UNIVERSITY FOR DEVELOPMENT STUDIES

AN INVESTIGATION OF FACTORS THAT INFLUENCE THE USE OF SKILLED DELIVERY SERVICES IN THE TALENSI DISTRICT OF THE UPPER EAST REGION, GHANA

ZAKARIA ABOTIYIRE IDDRISU

A THESIS SUBMITTED TO THE DEPARTMENT OF COMMUNITY HEALTH, SCHOOL OF ALLIED HEALTH SCIENCES, UNIVERSITY FOR DEVELOPMENT STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY DEGREE IN COMMUNITY HEALTH AND DEVELOPMENT

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BY

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AWARD OF MASTER OF PHILOSOPHY DEGREE IN COMMUNITY

HEALTH AND DEVELOPMENT

JULY, 2017

DECLARATION

Student

I hereby declare that this 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: **ZAKARIA ABOTIYIRE IDDRISU**

Supervisor

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies:

Supervisor's Signature:……. Date:…….

Name: **DR. VIDA NYAGRE YAKONG**

ABSTRACT

The use of skilled delivery services can avert some avoidable maternal and infant deaths. Deliveries that are conducted by unskilled persons can lead to complications to infants and their mothers. This study was conducted to investigate the factors that influence the use of skilled delivery services in the Talensi District of the Upper East Region of Ghana. A cross sectional descriptive study was conducted in the Talensi District The study was conducted among three months postpartum women, skilled birth attendants and traditional birth attendants. Sample size of 387 postpartum women, 12 skilled birth attendants, and 4 Traditional Birth Attendants were recruited for the study. The postpartum women were selected using multistage cluster sampling from 30 communities whilst the SBAs were selected through purposive sampling from all the health facilities of the district. Quantitative and qualitative methods were used to collect data. Majority of the postpartum women (56.3%) initiated ANC in the first trimester and about 75% made a minimum of 4 ANC visits. Majority (81.4%) delivered in health facilities whilst 18.6% (72) delivered at home. TBAs conducted 12.4% (48) of the deliveries whilst 81.4% (315) of the deliveries were conducted by skilled birth attendants. Mother in-laws conducted 6.2% of the deliveries. Factors that influence facility delivery are level of formal education, (χ^2= 13.2, $p < 0.02$), knowledge of danger signs of labour ($\chi^2 = 10.5$, $p = 0.01$), distance to health facility ($\chi^2 = 14.2$, $p < 0.001$), ANC attendance (AOR= 15.63, 95 % CI [8.16, 29.95]), parity (AOR= 11.21, 95 % CI [4.56, 27.58]) and autonomy (AOR= 3.44, 95 % CI [1.85, 6.39]). In

conclusion, facility delivery in the district is high. It is recommended that more CHPS compounds will be built to reduce the distance to health facilities.

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DEDICATION

I dedicate this work to my wife Madam Alberta Abaama Abongo and children Clementia, Akanbase Reagan and Ayinenongma Roosevelt for their moral support throughout this programme.

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LIST OF ACRONYMS/ABBREVIATIONS

ANC	Antenatal Care
ACDEP	Association of Church Development Programme
CHPS	Community-based Health Planning and Services
CHN	Community Health Nurse
CHO	Community Health Officer
CHAG	Christians Health Association of Ghana
CBSVs	Community based Surveillance Volunteers
CRS	Catholic Relief Services
DHMT	District Health Management Team
DHMS	District Health Information Management System
EmONC	Emergency Obstetric and Newborn Care
GFMHC	Ghana Free Maternal Health Care
FGD	Focused Group Discussion
GHS	Ghana Health Service
GDHS	Ghana Demographic Health Survey
GSS	Ghana Statistical Service
HCF	Health Care Facility
MDG	Millennium Development Goal

MMR	Maternal Mortality Ratio
MNC	Maternal and newborn care
ND	Nabdam District
PNC	Post Natal Care
PATH	Programs for Appropriate Technology in Health
SBAs	Skilled Birth Attendants
SBA	Skilled Birth Attendance
TBA	Traditional Birth Attendant
TD	Talensi District
UE/R	Upper East Region
UN	United Nation
UNDP	United Nations Development Programme
UNICEF	United Nations International Children and Emergency Fund
WFP	World Food Programme
WHO	World Health Organization

OPERATIONAL DEFINITION OF KEY TERMS WITHIN THE CONTEXT OF THIS STUDY

Antenatal care: The care that a woman receives during pregnancy which helps to ensure healthy pregnancy outcomes for women and newborns

Attitudes of health care providers:

Autonomy

Household Socio-economic status

Skilled/facility delivery: the act of a pregnant woman being assisted by skilled birth attendant to deliver her baby in an accredited health facility

Traditional Birth Attendant: A person (mostly a woman) who has been trained and is recognised in community to assist pregnant women in labour to deliver or refer them to a health facility.

Skilled Birth Attendant: A trained and professional health care provider (mostly a midwife/nurse/medical doctor) who assists pregnant women to deliver

Autonomy: The capacity to manipulate one's environment through control over resources or information for personal interest. One's capacity to make an informed, un-coerced decision

Household Socio-economic status: An economic and sociological combined total measure of a person family's economic and social position in relation to others, based on the income, education and occupation.

Attitudes of health care providers: A combination of beliefs and feeling held by the midwife, nurse or doctor that predisposes them to behave in a certain way

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Globally, one third of births take place at home without the assistance of a skilled attendant (World Health Organization, 2015). In Africa, less than 50% of births are attended by a skilled health worker despite an increase from 43% to 57% between 1990 and 2014 in all developing regions (UNFPA, 2014). Consequently, two million women have died in Africa during childbirth since 2009 (Wanjira et al, 2015). Forty million births in developing regions were not attended by skilled health personnel in 2015, and over 32 million of those births occurred in rural areas (WHO, 2016)

On a worldwide scale, significant progress has been made to date on improving maternal health (World Health Organization, 2015). Globally, the maternal mortality ratio dropped by 45% between 1990 and 2015, from 380 to 210 deaths per 100,000 live births (WHO, 2015). The UNFPA 2015 reported that despite progress in all world regions, the maternal mortality ratio in developing regions 230 maternal deaths per 100,000 live births in 2015 was fourteen times higher than that of developed regions, which recorded only 16 maternal deaths per 100,000 live births in 2015.

Maternal mortality is a health care issue between developed and developing countries with about 99% of all maternal deaths estimated to occur in the developing world. Burden of this tragedy is felt by African countries, which account for 40% of the global total pregnancy related mortality (UNICEF, 2012). Great disparities in perinatal health occur worldwide (Madson, 2011). Between 7 and 8 million perinatal deaths occur globally each year with the majority occurring in developing countries where over 90% of all infants are born (Stephenson et al, 2013). In Ghana, about 70% of all births were conducted by skilled birth attendants (GSS, 2014). The major causes of maternal deaths include unsafe abortions, eclampsia, bleeding, obstructed labour, infections and sepsis, reflecting poor provision and use of maternal health services (Sarah, 2013). One way to address both maternal and neonatal mortality is to ensure skilled obstetric care at the time of delivery, which is often achieved in sub-Saharan Africa by encouraging pregnant women to deliver their babies in health care facilities.

Poor use of maternal health services is a result of barriers to access (Van Lonkhuijzen et al., 2013). Most deaths would have been prevented if they had access to a skilled attendant, essential midwifery care and emergency obstetric care (EmOC).

For every woman who dies, up to 50 more suffer avoidable and debilitating health problems such as fistulae, prolapse of the womb and infertility (UNFPA, 2013). Over recent decades, infant mortality rates have fallen, but stagnating neonatal mortality rates mean that deaths in the newborn period are becoming responsible for an ever-increasing proportion of infant and child mortality (Lopez, 2012).

In Ghana, Infant mortality is less than 50 deaths per 1,000 live births while child mortality is 31 deaths per 1,000 children age one year. Neonatal mortality is 30 deaths per 1,000 live births in the most recent five year period, while the risk of post-neonatal mortality is 21 deaths per 1,000 live births (GDHS, 2014). Neonatal deaths account for 60 percent of the deaths in infancy (GDHS, 2014). The true burden of maternal mortality and neonatal morbidity and mortality is concealed due to delays and difficulties in presentation for care and the relative speed in which newborns can succumb to infection or perinatal hypoxia and more so newborn deaths occurring in the community may often go unreported (Carolyn et al., 2012).

Antenatal care (ANC) is one of the key practices that has a beneficial influence on maternal health. Good antenatal care and high coverage is

expected to impact positively on pregnancy and birth outcome and corresponding high levels of skilled attendance (Carolyn et al., 2013).

WHO (2011) recommends that, a minimum of four antenatal visits for care which include blood pressure measurement, urine testing for detecting bacteria and protein in urine, blood testing to detect syphilis and severe anemia, weight and height measurement to detect possible birth complications should be achieved before the woman delivers.

At delivery, the importance of skilled attendance has long been recognized (Carolyn et al., 2011). However, distance to health facilities, inadequate transportation and the need for immediate and specialized services have hampered women's ability to access these services (Brundtland, 2013). Attention to clean and hygienic delivery practices (WHO, 2003) and the provision of essential care for the newborn, such as thermal protection and early and exclusive breast-feeding (WHO, 1996), are important for the health of all infants whether born at home or in a health care facility.

About 70% of births in Ghana are delivered with the assistance of a skilled birth attendants (doctor, nurse/midwife, community health officer/nurse), 30 percent are delivered by a traditional birth attendant,

and about one in ten births is assisted by a relative, or receives no assistance (GDHS, 2014).

1.2 Problem Statement

Antenatal care (by a doctor, nurse, or midwife) is relatively high in Ghana with 96 percent of women receiving antenatal care at least once during the pregnancy. The UE/R of Ghana recorded the highest level of antenatal care (99%) in 2012. However, this positive trend of facilitating safe motherhood is matched by less than ¾ (61.4%) of all the pregnant women in the UE/R going to health facilities for childbirth (GSS, 2012). Mba and Aboh (2009), reported acts of disrespect and physical abuse in maternity wards by midwives serving as barriers to the utilization of skilled care in the Volta Region of Ghana. The 2014 GDHS cited the UE/R among other regions in the country as worse performing regions and therefore contributes largely to the national Maternal Mortality Rate (MMR) of 185 per 100,000 live births.

Analysis of the 2014 GHS annual report of the UE/R revealed that the use of skilled care at childbirth in more than five districts of the UE/R was lower than the regional average despite high antenatal attendance. Whereas the regional performance stood at 88.3% for skilled delivery in 2014, the Talensi district achieved 72.3% of skilled birth (GHS Annual Report, 2012)

An evaluation report of the Ghana Free Maternal Health Care (GFMHC) revealed that contrary to the well documented barriers to facility-based deliveries such as distance and cost of transport, a variety of local cultural practices and beliefs, and the cost of supplies requested by the midwives, the attitudes and perceived hostility of maternity staff are increasingly being established as major barriers to the utilization of skilled care at childbirth in Ghana (UNICEF, 2012). In the Talensi district where this study is conducted there is no district specific data or information on the barriers to the use of skilled delivery services hence the need to conduct this study.

The general purpose of this study was to explore the factors that influence the use of skilled birth services in the Talensi district of the Upper East Region. The findings of the GDHS (2014) showed that about 30% of births are conducted by unskilled birth attendants, majority of which occur in rural areas in the three northern regions of Ghana. Several factors account for the use and non-use of skilled delivery services. The aim of this study was to investigate the factors that influence the use of skilled delivery services in the Talensi district of the Upper East region.

1.3 Research Questions

i. What is the prevailing rate of uptake of skilled delivery services?

ii. What are the factors that influence the uptake of skilled delivery services in the Talensi district?

iii. What are the barriers to the uptake of skilled delivery services?

iv. What are the attitudes of skilled birth attendants towards pregnant women during labour?

v. What are the effects of SBAs' attitudes towards pregnant women during delivery?

1.4 Aim and Objectives of the Study

The general objective of the study was to investigate the factors that influence the use of skilled delivery services in the Talensi district

Specifically the study sought to;

i. determine current rate of uptake of skilled delivery services in the Talensi District

ii. assess the the attitude of skilled birth attendants on the use of skilled delivery services in the Talensi district

iii. Identify the determinants of the uptake of skilled delivery services and

iv. Identify the barriers to the uptake of skilled delivery services in the Talensi district

1.5 Relevance of the study

This research will provide important contributions to understanding the factors that influence pregnant women to deliver in health facilities. The study will also highlight the attitude of health service providers towards pregnant women and how that influence the utilization of maternal health services.

Even though several studies have been conducted in the area of skilled deliveries in Ghana, the findings of this study will provide factors that influence the uptake of skilled delivery services in a specific district in Ghana.

Principally, this research will contribute to the discussion within health access, enhancing understanding of social and other related barriers to the use of skill health service in Ghanaian communities. The theoretical frameworks employed in the study will allow access to health care to be understood as a function of human relation of the provider. Secondly, this thesis will demonstrate the importance of mixed methods (qualitative and quantitative methods) to gain a deeper understanding of factors influencing attitude, access, and utilization of maternal services. It is hoped that by developing an in-depth understanding of the participants' professional skills, economic, geographic, behavioural and social

environment, the researcher will suggest interventions that address both specific issues and seek to initiate fundamental changes in health and health care.

Lastly, this thesis will contribute towards the development of policy interventions which address issues of access to maternal health services in Talensi district of the UE/R of Ghana. Accordingly, the research will demonstrate how access of maternal health services is not exclusively the decision of individual women, but must be interpreted within the context of social factors, and environmental characteristics which shape, manifest, and determine women's access of maternal health care.

1.6 Scope of the Study

The study was conducted in the Talensi District of Ghana. The study was conducted in 30 communities and all the health facilities in the district.

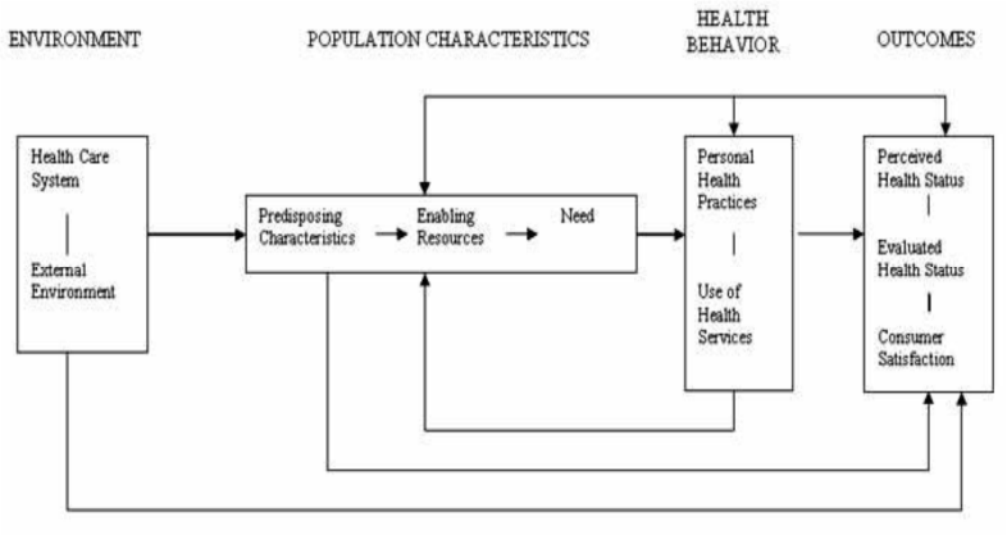
The study populations include; three months postpartum women, antenatal mothers, skilled birth attendants, and traditional birth attendants. The study sought to explore the factors that influence the use of skilled delivery services among pregnant women in the district. The factors were categorized under three broad areas thus individual or socio demographic factors, service providers and facility based factors, and socio cultural factors.

1.7 Conceptual Framework

The study was conducted based on the conceptual framework shown in Fig 1.1. The model of utilization of maternal health services used in this study is based on the conceptual framework of health-seeking behavior developed by Anderson and Newman (Anderson and Newman, 1973). This behavioral model proposed that the use of health care services is a function of three sets of individual characteristics: (i) predisposing characteristics, e.g. age, household size, education, number of previous pregnancies, health-related attitude;

(ii) Enabling characteristics, i.e. income, characteristics of health care system and access, and availability of health facilities; and (iii) need characteristics, i.e. characteristics of illness, perceived health status, and expected benefit from treatments. Fosu argues that the predisposing factors reflect the fact that families with different characteristics have a different propensity to use health care services, while the enabling factors reflect the fact that some families, even if predisposed to use health services, must have some means to obtain them, i.e. income, access, and availability of health services (Fosu, 1994). According to Andersen and Newman (1973), the need factor is the most immediate cause of health service use. The need factor reflects the perceived health status, as indicated by severity of the morbidity conditions or the number of

morbidities. The presence of predisposing and enabling components may not be enough for a mother to seek health care. She must perceive the disease as serious and believe that the treatment will provide the expected benefits (Fosu, 1994). Need for health care can be measured in a variety of ways: self-perceived health status, number of morbidity symptoms, or duration and severity of disability (Fiedler, 1981). Perceived severity or number of episodes of diseases has a positive association with health care utilization (Fosu, 1994).



