodest to show early signs of pregnancy	100.0	232
Women inability to choose when to have sex	232	100.0
Forbidding pregnant women to eat certain foods	10	4.3
Having several children	160	69.0

Source: Fieldwork, 2014

It is noted in Table 30 that all (100.0%) the respondents were of the view that women's inability to choose when to have sex as well as the perception that it is culturally immodest to show early signs of pregnancy were predominant cultural variables that affect the maternal health of the respondents. In responding to the inability



of women in the District to take decisions on matters on sex, the District Director of Health indicated:

“The men do not discuss their sexual relationship with their wives to know when to have sex to prevent an unwanted pregnancy”

Having all the women attesting that women’s in ability to choose when to have sex being a cultural issue that affect their maternal health gives the indication that the women of the Lawra District may be subjected to violence if they resist their partners as suggested by Heise et al. (1995). The result in Table 30 is also consistent with Arhin (2001) assertion that in some communities, it is culturally regarded immodest to show early signs of pregnancy until it is visible. These beliefs obviously prevent women from seeking maternal health treatment.

Furthermore, the belief towards the use of contraceptives was also a major cultural issue as almost all the respondents (99.1%) attested to this. The negative attitude towards the use of contraception is worrisome as improving postpartum contraceptive use is an important programmatic strategy to improve the health and well-being of women, newborns and children (UNFPA, 2012). This is explained by the fact that satisfying the unmet need for family planning alone could cut the number of maternal deaths by almost a third. Furthermore, the attitude of husbands towards contraceptives in the District could be explained by Awonodomo (2013) assertion that many families may not want to practice family planning because they want to produce more children who can help them on their farms. This was also supported by the interviews. One of the midwives indicated:



“One of the indigenous cultural practices that affect the maternal health of women in the District is the desire for more children. Thus the desire of the men as well as women to have more children which they perceive as a sign of wealth and strength hinders the maternal health of the women. The desire to have more children is usually influenced by the men.”

One of the pregnant women also indicated:

“The belief that the more children one has makes him richer and powerful affects the health of the women”

This meant that fertility is not the only factor in the quest to give more births by the local folks.

On the other hand, forbidding pregnant women to eat certain foods was noted to be a marginal (4.3%) cultural issue that affects the maternal health of the people as shown in Table 30. This meant that dietary taboos are not the most prevalent restrictions on pregnancy as suggested by Senah (1993).

The family factors that affect the maternal health of the people were also explored with the results shown in Table 31.

Table 31: Family Practices that Affect Maternal Health

Response	Frequency	Percentage
Husband’s decision on antenatal care	130	56.0
Attitude towards the use of health facilities	220	94.8
Attitude towards the use of traditional birth attendants	228	98.3



Mothers' decision to seek delivery care during pregnancy	231	99.6
Men abusing their wives during pregnancy	226	97.4

Source: Fieldwork, 2014

Generally, it is noted in Table 31 that almost all the family factors affect the maternal health of the respondents. However, mothers, mother's in-laws and elderly female relatives have substantial influence on women's decision to seek delivery care during pregnancy was noted as the major family factor followed by attitude towards the use of traditional birth attendants that affect the maternal health of the women. Attitude towards the use of Traditional Birth Attendants affecting the maternal health of the women supports Awonodomo (2013) assertion that though pregnant women in Ghana are free to enroll in Ghana's National Health Insurance, many pregnant women prefer to deliver at homes by using the services of TBAs and mother-in-laws and suffer complications. In other words, it is deduced that many of the women adhered to traditional birth practices which have several implications for the health of the child and the mother.

The study also explored the key indigenous family and cultural practices that affect the perception or attitude of the respondents towards maternal health using the binary regression analysis. In this instance, the dependent variable was perception on maternal health (positive or negative) while the independent variables were those measured in Table 30 and Table 31. The binary regression analysis was used in this regard since the dependent variable (perception on maternal health) was measured on a categorical scale.



In relation to cultural factors, the pseudo R-square analysis presented a co-efficient of determination value of 0.709 which implies that 70.9 percent of the variation on perception towards maternal health has been explained by the five independent cultural variables. The study further explored which of the independent variables had significant contributions to the results. The Wald test (and associated *p*-value) is used to evaluate whether or not the logistic coefficient is different than zero with the results shown in Table 32.

Table 32: Logistic Coefficient of Cultural Factors

Response	Wald	Sig.	Exp (B)
Belief towards the use of contraceptives	5.298	0.021	0.414
Culturally immodest to show early signs of pregnancy	27.858	0.000	0.221
Women inability to choose when to have sex	17.605	0.000	0.246
Forbidding pregnant women to eat certain foods	0.162	0.688	0.811
Having several children	3.866	0.049	1.902

Source: Fieldwork, 2014

It is noted in Table 32 that of the five cultural variables, culturally immodest to show early signs of pregnant (B=0.221, p=0.000), women inability to choose when to have sex (B=0.246, P=0.000), having several children (B=1.902, p=0.049) and the belief towards contraceptives (B= 0.0414, p=0.021) significantly influenced the attitude of the respondents on maternal health. In relation to the use of contraception, the results are consistent with Achonga (2010) that husbands’ attitudes towards contraception strongly



influence the willingness and ability of women to use contraception. According to the interviews conducted with the District Directorate of Health:

“One of the indigenous cultural factors that affect the maternal health of the women is negative attitude towards family planning. Some men and women have formed negative attitude towards family planning such as the use of contraceptives to prevent unwanted pregnancy”

This according to the Guttmacher Institute (2010) poses an enormous challenge to women in Sub-Saharan Africa, where spousal consent for females to receive contraceptives is often required by health care providers. The belief as well as the attitude of husband towards the use of contraceptives could explain the poor patronage of contraceptive and family planning methods across the country as noted by the Ghana Health Service (GHS). However, it is noted in Table 32 that forbidding pregnant women to eat certain foods ($B= 0.811$, $p=0.688$) was noted not to be a significant indigenous cultural factor that affects the maternal health of the people.

