

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**COLLEGE OF HEALTH SCIENCES**

**SCHOOL OF MEDICAL SCIENCES**

**DEPARTMENT OF COMMUNITY HEALTH**



**FACTORS CONTRIBUTING TO LOW UTILIZATION OF SKILLED DELIVERY**

**IN AHAFO ANO SOUTH DISTRICT**

**ASHANTI REGION, GHANA**

**MABEL NAI-ADJEI**

**NOVEMBER, 2008.**

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**THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES, KWAME  
NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI, IN  
PARTIAL FULFILMENT OF REQUIREMENT FOR THE AWARD OF DEGREE  
IN MASTER OF PUBLIC HEALTH  
(POPULATION AND REPRODUCTIVE HEALTH)**

**MABEL NAI- ADJEI**

**NOVEMBER, 2008.**

**DECLARATION**

I hereby declare that, with the exception of references to other people's works and publications which have been duly acknowledged, this thesis is the result of my own independent research work. I also declare that, this work has not been presented, either wholly or in part for any degree or other academic honours anywhere else.

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## **DEDICATION**

Dedicated to the Most High God by whose grace, wisdom and guidance has seen me through this programme.

To my family whose commitment, encouragement and patient endurance during my absence from home brought this work to a successful end.

## **ACKNOWLEDGEMENT**

My deepest appreciation goes to the Almighty God for His divine protection and guidance given me to complete this thesis. I extend my warmest gratitude also to my academic supervisor, Dr. Harry Tagbor for his patience, guidance, support and corrections made for its successful completion. My special thanks go to Professor (Mrs) E A. Addy, Dr. Easmon Otupiri, and Dr. Anthony K. Edusei, all of the Department of Community Health, Kwame Nkrumah University of Science and Technology.

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I am equally indebted to all members of the DHMT of Ahafo Ano South District Health Directorate especially the District Health Director Mrs. Mary Amponsah-Koduah and all the Community Health Nurses and midwives for their assistance and support during this study.

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## **DEFINITION OF TERMS**

**Household-** a population of people living in the same house

**Mothers-** respondents in the research

**Morbidity-**the state of being diseased

**Mortality-**the state of being liable to die

**No formal education-**a person who has not attended school

**Prenatal-**the period of uterine life

## **LIST OF ABBREVIATIONS/ACRONYMS**

AASD	--	Ahafo Ano South District
ANC	--	Antenatal Care
CHPS	--	Community based Health and Planning Services
DCE	--	District Chief Executive
DHA	--	District Health Administration
DHD	--	District Health Directorate
DHMT	--	District Health Management Team
EOC	--	Essential Obstetric Care
GHS	--	Ghana Health Service
HIV	--	Human Immune Deficiency Virus
IE&C	--	Information Education and Communication
MDGs	--	Millennium Development Goals
MOH	--	Ministry of Health
NHIS	--	National Health Insurance Scheme
RCH	--	Reproductive and Child Health
SHS	--	School Health Services
STIs	--	Sexually transmitted Infections
TBA	--	Traditional Birth Attendant
UN	--	United Nations
UNFPA	--	United Nations Population Fund
UNICEF	--	United Nations Children's Fund
USAID	--	United States Agency for International Development
WHO	--	World Health Organization

WIFA -- Women in Fertile Age-group

## ABSTRACT

This was a cross-sectional design to examine the factors affecting utilisation of skilled attendants among women in Ahafo-Ano South district in Ashanti. Using a systematic sampling method, a total of 312 women were interviewed using interview guide in six communities in the district. In addition, six health workers were interviewed and also 10 antenatal clinic sessions were observed. The objective of the study was to assess the quality of prenatal services; estimate the extent of access to skilled delivery and identify potential barriers; assess the districts capacity in providing skilled delivery services; and to identify the socio-economic and cultural barriers to utilization of skilled delivery services.

The results showed that thirty seven percent (37%) of the women delivered outside a health facility. Health workers interaction with pregnant women was satisfactory however, most (75%) of the public health facilities lacked delivery beds. The barriers to use of skilled attendants among the women include: lack of access road (Chi- = 18.10 p=0.00); lack of vehicles (chi= 14.00, p=0.00); and perceived cost of transport (chi = 3.63 p=0.05). Women who used tarred roads to the nearest health facilities were three times (OR = 2.98) more likely to use skilled attendants, and fourteen times (OR = 13.61) than those who lived on farm paths (inaccessible road). Women who have access to vehicles to the nearest health facility are five times (OR = 4.60) more likely to use skilled attendants compared to those who use trucks. Socio-economically, educated women were three times (chi = 29.24, p = 0.00; OR = 3.15) more likely to use skilled attendant, also women with educated husbands were two times (chi = 8.09, p = 0.00; OR = 2.15) more likely to use skilled attendants than those without educated husband. The employment of the women or their partners did not influence the use of skilled attendants (chi = 0.20; p = 0.65)

It is concluded that inaccessible roads to health facilities; lack of access to vehicles; low education of women and their husband; and inadequate equipment (delivery beds) at the health facilities accounts for the low utilization of skilled attendants in the Ahafo-Ano South district. It is recommended that the District Assembly, District Health Directorate and Opinion Leaders should collaborate to provide the feeder roads to link communities to the nearest health centre and also intensify education on the use of such services.

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background

Access to health services has been a challenge globally especially in developing countries. Utilization of maternal health services in developing countries is bedeviled with not only infrastructural and quality issues but also access. The resultant effect of low utilization of quality maternal care services is known to be a contributory factor to the high incidence of avoidable deaths of pregnant women in mostly developing nations including Ghana. As far as maternal health is concerned the use of skilled delivery is desirable as it is recognized to yield positive delivery outcomes by reducing maternal mortality and infant mortality.

The World Health Organization (WHO) estimates that globally, only 43% of women have access to skilled care during deliveries and the rest are exposed to unskilled delivery service (WHO, 2005). The organization has identified the lack of access to skilled delivery services as a hindrance to efforts in improving the health of women especially during delivery. The exposure of poor and vulnerable women to crude means of delivery at home and by untrained Traditional Birth Attendants (TBAs) (WHO, 2005), therefore, poses a great danger to the health of women, hence a major concern. In this regard, the United Nations have identified the need to reduce maternal mortality by three – quarters by 2015 (UN, 2005). Even though this objective in the Millennium Development Goals has been well lauded, relatively little progress has been made. Donors and governments are looking for cost-effective and sustainable approaches which can

reduce persistently high maternal mortality. One of the main challenges encountered has been to increase the proportion of women receiving antenatal care and delivering with a skilled attendant.