Conceptual framework adapted from Anderson and Newman, 1973

1.8 Organization of the Thesis

This thesis has been presented or organized into six chapters. Chapter one includes introduction to the study, background to the study, problem statement, study objectives, significance of the study and operational

definition of terms as used in the study. Chapter two contains a review of relevant literature in relation to the study.

Literature was reviewed on the general overview of maternal health, use of maternal health services, contribution of TBAs to deliveries factors influencing use of skilled delivery services and barriers to the use of skilled delivery services. Chapter three describes the methodology which was used in conducting the study. The sections under this chapter includes study or research design, study type, study variables (independent and dependent variables), method of data collection, data collection instruments, sampling procedure, sample size determination, study population, sources of data, calculation of household wealth index, quality control measures and ethical considerations.

Chapter four presents the results and findings of the study. The results are presented in tables with descriptive and inferential statistics used in explaining or interpreting them. Chapter five of this report contains a discussion of the results and findings of the study. The discussion was done by comparing or relating the results to that of other studies conducted by other researchers elsewhere and in line with this study. Chapter six presents a summary of findings of the study, conclusions and the recommendations made based on the findings of the study. The last

part of the study contains the references cited in this study and the study questionnaires are attached as appendices of this report.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews relevant literature in relation to the study. Literature have been reviewed on maternal health in general, the use of antenatal care services, use of skilled delivery services, the knowledge of women on danger signs of pregnancy and labour, attitude of health care professionals and the determinants of facility delivery.

2.1 Maternal Mortality Situation in Ghana

Millennium Development Goals (MDGs) were set at the 2000 Millennium Summit to accelerate global progress in development. Sexual and reproductive health is a prerequisite of all goals, particularly those related to gender and health. Progress is monitored through achievement of two targets and their associated indicators for monitoring under MDG 5.The *maternal mortality ratio* is the number of women who die from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births (WHO, 2012).

Although considerable progress has been made as various health survey results indicate a fall from a high of 740 per 100,000 live births in 1990

to 451 per 100,000 live births in 2008 (Ghana Health Sector Review, 2009). The results from the 2010 PHC cast further doubt on achieving the MDG target. The report based on 2010 Population and Housing Census (PHC), shows that Ghana's MMR stands at 485 deaths per 100,000 live births (GSS, 2013).

Although the census did not ask questions on the causes of maternal deaths, several studies relate it to pregnancy related complications such as severe bleeding (hemorrhage), hypertensive diseases, infections and abortions (Ghana Health Sector Review, 2010). The issue is if health workers and government are aware of the causes, why the country is missing this MDG 5 target. Even a more critical issue is whether the modest gains achieved so far have been evenly/equitably distributed across different geographical settings and socio-economic groups such as poor and non-poor individuals, rural and urban localities and age groups, etc.

The 2010 PHC results gives a startling revelation about the variation of MMR across the age-groups. Though not too surprising, the highest incidence of death occurs between the ages of 12 and 14 as the results indicate 5,671 deaths per 100,000 live births, more than ten times higher than the national rate. This age group, however, has the least number of pregnancy related deaths and live births of 52 and 917 respectively. The

data further show that the risk of death increases for women aged above 40 years. The second highest age group more likely to die from pregnancy related complication is women aged between 45 and 49 (GSS, 2012).

At the regional level, the disparities are much wider. The MMR ranges from 355 deaths per 100,000 in the Greater Accra Region to 802 deaths per 100,000 in the Upper East Region. Closely following the Upper East Region is the Volta Region which stands at 701 deaths per 100,000 (GSS, 2013).

2.1 Overview of Skilled delivery services

According to WHO report, in 2015, approximately 287 000 women died while pregnant or giving birth and 3.1 million newborns die in the neonatal period. The highest incidence of maternal and perinatal mortality occurs around the time of birth with the majority of deaths occurring within the first 24 hours after birth (WHO, 2015). Skilled Service provision requires an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborn. The World Health Organization advocates that these health professionals should be motivated and located in the right place at the right time and be supported

by appropriate policies, essential supplies including medicines and operating under appropriate regulatory frameworks.

Skilled attendance at all births is considered to be the single most critical intervention for ensuring safe motherhood, because it hastens the timely delivery of emergency obstetric and newborn care when life-threatening complications arise. Skilled attendance denotes not only the presence of midwives and others with midwifery skills (MOMS) but also the enabling environment they need in order to be able to perform capably (WHO 2004). It also implies access to a more comprehensive level of obstetric care in case of complications requiring surgery or blood transfusions.

Historical as well as contemporary evidence from many countries, most notably China, Cuba, Egypt, Jordan, Malaysia, Sri Lanka, Thailand and Tunisia, indicate that skilled midwives functioning in or very close to the community can have a drastic impact on reduction of maternal and neonatal mortality (WHO, 2011). This is why the proportion of births attended by a skilled health provider is one of the two indicators for measuring progress toward the fifth Millennium Development Goal, improving maternal health.

WHO (2013), reported that up to 15 per cent of all births are complicated by a potentially fatal condition. Although many of these complications

are unpredictable, almost all are treatable. Skilled attendants are trained to recognize problems early, when the situation can still be controlled, to intervene and manage the complication, or to stabilize the condition and refer the patient to a higher level of care, if needed. Skilled attendance is also vital to protecting the health of newborns: the majority of perinatal deaths occur during labour and delivery or within the first 48 hours after delivery.

The World Health Organization (2015) reported 73 percent of all deliveries in the world are attended by skilled health providers. However, in some countries only 10-15 percent the deliver in health facilities whilst in many of those cases the woman do not have access to life-saving emergency care should something go wrong.

2.3 Uptake of Skilled Delivery Services among Pregnant Women

According to Starrs (2007) use of antenatal care services, skilled birth attendance, access to emergency obstetric care and neonatal resuscitation skills are vital components needed to substantially reduce maternal, perinatal and neonatal mortality in developing countries.

The level of maternal health services utilization varies markedly among and within regions and countries, being well below 50% in many countries in South-East Asia and Sub-Saharan Africa (UNICEF, 2014).

Although official nation-wide figures may show high coverage rates, this picture can be misleading because there are regional variations within countries. Typically, rates of skilled attendance are lower in rural than in urban areas (Say et al, 2012). This situation applies to Tanzania where in 2004/2005 the average rate of skilled attendance was as high as 81% in urban areas and as low as 39% in rural, remote districts. Even within rural regions, marked differences may exist which can be related to cultural norms, socioeconomic circumstances, accessibility of health institutions and service provision (Gabrysch and Campbel, 2012). In the case of nomadic populations and peasant farmers, it is even more difficult to provide health services, including obstetric care with skilled birth attendance (Sheik-Mohamed and Velema, 2011).

It is estimated that 34% of mothers globally deliver with no skilled attendant; this translates into 45 million births occurring at home without skilled health personnel each year (WHO, 15). Skilled attendants assist in more than 99% of births in developed countries compared with 62% in developing countries. In five countries including Ethiopia the percentage drops to less than 20% (WHO, 2016).

Available literature suggests that several factors are responsible for the uptake of skilled delivery services by pregnant women. Extensive studies have been carried out in different countries to establish these factors.

Baral et al., (2010) found that socio-economic, cultural and religious factors play a significant role in the use of Skilled Birth Attendance for delivery in Nepal. Availability of transportation and distance to the health facility; poor infrastructure and lack of services; availability and accessibility of the services; cost and convenience; staff shortages and attitudes; gender inequality; status of women in society; women's involvement in decision making; and women's autonomy and place of residence are significant contributing factors for uptake of Skilled Birth Attendance for delivery in Nepal. However, it is unclear how and why these factors are responsible for utilization of skilled birth attendants in pregnancy.

According to McCarthy and Maine (1992), socio-economic factors that affect access to health care and causes maternal mortality operates at the individual, family and community level and is a complex issue. The individual woman makes decisions about her health depending on her educational level, occupation, level of personal income or wealth and her autonomy. The aggregate family income and occupation and education of family members could also affect access to health care for the woman. With the community, the collective resources and wealth plays an important role in the socio-economic aspects of the health needs of community members.

Deogaonkar (2010) also identified the autonomy of women to be a factor influences the uptake of skilled delivery services. He found that women in India find themselves in subordinate positions to men socially, economically and culturally. They are economically dependent on men. Women are largely excluded from making decisions, have limited access to and control over resources, are restricted in their mobility, and are often under threat of violence from male relatives.

In Tanzania, a study by Mrisho et al., (2011) found ethnicity, gender of the household head, maternal education level, and the maternal age at child birth, socio-economic and quality of services status as significant independent factors in determining the choice of delivery place. The study also identified sudden onset of labour or short labour as some factors that affect decisions towards selecting the delivery place. Selecting health facility for delivery was perceived to be more desirable for prolonged labour

A study by AbouZahr (2010) showed that factors such as cultural beliefs, socio-demographic status, women's autonomy, economic conditions, physical and financial accessibility, disease pattern and health service issues are important determinants of the use of maternal health care services.

Another study from India by Shariff et al., (2010) pointed out that the low utilization of maternal health services was due to low levels of household income, high illiteracy and ignorance, and a host of traditional factors.

In Pakistan, Babar et al., (2014) found poor socio-economic status, lack of physical accessibility, cultural beliefs and perceptions, low literacy level of the mothers and large family size as the leading causes of poor utilization of maternal health care services.

In another study from Ethiopia, it was observed that the use of maternal health services can be influenced by the socio demographic characteristics of women, the cultural context, and the accessibility to these services (Yared et al, 2003).

According to Thind et al., (2008) the choice of place of delivery by Indian women is greatly influenced by paternal education level, and scheduled caste status are the predisposing factors that determined the choice of private facilities, public and home deliveries.

In Pakistan, the size of family, parity, educational status and occupation of the head of the family are also associated with the use of maternal health services in addition to age, gender and marital status (Babar et al, 2004).

In September 2003, the Ministry of Health of Ghana introduced an exemption policy directed at making delivery care free. The thrust of these

policies have been to improve uptake, quality and financial and geographic access to delivery care services. The services covered by the exemption policy are normal deliveries, assisted deliveries including Caesarean section and management of medical and surgical complications arising out of deliveries, including the repair of vesico-vaginal and recto-vaginal fistulae. The policy covered delivery services in public, private and faith-based health facilities.

2.2 Uptake of skilled delivery services in Ghana

According to the Ghana Demographic and Health Survey (GDHS) (2014), seventy-four percent of pregnant women reported that their last live birth in the five years preceding the survey was delivered by a skilled provider and seventy-three percent of births were delivered in a health facility. However, there are differences or disparities in the rate of skilled delivery between rural and urban women because ninety-one percent of births to urban mothers were assisted by a skilled provider and 91 percent were delivered in a health facility, as compared with 59 percent and 58 percent, respectively, of births to rural women. The Northern region has the lowest rate of skilled deliveries in Ghana with 36 percent of skilled delivery in 2014.

Several interventions have been designed in Ghana to improve maternal and child health. Notable among these interventions are the Free Maternal

Health Care Policy, the distribution of mosquito nets to pregnant women during antenatal care, renewed focus on family planning, skilled care at delivery and emergency obstetric care recruitment and training of more health professionals, greater financial investment in maternal health services, robust tracking of progress and accountability which include measuring maternal mortality indicators at population and health services levels as a means of understanding and addressing the maternal mortality burden (Ghana Health Service, 2012). Despite these interventions, some pregnant women in Ghana especially those in rural areas still deliver at home without skilled providers which have led to high maternal mortality rates (Awoonor-Williams, 2013).

According to Kuganaab-Lem et al (2014), nurses, midwives and doctors need to have the knowledge and skills necessary to treat or stabilize and refer women with complications and also must employ sound normal birth practices that reduce the likelihood of preventable complications in order to have birth preparedness and complication readiness at the provider level.

According to Overbosch et al (2002), Ghana implemented a number of policies and strategies to achieve an improvement in the health of

pregnant women and their babies and a reduction of maternal mortality which include policies on maternal health services.

Nyonator and Kutzin, (2007) stated that almost all antenatal care in Ghana is received from modern health care providers, such as midwives, nurses, medical assistants, or doctors and that traditional health practitioners play only a minor role in antenatal care (1 percent only), according to these survey data.

The Government of Ghana has adopted the WHO focused antenatal care (ANC) package in a move to improve access, quality and continuity of ANC services to pregnant women. As part of these efforts, the Government has exempted fees for ANC clients. Refocusing ANC has resulted in significantly better quality of care, notably in prevention of diseases (e.g., malaria and anaemia in pregnancy), promotion of health (e.g., counseling on STI/HIV/AIDS) and continuity of care (Philomena et al, 2006).

Villar et al (2009) identified some forms of delay which are responsible for most of the maternal and neonatal mortalities that occur in Ghana. The delays that were identified were delays in deciding to seek care, delays in reaching care and delays in receiving care. Their study further reported that these forms of delay have their foundation on lack of adequate

preparedness among pregnant women and their families for child birth and its associated complications.

2.4 The Need for Skilled Birth Attendants

In 2015 approximately 287 000 women died while pregnant or giving birth and 3.1 million newborns die in the neonatal period. The highest incidence of maternal and perinatal mortality occurs around the time of birth with the majority of deaths occurring within the first 24 hours after birth (WHO, 2016). This is why WHO advocates for "skilled care at every birth". Ensuring quality maternity care services can save the lives of women and newborns (Stephenson et al, 2015). These services require “an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns”. (1) In addition to the appropriate skills, these health professionals should be motivated and located in the right place at the right time, they need to be supported by appropriate policies, essential supplies including medicines and operating under appropriate regulatory frameworks (Gitimu et al, 2015)

2.5 Knowledge of danger signs during pregnancy

Childbirth is often associated with unpredictable life-threatening obstetric complications that lead to maternal and neonatal morbidity and mortality, especially in low-resource countries. Indeed, in the absence of skilled obstetric care, 15% of all pregnant women will suffer from serious and long term morbidities and disabilities (Madson, 2014). Receiving care from a skilled provider during childbirth has been identified as the most important intervention to prevent maternal and neonatal mortality. Improved knowledge of obstetric danger signs, birth preparedness practices, and readiness for emergency complications are among strategies aimed at both enhancing utilization of maternal health services and increasing access to skilled care during childbirth, particularly for women with obstetric complications

The Ugandan Ministry of Health launched the Safe Motherhood Healthcare package in 2004, with the ultimate goal of providing obstetric interventions to reduce maternal mortality. The causes of maternal morbidity and mortality may be analyzed using the Three Delays Model (UNFPA, 2013). This model identifies three phases of delay: delay in seeking care, delay in reaching care, and delay in receiving adequate care when reaching a health facility. This model is based on the assumptions that knowledge of danger signs and preparedness for addressing obstetric

complications ensures that predictable elements of the three phases of delay can be anticipated, identified in time and addressed promptly as they arise. Delays in seeking care may be caused by failure to recognize signs of complications or perceive the severity of illness, cost considerations, and previous negative experiences with the healthcare system. Delays in reaching care may be caused by the long distances from a woman's home to a health facility, poor condition of roads, and absence or unaffordability of emergency transportation. Delays in receiving care may result from negative attitudes of healthcare providers, shortages of supplies and basic equipment, a lack of healthcare personnel, and poor skills of healthcare providers (UNFPA, 2013)

The Maternal and Neonatal Health Program of JHPIEGO developed the birth-preparedness and complication readiness (BPCR) matrix to address these three delays at various levels to ensure that women and newborns receive appropriate, effective, and timely care. These levels include the pregnant woman, her family, her community, health providers, health facilities, and policy-makers at different stages: pregnancy, childbirth, and the postpartum period. The concept of BPCR includes knowledge of danger signs, planning for a birth attendant and birth location, arranging transportation, identifying a blood donor, and saving money in case of an obstetric complication. It is unclear whether knowledge of danger signs

translates into improved birth preparedness and complication readiness, yet the objective of the BPCR strategy is to promote active preparation and decision making for delivery by pregnant women and their families, as every pregnant woman faces risk of sudden and unpredictable life threatening complications. From studies in Ethiopia among pregnant women or women of reproductive age, most women were not knowledgeable about birth preparedness and complication readiness for obstetric emergencies, despite having awareness on the danger signs of pregnancy.

In Ghana, a study conducted by Kuganab-Lem et al, (2013) showed that less than 70% of pregnant women living in rural areas of northern Ghana have knowledge of the birth control and complication readiness. This was attributed to the low level of formal education among women, low ANC attendance and poor level of advocacy among health professionals.