In relation to the family factors, the pseudo R-square analysis presented a co-efficient of determination value of 0.706 which implies that 70.6 percent of the variation on perception towards maternal health has been explained by the six independent family variables. The study further explored which of the independent variables had significant contribution to the results. The Wald test (and associated p -value) is used to evaluate whether or not the logistic coefficient is different than zero with the results shown in Table 33.



Table 33: Logistic Coefficient of Family Factors

Response	Wald	Sig.	Exp
(B)			
Husband's decision on antenatal care	3.687	0.050	1.879
Attitude towards the use of health facilities	4.580	0.032	0.221
Attitude towards the use of traditional birth attendants	3.866	0.049	1.902
Mothers' decision to seek delivery care during pregnancy. 4.296		0.038	1.899
Men abusing their wives during pregnancy	4.124	0.042	0.200

Source: Fieldwork, 2014

Mothers, in-laws and elderly female relatives have a significant influence (B= 0.003, p=1.899) on the decision of women to seek delivery care during pregnancy meant that the low utilization of delivery care is associated with the disadvantaged position of women in the family where women had to abide by the decision of their husbands and parents-in-law as noted by the International Institute for Population Sciences and Macro International (2009). Men abusing their wives during pregnancy being a significant (B= 0.042) family factor that hinders maternal health of the women of the Lawra District meant that intimate partner violence is not a major issues affecting maternal health. This finding rejects the findings of WHO (2014) that the high mortality rate among pregnant women can be attributed to violence against women. This meant that deeply entrenched socio-cultural practices and systems held by some few men still remain as noted by



Zeim and Gyebi (2010) despite the massive awareness being created about the harmful effects of domestic violence on pregnant women.

Husband decision on antenatal care being a significant influence ($B=1.879$, $p=0.050$) on the maternal health of the women supports Ewa et al. (2012) findings that apart from socio-economic factors influencing the choice of antenatal care and delivery centres among childbearing women in Ibadan North Local Government Area of Oyo State, husband's decision or preference of antenatal care and privacy constituted a prominent factor that influenced the choice of antenatal care as well as place of delivery.

As part of exploring the indigenous family and cultural factors that affect the maternal health of the respondents, the study analyzed a number of factors as shown in Table 34

Table 34: Views on Indigenous Family and Cultural Factors

Variables	SA 4	A 3	SD 2	D 1
The choice of the women to control their own sexual health is challenged by social/cultural factors that mitigate their ability to decide independently and freely on their reproductive and sexual choices	57	171	4	0
Utilisation of maternal health is influenced by cultural norms that impeded the autonomy of women with regard to childbearing	29	166	1	36
Husbands' attitudes towards contraception strongly influence the willingness and ability of women to use contraception	66	165	1	0
God/Allah would become angry if partners practice family planning	0	2	6	224

Source: Fieldwork, 2014

In this regard, the study analyzed which of the factors in Table 34 is the most important factor that influences maternal health in the district using the relative importance index (RII).

Relative importance index (RII) = $\frac{\sum w}{N \cdot A}$ —

Where w is the weighting given to each factor by the respondents, ranging from 1 to 4, A is the highest weight (i.e. 4 in the study) and N is the total number of respondents (232).

Table 35: Relative Importance Index on Indigenous Family and Cultural Factors

Variables	RII	RANK
The choice of the women to control their own sexual health is challenged by social/cultural factors that mitigate their ability to decide independently and freely on their reproductive and sexual choices	0.623	1
Utilisation of maternal health is influenced by cultural norms that impeded the autonomy of women with regard to childbearing	0.609	2
Husbands' attitudes towards contraception strongly influence the willingness and ability of women to use contraception	0.429	3
God/Allah would become angry if partners practice family planning	0.273	4

Source: Fieldwork, 2014

It is noted in Table 35 that the choice of the women to control their own sexual health being challenged by social/cultural factors that mitigate their ability to decide





independently and freely on their reproductive and sexual choices was ranked as the most important factor (RII=0.623) that influenced the maternal health of the respondents. This was followed by the fact that maternal health is influenced by cultural norms that impeded the autonomy of women with regard to childbearing (RII=0.609). On the other hand, the view that God/Allah would become angry if partners practice family planning was ranked as the least factor (RII= 0.273) that affects the maternal health of respondents. This meant that although religious belief could affect the maternal health of women, the effect is not as high as suggested by Awonodomo (2013). However, the findings are

consistent with Awonodomo (2013) that there are many family and cultural practices on the Africa Continent that influence maternal health including beliefs towards the use of contraceptives.

The choice of the women to control their own sexual health being ranked as the most important family practice that affects the maternal health of women of the Lawra District is consistent with Duong, Binns and Lee (2004) assertion that women who do have the independent ability to decide on sexual matters that concern their health experience severer maternal health issues.

5.6 The Effect of Indigenous Cultural and Family Practices on Maternal Deaths in the Lawra District

This section of the chapter explored the implications of the indigenous cultural and family practices on maternal deaths in the Lawra District. In this regard, the women

were asked of their description of the effect of indigenous cultural and family practices on maternal deaths in the Lawra District with the results shown in Table 36.

Table 36: Effects of Indigenous Cultural Practices on Maternal Deaths in the Lawra District

Responses	Family		Cultural	
	No.	%	No.	%
Highly significant	19	11.9	29	18.2
Partially significant	139	87.4	130	81.8
Total	159	100.0	159	100.0

Source: Fieldwork, 2014

The results in Table 36 show that family practices (87.4%) as well as cultural practices“ (81.8%) affects maternal deaths in the Lawra District were respectively rated as partially significant.