In Ghana, several efforts are being made to achieve this MDG on reducing maternal mortality. These include reducing the brain drain that affects staff adequacy at the facility level. This is intended to be achieved through enhanced staff conditions and services coupled with modifying training curriculum and also with increased intake of student nurse, midwives and doctors, and infrastructure expansions. In addition to the above, the concept of Community Health Planning Services (CHPS) - where skilled staff are equipped and motivated to stay in a community compound and provide quality service – is being implemented extensively tied with frequent monitoring and training of staff at all levels. Further, the Government of Ghana in 2003 initiated and implemented a free delivery services policy for all women. This policy ensured that all pregnant women access antenatal care (ANC) and delivery services at a free cost. The women were enrolled in the National Health Insurance Scheme (NHIS) without paying premium and they were encouraged to visit established and accredited health facilities for free service. These interventions are expected to result among others, the increase in quality pregnancy care, and the reduction in complications due to developed due to financial barriers to quality care. This could significantly reduce death due to pregnancies or deliveries (MOH, 2004).

The Ahafo-Ano South district, one of the districts in Ashanti Region, Ghana, implements these interventions. Women are suppose to visit skilled attendant for services before, during and after delivery. In this largely rural district, the District Health Management Directorate in accordance with the policy of the Ministry of Health (MOH), Ghana, adhere to all necessary interventions necessary to prevent maternal deaths.

## **1.2. Statement of problem**

Up to 15% of all births are complicated by a potentially fatal condition (WHO, 2005). Although many of these complications are unpredictable, almost all are treatable. Skilled attendants are trained to recognize and manage the complications or to stabilize the condition and refer the patient to a higher level of care if needed. Yet in the developing world only about 58% of all deliveries are reported as attended by skilled health providers (WHO, 2005). In some countries the figure is closer to 10-12% (WHO, 2005). And in many of those cases, the woman does not have access to life saving emergency care should something go wrong. Some women may clearly be at risk for complications such as those with obvious physical malformations or very short stature, and or those that are too young and immature or those having severe health conditions (WHO, 2005). Great majority of complications arise with little or no warning among women who have no risk factors. Every minute 110 women in the world experience a complication in their pregnancy and one of them will die (WHO, 2005).

Institutional data indicate that Ghana has persistent high maternal mortality ratio estimated to range from 214 to 800 per 100,000 live births (UNFPA, 2004). It also has growing social inequalities with rates of skilled attendance either static or declining for poorer women (Graham, 2004). According to the Ghana Health Services (GHS) even though antenatal care coverage has been highly sustained at 85%, access to skilled delivery has dropped from 44.5% in 2006 to 34.9% in 2007 and a commensurate increase in maternal mortality from 957 to 999 and from 187.2/100,000 to 229.9/100,000 live births for 2006 and

2007 respectively (GHS, 2007). In fact the decline in skilled delivery reflected in seven out of the ten regions of Ghana including Ashanti region.

Ashanti region recorded a skilled delivery utilization of about 28% one of the lowest in the country (GHS,, 2007). Ahafo-Ano South, is one of the district in Ashanti with a predominantly rural population that promotes safe motherhood practices including use of skilled delivery service yet among the lowest, as far as skilled delivery utilization is concerned. The District Health Administration (DHA) has raised concerns about means by which skilled personnel for delivery services could be maximized yet have not yielded any positive results. These concerns emanates from the observation that less than 50% of women who use ANC services use health facilities for delivery. There has not been any scientific documentation of the causes or barriers to skilled delivery in the district. This study is therefore intended to examine the factors that accounts for the non-use of skilled delivery by pregnant women in the Ahafo-Ano south district.

### **1.3 Rationale**

Women in developing nations continue die during delivery and the situation is worst amongst those who live in rural settings such as Ahafo Ano South. The death of women affects the society at large due to their role in caring for and supporting many vulnerable persons, including children. However, most of these deaths are preventable, yet, there seem to be little attempt on the part of women in rural settings in avoiding these deaths. In addition, the situation poses great challenge and frustration to health workers in rural settings, who continuously strive for improved maternal health care outcomes. This study in essence, would provide evidence to all stakeholders including governments, donor agencies, political structures and health managers and also women as to the possible barriers in accessing skilled delivery services. The

aim is that the provision of such vital information would inform better strategy in bridging and or eliminating the barriers to accessing skilled delivery. This would contribute significantly in reducing pregnancy complications and thereby reducing maternal deaths.

#### **1.4. Research question**

1. What is the quality of prenatal service provided in the district?
2. How accessible are existing health facilities in the district?
3. What is the capacity of maternal health service providers in the district?
4. What are the socio-economic and cultural barriers to skilled attendance at birth?

#### **1.5. Objective**

##### **1.5.1 Main objective**

The main objective of this study is to identify factors that contribute to and influence the low utilization of skilled attendants' services by pregnant women in the Ahafo-Ano South district.