Studies performed in different regions of Ghana have shown that health education during antenatal care enhances the utilization of skilled health care and improves mothers' knowledge about obstetric danger signs (Nyanator et al, 2012). During antenatal care and any other contact with pregnant women, the health education provided is supposed to raise awareness about obstetric danger signs and ensure mothers make

adequate preparation for childbirth complications. Whether knowledge of danger signs translates into and is associated with improved birth preparedness has not been documented. Such an assessment would add to the evidence that specific interventions result in reduced maternal or neonatal mortality and morbidity. The objective was to explore the association between knowledge of obstetric danger signs and birth preparedness/complication readiness among women admitted in pregnancy with obstetric complications (Nyanator et al, 2012)

2.5 The Role of Traditional Birth Attendants

Traditional Birth Attendants (TBA) are found in most communities of the world although their nature and function vary considerably. The World Health Organisation definition of a TBA is a person who assists the mother during childbirth and who initially acquired her skills by delivering babies herself or by working with other TBAs' (Leedam, 2008). TBAs are often older women and are generally illiterate (UNFPA, 2013). For families, TBAs are a cheaper option than domiciliary professional midwives and will often accept payment in kind. In many countries where home delivery is the norm, midwives are only available in health facilities. In many cultures TBAs are respected members of their community, perform important cultural rituals and provide essential social support to women during childbirth (Carney, 2010). However, in

some cultures, for example in the Indian sub-continent, TBAs are low caste and lack influence. People believe that body fluids released at childbirth (liquor and blood) are polluting and employ a TBA to carry out polluting tasks on behalf of the rest of the family (Rozario, 2010). In all cases their beliefs and practices are influenced by local customs and sometimes by religion (Bullough 2010).

The workload of TBAs varies considerably from place to place and among individuals. Some TBAs, may only attend family members and thus conduct only 2 or 3 deliveries a year while others have a wider clientele and a higher number of deliveries. It is unusual for TBAs to deliver more than 20 women in a year (WHO, 2011).

The stated goal of TBA training is to contribute to the reduction of maternal and child mortality and morbidity through improved delivery and child care practices by: a) improving the skills, understanding and stature of TBAs; b) increasing the number of births conducted by trained TBAs; and c) improving links between modern health services and the community through TBAs (Cabral et al., 2012). Core training generally focuses on teaching TBAs to perform deliveries in a more hygienic and safer fashion, discouraging harmful practices, recognising danger signs and referring women with complications to facilities where essential

obstetric care is available. Health education for pregnant women and antenatal and postnatal care are usually included. In some programmes TBA training has assumed a much wider agenda and includes child health intervention, health promotion and family planning. It has even been proposed that training TBAs in anthropometry could help in identification and improved management of pregnant women with malnutrition (Krasovek & Anderson, 2011). Training arrangements usually consist of short (about 5 days) basic course followed by regular meetings with mainstream health staff for supervision and on-going education. TBAs may be asked to keep simple records with the intention of allowing the health system to monitor their activities.

Non-Governmental Organizations (NGO) working at community level in resource poor countries frequently include TBA training in their activities. A number of governments, for example Bangladesh, have also adopted this approach, supported by massive donor funding. International agencies, including WHO, UNICEF and UNFPA have also supported TBA training. However, in recent years the value of TBA training has been increasingly questioned (Maine, 2010) although there are still many groups who remain enthusiastic (Greene, 2015). There often appears to be little common ground between the proponents and opponents of TBA training.

In a rural health project in Dana, Ghana, TBAs have been trained and supervised since 1973. Evaluation of this programme has demonstrated that trained TBAs can provide patient education and encourage women to go to health centres for preventive care. However, it has also shown that many TBAs routinely perform high risk deliveries even though they have been taught to refer them to higher level care. When TBAs do refer, a significant proportion of their patients do not comply with the referral advice. Reasons for non-compliance with referral by TBAs included financial constraints, lack of transportation and fear of disrespectful or painful treatment from medical staff (Awoonor-Williams, 2010). The study concluded that in this rural environment it was important to establish or upgrade referral facilities before training TBAs and that the main contribution of TBAs was probably in health promotion (Eades et al, 2013).

Studies in India have indicated that training TBAs in care and resuscitation can improve neo-natal outcomes (Bang et al. 2013) and that they can reduce neonatal mortality following training in management of neonatal pneumonia. At one time it was argued that TBAs could reduce the incidence of neonatal tetanus (WHO, 2014). However, vaccination with tetanus toxoid was shown to be overwhelmingly superior (Ross,

2011) though there is evidence that TBAs can participate effectively in promoting vaccination (Mathur et al, 2012).

Several studies have focused upon the contribution that TBAs can make to fertility regulation activities although it has been shown that TBAs can be quite negative to fertility regulation activity and thereby counteract access to contraceptives (Singh & Kaur, 2012).

A Bangladeshi NGO (Gonoshasto Kendra) has provided all maternal health services in one health District for over 20 years. A community-based approach is followed with TBAs and community health workers working as a team. The birth rate and the infant death rate of the district are lower than the national average and there is a higher contraceptive prevalence and immunisation rate. A recent evaluation report stresses the major contribution of the referral hospital, and of the continuing education programme to the effective functioning of the TBAs (Chowdhury, 2011).

Awareness of the perils of over medicalisation of childbirth have led some authors to support the concept of childbirth with a TBA as a natural process and to question the 'Western' content of the training process (MacCormack, 2010). It would be appropriate to attempt to model the risks and benefits of moves towards more medicalized care for normal childbirth in developing countries and to assess the extent to which

training of TBAs might lead them to abandon desirable traditional practices such as an upright position during labour (Lefèber, 2009).

2.6 Skilled Birth Attendant's knowledge and attitudes in pain management

In general terms, knowledge can be defined as familiarity, awareness or understanding gained through experience or study. On the other hand, the elderly refers to being past middle age and approaching old age". Attitudes is defined as „„the way a person views something or tends to behave towards it, often in an evaluative way"". (The free dictionary 2010). Both knowledge and attitudes affects the SP's ability to effectively manage pain. In managing pain, the objectives should be aimed at reducing pain to a reasonable point and assuring that one's ability to function and to lead a comfortable life is sustained or enhanced (Jablonski &Ersek 2009).

In nursing, nurses obtain their knowledge in different ways. According to history; some of the means are; traditions, authority, trial and error methods, borrowed knowledge from nursing related fields, personal experience, being a role model as well as a tutor or instructor, perception, thinking and research (Burns & Grove 2009.) In addition, the knowledge and training of those individuals qualified in the provision of healthcare services can be referred to as clinical expertise. It can be influenced by

the time spent by nurses in their field of work, up-to-date knowledge on research and clinical-based information as well as academic training attained during the study period. (Burns & Grove 2009, 10-11.) According to Craig & Smith (2007) and Sackett, Straus, Richardson, Rosenberg & Haynes (2000), the nurses' knowledge provides them with the ability to make decisions regarding clinical issues in dispatching the best care possible.

2.8 Effect of Attitude of SBA on the Uptake of Skilled Delivery Services

Both positive and negative attitudes of Health Service Providers play a part in the utilization of SBAs in various ways. Staffs' positive attitude towards women during labour e.g. giving reassurance and encouragement and politeness encouraged use of SBAs. Studies from different developing countries have shown that negative attitudes like rudeness, shouting during labour, lack of empathy, refusal to assist, and lack of moral support, making patients wait and giving priority on the basis of links to status, caste and ethnic, language and religion all discourage use of SBAs (Kamwendo and Bullough, 2005). Similarly, a study from Nepal shows that too many outpatients in the departments of the facility make it difficult to manage privacy and confidentiality and lack of adequate training to service providers to maintain privacy and confidentiality also discourage use of SBAs (Pradhan, 2005).

Upgrading delivery care often begins with improving the quality of personnel and services offered in facilities. When facilities have qualified personnel with the right attitude and provide quality services, they become widely used and trusted by community members (UNFPA, 2004). The lack of doctors, nurses and midwives and also the presence of all these people without the right attitude towards clients poses serious problems for developing countries. Essential competencies are also needed at the referral level. A study in Burkina Faso, for example, found that caesarean sections are sometimes referred from the district level. Pre-service training institutions are not producing graduates with the essential competencies and attitudes of a skilled attendant–either for routine obstetric care or for emergency obstetric care (Global Health Council, 2008).

A woman reported about the attitude and competencies of a skilled attendant and made a statement such as “even the delivery went normally, but there was a nurse, who was just in training, and after my baby was born, he pulled the placenta out by force…. when he pulled, another nurse shouted at him: ‘Don’t do that!’ I was torn badly down there, so they had to stitch it all up, but everything got so infected, and that infection never seems to have gone away” (Campbell-Krijgh et al, 2003).

According to Cotter et al (2006) women in Kenya place value on delivery by a TBA because of the attitude of nurses and other skilled attendants. The society respects and uses the services because of the attitude of some health professionals towards women especially those within the lower social class.

Ghana's free delivery care policy is seen as an effective approach to increase the utilization of skilled care for delivery. However, this has proved to be wrong because even with the delivery-fee-exemption policy the utilization of delivery services is not encouraging because of poor attitude of nurses towards clients, poor quality of care, low staff strength, poverty, transportation, long distances to health facilities, socio-cultural barriers, and the custom of using traditional birth attendant still remains and these hinder access to skilled delivery (Impact, 2007).

A study in Niger shows that the main reason for delays to go to health facility was due to past experience of poor outcome of pregnancy such as still birth, poor management of treatment. Women may choose a place for delivery because they feel that staff non responsive, rude, refusal to assist them, lack of empathy, lack of confidentiality and privacy. Further, they experience long waiting time (Meyer, et al., 2007; Duffy, 2007; D'Ambruoso, et al., 2005).

Gessessew and Melese (2002) stated that poor staff attitude in addition to problems of financial cost of drugs, supplies , equipment , transport and distance to facility, poor staff attitude leads to poor quality to conduct delivery and including EmOC delay woman to seek care at facility level.

2.9 Delivery Free Exemption Policy in Ghana

Like many other African countries, Ghana has been implementing a cost-sharing policy in its health sector since the 1990s. The adoption of this policy and the consequent charging of user fees for health services was due to stagnating economies and associated budgetary constraints and increasing gaps between supply and demand for basic social services that have been characteristic of African countries since the 1970s (African Population Studies 2004). The main objectives for the adoption of cost-sharing policies have been to improve both quality and access to health services. Studies focusing on the experience of African countries with the implementation of user fees indicate varying findings on the impact of user fees on their health delivery systems. The access of the poor, in particular, has been adversely affected, according to the findings of a number of studies. Policies, such as targeting the poor, have not been effectively implemented to mitigate the impacts of the user fee policy on their access. The main findings of this work indicate that a number of

shortcomings of policy adoption, particularly the lack of specification of criteria by which the poor can be identified, make it difficult for health workers to grant exemptions.

Further findings show that declining government budget allocations and supplies might have made it imperative for the facility manager to be more concerned about collecting revenue than attending to financial access of the poor. The study, however, suggests that despite the shortcomings of the targeting policy and its implementation, it should continue to be an important component of health policy, considering the vast inequalities in income in the population (Delali Margaret Badasu: Implementation of Ghana's Health User Fee Policy and the Exemption of the Poor).

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodology used in conducting the study. It includes a description of the study area, sample size determination, sampling procedures, data collection processes, data collection tools, data analysis, quality control measures and ethical considerations of the study.

3.1 Description of the study area

3.1.1 Location

The study was carried out in the Talensi Districts (TD) of the Upper East Region (UE/R) of Ghana. The district is bordered to the South by the West and East Mamprusi districts of the Northern Region, Bolgatanga municipal to the West, Nabdam district to the North and Bawku West to the East. The district rest between latitudes 10.15 and 10.60 north of the equator, and longitudes 0.31 and 10.5 west of the Greenwich Meridian. Tongo is the capitals of Talensi district. Datorko, Winkogo-Awaradone, Shia, Yinduri, Pwalugu, Balungu, Namologo, Wakii, Sheaga and Gbane are some major communities located in the Talensi district. Figure 1 below is a map of the Talensi district showing towns and villages located in the district. Based on the Population and Housing Census conducted by

the Ghana Statistical Service, GSS 2012, the total population size of the Talensi district is 85,164. Taleni and Nabit are the two major dialects spoken in the district. The cultural practices among the people in the district are interrelated. Polygamous marriage is predominantly practiced among the people of the districts. Figure 1 is a map showing towns and villages in Talensi District

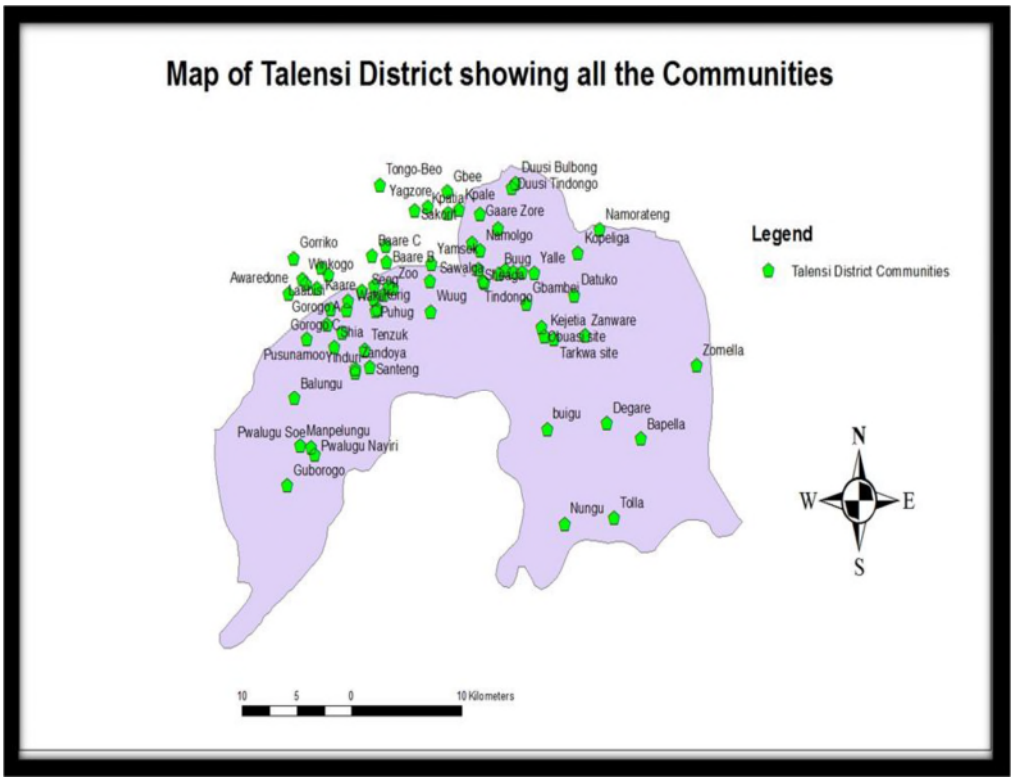


Figure 3.1: Map of Talensi District showing various towns and villages (Source: Talensi District Health Directorate)

3.1.2 Economic Activities of the Talensi District

With regards to economic activities, agriculture is the main source of employment of the people, 90% are engaged in crop production. Other economic activities undertaken in the district are gold mining popularly known as 'galamsay' operation, fuel wood extraction and food processing. Due to the soil types, geological structure, and vegetation, crops grown in the district include early millet, maize, late millet, guinea corn, groundnuts, potatoes and vegetables (Talensi District Assembly, 2014).

3.1.3 Health care services in the Talensi District

The Talensi district is served by one district hospital located in Tongo town, one health center in Pwalugu, 17 Community-Based Health Planning and Services (CHPS) compounds and 2 clinics owned by the Christians Health Association of Ghana (CHAG) located in Tollah and Namolgo communities respectively. Table 2 below shows the details of the health facilities in the district. There are also 189 TBAs who provide accompaniment to women and occasionally conduct emergency deliveries including head in vulva and road side delivery on their way to the clinic or at home. There are 268 Community-based Surveillance Volunteers (CBSVs) recruited by the health service providers to identify

early danger signs of pregnancy and delivery support refer women to the skilled service providers for better health care. Qualified medical staff are inadequate in Talensi district (2014 Annual Report). With a population of over 85,164 the Talensi district has only one qualified medical doctor who superintend over the Tongo district hospital. From the 2014 annual report, there are 18 midwives currently in the district, 72 Community Health Nurses (CHN) with fifteen currently on study leave. Most of the health facilities are poorly equipped with medical supplies and equipment and these compels them to refer most pregnancy related complications to the Bolgatanga regional hospital for proper care.

To improve geographical access to quality health service delivery for the people of the area especially those in the deprived rural communities, the District Health Management Teams (DHMT) have divided the health administration into six sub districts. These include Tongo Central sub district with Tongo as its capital, Tongo West sub district with Pwalugu as its capital, Tongo East with the capital at Namolgo and Datoko sub district with its capital located in Datoko. The District Health Management Team (DHMT) headed by the District Director of Health Services (DDHS) is responsible for the day-to-day administration and effective implementation of health delivery services in the districts. Though efforts have been made to improve access to health service

delivery by government and development partners, utilization of skilled birth services is still low in the Talensi district.