This meant that many of the indigenous factors as identified from the preceding sections have adverse effect on women as some of the practices increase their chances of dying through giving birth (Obeng-Kyereh, 2011).

The study also analyzed the views of the respondents on whether or not cultural and family practices have adverse effect on women as it increases their chances of dying through giving birth in the Lawra District. The results are shown in Table 37.



Table 37: Cultural and Family Practices that have adverse effect on Women

Responses	Family		Cultural	
	No.	%	No.	%
Strong agree	157	98.7	4	2.5
Agree	0	0.0	155	97.5
Disagree	2	1.3	0	0.0
Total	159	100.0	159	100.0

Source: Fieldwork, 2014

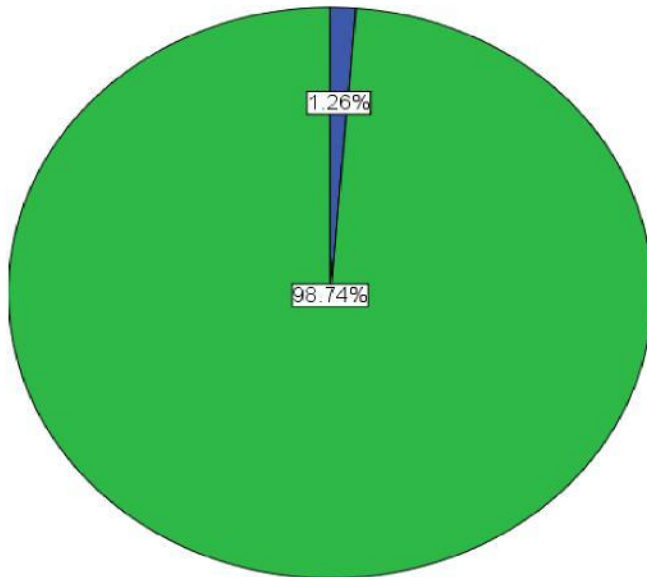
It is noted in Table 37 that almost all the women (98.7%) strongly agreed that family practices have adverse effects on women as it increases their chances of dying through giving birth in the Lawra District. Similarly, all the family members who responded to the study were of the view that family practices and cultural practices in the District affect the maternal health of the respondents.

The study also explored among the family members whether or not they have lost any family member during pregnancy or child birth. Majority of the respondents (98.7%) indicated that they have not lost any family member during child birth.



Figure 8

Have Lost Family Member during Child Birth



Yes = Lost Family Member
No = Did not Lose Family Member

Source: Fieldwork, 2014

The results in Figure 8 show that the rate at which women die while giving birth is reducing. This was supported by the views of the District Health Directorate. According to the Director of Health Services of the Lawra District:

“Although there are still some recording maternal deaths in the District, these figure have reduced drastically”

This meant that most of the uncontrolled numbers of maternal deaths recorded in the past were preventable as noted by Filippi et al. (2006). Thus although complications during pregnancy and childbirth remain a leading cause of death among women of



reproductive age in developing countries as observed by Bailey et al. (2006), much progress has been made in enhancing maternal health in the Lawra District.

5.7 Hypothesis Testing

This section tests the hypotheses that:

H0: There is no statistically significant relationship between indigenous family/cultural factors and maternal mortality

H1: There is a statistically significant relationship between indigenous family/cultural factors and maternal mortality.

The hypothesis was tested using the ordinal regression analysis where the family practices and cultural practices were used as the independent variables and effect of indigenous cultural practices on maternal deaths in the Lawra District was used as the dependent variable. The ordinal regression analysis was used because the dependent variable was measured on an ordinal scale. Table 38 shows the regression model fitting information.

Table 38: Model Summary on Maternal Mortality

Model	-2 Log Likelihood	Chi-square	df	Sig
Intercept only	60.304			
Final	26.664	33.639	21	0.040

Predictors: indigenous cultural and family practices

p is significant at 0.05

Source: Fieldwork, 2014

As part of testing the significance of the ordered logistic regression analysis, the significance of the model that includes the predictor variables which has been arrived



through an iterative process that maximizes the log likelihood of the outcomes seen in the outcome variable was performed. It is noted that the regression model is significant ($\chi^2 = 33.639$, $p = 0.040$) as shown in Table 38 and that at least one of the regression coefficients in the model is not equal to zero. It is also seen in Table 38 that by including the predictor variables and maximizing the log likelihood of the outcomes seen in the data, the "Final" model has improved upon the "Intercept Only" model. This can be seen in the differences in the $-2(\text{Log Likelihood})$ values associated with the models. The Pseudo R-Square analysis presented a Nagelkerke value of 0.380 which implies that 38.0 percent of the variation in maternal mortality was explained by the cultural and independent factors.

In conclusion, since the significance value of the test-statistics ($p=0.040$) obtained is less than 0.05, then the null hypothesis:

H0: There is no statistically significant relationship between indigenous family/cultural factors and maternal mortality is rejected in favor of the alternative hypothesis:

H1: There is a statistically significant relationship between indigenous family/cultural factors and maternal mortality.

Generally, the study concluded there is a statistically significant effect of the indigenous cultural/family practices on maternal mortality in the Lawra District



CHAPTER SIX

SUMMARY, CONCLUSIONS AND

RECOMMENDATIONS 6.1 Introduction

The chapter presents a summary of the findings from the study as well as the conclusions, recommendations and areas for future research. The first part of the chapter focuses on the summary and the key findings while the sub-sequent parts relate to the key conclusions and recommendations. The last part is used to discuss areas for further research.