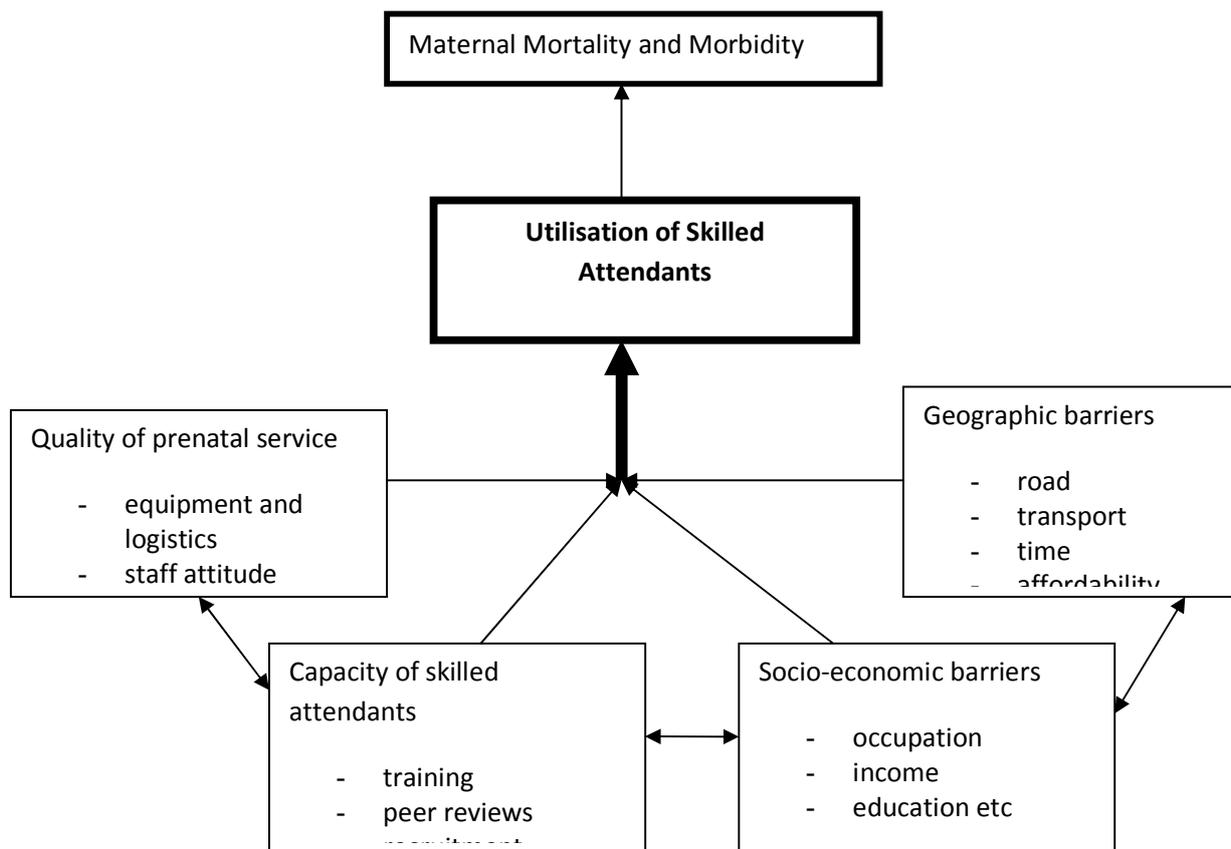
##### **1.5.2. Specific objective**

1. To examine the quality of prenatal services in the district and the extent it has contributed to the use of skilled attendants.
2. To estimate the extent to which access or non-access to existing health facilities influence the use of skilled delivery services in the district.
3. To determine the extent to which the district is building capacity in meeting the need for skilled attendants.

4. To identify socio-economic and cultural barriers to skilled delivery services and the extent to which they influence the utilization of skilled attendants in the district.

### 1.6. Conceptual Framework

Figure 1: Conceptual framework showing factors that affects utilization of skilled attendants



Source: Author's Construct

Maternal mortality and morbidity have a relationship with the utilization of skilled attendants. It is presumed that the high use of skilled attendants would decrease maternal mortality and morbidity and vice-versa. The use of skilled attendants is reliant on several factors which act independently and dependently on utilization of skilled delivery services with its resultant outcomes. The quality of prenatal services, geographic access to available health facilities coupled with the socio-economic background and the availability and capacity of skilled attendant are inter-related and interdependent in determining the use of skilled services. Quality of prenatal services would be dependent on clients satisfaction which would be influenced by their socio-economic perspective coupled with the skilled employed by the available skilled attendants and also the easy access to the physical health structure by the clients.

The availability of equipments and logistics would stimulate staff with the requisite training and skills to better perform hence, improve on the quality of services thereby by attracting more women to use skilled services. However the lack of it would also create frustration and weaken staff skills and capabilities and therefore with its resultant dissatisfaction of clients reflecting in low utilization of the services.

The capacity of staff when improved through training and facilitated peer reviews could stimulate better and improved performance in the use of current and effective skills in rendering delivery services. This would presumably influence the outcome of services and thereby increasing use. However, staff with poor capacity in the management of delivery cases would have a bearing on increasing mortality and morbidity during and after services delivery. This could lead to low utilization.

The clients socio-economic characteristics including their ages, educational status, religions, incomes, occupation and decision making influences among others could determine the use or non-use of skilled services for delivery purpose. It is presumed that clients who are self empowered socially and economically through education, religion and earnings could make informed decision and afford independently to implement such decision to her benefit. On the other hand, a client with low socio-economic status could be largely impeded by social, economic and decisional factors that could hinder her from using skilled attendants even though she may desire so.

The availability of health facilities is important in determining the utilization of skilled attendants. Access to such facilities should be such that roads to and from it are easily accessible, in times, cost and means. The lack of access roads, may increase time in accessing skilled delivery services due lack of vehicle or inability to afford the cost of transportation. Easily accessible roads attracts more vehicles and reduces cost of transportation hence, enable clients to access health facilities in time in times of need such as during labour.

The factors elaborated above could therefore affect utilization of skilled delivery services positively and negatively and therefore informs the framework for conducting this study.

## **1.7 Organisation of Work**

This work is organized in six chapters. The first chapter provides the background information, problem statements, rationale, research questions, objectives of the study and conceptual framework. The second chapter reviews related literature on skilled delivery services as has been found by other authors and renowned organization in different settings around the world. The third chapter, chapter three, reveals the methodological process of obtaining information and ensuring the quality of information. Chapter four demonstrates the findings of the study in tables, charts and graphs whilst chapters five provide discussion based on the findings of the study and in accordance with the study objectives. Chapter six, details the conclusions and recommendations of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The chapter describes skilled care at birth as experienced variedly within the global communities and related obstacles and policy solutions .Areas highlighted include: quality of prenatal service, accessibility, capacity and socio-economic and cultural barriers.

#### **2.2 Quality of prenatal service**

Antenatal care can provide an essential link between women and the health system and also provide other essential health services (Ross, 1998). Researchers now recommend four prenatal care visits, focused on the interventions like counseling about the danger signs of pregnancy and delivery complications and where to seek care in case of emergencies (Lederman, 2001). Also in certain settings, providing treatment for conditions that affect women's pregnancies such as malaria, tuberculosis, hookworm infection, iodine deficiency and STIs including HIV/ AIDS are accessible (Shulman, 1999). An observation made on demographic and health survey data for 1999 and 2000 in Bangladesh revealed that women who used health facilities for other services such as immunization, contraception and antenatal care were more likely to deliver in facilities (UNFPA, 2004).

Fikree and Jafery (1999) noted that in Karachi, Pakistan an Information Education and Communication (IEC) campaign raised awareness in the community about danger signs and the importance of skilled

care in health facilities equipped to handle obstetric emergencies. The programme which trained providers in counseling skills also established referral systems to link communities to nearby hospitals. An evaluation of the counseling for pregnant women and their spouses which included the need to have an emergency plan revealed an improvement in peoples' knowledge of preventive measures during pregnancy such as the importance of discussing and receiving permission from family elders or husbands or both for skilled care at birth.

A quality assurance project in Nicaragua tried to address physical and psychological barriers that prevented women from wanting to visit health care centres. A study found that only 58% of women visiting health centers in the districts of Jinotega and Matagalpa, Nicaragua for antenatal and delivery care were not satisfied with the way health providers treated them (USAID, 2000).

Sall (2000) further stated that the waiting and consultation rooms were not conducive to the comfort and privacy desired by clients. In addition, the study found that the staff of the health centres were unmotivated and lacked knowledge about what to do in case of obstetric emergencies. Standard protocols to guide the staff's work did not exist. The project introduced modern quality assurance techniques to make better use of the health centres limited resources. The physician's running the programme focused on improving client satisfaction and strengthening compliance with national standards for antenatal and delivery care. They redesigned the health centre to ensure shorter waiting time, trained health workers on how to care for women with obstetric complications and introduced new technologies to help health workers monitor women's labour and identify danger signals. Less than a year after the programme began, the number of recorded skilled deliveries increased significantly in the two districts in Jinotega where the project operated. The health centre teams

increased compliance with obstetric standards from under 3% in March 2000 to between 75% and 90% in November 2000. Finally, exit interviews conducted in November 2000 by the health unit confirmed that patient satisfaction had increased to almost 90%.