Healthcare services provision in the Talensi District is supported by some Non-Governmental Organizations. Development partners such as the Catholic Relief Service, World Vision International, PATH-Malaria Care and others are among the organizations supporting in the area of maternal, newborn child health in the Talensi District. Whereas CRS and PATH-Malaria Care support in the area of Maternal, Newborn Child Health, World Vision provides drinking water to serve the clinics and the communities.

Table 3. 1 Shows various health facilities in the district and type

No.	Name of facility	Location of facility	Type of facility
1	Datoku Clinic	Datoku	Clinic
2	Duusi CHPS	Duusi	CHPS
3	Gorogo CHPS	Gorogo	CHPS
4	Namolgo Clinic	Namolgo	CHPS/CHAG
5	Kpatia CHPS	Kpatia	CHPS
6	Pwalugu HC	Pwalugu	Health Centre
7	Yinduri CHPS	Yinduri	CHPS
8	Balungu CHPS	Balungu	CHPS
9	Winkogo CHPS	Winkogo	CHPS
10	Shia CHPS	Shia	CHPS
11	Tolla CHPS	Tolla	CHPS/CHAG
12	Tongo District Hospital	Tongo	District hospital

Source: District Health Administration, Talensi District, 2015.

3.2 Study Type

A cross-sectional descriptive survey was conducted (Bowling, 2007). This is a type of observational study that analyzes data collected from a population, or a representative subset, at a specific point in time. The respondents are asked to answer questions retrospectively. These surveys

gather information on opinions, perceptions, knowledge, attitude and use of services or some phenomena under study.

3.3 Study Population

The study participants were SBAs (midwives/doctors/nurses) in all the 12 health facilities of the Talensi district, 2 FGD with antenatal mothers in two health facilities and three months postpartum women selected from 30 communities of the district. Three months postpartum women were selected to reduce recall bias in relations to the ANC services and the skilled delivery services received.

3.4 Sample size

The proportion of skilled delivery in Talensi District as of 2014 was 71.6% of the total number of deliveries recorded in the district (DHD, 2015).

To calculate the sample size n represents the required sample size, t the confidence level at 95%, (standard value of 1.96) and p, prevalence of skilled delivery (71.6%), m is the Margin of Error at 5%, (standard value of 0.05).

The formula is $n = t^2 \times p(1-p)/m^2$

$n = (1.96)^2 \times 0.71(1-0.71)/0.05^2$

$n = 3.8416 \times 0.248064/0.0025$

$n = 0.9529626624/0.0025$

$n = 381$

A total of 390 respondents were interviewed. Nine respondents were added to cater for non-respondents and errors in questionnaires. Out of this number three questionnaires were rejected leaving 387 for data entry and analysis.

3.5 Sampling Procedures

Different sampling techniques were used at every stage of the study.

These are explained below.

3.5.1 Selection of the Communities/Clusters

The postpartum women were selected from 30 communities of the Talensi District. The communities were selected using Probability Proportional to Size (PPS). By this method, the lists of all the communities in the district were compiled with their corresponding populations. The cumulative populations of the communities were also calculated. The sampling interval was calculated by dividing the cumulative population by the number of clusters or communities (Sampling interval = Cumulative population/ number of clusters).

A random number which is less than the sampling interval was selected. The first cluster was located by finding the community whose cumulative population exceeded this random number. To select the second cluster, the sampling interval was added to the random number earlier selected.

The community whose cumulative population just exceeds this number was then chosen. The second cluster was located in this community. The subsequent clusters were selected by adding the sampling interval to the number which located the previous cluster. The procedure was repeated until all the clusters were chosen. By this method, communities with larger populations should have a proportionately greater chance of containing a selected cluster than smaller communities.

3.5.2 Selection of the Households of Respondents

The respondents were selected from the households of sampled houses in the selected communities. The houses have already been demarcated or enumerated by the Ghana Health Service for immunization programmes. The demarcation set out by the Ghana Health Service was therefore adopted by this study in selecting the households. To locate the first household in each of the communities, the investigator chose a starting location by going to a central location in the cluster. At the centre of the cluster, a travel direction was selected at random by spinning a pen. The investigator then moved in a straight line in a chosen direction and counting all of the households until the end of the community or cluster was reached. The investigator then randomly chose a number between 1 and the number of houses counted in the row as the starting point for the

survey. The number randomly chosen therefore corresponded with the starting house.

3.5.4 Selection of Individual Respondents (postpartum women)

Three months postpartum mothers who were living in sampled houses were interviewed. In houses where there were more than two mothers who met the inclusion criteria, only one of them was selected for the interview. The mother with the youngest child in the house was interviewed. This was to minimize recall bias. In houses with more than one household, only one household was selected and this was the mother with the youngest child. This was based on the premise that the mother with the youngest child has just delivered and therefore had fresh memories of the ANC services received which could reduce recall bias.

3.5.5 Selection of SBAs and TBAs

The SBAs and TBAs were selected through purposive sampling technique. Twelve (12) SBAs were selected one from each health facility in the district and was interviewed Four (4) TBAs were also selected through purposive sampling. The TBAs were selected from the same communities in which the postpartum women were selected.

3.6 Study Unit

Women with children below three months were interviewed at the household level. Pregnant women, Active Traditional Birth Attendants,

Midwives and Community Health Nurses who conduct skilled deliveries were the respondents.

3.7 Inclusion Criteria

The inclusion criteria were;

i. Three months postpartum women residing in the Talensi District at the time of the study
ii. Three months postpartum women in the Talensi District who were willing to participate in the study
iii. Skilled birth attendants (midwives/doctors/nurses) working in health facilities of the Talensi District.
iv. Traditional birth attendants residing in the study communities of the Talensi District.

3.8 Variables

The dependent variable is the uptake of skilled birth services and the independent variables include socio - demographic characteristics such as age, marital status, parity, religion; socio-economic status such as level of education of the mothers, occupation, household income; accessibility to health care facility in terms of time spent from home to health care centre, availability of transportation, decision making, attitude of skilled birth attendants, availability of medical equipment, attitude of client etc.

Interviewer – questionnaires were formulated and administered to collect demographic and socio-economic data, respondents' utilization of skilled birth services and attitude of SBAs that affect utilization of skilled birth services. This was guided by the study objectives. In-depth interview guides and Focus Group Discussions (FGDs) were used to collect information on the perception of skilled birth attendants on the reasons for poor skilled birth uptake. Pregnant women participated in FGDs to ascertain their next place of birth and reasons for the choice of place of birth. The research instruments were prepared in English and administered in the language (Talen, Nabt and Gurene) of the respondents.

3.9 Data Collection and Study Instrument

Quantitative and qualitative methods were used in the data collection. Data collection was carried out using the interviewer questionnaires, semi-structured interviewer questionnaires for the FGD with antenatal mothers to get the overall picture of SBAs utilization, attitudes of service providers towards women during labour and the effects.

The quantitative data included the socio-demographic characteristics of the respondents, maternal history of ANC utilization, use of skilled delivery services, household decision making issues and household

wealth index. Structured questionnaire was designed which was used to interview the mothers.

Key informant Interviews (KIIs) were conducted with the SBAs to explore the providers perspectives of their relationship with clients during labour and the implications to SBAs. In-depth interviews were held with TBAs who provide accompaniments to pregnant women during labour to understand from their perspective the relationship that exist between health service providers and the pregnant women and how that negatively or positively affects the utilization of skilled birth services in their communities. Qualitative data was recorded in narrative form using audio recording devices.

3.10 Data Analysis and presentation methods

Data from the structured questionnaires was coded and entered into Statistical Package for Social Sciences (SPSS version 20.0) for analysis. Both bivariate and multivariable analyses were performed to find the factors or determinants of the use of skilled delivery services. Chi square values of these bivariate analysis were considered to be statistically significant with $P < 0.05$ and a confidence level of 95 %. Independent variables found to be statistically significant at the 0.1 level based upon the results of the bivariate tests, were entered as potential variables included in the logistic regression models.

Statistical difference was considered significant if the P-value was less than 0.05 and 95 % Confidence Intervals (CI) was calculated for all main outcome measures that met the normality and homogeneity criteria.

Multiple logistic regression analysis was done to find out the determinants of the uptake of skilled delivery services. Factors that were included in the first step of the multiple logistic regression analysis included the maternal education level, wealth index, maternal autonomy and distance to health facility.

In both bivariate and multivariate analyses, p-values were considered statistically significant when P< 0.05. Chi square values were used to test the association between categorical variables and the uptake of skilled delivery services. The focus group discussions were recorded and the tapes transcribed. The main themes were also recorded in a jotter during the discussion sessions. The recorded tapes were transcribed into the English Language since the discussions were done in the local languages. Content and thematic analyses were performed to the themes of the interviews. The main issues that ran through all the discussions were taken as the themes and supported with some direct quotations from the discussants.

3.11 Quality Control Measures

Reliability is the degree of consistency that the instrument or procedure demonstrates in whatever it is measuring. It is the ability of the study instrument to measure what it is intended to measure consistently. In order to establish the reliability of the data collection tool or the study questionnaire, Cronbach's alpha (Rist, 2010) was calculated after the data entry for what?. This was found to be 0.8831 which is high and closer to 1. Other quality control measures that were employed include training and pretesting of questionnaires. There was a training session for the research assistants who assisted in the data collection to ensure that valid and reliable data were collected. The training gave the data collectors much insight into the questionnaires and what it sought to achieve.

Pre-testing of the tool was done to check clarity of items, ambiguity of the language and feasibility of the tool. Formal permissions were obtained from the Talensi DHMT and traditional leaders of the communities before administering the questionnaires. The structured items were administered to three months postpartum mothers who were selected by probability sampling methods. The time taken by each respondent to answer the questions varied from 20-30 minutes. The tool was found to be clear

feasible and there was no ambiguity in the language. Questionnaires were numbered in a sequential order before field and confirmed from the field. To ensure reliability of findings, research assistants recruited for the study were persons who are familiar with the study area, minimum qualification of Diploma, speaks the local languages (Gurene, Talen and Nabt)

Double entry of the data was done after the questionnaires were administered. The quantitative data was entered by two persons after which the two data sets were compared to check inconsistencies in the data. The recorded tapes of the FGDs were played and transcribed verbatim after which the main themes were extracted and supported with some direct quotations or statements from the discussants.

3.12 Determination of Household Wealth Index or Economic status

A household wealth index based on household assets and housing quality was used as a proxy indicator for socio-economic status (SES) of households. An absolute measure of household wealth (wealth index) used in this study is based on an earlier concept developed by Garenne & Hohmann (2003), whereby the sum of dummy variables created from information collected on housing quality (floor, walls, and roof material), availability of electricity, water and type of toilet facility, and ownership of household durable goods and livestock (e.g. bicycle, television, radio,

motorcycle, sewing machine, telephone, cars, refrigerator, mattress, bed). These facilities or durable goods are often regarded as modern goods that have been shown to reflect household wealth. A household of zero index score for example means that household had not a single modern good. The scores were thus added up to give the proxy household wealth index. The index varied from 0-18. Households that had a wealth index score of 13 and below were classified as having a low wealth index score and those that had a wealth index score of 14 and above were classified as having a high wealth index score.

The main aim of creating the index was to categorize households into SES groupings in order that we could factor in socio-economic status in multiple regression analysis and to compare the difference in the uptake of family planning services between the groups of lowest and highest SES.

3. 13 Determination of Maternal Autonomy

Autonomy has been defined as the control women have over their own lives, the extent to which they have an equal voice with their husbands in matters affecting themselves and their families, control over material and other resources, access to knowledge and information, the authority to make independent decisions, freedom from constraints on physical

mobility and the ability to forge equitable power relationships within families (Jejeeboy and Sathar, 2001).

Maternal autonomy or the mother's status in the household indicates her decision-making power with respect to movement, finance, healthcare use, and other household activities. The dimension of women's autonomy that was investigated in this study related more to decision-making power, control over finances and ability to communicate with spouse or health worker on her health. Maternal autonomy was determined by taking into consideration the ability of the woman to take some decisions including the following:

i. Woman takes part in decision making on household matters
ii. Woman decides how to spend her own money
iii. Woman makes the decision to buy her clothes
iv. Woman is involved in making decision to buy large household items/furniture
v. Woman makes the decision to work outside of the home
vi. Woman's power to deny sex to the husband
vii. Woman's freedom to travel
viii. Knowledge of where to find family planning services
ix. Ability to discuss family planning issues with spouse
x. Ability to communicate with service provider on health matters

In this study, women are considered to participate in decision making if they make decisions alone or jointly with their husband or someone else. A composite measure was created using the sums of equally weighted binary input variables. Women were scored 1 for answers to each factor that included her (alone or jointly) in decision making, otherwise they were scored 0. The index of decision making power contained ten factors, thus the respondents were scored from 0 to 10. A composite index of women autonomy (CIWA) was then constructed similar to that of Singh et al (2005). Two categories of CIWA viz. low and high were created on the basis of average value of index in the study sample. Thus a binary variable from CIWA was created to indicate women with high autonomy versus low autonomy. The high and low categories were created by dividing the sample indexes into approximately half. The women receiving less than the average score were classified as low autonomy category. Women who scored at least the mean index value were classified as having relatively high autonomy.

3.14 Ethical considerations

An approval was obtained from the Department of Community Health of the University for Development Studies and also from the District

Director of Health for Talensi District. Introductory letters were taken from the two institutions

All researchers and research assistants were trained on the conduct of ethical procedures and were monitored during data collection by supervisors trained to monitor the data collection. Informed consent was obtained separately for each study participant for each component in the language best understood by the respondents. All participants were given detailed information about the study including: aims/methods of study; institutional affiliations of the researcher; anticipated benefits, risks/discomfort it may cause, the time the questionnaire or interview will take; the fact that they may choose not to answer any questions and that they have the right to abstain from participating in the study, or to withdraw from it at any time, without reprisal; measures that will be taken to ensure confidentiality and anonymity of information provided, contact details of the study coordinator for any questions or concerns. A cake of soap was provided to all respondents to compensate for the time spent with them in the interview. A back-up storage facility in the form of hard disk of CD Rom was provided. All questionnaires were put in a well labeled sealed large envelope and kept in a metal cabinet under lock and key.

3.15 Limitation of the study

Recall bias – The recall period in the study was maintained at 3 months, but this was still a sufficiently long period to be affected by recall bias. The views and opinions of respondents and the analysis represent the population.

3.16 Plans for Dissemination of Results

The findings of this study will be made available to the district involved in the study, the regional health administration, UE/R and relevant actors who promote maternal and newborns care (CRS Ghana, ACDEP, WFP, PATH and UNICEF). Presentations of the findings of this study will be done in the academic and scientific meetings of the University for Development Studies, Department of Community Health and Development, Graduate School, Tamale annual Health Service Performance Review Meeting of the Talensi and Nabdam Districts. Finally, this work will be published in consultation with the supervisor and the academic board of the university in a reputable journal.

CHAPTER FOUR

RESULTS OF THE STUDY

4.0 Introduction

The results of the study are presented in this chapter. Univariate, bivariate and multivariate analyses were done for the quantitative data. The results are presented in tables and charts and described with descriptive and inferential statistics. The findings of the qualitative data are presented with the themes and direct quotations from the key informants.

4.1 Socio-Demographic Characteristics of Respondents (Postpartum Women)

The study involved women in fertile age with a mean age of 23.22 ± 3.10 years (Mean ± Standard deviation). The least age of the respondents was 15 years with a maximum age of 48 years. The range of the ages of the respondents was 33 years and a skewness of 1.5 ± 0.9. The variance of the ages of the respondents was 101.9.

The results showed that most of the respondents forming 47% (182) were within the age group of 15-25 years whilst 31.3% (121) were within the age group of 26-35 years. Only 41% (16) of the respondents were above 46 years. In this current study, the results showed that a great majority of the respondents representing 92.2% (357) were married whilst 6.5% (25) were single as shown in table 4.1 below.

The results further showed that majority of the respondents who formed 78.8% (305) were Christians with 18.1% (70) being traditionalist. Farmers formed 20.4% (79) of the study sample with 35.4% (137) being unemployed or housewife. Table 4.1 below shows the socio demographic characteristics of the respondents.

Table 4.1 Socio demographic characteristics of the postpartum women

Variable	Frequency (n= 387)	Percentage
Age group (years)		
15-25	182	47.0
26-35	121	31.3
36-45	68	17.6
46 and above	16	4.1
Marital status		
Married	357	92.2
Single	25	6.5
Widowed	5	1.3
Ethnicity		
Talen	284	73.4
Nabd	16	4.1
Gurune	75	19.4
Others	12	3.1
Religion		
Christianity	305	78.8
Islam	12	3.1
Traditionalist	70	18.1
Occupation		
Paid worker	8	2.1
Petty trading	102	26.4
House wife	137	35.4
Farming	79	20.4
Student	15	3.9
Artisan	42	10.8

Mining	4	1

4.1.1 Educational level of respondents (Postpartum women)

An assessment of the educational level of the respondents showed that majority of the respondents who formed 49.9% (193) did not have any formal education whilst 41.1% (159) were educated to the basic level. Only 3.6% (14) of the postpartum women were educated to the tertiary level as shown in figure 4.1 below.