6.2 Summary

The study explored the indigenous role of the family in enhancing or hindering maternal health. In all, 251 respondents took part in the study. This comprised of 56 pregnant women, 103 women who have delivered and 73 family members (men and women) all of which responded to the study through questionnaires. On the other hand, 19 key informants including Traditional Birth Attendants (TBAs) and midwives also participated in the study through in-depth interviews

The general perception of the men and women of the Lawra District about maternal health was the focus of the first objective. The following key findings emerged: i. In spite of the fact that majority of the women used hospitals/clinics/health centres for their antenatal and post-natal services, a good proportion still use the services of TBAs/Services of mother- in-laws





- ii. With the exemption of the marital status of the respondents, none of the demographic variables of the respondents had an influence on their use of hospitals/clinic services. However, with the exemption of the educational background of the respondents, none of the demographic variables of the respondents had an influenced on their use of traditional birth attendants
- iii. Generally, the respondents held a relatively positive perception towards maternal health
- iv. Majority of the respondents were of the view that only men should decide on the need for women to seek antenatal/postnatal care and that the dominance of men in the household makes women in the Lawra District to have limited role in taking decisions that concern their maternal health care
- v. Most of the respondents disagreed that women are considered to be strong and independent if they can deliver by themselves without going to a health facility for safe delivery. However, majority of the respondents held the perception that the more children a woman has, the more fertile she is
- vi. Majority of the respondents disagreed that the use of contraceptives could later prevent a woman from giving birth
- vii. With the exception of the view that the use of contraceptive could later prevent women from giving birth, the perception that husbands or male partners have to grant permission to their partners before they access maternal health services, women are considered to be strong and independent if they can deliver themselves without going to a health facility for safe delivery and the

more children a woman has, the more fertile she is were all significant perceptions that affect the maternal health of women in the Lawra District

The indigenous cultural and family practices that promote or hinder maternal health in the Lawra District were studied in the second objective with the following key findings:

- i. The indigenous cultural practices that affect the maternal health of the women of the Lawra District include women's inability to choose when to have sex as well as the perception that it is culturally immodest to show early signs of pregnancy
- ii. The belief towards the use of contraceptives was also noted to be a key indigenous cultural practice that affect the maternal health of the women in the District
- iii. Forbidding pregnant women to eat certain foods was noted to be an insignificant indigenous cultural factor that affects the maternal health of the women of the Lawra District
- iv. In relation to family factors, mothers, mother's in-laws and elderly female relatives substantial influence on women's decision to seek delivery care during pregnancy was noted as the major significant family factor followed by attitude towards the use of traditional birth attendants that affect the maternal health of the women.

The effects of indigenous cultural and family practices on maternal deaths in the Lawra District were the focus of the third research objective with the following findings: i. Maternal health is significantly influenced by the cultural and family practices in the Lawra District



- ii. There exist a statistically significant relationship between indigenous family/cultural factors and maternal mortality in the Lawra District
- iii. Majority of the respondents were of the view that family and cultural practices had a significant effect on maternal deaths in the Lawra District

6.3 Conclusions

Generally, the study concluded that men and women of the Lawra District held a relatively positive perception about maternal health. However, the study concluded that a significant number of births still occur in the homes of Traditional Birth Attendants and/or mother in laws in the Lawra District. The study also identified a number of indigenous family and cultural practices that affect the maternal health of the women of the Lawra District including women's inability to choose when to have sex, beliefs towards the use of contraceptives, attitude of husbands towards antenatal care men's abusive nature towards women, mother's in-laws and elderly female relatives substantial influence on women's decision to seek delivery care during pregnancy and attitude towards the use of traditional birth attendants.

Generally, the dominance of men in the household makes women in the Lawra District to have limited role in taking decisions that concern their maternal health care. In relation to the role of the family on maternal health, the study concluded that there is a statistically significant relationship between indigenous cultural and family practices in the Lawra District and the maternal health of the women of the Lawra District. In other words, maternal health is significantly influenced by the cultural and family practices in the Lawra District.



6.4 Recommendations

Based on the key findings that emerged from the study, the following recommendations are made for policy making and direction for further research:

□ **Extensive education on contraceptives and cultural/family behavioral changes**

Helping men and women to change psychosocial risk and protective factors involving sexuality; increasing knowledge about risks and consistent and safe use of contraceptives are crucial to the adoption of contraceptives among men and women. In this regard, the study recommends that extensive education on how to accurately use contraceptives should be carried out for the men and women of the Lawra District and how to change certain culture/family practices/behaviours. The District Health Directorate should collaborate with the District Assembly and other stakeholders such as churches, mosques and opinion leaders such as Chiefs to provide extensive education on using contraceptives to promote maternal health and to do away with certain culture/family behaviours. In carrying out the extensive education, the mode of communication should be critically reviewed. The mode of communication should be in the local dialect where possible since the populace had low educational backgrounds.

□ **Performance bench marking/Bye law**

The Paramount Chief of Lawra should use maternal and for that matter maternal mortality as bench marks in assessing the performance of chiefs in his jurisdiction. In this regard Sub Chiefs are to make sure cultural/family barriers that hinders maternal health including the provision of transport to support pregnant women/children visit the health facility



□ **Effective training workshops for traditional birth attendants**

Although enormous attempts have been made by NGOs, government and other stakeholders in the provision of health centres across rural communities, access to antenatal care is still limited in some rural communities. To temporarily augment this gap, this study recommends that considering the proximity of TBAs to the local folks as well as the lack of formal education or medical training, TBAs should be given regular training as promoters of essential neonatal care in their communities. Training in this regard should focus on areas such as:

- i. Updating and improving the knowledge and skills of TBAs, to strengthen effective and efficient delivery system
- ii. Introduction of the holistic approach to maternal and child health care delivery to promote the concept of improving maternal and child health through support to both household and communities and by strengthening the linkages between pregnant women and those with babies, TBAs and the health centres.