### **2.3 Accessibility**

According to UNFPA reports (2004) from the field, many factors complicate women's access to skilled care in the Sub-Saharan African region. The report further explained that often women give birth at home because of the prohibitive cost of medical care or cultural beliefs that promote home-based delivery. Some simply lack confidence in the health system. Difficult geographic terrain and limited transportation may present obstacles to reaching a skilled attendant. Nahar and Costello (1998) asserted that cost can be a significant barrier to the decision to seek lifesaving care in many settings. There are unexpected costs associated with obstetric emergencies.

In a study conducted by Hotchkiss and Gordillo (1999) in Morocco on household health expenditure revealed that significant percentage of people who used public services incurred substantial costs even though the user fees are supposed to be low in public facilities. Women had to dip into personal and family savings to pay for drugs, exams, surgical and X-ray fees as well as other expenses associated with hospital stay.

Bolivia has also made efforts to address the issue of maternity care costs. In 1996, a study found out that only 60% of all births were attended by skilled care providers and more than half of the population was not using formal health services, mainly because, services were perceived as too

costly. For women, cost was a major barrier to obtaining appropriate medical care; those delivering in a public facility had to pay medical fees, anaesthetic and antibiotic costs and the cost of surgical supplies such as gloves and surgical drapes (Gutierrez and Ochoa, 1994).

In an effort to improve the quality of maternal and child health care in the country, the government of Bolivia developed and implemented the law of popular participation, which among other things established the national mother-child insurance for maternity and childhood programmes to provide free services to pregnant women and children under five years in over 300 municipalities (Gutierrez and Ochoa, 1994). Under the insurance programme, coverage for pregnant women includes four antenatal visits, hospital delivery, treatment of obstetric complications and one postnatal consultation. The programme was advertised through public announcements on radio and T.V and community informal discussions. One year following implementation of the popular participation law, antenatal visits had increased by 80%, deliveries at public health facilities by 50% and hospital treatment of emergency cases by 90% (Gutierrez and Ochoa, 1994). An evaluation of the insurance programme as it completed its second year of operation found that it had stimulated use of maternity care. Use of the programme was also found to be strongest among the poor and relatively high for adolescents, groups that were not previously using formal health services (Ransom and Yinger, 2002).

Macintyre and Hotchkiss (1999) asserted that physical, financial and socio-cultural barriers often prevent women and their families from getting to care in time. Transportation is a major barrier in countries where the geography poses challenges or where road systems are not comprehensive or well maintained. They further stated that in remote areas, vehicles are often scarce and in poor conditions. The cost of arranging emergency transportation can be daunting.

Essien, et. al. (1997) also asserted that these costs include the price of hiring a private vehicle and fuel expenses. The opportunity cost, or loss of productive time of the person accompanying the woman can also pose an obstacle. In addition, private drivers are sometimes reluctant to transport severely ill women because of the risk that they will bleed in their vehicles or die on route.

According to Koblinsky et al (2000), in some countries, pregnant women from remote areas travel to facilities near hospitals where they plan to deliver. Maternity waiting homes which are typically built near hospitals provide a place where women can go near the time of delivery to have easy access to skilled deliveries.

Sionke and Donnay (2001) stated that in most settings around the world, women in need of care are transported in ambulances or vehicles such as buses, pick up trucks, motor cycles tricycles and even bicycles and boats. In Tanzania, a community-based reproductive health project identified transportation as one of the barriers to maternal survival in two districts in the Mwanza region. A qualitative assessment in May 2000 revealed that during obstetric emergencies, the most important barrier faced was ready access to inexpensive transportation. The project managers developed a strategy to work with communities in about 40 villages to identify transportation options, develop their own action plans to create functional systems from the community's own vision, share innovations from other communities and provide assistance and support for problem solving. During a 14 month period, 35 communities developed transportation plans. Each transportation plan was different. Some plans involved purchasing and managing reconditioned vehicles, tractors, and motor-boats. In one case, the community relied on a locally manufactured tricycle. In other villages along

Lake Victoria, the communities strengthened existing response systems by making canoes available. Plans varied according to the economic status of the community (Kouletio et al, 2000).

Shehu, Ikeh and Juna 1997 noted that in the rural Northwestern state of Kebbi in Nigeria, a safe motherhood network enlisted the supported of a local bus drivers union, the Nigerian union of road transport workers. Shehu (1997) further observed that focus group discussion and a village case study had found that shortages of vehicles and fuel meant that women in need of emergency obstetric services could not get to care. In many case a search for transportation at affordable rates was time-consuming and required continuous negotiations. She further stated that after a series of community mobilization meetings organized by the safe motherhood network with bus drivers and village heads, the union members agreed to provide transportation for women with obstetrical emergencies during market day hours. The members who received training from the network in how to transport emergency cases to care as well as certificate and special stickers for their buses, could be reimbursed for the fuel cost by safe motherhood fund created by the community members and the network.

#### **2.4 Capacity**

Dayaratna et. al. (2000) stated that in many settings, improving services that already exist, investing in upgrading the skills and competence of health care providers and enhancing referral system can have significant impact on maternal health service delivery. In order to manage obstetric complications, a facility must have trained staff and a functional operating theatre, and must be able to administer blood transfusions and anaesthesia. District hospital and health centers can often become capable of providing emergency obstetric care (EOC) by making just a few changes to their existing resources:

renovating an existing operating theatre or equipping a new one; regaining or purchasing surgical and sterilization equipment; converting unused facilities within the hospitals or health center into a basic or comprehensive EOC facilities training doctors and nurses of existing resources.

A national level study conducted in Egypt found out that 47% of the 'avoidable factors' associated with women's deaths were due to substandard delivery care. In many cases no standard referral system was in place or no protocols were available for obstetric emergencies (MOH – Egypt 1998). As a result of the study finding's, the Egyptian MOH worked to define a set of health facilities and community based interventions to address the available factors identified. Among the interventions were protocols for delivery care, standard of quality of care and special training courses for maternity care providers (USAID, 2000).

According to UNFPA Report, the key problems to skilled delivery in Jamaica include staff shortages (with vacancy rates for midwives from 45% - 70%) inconsistent supply of essential items and client dissatisfaction with long waiting times. The problems all relate to weak institutional capacity. The reports further stated that access to skilled care at delivery in Malawi is limited. Although nearly 55% of births take place in health facilities, there is no guarantee that assistance will be provided by a skilled attendant. Self-delivery or deliveries by ward attendants or guardians are common. Among the many barriers to Malawian women's' access to health care service are lack of information, poor interests in or disapproval of services, financial constraints, transportation and discomfort with male service providers.

A detailed problem identification exercise was completed in Malawi to identify the root causes of these factors and to generate ideas on how to solve them. The inadequate number of nurse / midwives for instance was seen to have multiple causes including poor pay and resources, a small pool of candidates for training and high mortality of professionals due to HIV/AIDS. Many of the maternal deaths in Mexico could be prevented if women had access to quality health services during pregnancy, delivery and the post-partum period.