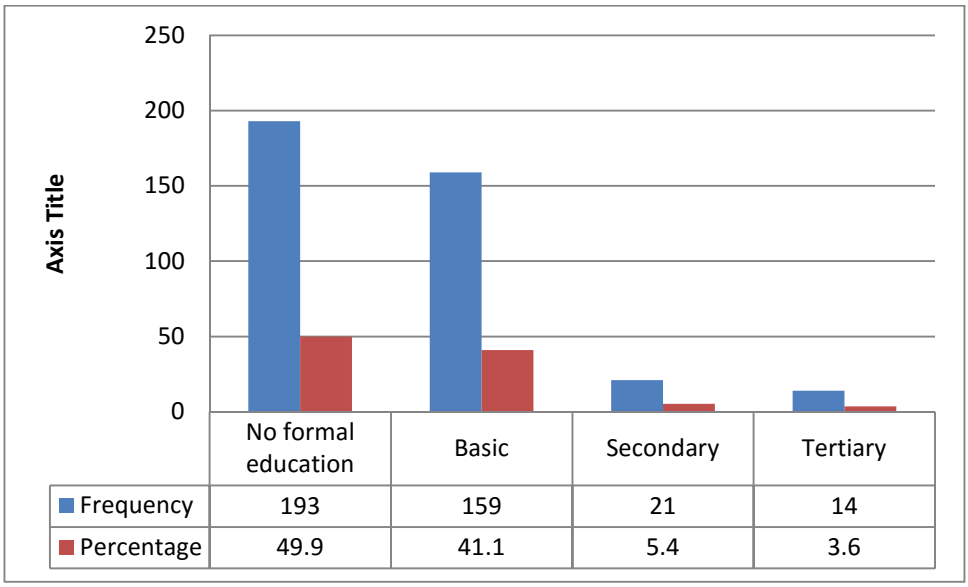


Figure 4.1 Educational level of postpartum women

4.2 Use of Antenatal Care Services

This current study assessed the use of ANC services during the last pregnancy of the postpartum women from their maternal health record book. The results showed that majority of the respondents forming 56.3%

(218) initiated ANC in the first trimester whilst 40.3% (156) initiated ANC in the second trimester. Only 3.4% (13) of the respondents initiated ANC in the third trimester.

All the respondents sought antenatal care in their last pregnancy. An assessment of the frequency of ANC visits showed that 25.1% (97) of the respondents made less than 4 ANC visits whilst majority (74.9%) made a minimum of 4 ANC visits. Table 4.2 shows the timing and frequency of ANC visits.

Table 4.2: Timing and frequency of ANC

Variable	Frequency (n=387)	Percentage
Timing of first ANC visit		
First Trimester	218	56.3
Second Trimester	156	40.3
Third Trimester	13	3.4
Frequency of ANC Visits		
None	0	0.0
1-3 times	97	25.1
At least 4 times	290	74.9

4.3 Reasons for ANC Services Utilization

The reasons for attending ANC were among the postpartum women. The results showed that majority of the respondents forming 48.1% (186) attended ANC to protect the health of the mother and child. It was also

found that 18.6% (72) of the women attended ANC to prevent or identify potential health problems during pregnancy. It was also found that 11.9% (46) of the respondents sought ANC to get medication for pregnancy related complications as shown in table 4.3 below.

The study found that 169 out of the 387 respondents initiated ANC late in pregnancy (second or third trimester). The main reason for the late initiation of ANC was due to the fact they did not encounter any health problems during their pregnancies. This was cited by 79.3% (134) however, 13% (22) of the respondents did not give any reason for their late initiation of ANC. Table 4.3 below shows reasons for late attendance of ANC.

Table 4.3: Reasons given for attending ANC

Reason	Frequency (n)	Percent (%)
Reasons for attending ANC		
Improve the health of the mother	24	6.2
Protect the health of the child	59	15.2
Protect health of both mother and child	186	48.1
Prevent /identify potential problems during birth	72	18.6
Get medication for pregnancy related conditions	46	11.9
Total	**387**	**100.0**
Reasons for late ANC reporting		
No health problems encountered	134	79.3
Late detection of pregnancy	7	4.1
Decision of husband	2	1.2
Financial difficulties	4	2.4
No reason	22	13.0
Total	**169**	**100.0**

4.4 Content and Quality of ANC Services

Women were asked whether specific ANC services including taking of weight and height, health education, TT injections, SP administration, measurement of blood pressure, and taking blood or urine samples were carried out for them Tables 4.4a and 4.4b show the kind of services received.

The results showed that all the respondents had their blood samples examined for STIs and other diseases however, only 74.7% (289) had their blood samples taken for examination. The proportion of respondents whose weight was checked or measured was 98.7% (382) as shown in table 4.4a below.

Table 4.4a: ANC services received during pregnancy

ANC services	Frequency (n=387)	Percentage
Weight Measured		
Yes	382	98.7
No	5	1.3
Height measured		
Yes	268	69.2
No	119	30.8
Blood pressure checked		
Yes	374	96.6
No	13	3.4
Laboratory examination of urine samples		
Yes	289	74.7
No	98	25.3
Laboratory examinations of blood samples		
Yes	387	100.0
No	0	0.0
Health education given at ANC		
Yes	387	100.0
No	0	0.0

The results further showed that 82.2% (318) of the respondents received TT injections during pregnancy whilst 97.1% (376) of them received iron supplements. The proportion of respondents who received malaria

prophylaxis was 95.1% (368) whilst 50.7% (196) of the respondents said that their fundal height was measured as shown in table 4.4b below.

Table 4.4b: Content of ANC services that were given to pregnant women

Content of ANC given	Frequency (n)	Percentage (n)
Tetanus injections received		
Yes	318	82.2
No	69	17.8
Iron supplements given		
Yes	376	97.1
No	11	2.9
Malaria prophylaxis with SP		
Yes	368	95.1
No	19	4.9
Fundal height measurement		
Yes	196	50.7
No	191	49.3

4.5 Knowledge of danger signs during pregnancy

There is a positive correlation between knowledge and attitudes Thus, all other things being equal, knowledge of something makes one to behave positively toward it. The opposite is true. The researcher wanted to ascertain whether the respondents are aware of these life threatening signs during pregnancy. Table 13 shows that, of the 387 interviewed, 20.9% mentioned vaginal bleeding as a danger sign while 79.1% did not

mentioned it. On severe headache 73.4% checked whether the pregnant women had severe headache, 30.7% checked swelling face and hands. Only 4.1% checked premature labour pains whilst 21.4% checked for high fever. Further, on the danger signs of reduced or no fontal movement at all only 1% checked whilst 31.5% checked severe abdominal pains.

The results showed that majority (73.4%) of women know severe headache as a danger sign during pregnancy more than any other danger sign they know.

Table 4.5: Maternal Knowledge of danger signs in pregnancy

Danger Sign	Checked (frequency)	Per Cent	Unchecked (frequency)	Per cent	Total
Vaginal bleeding	81	20.9	306	79.1	100
Severe headache	284	73.4	103	26.6	100
Swelling of face and hands	119	30.7	268	69.3	100
High fever	83	21.4	304	78.6	100
Premature labour pains	16	4.1	371	95.9	100
Reduced or no total movement at all	4	1.0	383	99	100
Severe abdominal pains	122	31.5	265	68.5	100

4.5.1 Maternal Knowledge of danger signs in labour/delivery

The respondents were asked of the danger signs of labour and delivery.

Table 13 indicates that, 47% knew severe headache as a danger sign

Whilst 89.1% knew severe abdominal pains.

Again, 3.1% of the respondents knew convulsion as a danger sign during labour and delivery whilst 16% knew fever as a danger sign. The results further showed that 2.8% mentioned foul of vaginal discharge as a symptom of labour whilst 7.2% mentioned severe pains as a symptom labour.

About 2.6% of the respondents mentioned excessive bleeding as danger sign of delivery whilst 1.3% mentioned cord, arm or leg prolapsed as dangers during delivery.

Table 4.6: Maternal Knowledge of danger sings during labour/delivery

Danger Sign @ Delivery	Checked (FREQ)	Per cent	Unchecked (FREQ)	Per cent	TOTAL
Severe headache	182	47	205	53	100
Severe abdominal pains	345	89.1	42	10.9	100
Convulsion or fits	12	3.1	375	96.9	100
Tight fever	62	16	325	84	100
Foul vaginal discharge	11	2.8	376	97.2	100
Labour pains more than 12hrs without delivery	28	7.2	359	92.8	100
Ruptured membranes more than 12hrs	10	2.6	377	97.4	100
Excessive Bleeding during delivery	48	12.4	339	87.6	100
Cord, arm or leg prolapsed	5	1.3	382	98.7	100

4.5.2 Knowledge of symptoms of danger signs after delivery

The respondents were asked of their knowledge of dangers signs or symptoms after delivery. Table 14 shows that, 23, 8% knew delayed placenta as a danger sign of delivery whilst 43.4% mentioned excessive bleeding as one of the dangers during delivery. It was also found that

61.5% of the respondents mentioned severe abdominal pains as danger sign of delivery whilst 1.6% mentioned convulsion as a danger sign of delivery. Only 19% mentioned high fever as danger sign of delivery. All the respondents mentioned foul vaginal discharge as symptom of labour and delivery.

Table 4.7: Maternal knowledge of danger signs during postpartum.

Danger Signs at Postpartum	Checked (Frequency)	Per Cent	Unchecked (Frequency)	Per Cent
Lacerate delayed within 30minutes	92	23.8	295	76.2
Excessive bleeding during delivery	168	43.4	219	56.6
Severe abdominal pains	238	61.5	149	385
Convulsion of fits	6	1.6	381	98.4
Higher fever	35	9.0	352	91
Foul vaginal discharge	387	100	-	-
Mood swings	93	24	294	76

4.5.3 Place to seek care with Danger signs

The respondents were asked of where they go for assistance when they have danger signs before, during and during pregnancy; out of the 387 respondents, 94.8% said they attended a health facility while 1.3% said they managed their condition at home. This analysis shows that majority

of women in the study district seek care at the health facilities whenever they experience any danger signs before, during and after delivery.

Table 4.7: Danger signs assistance seeking

Where to seek assistance	Frequency	Percent
Health facility	367	94.8
None	20	5.2
Total	387	100.0

4.6 Use of Skilled Delivery services

An assessment of the use of skilled delivery services revealed that majority of the respondents forming 81.4% (315) of the respondents delivered in health facilities whilst 18.6% (72) delivered at home. The results showed that TBAs conducted 12.4% (48) of the deliveries whilst 81.4% (315) of the deliveries were conducted by skilled birth attendants (SBA). It was also found that 6.2% (24) of the deliveries were conducted by mother in-laws, other relatives or the pregnant women were not assisted by anybody to deliver. Only 4.7%(18) of the respondents planned to deliver at home whilst 13.9% (54) said that they did not plan to deliver at home as shown in table 4.7 below.

Most of the deliveries occurred in CHPS compounds representing 39% (151) whilst 22% (85) occurred in the District Hospital. The results also

showed that a great majority (92.1%) of the deliveries were through vaginal delivery whilst 7.9% were through cesarean section. Table 4.5 shows the use of skilled delivery services among the respondents.

Table 4.8 Use of skilled delivery services

Place of delivery	**Frequency(n=387)**	**Percentage**
Home-self/mother in-law/relative	24	6.2
Home TBA	48	12.4
Health facility	315	81.4
Facility of delivery		
Regional Hospital	54	13.9
District Hospital	85	22.0
Health Center	25	6.5
CHPS compounds	151	39.0
Home	72	18.6
Planned Home delivery		
Yes	18	4.7
No	54	13.9
Not applicable	315	81.4
Birth Attendant		
Self/ mother in-law/relative	24	6.2
SBA (Doctor/midwife/nurse/CHN)	315	81.4
TBA	48	12.4
Mode of delivery		
Cesarean section	25	7.9
Vaginal delivery	290	92.1
Cost of service utilization		
NHIS paid expenses	296	94.0
Paid cash for the service	19	6.0

4.7 Determinants of Place of Delivery (Bivariate analyses)

Bivariate analyses were done to establish the determinants of place of delivery. The results showed that education level of the respondents is a significant determinant of place of delivery. The use of skilled delivery services increased with increasing level of formal education. The higher the level of formal education, the higher the probability of delivering in a health facility ((χ^2) = 13.2, p < 0.02). However, increasing level of economic status did not have any influence on the place of delivery. There was no significant difference in the choice of place of delivery between women with high and low economic status ((χ^2) = 1.4, p = 0.66).

The results showed that knowledge of danger signs of labour is positively associated with place of delivery. Women who knew at least 4 danger signs of labour were more likely to deliver in health facility than those without a knowledge of the danger signs of labour. It implies that, as the knowledge of danger signs of labour increases, the probability of delivering in a health facility also increased (χ^2 = 10.5, p = 0.01). The inverse trend was found for the distance to health facility. As the distance to health facility increased, the probability of delivering in a health facility decreased (χ^2 = 14.2, p < 0.001) as shown in table 4.9 below.

Table 4.9 Determinants of place of delivery

Variable	N	Place of delivery of recent child		Test statistic
		Home	Health facility	
Education				
Not formally educated	193	149 (77.2)	44 (22.8)	(χ^2) = 13.2, p < 0.02
Basic level	100	23 (14.5)	77 (76.1)	
Secondary level	59	11 (18.6)	48(81.4)	
Above secondary level	35	5 (14.3)	30 (85.7)	
Household Economic status				
Low	184	38 (20.7)	146 (79.3)	(χ^2) = 1.4, p = 0.66
Average	140	21 (15.0)	119 (85.0)	
High	63	13 (20.6)	50 (79.4)	
Knowledge of at least 4 danger signs of labour				
Yes	242	49 (20.2)	193 (79.8)	(χ^2) = 10.5, p = 0.01
No	145	122 (84.1)	23 (15.9)	

Distance to nearest health facility				
Less than 5km	213	58 (27.2)	155 (72.8)	(χ^2) = 14.2, p < 0.001
Above 5 km	174	160 (92.0)	14 (8.0)	
Women Autonomy				
Low tercile	338	269 (79.6)	69 (20.4)	(χ^2) = 24.8 p < 0.001
High tercile	49	3 (6.1)	46 (93.8)	

4.8: Determinants of Place of Delivery (Multivariate Analysis)

Analyses were made to compare the main determinants of uptake for skilled delivery services in the study area. The results showed that socio-economic status as measured by household wealth index was not an important predictor of utilization of health institutions for birth. The frequency of ANC attendance, parity, distance from health facility, educational level and knowledge of danger signs during delivery were strong determinants of uptake of skilled delivery in the study areas (Table 4.10). The set of predictors of institutional delivery in the study area accounted for 55 % of the variance in uptake for skilled delivery services (Nagelkerke R Square = 0.551).

Women who attended ANC at least four times were 15.6 times more likely to deliver in a health institution (Table 4.10), compared to women who attended less than 4 times (AOR= 15.63, 95% CI [8.16, 29.95]). Women who were far from health facility were not likely to uptake skilled

delivery services as compared to those near the health facility (AOR= 1.5, 95 % CI (5.33, 9.29).

Women of high parity (> 4) were 11 times more likely of delivering in a health facility, compared to women of lower parity (1-2) (AOR= 11.21, 95 % CI [4.56, 27.58]). Women of high autonomy (economic independence, decision making, freedom of movement were 3.4 times more likely of delivering in a health facility, compared to women of low autonomy. Women of high education level were more likely of delivering in a health facility, compared to women of low education (AOR= 3.44, 95% CI [1.85, 6.39]). Women who had knowledge of danger signs during labour were 2.4 times more likely to deliver in the health facility, compared to women without knowledge of danger sign during labour (AOR= 2.36, 95% CI [1.91-3.52])

Surprisingly, household wealth index did not have any influence on delivering in a health facility (Table 4.9). It was also established that the attitude of health care providers did not have any significant influence on facility delivery among the respondents (AOR= 0.921, 95 % CI [4.31-27.31]). The set of predictors of institutional delivery in the study area accounted for 55 % of the variance in uptake for skilled delivery services (Nagelkerke R Square = 0.55).