□ **Economic empowerment of women**

Women's exclusion from many formal economic activities, especially in rural areas, has contributed to the high incidence of maternal mortality. In this regard, civil societies and NGOs in the area of women empowerment are advised to provide skill based training, micro enterprise promotion, women cooperatives establishment, credit and saving groups (Village Loan and Savings Schemes), job creation schemes, awareness issues, resource mobilization and market linkages to economically empower the women



of the Lawra District. This is essential in reducing extreme poverty to assist women access adequately maternal health provisions in the District.

□ **Eliminating domestic violence against women**

Since abuse during pregnancy could produce many adverse physical and psychological effects for the mother and foetus, this study recommends that men of the Lawra District should be educated on the severer effects of their abusive acts on the maternal health of women. This is essential in empowering men on how to react and constructively resolve conflict situations during pregnancy.

6.5 Future research

Considering the extent to which women of the Lawra District patronised the services of Traditional Birth Attendants, this study recommends that a further study be conducted to extensively explore the potential role of Traditional Birth Attendants can play in Neonatal Health in rural communities in Ghana.



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APPENDIX

Appendix 1

THE TREND OF MATERNAL DEATHS AND STILL BIRTHS IN LAWRA DISTRICT

Health Centre	BABILE		DOWIN E		EREMO N		LAWRA		ZAMBO		GOOD SHERP		TOTAL	
YEAR	M D	SD	M	SD	M	SD	M	SD	MD	SD	MD	SD	M	SD
2008	0	0	0	0	0	0	0	11	0	0	0	0	0	11
2010	0	0	0	0	0	0	2	0	0	0	0	0	2	0
2011	0	0	0	0	0	0	1	13	0	0	0	0	1	13
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	7
2013							3						3	

MD = MATERNAL DEATHS

SD/B = STILL DEATHS/ BIRHS

SOURCE: DHMT, LAWRA DISTRICT

Appendix 2

2009 – 2013 ANC, PNC AND INSTITUTIONAL DELIVERY

YEAR	ANC	PNC	INSTITUTIONAL DELIVERY
2009	1,469	1,136	976
2010	1,436	1,273	999
2011	1,423	1,128	533
2012	1,350	1,134	987
2013	1,522	1,074	1,004

SOURCE: LAWRA, DHA.(2014)

Appendix 3

Sample Size Calculations for each Stratum of Analysis

Women who are pregnant

$$Z = \text{Confidence level at 95\%} = 0.96$$

$$P = \text{Estimated women of child bearing age} = 0.40$$

$$C = \text{margin of error} = 0.123 = 0.13$$

$$SS = \text{Total sample size} = ?$$

$$SS = 0.9216 / (0.13)^2$$

$$= 56$$

Women who have given birth

$$Z = \text{Confidence level at 95\%} = 0.96$$

$$P = \text{Estimated women of child bearing age} = 0.40$$

$$C = \text{margin of error} = 0.0943 = 0.09$$

$$SS = \text{Total sample size} = ?$$

$$SS = 0.9216 / (0.09)^2$$

$$= 103$$

Family Members (Household Heads)

$$Z = \text{Confidence level at 95\%} = 0.96$$

$$P = \text{Estimated women of child bearing age 40\%} = 0.40$$

$$C = \text{margin of error} = 0.1122 = 0.11$$

$$SS = \text{Total sample size} = ?$$

$$SS = 0.9216 / (0.11)^2$$

$$SS = 73.1 = 73$$



Appendix 4

Table 5: Statistical Analysis and Techniques across Research Questions

RESEARCH QUESTIONS	TYPE OF DATA	DATA ANALYSIS	STATISTICAL DATA ANALYSIS TECHNIQUE
Research question (1)	Qualitative Quantitative	SPSS version 18 SPSS version 18	Descriptive (frequency and percentages) and inferential (chi-square test of independence) Thematic Analysis
Research question (2)	Qualitative Quantitative	SPSS version 18 SPSS version 18	Descriptive (frequency and percentages) and inferential (chi-square test of independence) Thematic Analysis
Research Question (3)	Qualitative Quantitative	SPSS version 18 SPSS version 18	Descriptive (frequency and percentages) and inferential (Pearson correlation, multiple regression analysis) Thematic Analysis.

Source: Researcher Construct, 2014



Appendix 5:

Tables 3: The Human Resource Position of the Lawra District

7/14/2014

Human Resource position at the hospital			
Category/grade	HOSPITAL		
	2012	2013	2014
Biomedical Scientist	2		1
Technical officer (lab)	0		2
Technical officer (Nut)	0	0	0
Technical officer (DC)	0	0	0
Laboratory Assistant	1		1
Field technicians	0	2	2
Laundry/washerman	0		0
Health services administrator	1		3
Secretary/typist	0		0
Driver	1		1
procurement officer	1	1	0
Watchman/security	2	2	2

Human Resource position at the hospital			
Category/grade	HOSPITAL		
	2012	2013	2014
Health services administrator	1		3
Ward Assistant	4		6
Health Aides	3		0
Orderlies/cleaners/Labourers	7		7
Anaesthetist			2
Supplier Officer	1		1
Estate officer	1		0

7/14/201

Human Resource position at the hospital

Category/grade	HOSPITAL		
	2012	2013	2014
Medical officer	3	3	
Cuban Medical Officers	2	2	0
Medical Assistant	4	3	3
Pharmacist	1	3	3
Dispensing Technician	3	1	1
Dispensing Assistant/Attendant		6	0
Field Technician		1	4
Technical officer (HI)	1	2	1
HIV /AIDS Data manager	1	1	1
Medical records assistant	1	1	1

4

Human Resource position et the hospital

Category/grade	HOSPITAL		
	2012	2013	2014
RGN	50	61	16
Midwives	7	8	8
Enrolled Nurse)	43	48	60
CHN	2	4	4
Public health nurse	0	0	1
Accountant	2	2	2
Accounts officer	4	3	0
Accounts assistant/revenue	3	1	0
Catering (cook)	3	4	0
Catering officer	1	1	1
Casual workers			49