Information collected from a strategy development tool identified a variety of problems related to skilled delivery attendance, including:

- Too few qualified personnel to attend deliveries, especially during the night shift.
- Obstetric skills among various levels of staff need upgrading.
- Health workers need to be sensitized to the needs and cultural practices of women.
- Supervision and monitoring and evaluation systems are inadequate.
- Space, equipment and supplies in the hospitals are limited. (UNFPA, 2004)

In Botswana, the safe motherhood protocols refer to skilled care as supervised deliveries attended by a doctor or trained midwife. Strategies to improve delivery included the development of infrastructure, investment in health personnel and community outreach. This focused response contributed to an increase in supervised deliveries from 66% in 1984 to 87% in 1996.

Uganda's policy on training reflects the MOH's priority on skilled attendance. While nurses and midwives were previously trained separately, all nurses are now required to have midwifery training. The MOH also mandates regular in-service training as part of continuing education for promotion.

With a maternal mortality that ranges between 828 and 921 deaths per 100,000 live births, Somalia lacks a clearly defined policy related to skilled care at birth. Only 10% of women receive skilled care during either pregnancy or child birth (IRIN, 2009).

In Nepal, 3½ months of basic training plus six weeks, of refresher training is provided for maternal and child health workers who serve as skilled attendants at the sub-health post level. In addition to basic training, a six week midwifery training for staff nurses and auxiliary nurse midwives who serve as attendants at hospitals, primary health-care centre and health post (WHO, 1997). In Bangladesh, only 14% of deliveries are assisted by health professionals, 22% by relatives and almost half by traditional birth attendants. Also locally recruited health workers are often well accepted by communities as skilled attendants (Piet-Pelon, 1999).

## **2.5 Socio-economic and cultural barriers**

Medhet et. al. (1998) asserted that, skilled attendance at delivery is influenced by the socio- economic and political context of the health care system and the cultural and biological realities of women seeking care. This complex interaction means that even when skilled care is available women may not seek it out or receive it. Medhet et. al. (1998) further explained that often women do not make decisions to seek care alone, other family members, members of the community or traditional birth attendants may also fail to make timely decisions about the need to seek care. This hesitation to act may result from mistrust of health providers, fear of or receiving poor quality or dehumanizing care or worries about the cost of services. In some countries, women are reluctant to seek care because they

prefer to see female health care workers. In settings like rural Pakistan, where there are few female practitioners, women's modesty may prevent them from seeking potentially life saving care.

UNFPA Reports (2004) from Bangladesh indicated that factors affecting skilled delivery include mother's age and education, religion, residence, poverty status and child's birth order. Wealthy women are more likely to deliver in a facility than poor women. The report further stated that women face barriers to skilled care at different levels. At the individual level, women avoid institutional delivery due to shame, fear of caesarean sections and death. At the family level, economic constraints are a major barrier. The main decision makers (mothers-in-law and husbands in the family) were the least knowledgeable about different obstetric services available, which actually increased their ultimate expenditures on obstetric care. At the facility level, unfriendly health care providers, lack of female doctors and referral problems limit access to formal delivery care.

Piet-Pelon et al (2002) observed that, in many settings, male partners and relatives of women make crucial decisions about whether or not to seek care; a dangerous situation when they are ignorant of danger signs and how to go about it. Gender roles influence maternity care; when complications of pregnancy and child birth develop women are often not able to make decisions about community members in decision making roles. However, men often make poor decisions about seeking care during pregnancy and child birth in part because they do not understand the dangers involved. Results of a survey of men's involvement in reproductive health programmes in India, Pakistan and Bangladesh highlighted that men base decisions on conventional ways of managing health matters such as economic assessment of the situation. Research has suggested that if men were better educated about danger signs and what to do about them, they could play a lifesaving role during

pregnancy and child birth (Cohen and Burger, 2000). A study in Nigeria found that women in Osun state were not receiving necessary care during obstetric emergencies; part of the reason was that men were making the major decisions about their wives' use of health care. Subsequently, the center for research, evaluation resources and development designed a project to educate members of the community about danger signs, what can be done to address them and what roles husbands should play. The project disseminated information through radio, TV, newspaper, local' cooperate societies', hand bills, posters, town criers, churches and mosques. An evaluation found the communication effort successful, especially because it sparked significant discussions in the community. The majority of men reported that they were persuading friends and relatives to take proper care of their wives in pregnancy (Adewuyi, 1999).

Khan, et.al. (1998) noted that promoting the rights of women is also an integral part of improving women's access to essential obstetric care in Bangladesh. Williamson and Shen (as cited in Ransom and Yinger, 2002) observed that women are often not empowered to make decisions about seeking maternity care. But seeking care is just one aspect of safe motherhood. In many countries, women have little education, poor nutrition, limited decision making power, few resources and inadequate access to social services. Starrs (1998) explained that empowerment is critical to women's health because it enables women to articulate health needs and concerns, access services with confidence and without delay and seek accountability from service providers and programme managers.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Study Design**

This is a descriptive study with cross-sectional design examining the factors that account for low utilization of skilled attendants' services in the Ahafo-Ano South. This design was employed to examine quality of care, capacity of staff on skilled delivery, socio-economic characteristics of women and geographic access to health facilities in relative to the use of skilled attendants. This study was conducted between August – December 2008.

#### **3.2 Study Area**

Ahafo-Ano South District was the selected area for the study. It is one of the 22 administrative districts in the Ashanti Region of Ghana with Mankranso as the capital. It is about 30km from Kumasi. The District occupies a total land area of 124km square. It shares boundaries with other districts as follows: North – Tano District in Brong Ahafo Region; South - Atwima Districts of Ashanti Region; East - Offinso District and part of Atwima Districts. The District has a total population 168,871 (DHA, 2007). A

greater proportion of the people are made up of Ashantis, then Ewes, Frafras, Kontokoris, Grushies and Hausas. About 80% are peasant farmers engaged in cocoa, vegetables, plantain and maize farming. The rest are petty traders, chain saw operators and civil servants. There are few sawmills in the district.

### **3.2.1 Traditional and Political Structure**

Traditionally the district represents one of the traditional areas under the Golden Stool. The Chief of the traditional area therefore is a member of the Asante Traditional Council headed by the Otumfour Osei-Tutu II, the Asantehene. The chief of the area is supported by divisional and sub-chiefs at the community levels. The traditional leaders of the area meet every forty days, under the Akwasidae festival, where discussions about the general state of affairs of issues affecting the people including that related to health, and maternal issues are held. In such meetings representatives, including health mangers, women groups and other agencies attend and debrief the traditional council as deemed fit. Before such occasions the chiefs in their own capacities also interact with people and settle social issues affecting them. Such matters include that relating to marriage, child birth, parenting among others are summoned for settlement and judgment made by the chiefs. The chiefs therefore provide the great platform for galvanizing resources and providing and enforcing such social norms and values including that relating to health of women and therefore maternity services in particular. These

leaders assist health managers in ensuring community participation and acceptance of health interventions including maternity health services.