Table 4.10: Independent predictors of health facility delivery

	Wald	Sig.	Exp. (B)	95% C.I. for EXP(B)	
				Lower	Upper
ANC visits of at least 4 times	68.654	<0.001	15.63	8.16	29.95
Parity (Reference: 1-2)	29.349	<0.001			
3-4	14.421	<0.001	3.87	1.93	7.79
> 4	27.693	<0.001	11.21	4.56	27.58
Knowledge of danger signs	11.022	<0.001	2.36	1.91	3.52
Educational level	15.252	<0.001	3.44	1.85	6.39
Distance (>5 km)	29.940	<0.001	1.5	5.33	9.29
Household wealth index	1.427	0.071	1.49	1.04	18.28
Attitude of service provider	5.601	0.082	0.921	4.31	27.31
Constant	12.386	<0.001	0.21		

4.8 Evaluation of Health Providers'/Midwives' perception

This aspect of the study involved 12 respondents (skilled birth attendants) who were interviewed using the in-depth interview guide. One SBA each worked in health facilities recruited into the study. The total number of midwives in all the health facilities discovered from the research in the district was 17. They had been serving as SBA for a minimum of 1 year and a maximum of 19 years with a mean age of service as midwives of 8 years.

4.8.1 Professional training for the conduct of skilled birth care for pregnant women.

There is a correlation between training and skilled birth care. The study assessed the professional training district. Only 1 of the SBAs said that she has not received any training on skilled delivery since she left school. Additionally, the respondents were asked whether they have received additional training on Emergency Obstetric Care or lifesaving skills to help provide high quality skilled birth care to pregnant women during labour. All (12) of them said yes they have received additional training including refresher on emergency obstetric care or lifesaving skills. It is surprising that, a community health nurse is performing a function that she has not been trained for. It goes without saying that, there are still

some few communities without skilled birth care professional (midwives).

4.8.2 Neglect or abuse of client during labour

The study also explored the reasons why some women in labour are left unattended to. Among the reasons given were stress, refusal to take instruction (push and open legs), not bringing delivery items to clinic, no family member accompanying women, failure to carry out medical examination instructed by SBA, refusal to use delivery bed during labour, language barrier, not reporting for labour with health insurance card, refusal to be referred to next level of care, psychological state of SBA at the time of visit and conflict among SBA at the health facility. This analysis shows that, different factors are responsible for the negative attitude exhibited by the midwives towards the pregnant women during delivery.

4.8.4 Minimizing the negative attitude of SBA towards pregnant women at birth

The respondents were asked of the ways of minimizing the negative attitude towards pregnant women at birth. Among the responses given were training more midwives and posting them to the health facilities where one midwife is attending to pregnant women during labour and

antenatal care in order to reduce stress, strengthening health education on birth preparedness and labour issues at ANC, stocking facilities with medical equipment and supplies such as pads, detergents, delivery beds, delivery kits etc, encouraging midwives to provide alternative delivery positions to women during labour and stakeholders to provide refresher for midwives to act professionally during labour and delivery. This analysis shows that the problem of negative attitude of SBAs is not insurmountable. There are numerous ways and means of minimizing this negative attitude if not eradicating it. Management of the various health facilities should make sure these measures are implemented and monitored.

4.9 Improving on quality of skilled birth service in the health facilities

The respondents were asked of what to be done to improve on the quality of skilled birth services in the health facilities. The responses were that incentives should be given to women who deliver with SBA, motivating for TBAs/CHVs who provide accompaniment to pregnant women during labour, equipping health facilities with basic delivery items such as beds, kits, pediatric weighing scale and detergent, strengthening referral network during emergency, extending source of electricity to health facilities to provide electricity during the night and as well as posting

more midwives to support the existing ones in the health facilities. This analysis also shows that a number of measures exist for improving skilled birth services in the health facilities. Implementing these measures is therefore a force to reckon with.

4.9.1 Respondent's assessment of the presence of basic medical supplies/equipment in the medical facilities they work for

When asked whether their health facilities are equipped with basic medical supplies and equipment, 10 of the respondents indicated yes and 2 indicated no. Additionally, when asked of the supplies and equipment that are missing and need replacement, Respondents mentioned pediatric weighing scale, delivery beds, delivery kits, examination couches, supplies, (Mg S04, detergents, gauze, spirit, surgical glove) and vacuum extractor. There is an indication from this analysis that, the health facilities do not have adequate basic medical supplies and equipment for skilled birth delivery.

4.9. 2 Evaluation of traditional birth attendants' (TBAs) opinion regarding who providers' attitudes towards clients during labour.

Key interviews were conducted to find out TBAs perception about skilled service providers towards pregnant women during labour and delivery. Four (4) active traditional birth attendants (TBAs) were involved. The

evaluation covers place of access of skilled birth service by the pregnant women, their motivation for choice of place of birth, roles played by traditional birth attendants (TBAs) in helping women access skilled birth services, mode of reception of women at the health centre during birth, attitude of health workers (midwives), treatment of women during labour by health workers, number of pregnant women accompanied for delivery at the health facility, intervention in catchment area aimed at increasing utilization of SBAs, challenges faced in supporting women to access skilled birth services in the catchment population, socio- cultural issues barring women from utilizing SB services, training received to facilitate the work of TBAs and TBAs relationship with the health providers (midwives)

When asked of the place in the community where women access skilled birth services, all the 4 TBAs said health facility and that the women motivation for doing that stems from the fact that, delivering in the health facilities offers a number of benefits which include the skilled birth care they receive during labour at the clinic than home, fear or danger of losing baby or ones live if labour condition is not properly managed, awareness that health facility delivery is now a normal practice and women who deliver home may suffer the need for blood transfusion and caesarian section.

According to the TBAs, they play a good number of roles in helping women to access skilled birth services such as supporting to encourage women to visit clinic when they are in labour, providing accompaniment to deliver with SBAs, finding if women have visited health facility and supporting those not to be able to go, assessing the condition of pregnancy and refer to the health facility for SBA and monitoring the pregnancy of women and advise them on what to do at each stage. All the 4 TBAs opined that the reception of the women at the health centers was good and the attitude of the health workers (midwives) towards the women they accompanied to the health facilities was friendly.

The length of stay by the women before being received by the health workers was also within acceptable norm except in few cases. When asked instances they witnessed a pregnant woman been beaten, disrespected or abused during labour by a health worker, three of the TBAs recounted, “I remember one labour case I brought to the clinic and the woman was delivering for the first time in her life, she didn’t want to open her legs and push out the baby when the midwife instructed her to do so. Because she refused to open her legs and push, the midwife shouted on her and asked if she did not want her baby alive? “Mistreatment rarely occurs. The one I experienced and can remember it was the mother who delayed in reporting to the health facility when she was in labour.

Another TBA (the third one) shared her experience indicating that, “in one of her visit with a laboring woman to the facility, the midwife delayed when she was called to receive a baby which was about to come out during labour in her facility. The fourth TBA interviewed said she has never witnessed her client being abused during labour. The numbers of pregnant women the four TBAs interviewed accompanied to the health facilities to deliver are 217 (60, 7, 200 and 50) and the level of utilization of SBAs in their catchment areas according to them was high. Other interventions in their catchment area that promote utilization of SBAs include the CRS Rural Emergency Transport Project which is supporting emergency referral network.

The TBAs are faced with diversity of challenges in their endeavor to support women to access SB services in your catchment population. They include lack of vehicle to refer emergency cases to Bolgatanga or Talensi district hospital, the motor king in nearby communities are not user friendly as they shake the pregnant women on the rough road and caused additional pain, lack of motivation in the form of cash and stress. There are no sociocultural issues barring women from utilizing SB services in the communities. Finally, the TBAs received training of a sort to facilitate their work and the relationship between the TBAs and the health workers (midwives) was cordial.

4.10 Evaluation of Pregnant Women Views

In probing to find out these barriers and challenges to accessing skilled delivery services, these were the findings;

Majority of the women who took part in the focus group discussions said that they did not deliver at health facility because there are no health facilities in their communities and the distance to the nearest health facility is too far for a woman in labour to travel.

These are some of the statements of these women to that effect;

……"I made up my mind to deliver in a health facility but we don't have health centre in this community and the distance to the nearest health facility is about 12 kilometers. The road is also not good to travel on when you are seriously sick. How much more when you are in labour? This is the reason why we deliver at home.……

……"Every woman wants to deliver safely which we know is possible when you deliver in the hands of nurses and midwives. But when you don't stay close to a health facility it becomes very difficult for you to predict where you will deliver. Because labour comes unceremoniously.……..

"The only means of travelling in this community is the motor bike, so it is very difficult to travel to a health facility to deliver when you are in labour because you can't sit on a motorbike when you are in labour"

……."when a woman is in labour in this community, because of the distance to the health facility we use motorbikes to carry the person to the health center"……..

…..."my sister delivered her first child on her way to a health facility when she was in labour"…….

……."it is difficult for a woman to sit on a bicycle when she is labour especially on a bad road like this. We don't also have a passenger car in this community except on market days so that is why women deliver at home"……..

High cost of delivery pack: Women who deliver in health facility are supposed to buy a delivery pack which is made up of soap, antiseptic, white bed sheets and toilet rolls. This was found to be a hindrance to facility delivery. These are some statements to that effect;

……."Nurses always ask us to bring detol, Geisha soap, white bed sheets, blades and toilet rolls. It is our husbands who are supposed to buy these items for us to deliver in health facilities but they don't have money to buy

them. It is also embarrassing for you to go to a health facility without these items."……

……"anytime you want to deliver in health facility, nurses ask for Detol and Geisha soap. They don't want any other soap or antiseptic apart from these ones. Meanwhile we don't have money to buy these items

Poor attitude of nurses towards clients: Nurses attitude towards women who come to deliver at health facilities was cited as one of the barriers militating against facility delivery. Some of the women complained that they are not treated with some modicum of respect when they go to the health facilities. This unfriendly act of nurses prevents women from taking maternal health services. These are some of their statements to support it;

The men also made some statements to support this claim. These are examples of these statements;

……."young nurses are the people who prevent women from delivery in health facilities because of the way they insult. They talk to clients as if they are not human beings. They shout on you, they are not polite in treating patients. Meanwhile some of them are our children's age mates. I don't want to be insulted and disgraced so I deliver at home"……

……"when I went to deliver my first child at the hospital, the midwife told me that she didn't impregnate me so I shouldn't cry to disturb her peace. When I was having sexual intercourse with my husband I didn't call her"……...

……"When you come to deliver you make yourselves so dirty and smelly because you don't bath well. You don't shave your private parts. This is an act of villagers. So why should I allow myself to be insulted by a nurse like this? I will rather choose to deliver in the house than to go to the hospital and be insulted"……...

……" One of the nurses slapped me when I was in labour. She slapped my face but I just kept my temper under control because I have gone there to deliver. The next if I don't go there again will she get me to slap?"….....

……"A midwife made me to jump for a long time when I was in labour. She beat up my hips and my child died in the womb when delivered him. It was the nurse who killed the child"……

Ease or no difficulties in delivery among: Some of the women admitted that sometimes home deliveries are not planned or intentional. They deliver at their least expectation so you cannot go to a health facility. These are some of their statements:

……"I was stirring "Tuo-Zaafi" in the afternoon when I experienced something like a wave moving through my abdomen. I just got up from the stool on which I was sitting and entered the bathroom to check underwear. Spontaneously or instantly I felt that the baby was dropping from my vagina. I then called my mother in-law and she helped me to deliver in not more than 10 minutes"……..

…." I spent two days each in labour when I was delivering all my four children. For this reason I always deliver in hospital"…..

……"I delivered this baby on my way to the farm. I was feeling fine in the morning so decided to go to farm with my eldest child. We didn't reach the farm when I felt some strange pains in my abdomen. I just squatted to deliver the baby and sent my child to go back to house and inform my mother. They came around and dressed me up and we all went back to the house"…….

……"we are real women, so we don't struggle to deliver because of the kind of food we eat. Any little push will bring the child out. We believe that no woman in this community will die through child birth"…

……"I delivered my child in the night; it was so simple and fast. I have given birth to 5 children and all of them were delivered at home. I go to hospital for antenatal care but I don't deliver at hospital because I don't

experience difficult labour. I sometime deliver without anybody helping or assisting me. That is a gift of God for me"

…….."there some women who have difficulty in delivering or prolonged labour. Anytime such women are in labour the whole community would hear of it and they must go to hospital to deliver. But for me, I have very short labour so why should I go to the hospital and deliver?"…..

Preferred position of delivery: Some of the women mentioned this as a barrier to skilled delivery. Some stated that the lying position which midwives want to use and deliver is more hurting. These are some of their statements;

….the hospital bed is too small for you to lie and deliver on it. Nurses don't want you to squat and deliver which is the easiest method'…….

….." I prefer to squat and deliver so that I can push harder for the baby to come out but nurses don't allow that. When you lie down to deliver it is prolonged and more painful"……

However, some of the women were comfortable with the lying position and according to them it is less painful and easier. These are their statements;

…….” I don’t have problem with lying down to deliver, it is better and less painful than the squatting. When you squat to deliver it is more painful and your knee joints would be shaking/trembling when you squat for a long time”…….

…..”When I lie down to deliver it is easier for me. Because you relax your muscles and joints”……

Fear of caesarean session: Some of the women also mentioned the fear of going through a caesarean session when you want to deliver at a health facility. They made the following statements;

…….”when you go to the hospital to deliver you are likely to undergo a caesarean session. This is why some women are afraid to go to hospital to deliver”…..

…..”when we hear the siren of the ambulance, it frightens us and makes the whole community feel that the woman is going to die. You end up going through caesarean session”…….

4.9.4 Dangers of Home Delivery

The discussants were not oblivious of the dangers of home deliveries. Some of the dangers that were espoused are stated below;

No medication available after delivery: In all the focus groups, it was mentioned that home deliveries can lead to death and other complications because no medication is given to the mother and her child if complications arise which can lead to maternal and infant mortality. Some of the statements to this effect include;

…..”When you deliver at home and you fall sick immediately after the delivery you can die because there are no proper drugs for you to take. This can kill you and your child”…..

……”When I delivered my child at the hospital he was not breathing for about 1 hour but the nurses put some things through the nostrils and revived him. If it was to be home delivery, they would have buried the child because he was lifeless and not breathing”…..

……”when I delivered my child at the hospital, the midwife detected that there was water in my abdomen so it was drained and I became free”…….

……”when you deliver at the hospital and you have some abdominal pains they will give you drugs to treat it but in the house they will only boil water and massage you with it which is not effective”……

……" Your child is given some immunization when you deliver in hospital but you won't get this when you deliver at home"……..

Placental retention: This was the most common danger mentioned by the discussants. These are some of their statements;

……..''when I delivered my second child the placenta didn't come out. So they quickly arranged for a car to carry me to the hospital for treatment. This condition can kill you. Due to this past experience I don't deliver at home"…….

……"the main problem with home delivery is when the placenta remains in you. One woman died out of this condition"

…."when a woman delivers at home and the placenta doesn't come out she can die out of it especially if she is not sent to the hospital very fast"

4.10.5 Ways to Improve the Uptake of Skilled Delivery Services

During the focus group discussions the discussants mentioned proposed some ways and measures to improve the uptake of skilled delivery services. These are stated below;

Provision of means of transport: The discussants stated that lack of means of transport is a major factor for home delivery. Their statements include;

……"when you are in labour and you call the ambulance at the district hospital to come and carry you to the hospital they have a flat rate charge. You are charged 40 Ghana cedis and even if you deliver on the way or before the ambulance gets to your community you will still pay the fees"

……"if there is a vehicle to carry us to the hospital we will deliver in the health facilities. The problem is always with transport because your husband will have to hire a whole vehicle to take you to hospital to go and deliver. This is very expensive"……..

……"if you are to sit on a bicycle or motorbike to health facility to go and deliver it is very painful. We need a vehicle to carry women to hospital"……

Education of men on skilled delivery: The female discussants were very critical on the reluctance of their husbands when it comes to the issues of maternal and child health. Their statements include;

……"some men think that if you want to deliver at the hospital then you are ready to let him spend his whole money on you. They think that women deliberately want to waste their money at the hospital"……..

…..."my husband told me that my colleagues have been delivering in the house why should I go to the hospital to deliver?"……..

…..”when you are in labour and the issue of facility/hospital delivery is mentioned then your husband becomes angry with you as if you want to expose his poverty"……..

Change of attitude among nurses: The attitude of nurses if changed to the positive would encourage more women to go for skilled delivery services. Some of the statements of the discussants are;

…….”nurses should have patience for pregnant women who come to the health facilities to deliver. They should treat us like human beings and we will always go there to deliver"

……..…"our nurses should understand the point that we cannot all be literates and can therefore not behave the same way. They should therefore treat us with respect when we come to the health centers to deliver"…….

……”nurses should encourage us and pamper us when a woman goes to deliver so that she will come there the next time to deliver. If you don't treat the person with respect she may not come again to deliver at the health facility”……..

These were the views of the antenatal women who were interviewed during the FGD. The content analysis was done by comparing the recorded tapes in all the communities before selecting the various themes. Two FGD were held, one in Namolgo Health Center and another one in Awaradoni CHPS compound. Twenty four antenatal women participated in the FGD. Twelve pregnant women were drawn from Namolgo H/C and twelve from Awaradone CHPS

CHAPTER FIVE

DISCUSSION OF RESULTS

5.0 Introduction

This chapter presents a discussion of the results and findings of the study. The discussion has been done by comparing the findings with that of other research works conducted in Ghana and elsewhere. In areas where the results are not consistent with the findings of the other studies, an explanation has been given to the causes of the differences.