SUBDISTRICTS

Health centre	FT	CHN	EN	MA	MIDWIFE	RGN	NON-TECHNICAL STAFF
BABILE	1	8	8	1	2	2	5
DOMWINE	0	5	2	0	1	1	5
LAWRA	0	9	2	0	1	0	1
EREMON	0	3	4	1	1	0	1
ZAMBO	1	5	3	0	1	0	0

Source: Lawra DHA, 2014



Appendix 6

UNIVERSITY FOR DEVELOPMENT STUDIES (UDS)

**THE ROLE OF THE FAMILY IN PROMOTING MATERNAL HEALTH IN
THE LA WRA DISTRICT OF THE UPPER WEST REGION OF GHANA
QUESTIONNAIRE FOR FAMILY MEMBERS (HOUSEHOLD HEADS)**

Dear Respondent,

This questionnaire has been designed purely for academic purpose. It has been designed to explore the indigenous role of the family in enhancing or hindering maternal health with specific focus on the general perception of men and women of the Lawra District about maternal health, the indigenous cultural and family practices in the Lawra District that promote or hinder maternal health and the effect of indigenous cultural and family practices on maternal deaths in the Lawra District.

You have been identified as one of the most trusted family members to respond to the issues to the best of your ability. You are, however, assured that information provided to complete this study will be treated with the strictest confidentiality.

Thank you in advance for your participation.

INSTRUCTION: Please supply answers and tick where appropriate

SECTION A: DEMOGRAPHIC CHARACTERISTICS

- 1) Gender... a) Male b) Female
- 2) Age... a) 15-24 b) 25-34 c) 35-44 d) 45-54 e) 55-64 f) 65 and above
- 3) Marital status... a) Never married b) Married c) Widowed
- d) Specify if others... ..
- 4) Educational background... a) Second degree b) First degree
- c) HND/Diploma Secondary e. Basic f. No formal education



The use of contraceptives could later prevent a				
---	--	--	--	--



woman from giving birth				
-------------------------	--	--	--	--

SECTION C: THE INDIGENOUS CULTURAL AND FAMILY PRACTICES IN THE LAWRA DISTRICT THAT PROMOTE OR HINDER MATERNAL HEALTH

10. Kindly indicate specific indigenous cultural practices in the Lawra District that:

i. Promote maternal health in the District

.....

.....

.....

ii. Hinder maternal health in the District

.....

.....

.....

11) Kindly indicate specific indigenous family practices in the Lawra District that:

i. Promote maternal health in the District

.....

.....

.....

ii. Hinder maternal health in the District

.....

.....

.....

12) To what extent does each of the following factors/practice in the Lawra District promote or hinder maternal health?



	Very high	High	Low	Very Low	Not at all
Cultural practices in the District promote maternal health					
Family practices in the District promote maternal health					
Cultural practices in the District hinder maternal health					
Family practices in the District hinder maternal health					

13) Which of these indigenous cultural and family practices affect maternal health? You may tick more than one

Which of these indigenous cultural and family practices affect maternal health? You may tick more than one

Cultural practices		Family practices	
Beliefs towards the use of contraceptive		Husband's decision or preference of antenatal care	
Culturally immodest to show early signs of pregnancy until it is visible		Attitude towards the use of health facilities	
Women inability to choose when to have sex		Attitude towards the use of traditional birth attendants	
Forbidding pregnant women to eat certain foods in the community		Mothers, mother's in-laws and elderly female relatives	



16.If Yes from question 2, what was the specific cause of the death?

.....
.....

17. In what specific ways would you attribute the death to:

i. Cultural practices in the District

.....
.....
.....

ii. Family practices

.....
.....
.....

18. Which of these factors significantly contribute to the death of women in the Lawra District through child birth? You may tick more than one

- i. Family practices
- ii. Cultural practices

SECTION E: RECOMMENDATIONS

19. What relevant measures can be put in place to ensure that cultural and family practices do not contribute to maternal mortality in the District?

.....
.....
.....

20.In your view, what should:

i. men do to help promote maternal health in the Lawra District?



.....
.....
.....
ii. Women do to help promote maternal health in the Lawra District?

.....
.....
.....

UNIVERSITY FOR DEVELOPMENT STUDIES (UDS)

**THE ROLE OF THE FAMILY IN PROMOTING MATERNAL HEALTH IN
THE LAWRA DISTRICT OF THE UPPER WEST REGION OF GHANA**

**INTERVIEW GUIDE FOR THE DISTRICT HEALTH DIRECTOR AND
MIDWIVES**

Dear Respondent,

This questionnaire has been designed purely for academic purpose. It has been designed to explore the indigenous role of the family in enhancing or hindering maternal health with specific focus on the general perception of men and women of the Lawra District about maternal health, the indigenous cultural and family practices in the Lawra District that promote or hinder maternal health and the effect of indigenous cultural and family practices on maternal deaths in the Lawra District.

You have been identified as one of the most trusted respondents to respond to the issues to the best of your ability. You are, however, assured that information provided to complete this study will be treated with the strictest confidentiality.

Thank you in advance for your participation.

INSTRUCTION: Please supply answers and tick where

appropriate SECTION A: BACKGROUND INFORMATION

1) Position.....



2) How long have you been working in the District?

SECTION B: OVERVIEW OF MATERNAL HEALTH IN THE LAWRA DISTRICT

3) Generally, how would you describe the prevalence of maternal mortality in the District?

.....
.....
.....

4). How would you describe the patronage of maternal health facilities by women in the District?.....

.....
.....

5)Kindly describe the availability of modern facilities and equipment for maternal health in your facility?(**Midwives only**)

.....
.....
.....
.....

SECTION C: THE GENERAL PERCEPTION OF MEN AND WOMEN OF THE LAWRA DISTRICT ABOUT MATERNAL HEALTH

6) What perception in your view do:

i. Women of the Lawra District hold about maternal health?