Politically, the District Chief Executive, Assembly men and Unit Committee members elected in the area, ensure that government policies are implemented as intended. In this regard, the DCE coordinates and provides leadership in the mobilization of resources and activities in achieving better health care services for the general population, especially women. The Assemblymen and Unit Committee members are closer to the people at the community level and are therefore in constant touch with issues affecting women in the area. Such important matters such as access to health facilities are expected to be raised by them at the district assembly level and followed up for solution to the benefit of the people. In this regard, the district provides scholarship, training and other incentives to health professionals and the indigenes to participate effectively in the provision of health care services.

### **3.2.2 Social Services**

#### **3.2.2.1 Transportation**

Access to health facilities is facilitated by goods roads. This does not only reduce time to the health facility but also attract more commercial vehicles hence makes transportation readily available to the people. The Ahafo-Ano South district is largely rural and therefore has limited tarred roads. Except for roads leading to major communities in the district, majority of the roads are un-tarred and in most remote communities are not-motorable.

#### **3.2.2.2 Communication**

Access to media and use of telephone facilities provide the required communication medium to educate and sensitise people of the district about social and health issues including utilization of health services for delivery purposes. The district receives radio and television transmission. Over 23 radio stations can be received in the major communities in the district but this is somehow limited moving into the most rural communities. National television and two privately owned televisions are also received. The women watch and listen to programmes from the above media and these influence the daily discussions on matters of health. In addition, mobile services and fixed telephone facilities are accessible and used by the people in the district. Internet facilities however, do not exist.

### **3.2.2.3 Education**

Formal education is pivotal in influence health seeking behaviour of women as it assists them in making informed choices about health interventions and options. The district has over 200 schools comprising 105 primary schools, 53 Junior High Schools (JHS) and one Senior High Schools (SHS) with rest being pre-schools. Adult literacy of the district is estimated at 41.1% with 24.8% and 80.9% having obtained secondary and primary levels of education respectively. The district education office is adhering to government policies of encouraging female education in basic and secondary levels.

### **3.2.2.4 Health Administration and Services**

The district is zoned into 6 sub districts namely Mankranso, Pokukrom, Mpasaso, Wioso, Sabronum and Biemso. Each sub district has a government health facility. The district is also supported by mission, private, CHPS compounds and traditional health care services. Service delivery is offered by trained health personnel.

The Health sector in the district is managed by the District Health Management Team (DHMT). This comprises of the District Director of Health Services, Technical officer (Epidemiology), Public Health Nurse, Biostatistician, Accountant, and a Nutrition Officer as the core members. Other collaborators are from Ghana Education Service, District Assembly and Ministry of Agriculture.

Ahafo Ano South District offers clinical, preventive and health promotion services in Reproductive and Child Health, Clinical (medical, surgical, obstetrics and gynaecology), Integrated Disease Surveillance and Response example TB, Buruli Ulcer, Health Education and promotion. The trend in coverage of skilled delivery vis – a – vis prenatal service from 2004 – 2007 (4 years) stands as follows:

**Table 1:** ANC Registrants/Skilled Delivery Coverage

<b>SERVICES</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
ANC	69.0%	60.9%	62.7%	66.5%
Skilled Delivery	41%	41.5%	38.0%	44.2%

**Source:** DHA, 2007

Services rendered by TBA's in the district are not included in these figures.

### **3.4 Study Population**

The study is targeted at women within the fertility age group (WIFA). Thus a total of 40,529 women aged between 15 – 45 years fall in this category. These women had the potential of being pregnant, had ever been pregnant and given birth and or have intention of having another child. They are therefore affected by the factors under consideration that relates to the utilization of skilled attendants services in the district. The women included in the sample were those who had given birth over a period of one year, had lived in the district for over a year. Women who had migrated in the district in less than one year and have had or do not have children were therefore excluded in this study.

### 3.5 Study Variables

Table 2: Study variables, operational definitions and means of measurement

<b>Variables  (objective)</b>	<b>Sub- variables</b>	<b>Operational Definition</b>	<b>Scale of Measurement</b>
Quality  (Objective 1)	<ul style="list-style-type: none"> <li>• I E &amp; C</li> </ul>	Number of mothers at the session , delivery content, learning material, individuals counseling sessions, sitting arrangement	Nominal
	<ul style="list-style-type: none"> <li>• Attitude of service providers</li> </ul>	Friendly, unfriendly	
	<ul style="list-style-type: none"> <li>• Waiting Time</li> </ul>	Undue delay, punctual	
	<ul style="list-style-type: none"> <li>• Equipment/Supplies/Drugs</li> </ul>	Available, obsolete, adequate, functioning	Nominal
	<ul style="list-style-type: none"> <li>• Type of service</li> </ul>	Facility with all services inclusive, treatment of conditions that affect women’s pregnancy –malaria, TB, Helminths, STI, Anaemia.	Nominal
Accessibility	<ul style="list-style-type: none"> <li>• Distribution of health facilities</li> </ul>	Catchments area	Nominal
	<ul style="list-style-type: none"> <li>• Terrain/Road Network</li> </ul>	Tarred untarred, mountainous, seasonal accessibility	Nominal

(Objective 2)	<ul style="list-style-type: none"> <li>Distance to Health Facility</li> </ul>	Less than 5km, 5km or more	Interval/ordinal
	<ul style="list-style-type: none"> <li>Transport</li> </ul>	Vehicle, truck, bicycle, boat, walk, fare, affordability	
	<ul style="list-style-type: none"> <li>Financial</li> </ul>	Health insured or un-insured	Nominal
Capacity	<ul style="list-style-type: none"> <li>Categories of Service Providers</li> </ul>	Doctors, Midwives, Nurses	Nominal
(Objective 3)	<ul style="list-style-type: none"> <li>Staff strength-number</li> </ul>	Number of each category	Nominal
	<ul style="list-style-type: none"> <li>Training updates</li> <li>Policy and advocacy</li> </ul>	Any training programme, Workshops, Seminars & Frequency	
	<ul style="list-style-type: none"> <li>Enabling environment</li> <li>Equipment/Supplies/Drugs</li> </ul>	Availability, Adequate, Functioning, Obsolete	Nominal
	<ul style="list-style-type: none"> <li>Staff Motivation</li> </ul>	Appraisal, Study Leave, Awards	Nominal
Socio-economic	<ul style="list-style-type: none"> <li>Income status of women</li> </ul>	Government Employee, Self Employed, Unemployed	Nominal
(Objective 4)	<ul style="list-style-type: none"> <li>Occupation</li> </ul>	Civil Servants, Farmers, Trader	Nominal
	<ul style="list-style-type: none"> <li>Decision making on place of delivery</li> </ul>	Husband/In-laws, Self Decision	Nominal
	<ul style="list-style-type: none"> <li>Knowledge of pregnancy risk factors</li> </ul>	Conditions that affect women's pregnancy, cause, symptoms, prevention, cure	Nominal
	<ul style="list-style-type: none"> <li>Perception about delivery</li> </ul>	Expectations, in crisis where to seek help	
	<ul style="list-style-type: none"> <li>Birth practices</li> </ul>	Health facility, TBA, Home-based	Nominal
<ul style="list-style-type: none"> <li>Religion</li> </ul>	Christian, Moslem, Traditional, their perception of delivery		

	• Birth order of child	First child, 2 <sup>nd</sup> child, Xth child, beliefs associated	Nominal
	• Income level of husband	Employed, Self employed, unemployed	
	• Husbands level of education	Primary, Secondary, Tertiary, illiterate	



### 3.6 Sample size and sampling technique

#### 3.6.1 Sample size

With an estimated population of 163,318 four percent expected pregnancies were determined. Using a total of 6,533 expected pregnancies in the district and a skilled attendants' utilization rate of 44.2%, a sample size of 312 women was determined using Epi Stat CALC version 4.0.1 at 95% confidence interval and a worst acceptable frequency of 38.8% at 5% error margin.