5.1 Socio demographic Characteristics of Respondents

The study was conducted among postpartum women in the Talensi District. A total of 387 postpartum women were involved in the study. The mean age of the postpartum women was 28.9 +/- years. This is similar to the mean age of 26.8 years of postpartum women involved in study conducted by Kuganab et al, (2014) in the Sissala East District of Ghana. The similarities of the results could be attributed to the fact that the two districts have large proportions of the women who are living in rural communities. The results are also consistent with that of Muhammedawel and Mesfin (2014) conducted in Robe Woreda, Ethiopia among postpartum women, who found a mean age of 25 years. Ghana and Ethiopia have similar geographical and cultural settings of the areas. This

could have an effect on the age at which women start giving birth due to cultural and societal perceptions of child bearing.

The modal age group of women in this current study was 15-25 years. This is consistent with the modal age of the study by Gurmesa et al, (2014) in the Jimma Zone, Southwest Ethiopia which found that the modal age was 15-26 years with 51%. Even though the modal age in the study groups were the same, the percentages were different. This could be attributed to the differences in the study sample used.

In this current study, it was found that Muslims were the dominant group among both pregnant and postpartum women. Over 78% of the women were Christians whilst 18.1% were traditionalist. These findings are consistent with that conducted by the Ghana Statistical service (2012) in the Population and Housing Census which found Christianity to be the dominant religion in the Talensi District accounting for about 75.7% of the entire. The findings of this current study on the religious distribution of the respondents are a true reflection of the general population of the district because the Population and Housing Census that was conducted in 2010 showed that majority of the people living in the Talensi District are Christians.

Talen were found as the dominant ethnic group in the Talensi District with over 70% representation in the study sample. These findings support that of the GSS (2012) which reported that Talen are the dominant ethnic group in the Talensi District forming 80% of the entire population of the district. Even though Talen formed majority of the study sample the percentage representation was lower than the 80% established by the Ghana Statistical Service. The differences could be attributed to the smaller sample used by this study as compared to the Population and Housing Census which involves the entire population of the district. District. With respect to the marital status of the respondents, the study found that 92% of the women were married. These findings are inconsistent with the assertion by the GSS (2012) that 48.7% of females in the Talensi District were married. The difference could be attributed to the larger sample size involved in the Population and Housing Census as compared to the smaller sample size used in this current study. In this study, 92% of the postpartum women were married. This does not corroborate the findings of Kuganab et al, (2014) who found that 88% of the postpartum women involved in their study in the Sissala East District were married. The findings also support that of Oware et al, (2010) and Quaye et al (2011) who conducted studies in Ashanti and the Greater Accra regions. In the two studies, a great majority of the respondents were

married. The proportion of married women in their study samples was more than 80%.

Many (50%) of the postpartum women did not have any formal education. The finding on the education level among pregnant women is inconsistent with the 47.7% of women without formal education in the Talensi District as established by the GSS (2012). This implies that the use of maternal health services among women may be low because of the low level of formal education since education level of women has been found to significantly influence the use of maternal health services (Stephenson et al, 2011). It also implies that the economic status of the women may be low because poverty increases with decreasing level of formal education (GSS, 2015)

The population and Housing census report showed that 60.5% of women in the Talensi District were involved in agricultural activities. However, this study found that 20% of the women were farmers. This finding does not corroborate that of the GSS (2012). This difference could be attributed to the small sample size of this current study.

5.1 Uptake of ANC Services

The results showed that less than half of the respondents made 1 to 3 ANC attendances during their pregnancy. There were also 65.4% of them

who made at least 4 antenatal care visits as recommended by WHO (2007). In this study adequate prenatal care was defined as one that was initiated in the first trimester and a minimum of four expected visits made before delivery. Going by this definition, only 51.8 % of the respondents received adequate prenatal care. The early initiation of prenatal services is low or not encouraging since everybody made ANC visits but the only half of them initiated it in the first trimester.

The results reaffirm the findings of the GDHS 2008 that almost all Ghanaian women (95%) receive some antenatal care (ANC) from a skilled provider, most commonly from a nurse or midwife and a doctor. The results are also similar to that of the GDHS which showed that more than three-quarters of women had the recommended four or more ANC visits, and 55% of women had an antenatal care visit by their ninth month of pregnancy, as recommended. These figures are lower than that of the MICS (2011) which found that 84.7% of pregnant women in Ghana attended the minimum number of four visits.

5.2 Content of ANC Services

Results of this study portrayed a number of activities carried out during antenatal clinic in the health facilities. Majority (about 95%) of the respondents received ANC services such as weight measurement, urine examination and blood samples examination. Tetanus toxoid injection was the service that had the lowest record of pregnant women going for it thus 58.8%. Again, 66.5% of the respondents received health education during ANC. This is very essential since that gives advice to the types of food they should eat and how to live healthy lifestyles.

Results of the study showed that the activities carried out during ANC visits in the health facilities include weight and height measurement, hemoglobin concentration measurement and measurement of blood pressure. HIV/AIDS counseling and testing is also done during ANC. These findings are consistent with the proposal made by Ahmed and Yousif (2011) that ANC services should include activities such as vaccination, blood pressure measurement, hemoglobin estimation, urine analysis, and testing and counseling on STIs.

The results also agree with the proposition by the WHO/UNICEF (2003) which stated that ANC is a key entry point for a pregnant woman to

receive a broad range of health services including nutritional support and prevention and treatment of anaemia; prevention, detection and treatment of malaria, tuberculosis and sexually transmitted infections (STIs/HIV/AIDS). The results are also consistent with the proposition made by USAID (2007) that ANC should include how pregnancy progresses and how to prepare for birth ,how to recognize danger signs ,what to do if they arise and where to get help or education on exclusive breastfeeding ;and need for protection against STI's and HIV. They further explained that ANC should include immunization against tetanus, reduction of iron deficiency anemia through nutritional counseling and iron/folate supplementation, protection against malaria, prevention of HIV/AIDS through testing and counseling and protection against vitamin A and iodine deficiency.

5.4 Knowledge of Danger Signs during Pregnancy

The knowledge of dangers of pregnancy was high among the respondents. Most of women intimated that there could be severe bleeding during pregnancy which supports the findings of the survey conducted by JHPIEGO (2004) among pregnant women in Nigeria and found that the most common danger that is known among pregnant women is excessive or severe bleeding during pregnancy. This they attributed to the fact that TBAs and relatives who assist pregnant women to deliver at home usually

encounter such conditions. Only some few people in the study sample mentioned other conditions such as oedema, severe headache and waist pains as some risks of pregnancy. According to Starrs (2006) knowledge of this signs is low because they are not considered as being very serious dangers that can kill a woman or her unborn baby. The findings of this study affirms that of Starrs (2006) because in rural communities some health conditions or risks are not considered as being serious conditions that need to be treated or prevented.

Knowledge of danger signs during labour and child birth was also high among respondents. Majority of the respondents thus 72.8% (291) mentioned eclampsia as one of the dangers or risks during labour. This confirms the findings of Thaddeus and Maine (2004) who reported that eclampsia is a condition that kills most pregnant women who go into labour in rural areas. Their study asserted that lack of transport services to health facilities exacerbates the rate at which pregnant women lose their lives through eclampsia. Other danger signs of labour that were mentioned include prolonged labour, rupture of membranes, the vaginal tract and severe bleeding. The knowledge of these signs is high among women who have multiple deliveries or high number of children. As the number of children increases the knowledge of danger signs during labour also increases. This is consistent with the findings of Del Barco (2004)

who said that knowledge of danger signs in labour is positively associated with parity and education.

5.4 Use of Skilled delivery Services

There was a high patronage for institutional delivery in the study area.

The reports of MICS (2011) found that nationally, 88.2% of pregnant women in urban areas delivered in health facilities whilst 53.9% of pregnant women in rural areas delivered in health facilities. This current study found that 81% of the women delivered in health facility. The findings of this study support this assertion because the study found that the great majority of the women delivered in the health facility with the aid of SBAs.

The study found that all the 81% deliveries in the health facilities were conducted by SBAs whilst 19% of home deliveries were conducted TBAs, mother in-laws or without assistance from anybody. Again, the GDHS (2014) established that 30% of deliveries in Ghana were conducted by TBAs. The MICS (2011) however found that 26% of births were conducted by TBAs in the Upper East region. In this study, the proportion of births conducted by TBAs was lower than the national average.

Most of the women who did not deliver at the health facility did not plan to deliver at home. This is consistent with the findings of PPAG (2012)

that most pregnant women in the three northern regions of Ghana do not intentionally decide not to deliver in health facilities, majority of whom are from the rural areas of the regions. The results of this study showed that majority of the people who delivered at home had no difficulty in their previous deliveries which encouraged them to deliver at home. This is consistent with the findings of Stephenson et al (2006) that women who delivered at home in Malawi had never experienced any obstetric complication in their previous deliveries which gave them the courage to continue to deliver at home in their subsequent pregnancies. Transportation difficulties were the most significant determinant of home delivery among women in rural areas. This corroborates the findings of studies conducted by AbouZahr et al (2008) and Bazzano et al (2008). Their studies found that women who stayed far away from health facilities were more likely to deliver at home than those who were closer to health facilities. This was due to difficulty in transportation and the bad road networks of their communities.

Earlier studies conducted by the Chengxin (2005) in Tanzania and D'Ambruoso et al (2005) in Ghana found that high cost of skilled delivery pack is one major barrier to the use of skilled delivery services among pregnant women. This was not corroborated by the findings of this study

which established that the effect of cost of delivery pack was not a reason for home deliveries.

5.5: Determinants of Place of Delivery

The factors that were found to influence the use of skilled delivery services were mainly demographic factors and contextual community factors which were already established by some studies conducted elsewhere. Frequency of ANC attendance was found to be a predictor of facility delivery. This supports the findings of WHO (2011) which reported that women who make 4 plus ANC visits are more likely to deliver in health facilities than those who do not make the required number of visits. This could be attributed to the education received during ANC and the improved health seeking behavior of such women. According to Stephenson et al (2007) distance to health facility has an effect on the use of healthcare services. Women who were found to be closer to health facilities delivered in health facilities as compared to those who stayed far away from the health facilities. Other factors that were found to have an influence on facility delivery were maternal age and parity which is consistent with the finding of Babar et al (2004) that older women were more likely to deliver at home than younger women. This is due to the previous experience of delivery among older women. The GDHS (2014) asserted that women of higher socio-economic status were

more likely to deliver in health facilities than those with lower socio-economic status. The survey also found that women with higher educational level used skilled delivery services than those with lower educational level. This is due to their high knowledge of the dangers of obstetric complications and also their higher socio economic status compared to those with lower or no level of formal education. Higher educated women are also more likely to have higher autonomy and takes part in decision making than those without any formal education.

Several factors account for disparities in the use of skilled delivery services among rural and urban women. The determinants of health facility deliveries were not exactly the same in the urban and rural areas. The results of this study showed that in the rural areas, socio-economic status as measured by household wealth index was not an important predictor of utilization of health institutions for birth. This is inconsistent with the findings of the GDHS (2014) that women with higher socio-economic status were more likely to deliver in health facilities in Ghana. However, no distinction was made about their place of residence that is whether urban or rural. The frequency of ANC attendance, parity, distance from health facility, and women autonomy were strong determinants of skilled supervised delivery in the rural areas. These are

consistent with the findings of Stephenson eta l (2007), PPAG (2012) and Kabeer (2003).

Women of high parity (> 4) were 11 times more likely of delivering in a health facility, compared to women of lower parity. This finding is inconsistent with that of AbouZahr (2003) who found that among rural women, as the number of deliveries of a woman increased the likelihood of her delivering in a health facility decreased. This was attributed to the experiences they gather in delivery. This was more likely to occur among women who had no difficulties in their previous deliveries. The point of inconsistency or disagreement in the findings of the two studies could be due to the fact that this study was a comparative study which involved two groups of women from different study settings. Parity was found to be a significant determinant of the use of skilled delivery services among rural women but not in urban women because of the high fertility rate among rural women. However, in rural areas there is a geographical barrier in accessing health facilities so only difficult labour cases are sent to health facilities whilst women with experience in labour strive to deliver at home.

5.7 Barriers to the Uptake of Skilled Delivery Services

The findings from the focus group discussions on the barriers to the uptake of facility delivery are consistent with the findings or results of the

quantitative data. The main barriers to the uptake of skilled delivery services were lack of health facilities in the communities, high cost of delivery pack, poor attitude of nurses towards clients, ease or no difficulties in previous delivery and fear of caesarean delivery. These findings corroborate or synchronize with the findings from the quantitative data.

CHAPTER SIX

CONCLUSION

AND RECOMMENDATIONS

6.1 **Conclusions**

Based on the findings and observation of the study, the researcher concluded that, majority of the women uptake skilled delivery services whilst few of the women delivered with a Traditional Birth Attendant. Greater proportion of the respondents attend the health facilities for their ANC and they start their ANC within a gestation period ranging from 1 - 3 months. They make decision concerning ANC attendance, had 1 – 3 delivery and are ever ready to have their next deliveries in the health facilities. They utilize mostly of the CHPs compounds. The women are usually assisted by skilled birth attendants, midwives and medical doctors during labour. The delivery expenditure is borne by the NHIS except delivery packs, blade and detergents and their child index stands between the ranges of 13 – 23 months and 7 – 12 months. Also, women usually they receive services such as examination for palpitation and laboratory test, checks for examination for medication, checks for health and nutrition education, food ration and ITN distribution.

The women are not aware of many of the symptoms of danger signs during pregnancy, labour and delivery and after delivery. It is only severe headache, abdominal pain and foul vaginal discharge that they know. The women usually have normal delivery during birth and take their attendance to the health facilities seriously and are in readiness to have subsequent deliveries in a health facility since it is more appropriate and less risky. The women are conscious of danger signs associated with pregnancy, delivery and post-delivery and will rush to the health facilities for assistance. They are mostly accompanied by their relatives to the health facilities. However, very few of them go to the health facilities without anybody accompanying them.

Diversity of reasons or factors is responsible for the women delivering with SBAs. These reasons include lack of transportation, not attending ANC before delivery, walking long distance (5kms) to access health services, parity, autonomy and negative attitude of health providers among others. The women perceive the behaviour of the SBA to be positive (respectful) and that their birthing experience with them (SBAs) has been good. However, some of the women usually sit for at least one hour before being received by the SBAs and are sometimes neglected and beaten during labour. This can have devastating effects on them and their babies and deter women from delivering with the skilled birth attendant

There are no cultural barriers in the various communities and for that matter the whole Talensi district that prevent the women from using the services of SBAs.

The midwives have been given professional training to equip them with the skills of executing skilled birth care for pregnant women. They have also been given training on EmOC or lifesaving skills to help provide high quality skilled birth care to the pregnant women during labour. There are certain reasons that make the midwives (SBAs) to neglect or abuse client (pregnant women) during labour. They include stress on the part of the midwives, refusal to take instructions such as push and open legs on the part of the women in labour and not bringing delivery items to the clinic. Others are, no family member accompanying the women, failure to carry out medical examination, refusal to use delivery bed during labour, language barrier, not reporting for labour with NHI card, refusal to be referred to next level, pregnant women overreacting to labour pains, psychological state of SBAs at the time of visit and conflict among SBAs.

The negative attitudes exhibited by SBAs at work towards the women can be minimized. Educating more midwives, strengthening health education on birth preparedness and labour issues at ANC, stocking facilities with medical supplies, midwives developing alternative delivery positions to

women during labour and providing refreshers for midwives to act professionally during labour and delivery are the possible ways of minimizing the negative attitude of the midwives. Also, to improve upon the quality of skilled birth services in the facilities, there is the need of stakeholders' involvement in providing incentives to women who deliver with SBA, motivating TBAs/CHVs, equipping facilities with basic delivery items, strengthening referral network, providing electricity to facilities conducting deliveries in the dark and increasing the number of midwives at the health facilities. Finally, the health facilities lack basic supplies and equipment such as pediatric weighing scale, delivery beds delivery kits examination couches, supplies (MG504, detergents, gauze, spirit, and surgical gloves), vacuum extractors among others.

It is beneficial to deliver in a health facility. The TBAs play critical roles in supporting women to access skilled birth services even though they encounter a number of difficulties. Also, there is some amount of abuse of women in labour by the health workers. There is also, a high level of utilization of SB services in the catchment population. Due to training given to the SBAs, they are able to conduct their activities.