.....
.....
.....

ii. Men of the Lawra District hold about maternal health?



.....
.....
.....

7) How would you describe the attitude of men and women of the Lawra District about the use of:

i. Modern health facility

.....
.....
.....

ii. Traditional birth attendants

.....
.....
.....

8) What factors in your view contributes to the perception women and men of the Lawra District hold about maternal health?

.....
.....

SECTION D: THE INDIGENOUS CULTURAL AND FAMILY PRACTICES IN THE LAWRA DISTRICT THAT PROMOTE OR HINDER MATERNAL HEALTH

9) Kindly indicate specific indigenous cultural practices in the Lawra District that:

i. Promote maternal health in the District

.....
.....
.....



ii. Hinder maternal health in the District

.....
.....
.....
.....

10) Kindly indicate specific indigenous family practices in the Lawra District that:

i. Promote maternal health in the District

.....
.....
.....

ii. Hinder maternal health in the District

.....
.....
.....

SECTION E: THE EFFECT OF INDIGENOUS CULTURAL AND FAMILY PRACTICES ON MATERNAL DEATHS IN THE LAWRA DISTRICT

11) How would you describe the prevalence of:

(i) Maternal deaths in the District?

.....
.....

(ii) Still births in the District?

.....
.....

12) How would you describe the relationship between:

i. cultural practices in the Lawra District and the prevalence of maternal deaths in the District?



.....
.....
ii. Cultural practices in the Lawra District and the prevalence of still births in the District?

.....
.....

iii. Family practices in the Lawra District and the prevalence of maternal deaths in the District?

.....
.....

iv. **Family** practices in the Lawra District and the prevalence of maternal deaths in the District?

.....
.....

SECTION F: RECOMMENDATIONS

13. What relevant measures can be put in place to ensure that cultural and family practices do not contribute to maternal mortality in the District?

.....
.....
.....

14. In your view, what should:

i. men do to help promote maternal health in the Lawra District?

.....
.....
.....

ii. Women do to help promote maternal health in the Lawra District?



.....
.....
.....

UNIVERSITY FOR DEVELOPMENT STUDIES (UDS)

**THE ROLE OF THE FAMILY IN PROMOTING MATERNAL HEALTH IN
THE LAWRA DISTRICT OF THE UPPER WEST REGION OF GHANA**

INTERVIEW GUIDE FOR TRADITIONAL BIRTH ATTENDANTS

Dear Respondent,

This questionnaire has been designed purely for academic purpose. It has been designed to explore the indigenous role of the family in enhancing or hindering maternal health with specific focus on the general perception of men and women of the Lawra District about maternal health, the indigenous cultural and family practices in the Lawra District that promote or hinder maternal health and the effect of indigenous cultural and family practices on maternal deaths in the Lawra District.

You have been identified as one of the most trusted traditional birth attendants to respond to the issues to the best of your ability. You are, however, assured that information provided to complete this study will be treated with the strictest confidentiality.

Thank you in advance for your participation.

INSTRUCTION: Please supply answers and tick where appropriate

SECTION A: BACKGROUND INFORMATION

1) P o s i t i o
n

2) A g e



3) How long have you been working as a traditional birth attendant in the District?

.....
.....

4) E d u c a t i o n a l
b a c k g r o u n d

5) H o w d i d y o u b e c o m e a t r a d i t i o n a l b i r t h
a t t e n d a n t ?

6) H a v e y o u h a d a n y t r a i n i n g i n c h i l d
d e l i v e r y ?

7) K i n d l y i n d i c a t e t h e o r g a n i s e r s o f t h e t r a i n i n g p r o g r a m m e (s) i n c h i l d
d e l i v e r y

SECTION B: OVERVIEW OF MATERNAL HEALTH IN THE LAWRA DISTRICT

8.....).....Generally, how would you describe the prevalence of maternal mortality in the District?.....
.....

9. What factors in your view contribute to the current trend of maternal health in the District?.....
.....

SECTION C: THE GENERAL PERCEPTION OF MEN AND WOMEN OF THE LAWRA DISTRICT ABOUT MATERNAL HEALTH

10) How would you describe the 149 patronage of your facility by women in the



District?.....



.....
.....
.....

11. What perception do men and women hold about the services of traditional birth attendants in the District?

.....
.....
.....

12. What factors in your view contribute to the perception women and men of the Lawra District hold about the services of traditional birth attendants

.....
.....
.....

SECTION D: THE INDIGENOUS CULTURAL AND FAMILY PRACTICES IN THE LAWRA DISTRICT THAT PROMOTE OR HINDER MATERNAL HEALTH

13. Kindly indicate specific indigenous cultural practices in the Lawra District that:

i. Promote maternal health in the District

.....
.....
.....

ii. Hinder maternal health in the District

.....
.....
.....

14. Kindly indicate specific indigenous family practices in the Lawra District that:



i. Promote maternal health in the District

.....
.....
.....

ii. Hinder maternal health in the District

.....
.....
.....

SECTION E: THE EFFECT OF INDIGENOUS CULTURAL AND FAMILY PRACTICES ON MATERNAL DEATHS IN THE LAWRA DISTRICT

15. How would you describe the prevalence of:

(i) Maternal deaths in your facility?

.....
.....

(ii) Still births in your facility?

.....
.....

16. Generally, how many deaths have you recorded if any since your practice as a traditional birth attendant in the District:

.....
.....
.....

17) How would you describe the relationship between:

i. cultural practices in the Lawra District and the prevalence of maternal deaths in the District?



.....
.....

ii. Cultural practices in the Lawra District and the prevalence of still births in the District?

.....
.....

iii. Family practices in the Lawra District and the prevalence of maternal deaths in the District.....