#### 3.5.2 Sampling technique

The total sample was distribution based on the population densities of the six sub-districts in the Ahafo-Ano South district. After this, the communities per each sub-district were compiled and one each randomly selected for use for data collection purposes. In the selected community, the study participants were selected after every third house after a spin for direction at either the chief's house or the market square. In the selected house, women who met the selection criteria were purposively selected appropriately. In cases where there were two or more eligible respondents, the simple random sampling using the balloting method was employed to select a respondents.

Table 3: Sample size distribution per sub-district

Sub-district	% of Expected Pregnancy	Sample Size
Mankranso	20.9	64
Pokukrom	17.9	56
Mpasaso	18.0	56
Wioso	17.2	54

Sabronum	14.5	45
Biemso	11.5	37

Source: DHA, 2007

### 3.6 Data Collection Technique and Tools

A mix of data collection techniques were employed in this study. This included the interview-administered technique, and non-participant guided observation technique. The interviewer technique was used in assessing the views of women on utilization of skilled delivery in the district. The researcher read the questions out to the selected woman and the responded provided ticked appropriately on the data collection tool. The interviewer administered technique was also used in interviewing health workers at the health facilities. The guided observation techniques were employed during observation at the antenatal clinic session.

The tools used were the interview guide containing close and open ended questions on the socio-demographic, economic, and skilled delivery perspectives of women in the district. Another interview guide was also used for collection of data from the health workers. Checklist was also developed to observe the quality of health education delivered at the ANC. The checklist was used to observe the quality of care rendered to women. Quarterly and annual reports, delivery registers were used to find data that could give information about the use of delivery a service including the data for use at the ANC.

### **3.7 Pre-testing**

A pretest of the research method was carried out on ten mothers randomly selected at a clinic Potrikrom. This was to access/evaluate the logical sequence of format and clarify the wording of the questionnaire, the feasibility of the design procedure for data processing analysis and any potential problems. It also enabled for standardization of interpretation of words in the instruments which were in English and needed to be translated in Akan (Twi).The pre-testing revealed the reactions of respondents to the research procedures and to questions related to sensitive issues which will enhance the actual field work

### **3.8 Data Processing and Analysis**

The data was coded and seriated based on the community and the sequence of the interviewees. The data collected was checked for completeness and accuracy with the interviewee before filed, collated and kept in a safe. The cleaned data was entered in a pre-designed template in the Statistical Package for Social Scientist (SPSS) software, version 15.0. The entered data was validated with the hard copies to ensure accuracy and consistency in response and also to eliminate data entry errors. The data was analysed with SPSS version 15.0 using descriptive and inferential statistics. Descriptive statistics showed responses in proportions, means whereas 95% confidence interval, chi square and p-values were used for purposes of making inferences. The result was presented in tables, graphs and charts.

### **3.9. Ethical Issues**

The proposal of the study was approved by the Community Health Department following which an introductory letter was issued for implementation. The Ahafo-Ano District Health Management Team also gave consent for the implementation of the study.

For the selected women, a consent form was developed for their approval before interviewed. The consent addressed issues relating to confidentiality of their responses. The women were assured that their names were not required in order to participate in the study and that they are at will to complete or discontinue the interview at any time without being penalized. They were further assured that the responses they provide would not be associated with them now or in the future and that it would not affect their relationship with the DHA or health services providers and or health facilities in the district now or in the future.

### **3.10. Limitation**

The study was limited in terms of examining representation of women in all communities in the district however, this was curtailed by giving all communities equal chance to be selected. The planning of the study based on resources affected the decision to use a community per sub-district however; it is presumed that the characteristics of the selected community do not vary with other communities within the sub-district and therefore the entire district.

The interview was conducted in Twi which could have posed a challenge in respect of persons who were not indigenous Akans. In such situation a relative who was fluent in Akan assisted in translating the questions to the understanding of the interviewee. Interviewees were allowed to seek for extensive

clarification before responding to questions so as to curtail misinterpretation or misunderstanding of the import of questions posed.

### **3.11. Assumptions**

The following assumptions were made:

1. all respondents provided exact and accurate account on the subject matter
2. all respondents were able to recollect vividly their experience and provide them accurately
3. the instruments used were accurate and reliable in capturing the required data.

## **CHAPTER FOUR**

### **RESULTS**

#### **4.1 Introduction**

The findings of the study are shown in this chapter. The findings are presented according to the objectives of the study and are depicted in the forms of tables and figures.

#### **4.2 Background of respondents**

Table four below details the background characteristics of the respondents. The average age of the respondents was  $26.77 \pm 6.37$  with a 95% C.I of (26.06, 27.48). Over half (55.7%) of them were between the ages of 20 – 29 years. Out of the 312 respondents, 77.2% were Christians. Over a quarter (28.2%) of the respondents had not had any formal education exposure whereas the rest, 71.8% had had some

formal education. About sixty two percent (61.9%) had Junior High School/Middle School as the highest educational level obtained. Among their partners, 22.8% had not had education with 57.4% attaining JHS/MSLC education. Seventy four percent and 84.0% of the respondents and their partners respectively indicated that they engaged in work for income. The enlisted occupation by the women included farming, hairdressing, teaching and trading. Those of their partners were: farming, trading, tailoring, timber machine operation and driving. One of the partners was a student. Half (50.6%) of the women had more than two children and 46.2% decides themselves as to the place to deliver. The other persons who decide where they deliver were: husbands (30.8%), mothers (16.7%) and mothers-in-law (6.1%).