6.2 Recommendations

Based on the findings of the study, the following recommendations are made:

The women inability to mention the numerous danger signs of pregnancy, labour, delivery and after delivery could be a threat to their health (maternal mortality) and of their babies (infant mortality). To mitigate this, there is an urgent need for the health sector, health authorities and health directorate to charter a universal, comprehensive and principled programme geared at educating, sensitizing, motivating and empathetically communicating with the women on the danger symptoms of pregnancy, labour and delivery and after delivery. There should be both intrinsic and extrinsic motivation for women who utilize the health facilities as the most appropriate place for child delivery. This can take the form of food, clothes, and detergents especially for the poor women. It can also take the form of occasional visited by the midwives at a particular venue to offer piece of advices as how to take care of themselves and their babies etc.

The ministry of health should reinforce the training of more midwives to put them in a position to be able to execute skilled birth care to pregnant women. They should also be given professional training an EmOC or

lifesaving skills to help provide high quality skilled birth care to pregnant women. In fact, the training should be continual. The human resource management sector of the Ministry of Health would need to develop and design training programmed aimed at producing the needed skilled birth care professionals in all the health facilities in Ghana. Such a training programmed should be implemented and monitored.

The training programmes should contain aspects dealing with stress management, crisis management, emotional intelligence, time management, patients – nurse relationship etc so that these midwives (SBAs) could be placed on a good and stable pedestal to cope with some of the irritating attitudes and behaviours exhibited by the women during pregnancy, delivery and even after delivery.

The government, the ministry health, and other stakeholders such as the non-governmental organization (NGO) churches, philanthropists etc. should deeply be involved in providing basic supplies and equipment to the health facilities in the country (Ghana). Basic supplies such as pediatric weighing scales delivery beds and kits, examination couches and vacuum extractors are critical to the proper functioning of the health facilities across the country. But it is a fact that, the government alone cannot provide them. Thus, the need for other stakeholders' involvement.

There is equally the need for more CHPs compounds to be established across most communities since the women prefer attending the CHPs, compounds to other facilities. This would also help reduce the need to travel long distance to attend ANC with its attendant negative effects on the health of the women and their babies. The establishment of the CHPs compounds will also help prevent the women from delivering at home due to lack of transportation.

There is the need to create the awareness of the Ghanaian woman about the invaluable services such as examination for palpitation and laboratory test, checks for health and malnutrition education, food ration and INT distribution available during ANC.

In the interior village where accessibility to health services or skilled birth care services is a challenge, the traditional birth attendants should be identified and given training on how to deliver cases presenting with head in vulva care services and do prompt referral after delivery. They should be told how to deliver the pregnant women and the hygienic mode or method of doing so. They should also be told as how to get the health facilities informed of difficulties in delivery. It is also critical to select some few male community nurses in the interior villages and train them on how to deliver pregnant women just like the male CHN in Tollah clinic

is doing. Such nurses could work hand in hand with the traditional birth attendants to help do deliveries. Also, some key people in the interior villages should be appointed by the Ministry of health and charged with the responsible of transporting women in labour to the nearest health facility, Transportation expenditure be borne by the government (ministry of health), NHI and other stakeholders.

Finally, the health facilities should reinforce their rules and regulations, code of conduct and ethics. The negative attitude of some of the midwives towards some of the pregnant women could emanate from the relaxed nature of these rules and regulations, code of conduct and ethics. If they (midwives) know that behaving negatively wound attract punishment, they would behave well. Some kind of negative reinforcement should be employed. For instance, if a midwife misbehaves, she could be punished by refusing to promote her to a higher level. In fact, rules and regulations governing the work of the midwives should be found to biting. The midwives should also be appraised regularly. The appraisal should be closely linked to the behaviour and attitude towards clients. They should be made to know that, they are appraised through the very clients that they deal with. This would force them to be well behaved because they would realize that the clients will be given an account of their attitude and behaviour through a verbal inquiry or other means. More importantly,

such appraised should be closely linked to promotions, transfers and demotions.

Include training for health care providers on interpersonal and therapeutic communication to improve on their attitudes towards patients

Suggestion for further research

The researcher wishes to suggest that similar research be conducted using other facilities and respondents in adjoining district, municipalities, and metropolis to determine whether findings can be generalized.

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APPENDIX 1

Study Clusters

Table 4 shows 30 clusters selected for the study.

Community	Frequency
Awaradone	13
Baare	13
Balungu	23
Dapoore	13
Datuko	13
Duusi-Bulbong	26
Duusi-Telfel	13
Duusi-Tindongo	13
Gbeogo	13
Gorogo	13
Kolpeliga	13
Kpatia	13
Namolgo	13
Nungu	13
Pwalugu	13
Seog	13
Sepaart-bung	13
Sheaga	13
Shia	13
Tengzuk	13
Tindongo	13
Tolla	13
Winkogo	13
Yagzure	13
Yameriga	13
Yinduri	13
Zoo	13
Zubeongo	13
Total	387

APPENDIX 2:

Names of Communities where data was collected

Community	Frequency	Percent
Awaradone	13	3.4
Baare	13	3.4
Balungu	23	5.9
Dapoore	13	3.4
Datuko	13	3.4
Duusi-Bulbong	26	6.7
Duusi-Telfel	13	3.4
Duusi-Tindongo	13	3.4
Gbeogo	13	3.4
Gorogo	13	3.4
Kolpeliga	13	3.4
Kpatia	13	3.4
Namolgo	13	3.4
Nungu	13	3.4
Pwalugu	13	3.4
Seog	13	3.4
Sepaart	13	3.4
Sheaga	13	3.4
Shia	13	3.4
Tengzuk	13	3.4
Tindongo	13	3.4
Tolla	13	3.4
Winkogo	13	3.4
Yagzure	13	3.1
Yameriga	13	3.4
Yinduri	13	3.4
Zoo	13	3.4
Zubeongo	13	3.4
Total	387	100.0

APPENDIX 3

Instruments for the Study

a) FGD questions for pregnant Mothers

Serial Number	Age of Mother	Educational level	Parity (number of births)	Antenatal Attendance	Duration of pregnancy
1					
2					

Questions

1. Do you attend Antenatal care? If yes, probe for reasons for ANC attendance. If no probe for reasons for non-attendance
2. Are you satisfied with the reception at ANC attendance? If yes explain and if no explain why?
3. Where did you deliver your child the last time? If home give reasons for home delivery? If health facility, give reasons for skilled delivery
4. How were you received at the health facility during your last delivery?
5. What was the attitude of the SBA towards you at the labour room during your last delivery? Good or bad?
6. Did he/she show any confidentiality during your last delivery?

7. Where will you deliver your baby this time around and why?
8. What systems are in place to assist pregnant woman in case of an emergency in your community?
9. In your opinion what should be done to improve upon the quality of Skilled Birth Attendance at the health facility

b) In-depth Interview Guide for TBAs

1. Where do women in this community go for Skilled Birth services?
2. What informs their decision for the choices they make regarding place of birth?

3. What role do you play in helping women in this community to access skilled birth services?
4. Tell me how pregnant women are received at the health center during labour?
5. How can you describe the attitude of the health worker (midwife) that attended to women you accompanied to the HC to deliver?
6. How long did you stay in the health facility after arrival before the health worker (midwife) suffices to provide care for you?
7. Tell me some of the instances you witnessed a pregnant women been disrespected or abused during labour by a health worker

8. About how many antenatal women did you assist last year?

9. What is the total number of deliveries for the last one year in your catchment population?

10. How many pregnant have been delivered in the health facility?

11. What is the level of utilization of SBAs in your catchment area?
    …….

12. Are there any other interventions in you catchment area aimed at increasing utilization of SBAs? ……
    ……..

13. What challenges do you face in enhancing utilization of skilled birth attendants in your catchment population?
    ……

14. Are there any cultural barriers related to SBA utilization?
    Yes or No

15. If yes, list all the cultural barriers you know .....……
    …….....
    ……

16. Do you receive any training/support in offering your services?
    ……

17. What kind of services do you offer to your clients during pregnancy, delivery and after delivery? ……
    ……

18. How is your partnership with the nearest health facility?
    ……

c) **Key informant interview with midwives**

Hello. My name is _____, and I am a research assistant. We are conducting a survey and would appreciate your participation. I would like to ask you about your profession and the work

you do in this health facility. This information will help the researcher measure suggest recommendation to strengthen the health delivery system in your facility and the district at large. The interview will for 30 minutes. **Whatever information you provide will be kept strictly confidential.** Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. You can stop the survey at any time. However, I hope that you will participate in this survey since your views are important.

Will you participate in this survey? YES [ ] NO [ ].

At this time, do you want to ask me anything about the survey?

1. RESPONDENT AGREES TO BE INTERVIEWED. YES ☐ NO ☐

Signature of Respondent……..…….

19. Name of health facility ……..
    ……..…….
20. Number of Skilled Birth Attendants Present in the health facility
    ….....
    a) Midwives……..b) Medical Doctors …… c) CHOs/Nurse……..……..……
21. How long have you being working as a SBA? …….
    ……..….
22. Have you received adequate professional training to conduct skilled birth care for pregnant women? Yes/No
23. Have you received additional training on EmOC/Life savings skills, Quality Assurance and Customer care to help you provide high quality skilled birth care? Yes/No

24. Have you ever beaten or yell at or neglected or abused a client during skilled birth attendance? Yes/No
25. From your experience what will make a health worker beat up, yell at, neglect or abuse a client during labour? …….....
26. What do you think should be done to minimise the negative attitude of health workers towards pregnant women at birth? ……..…….
27. In your opinion, what should be done to improve upon the quality of skilled birth services in this facility
28. Is your health facility equipped with basic medical supplies/equipment to provide timely and appropriate care for all pregnant women during labour? Yes or No ……. .....

If no, list the missing equipment and supplies in your facility that need replacement…….....……..

d) Questionnaire for quantitative study- care givers

My name is ……, a research assistant. I am collecting information on a study to find out skilled birth service utilization in Talensi districts of the Upper East Region of Ghana. I would like to inform you about this study.

Purpose of the Study: This study aims at exploring skilled birth attendants' attitudes toward pregnant women during labour and delivery in this community. I wish to learn how these attitudes influence the pregnancy outcome and satisfaction with the birthing process as well as the utilization of skilled birth services

Benefits: This study is purely for academics. It has no direct benefit to you as a participant, however, findings from this study will contribute to knowledge and policy guidance for decision making in the health sector.

Confidentiality: The answers to the questions in this study will be kept confidential. No names will be used in the final write up. The questionnaires will be coded and original destroyed after one year. Neighbours may know that you have participated in the study but they will not know the answers that you gave to our questions

Are you willing to participate? 1. Yes…….. 2. No ……..

Signature/Thumbprint of the participant ----------

Date ……..

Questionnaire for Women of Reproductive Age Respondents

Socio - Demographic Data

1. How old are you? ……..
2. What language(s) do you feel comfortable speaking?
   .....
3. What is your highest level of education? ….....
4. What is your marital status? ……...
5. Which religion do you belong to? …….…….
6. What is your occupation? …….....
7. What is your husband/partner's occupation? …….
   …….
8. Where do you reside? …….……..
9. What type of house do you reside in? …….…….
10. Who owns the house? ……

11. How many deliveries do you have? ……..
12. How old is your youngest child? ……..

Antenatal Care

13. What is your total monthly income? ……

14. Did you attend ANC at health facility during your last pregnancy) yes b) no c) NA

15. Who decided on where you will attend ANC? A) Myself b) husband d) mother in-law c) others, specify

16. At what gestation did you start attending ANC? A) 1-3 months b) 4-6 months c) 7-9 months d) NA

Knowledge on Pregnancy and its Outcome

17. Did you discuss danger signs during pregnancy, labour and delivery with the service provider during ANC? A) Yes b) no

18. If yes, (Tick as appropriate)

Danger Signs in Pregnancy

a) Vaginal bleeding ( ) b) Severe headache ( ) c) Swelling of face and hands ( )

d) Convulsions or fits ( ) e) High fever ( ) f) Labored breathing ( ) g) Premature labour pains ( )

h) Reduced or no foetal movements at all ( )

Danger Signs in Labour and Delivery

19. List some of the danger signs in Labour and delivery you know: Tick as appropriate:

i) Severe headache ( ) j) Severe abdominal pain ( ) k) Convulsions or fits ( ) l) High fever ( )

m) Foul vaginal discharge ( ) n) Labour pains > 12 hours ( ) o) Ruptured membranes > 12hours (p) Excessive bleeding during delivery ( ) q) Cord, arm or leg prolapsed ( )

Danger signs after delivery

20. List all the danger signs after delivery you know

r) Placenta not delivered within 30 minutes ( ) s) Excessive bleeding after delivery ( )

t) Severe abdominal pains ( ) u) Convulsions or fits ( ) v) High fever ( ) w) Foul vaginal discharge ( ) x) Mood swings ( )

21. Where did you go for assistance when any of these occurred? A) Health facility b) Traditional medical practitioner c) others, specify

22. Were you counseled and offered the following services during ANC with skilled service provider?

a) Healthy nutrition ( ) b) PMTCT ( ) c) TT ( ) e) Deworming ( ) f) Family planning ( ) g) Iron/folate supplementation to prevent anaemia ( ) h) IPT and LLITN to prevent malaria/anaemia ( )

i) Newborn care ( ) j) Rest and hygiene ( ) k) ANC profile ( )

19. Did you develop any complications during ANC? ……..……
Which ones? (list them)
……
……

23. In your community, are there systems put in place to assist a pregnant woman in case of an emergency? A) Yes b)no

24. If yes, what are the systems ……
……..…….

25. In your opinion, is there any importance in hospital delivery? A) Yes b) no

26. List three importance of health facility delivery…….

Delivery

27. Who accompanied you to the place of delivery? …….
..……

28. What was the mode of delivery? A) Normal b) caesarian section d) others, specify……..……..

29. Who assisted you during delivery? A) Midwife b) TBA d) mother in-law d) other specify ……..……..

30. Who decided where to deliver your baby? A) Husband b) myself c) father in-law d) mother in-law d) other, specify

31. How much did you pay for delivery? …….

32. Who catered for your delivery expenses? A) Myself b) husband c)NHIS d) others, specify…….……..

33. If you become pregnant again where will you go to deliver? A) Health facility b) home

Health Facility Factors

34. What is the distance from your home to the heath facility in kms? A) Within 1 km b) within 5kms c) more than 5kms

35. What is your perception of health caring behaviour during delivery? A) Respectful b) disrespectful c) other, specify……..……

35. How would you describe your birthing experience with health facility staff? A) Good b) poor

36. Are there any cultural factors that determine your utilization of SBAs? A) Yes b) no.

37. If yes, list all of them……
……

APPENDIX 4

Themes/Topics for the Qualitative interview

Theme/Topic	Questions	Probes
Focus Group Discussion with pregnant women		
Perception of maternal health care	Where do women go for care during pregnancy and deliveries and what are the reasons for their choices? Why should women seek for care during pregnancy and deliveries? Who takes decision for the choice of the place of care?	
Barriers to seeking health care	What will normally make it difficult for women to seek care from the health service providers during labour and delivery?	

Perception about health workers attitude towards women during labour	How were you received in your last delivery at the health center by the health worker? What is your impression of midwives/doctor/nurse attitude? How can you describe the attitude of the health worker (midwife) that attended to you? How long did you stay in the health facility after arrival before the health worker (midwife) suffices to provide care	**Probe for the ff: R**espectful, caring, disrespectful etc. Probe for specific examples of the health worker attitude
Perception about the implication of health workers attitude towards women during birth	In your next labour, where will you go to deliver? Do you think the attitude of the health worker can affect the use of the service anyway? Tell me why you think a health worker will neglect, beat up or yell at a woman during labour?	Probe for both good and bad attitude

Key Informant Interview with Skilled Birth Attendants (midwife/doctor/nurse)		
Professional Training for the job	Have you received adequate professional training to conduct skilled birth care for pregnant women? Have you received additional training on EmONC/Life savings skill, Quality Assurance/Customer care to help you provide high quality skilled birth care?	

Workload	How many deliveries averagely do you conduct in a day/month? In your absence who takes over to conduct delivery? In your estimation do you have all the basic medical supplies and equipment to conduct safe delivery? Have there been instances where a case of disrespect or abuse of women in labour	
Environment of health facility/availability of supplies and equipment	Is your health facility equipped with basic medical supplies/equipment to provide timely and appropriate care for all pregnant women during labour?	

In-depth interview with TBAs		
Perception about where women should access maternal and child health services	What role do you play in helping women in this community to access MCH services? Where do women in this community go for MCH services? What informs their decision for the choices they make regarding place of birth?	
Perception about the attitudes of health workers towards women during labour	Tell me how pregnant women are received at the health center during labour? How can you describe the attitude of the health worker (midwife) that attended to women you accompanied to the HC to deliver? How long did you stay in the health facility after arrival before the health	

	worker (midwife) suffices to provide care for you? Tell me some of the instances you witnessed a pregnant women been disrespected or abused during labour by a health worker Do you think pregnant women should be beaten during labour if they fail to push out the baby after been instructed by the midwife? Yes/no and why? In your own opinion, how can we reduce or eliminate abuse and disrespect for women during labour in our health facilities?