.....
.....

iv. Family practices in the Lawra District and the prevalence of maternal deaths in the District?

.....
.....

SECTION F: RECOMMENDATIONS

18. What relevant measures can be put in place to ensure that cultural and family practices do not contribute to maternal mortality in the District?

.....
.....
.....

19. In your view, what should:

i. men do to help promote maternal health in the Lawra District?

.....
.....

ii. Women do to help promote maternal health in the Lawra District?



HND/Diploma

d) Secondary

e. Basic

f. No formal education



g) Specify if others.....

4) Religion... a) Christian b) Muslim
 c) Traditional d) Specify if

others.....

5) Employment status... a) Employed b) Unemployed

6) Occupation

7) Husband's occupation (if married)

8) Category of respondent... a) I am pregnant b) I have given birth

9) Ethni

10) How many children do you

11) Have you ever suffered any complications before during pregnancy or through giving birth?.....

SECTION B: TYPE OF HEALTH FACILITY USED

9) Which type of health facility do (did) you patronise? You may tick more than one. a) Traditional birth attendant b) Hospital/clinic only

10) Kindly indicate the extent to which you patronise each of the health facilities where 1 = Very high, 2 = High, 3 = Low and 4 = Very low

Type of health facility	1 Very High	2 Hig	3 Lo	4 Very low
Traditional birth attendant				
Hospital/clinic				

10) How many times did you patronise (only for those who have given birth)



- (i) Traditional birth attendant?
- (ii)H
ospital/clinic?

11. Under what stage of the pregnancy do (did) you patronize if any:

- (i) Traditional birth attendant?
- (ii)Hospital/
clinic?.....

SECTION C: THE GENERAL PERCEPTION OF WOMEN OF THE LAWRA DISTRICT ABOUT MATERNAL HEALTH

12) In your view, who should decide on the need for women to seek antenatal/postnatal care? a) Men only b) Women only c) Joint decision by the men and women

13) Kindly give reason(s) for your choice of answer in question 12
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14) Kindly indicate your view on the following where 1 = Strongly Agree (SA), 2 = Agree (A), 3 = Strongly Disagree (SD) and 4 = Disagree (D)

Variables	S A 1	A 2	S D 3	D 4
As a woman, my husband or partner has to grant me permission to access maternal health services				
As a women, am considered to be strong and independent if I can deliver myself without going to a health facility for safe delivery				



The more children a woman has, the more fertile she is				
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The use of contraceptives could later prevent me from giving birth				
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SECTION D: THE INDIGENOUS CULTURAL AND FAMILY PRACTICES IN THE LAWRA DISTRICT THAT PROMOTE OR HINDER MATERNAL HEALTH

15) Kindly indicate specific indigenous cultural practices in the Lawra District that:

i. Promote maternal health in the District
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ii. Hinder maternal health in the District
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16) Kindly indicate specific indigenous family practices in the Lawra District that:

i. Promote maternal health in the District
.....
.....
.....

ii. Hinder maternal health in the District
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.....
.....

17) To what extent does each of the following factors/practice in the Lawra District promote or hinder maternal health?



	Very high	High	Low	Very Low	Not at all
Cultural practices in the District promote maternal health					
Family practices in the District promote maternal health					
Cultural practices in the District hinder maternal health					
Family practices in the District hinder maternal health					

18) Which of these indigenous cultural and family practices affect maternal health? You may tick more than one

Cultural practices		Family practices	
Beliefs towards the use of contraceptive		Husband's decision or preference of antenatal care	
Culturally immodest to show early signs of pregnancy until it is visible		Attitude towards the use of health facilities	
Women inability to choose when to have sex		Attitude towards the use of traditional birth attendants	



Forbidding pregnant women to eat certain foods in the community		Mothers, mother's in-laws and elderly female relatives substantial influence on women's decision to seek delivery care during pregnancy	
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Having several children		Men abusing their wives during pregnancy (intimate partner violence)	
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19) Kindly indicate your view on the following where 1 = Strongly Agree (SA), 2 = Agree (A), Strongly Disagree (SD) and 4 = Disagree (D)

Variables	S A 1	A 2	S D 3	D 4
The choice of the women to control their own sexual health is challenged by social/cultural factors that mitigate their ability to decide independently and freely on their reproductive and sexual choices				
Utilisation of maternal health is influenced by cultural norms that impeded the autonomy of women with regard to childbearing				
Husbands' attitudes towards contraception strongly influence the willingness and ability of women to use contraception				
God/Allah would become angry if partners practice family planning				

SECTION D: THE EFFECT OF INDIGENOUS CULTURAL AND FAMILY PRACTICES ON MATERNAL DEATHS IN THE LAWRA DISTRICT



20) How would you describe the effect of indigenous cultural practices on maternal deaths in the Lawra District? a) Highly significant b) Partially significant c) Not significant at all



21) How would you describe the effect of indigenous family practices on maternal deaths in the Lawra District? a) Highly significant b) Partially significant c) Not significant at all

22) Cultural practices have adverse effect on women as it increases their chances of dying through giving birth in the Lawra District. a) Strongly agree b) Agree
c) Disagree d) Strongly disagree

23) Kindly indicate specific indigenous cultural practices in the Lawra District, if any, that could increase women's chances of dying through giving birth

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24) Family practices have adverse effect on women as it increases their chances of dying through giving birth in the Lawra District. a) Strongly agree b) Agree
c) Disagree d) Strongly disagree

25) Kindly indicate specific indigenous family practices in the Lawra District, if any that could increase women's chances of dying through giving birth

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SECTION E: RECOMMENDATIONS

26. What relevant measures can be put in place to ensure that cultural and family practices do not contribute to maternal mortality in the District?

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27. In your view, what should:



i. men do to help promote maternal health in the Lawra District?

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ii. Women do to help promote maternal health in the Lawra District?

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