Table 4: Background characteristics of respondents

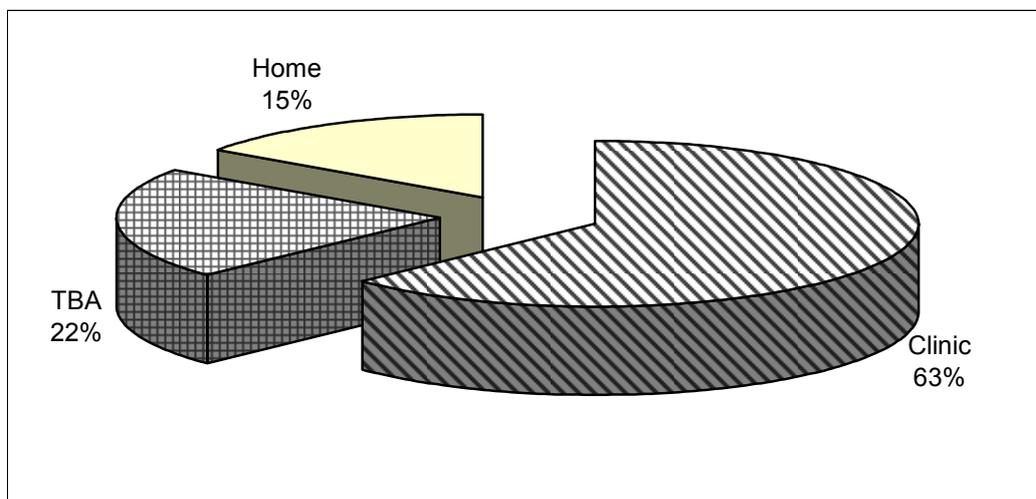
<b>Variable</b>	<b>Frequency (N = 312)</b>	<b>Percentage (%)</b>
<b>Age</b>		
- < 20 years	39	12.5
- 20 – 24 years		
- 25 – 29 years	85	27.2
- 30 – 34 years		
- 35 and above years	89	28.5
	52	16.7
	47	15.1
<i>Mean = 26.77; SD = 6.37; 95% C.I. (26.06, 27.48)</i>		
<b>Religion</b>		
- Islam	63	20.2
- Christian		
- Other	241	77.2
	8	2.6
<b>Women's educational level</b>		
- No formal education	88	28.2
- Primary		
- JSS/MSLC	14	4.5
- SSS/High School		
- Tertiary	193	61.9
	17	5.4
	0	0.0
<b>Employment status of woman</b>		
- employed	231	74.0
- not employed		
	81	26.0
<b>Partner's educational level</b>		
- No formal education	71	22.8
- Primary		
- JHS/MSLC	9	2.9
- SSS/High School		
- Tertiary	179	57.4

	48	15.4
	5	1.6
<b>Partner's employment status</b>		
- employed	262	84.0
- not employed	50	16.0
<b>Decides on place to deliver</b>		
- husband	96	30.8
- mother-in-law		
- my mother	19	6.1
- personal decision		
- father	52	16.7
	144	46.2
	1	0.3
<b>Birth order of child</b>		
- 1 <sup>st</sup> baby	75	24.0
- 2 <sup>nd</sup> baby		
- 3 <sup>rd</sup> baby	79	25.3
- 4 <sup>th</sup> and above		
	59	18.9
	99	31.7
<b>Place of delivery</b>		
- clinic	196	62.8
- TBA/Spiritualist		
- Home	68	21.8
	48	15.3

Source: Author's field data

Sixty three percent of the women interviewed delivered at a health facility whilst the rest did not. As shown in figure 2 below, 22% delivered by a TBA and 15% at home.

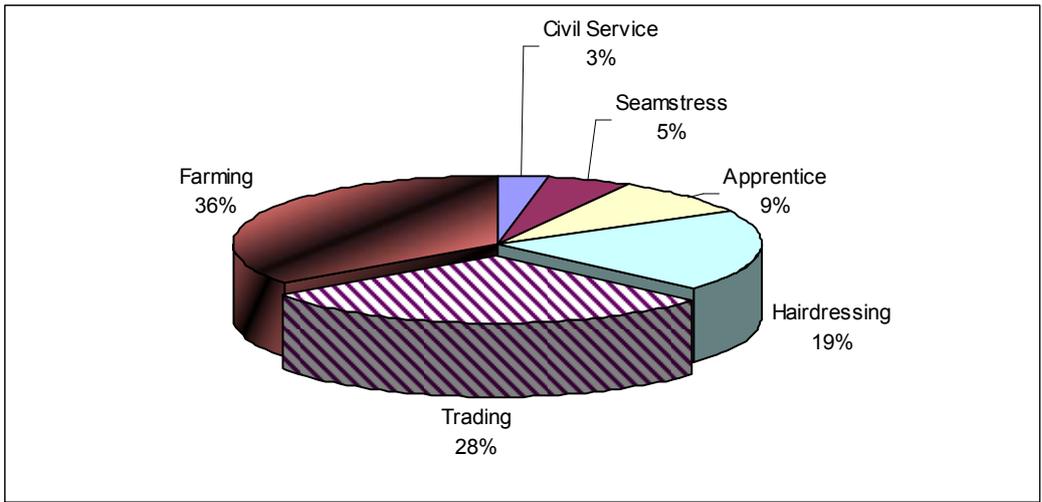
Figure 2: Place of delivery by respondents (N=312)



Source: Author's field data

Majority of the women employed were farmers (36%) and traders (28%) with the minority group comprising civil servants (3%) and seamstress (5%) as shown in figure 3 below.

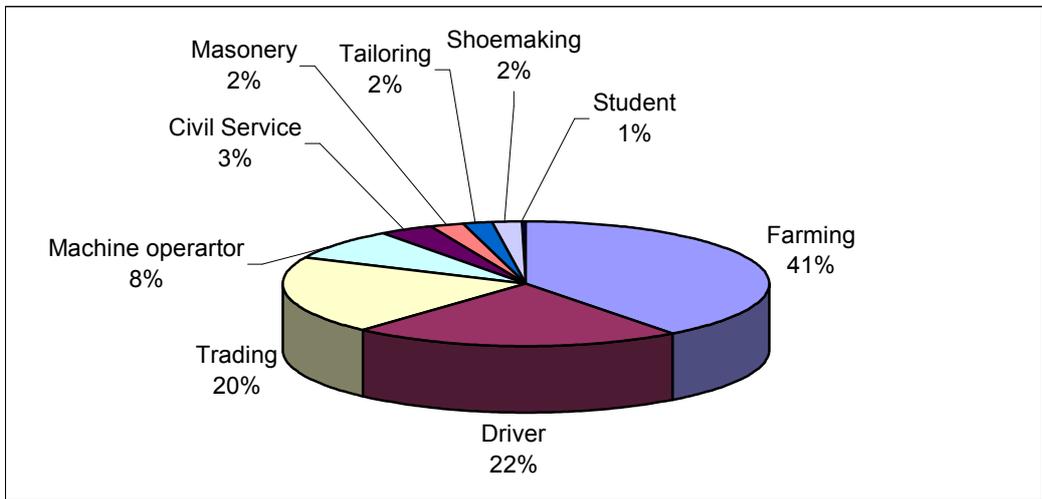
Figure 3: Type of employment of women (respondents) (n = 231)



Source: Author's field data

The partners of the women were engaged in farming (41%), driving (22%) and trading (20%). Others were in the civil service (3%) and machine operators (8%) as graphically presented in figure 4 below.

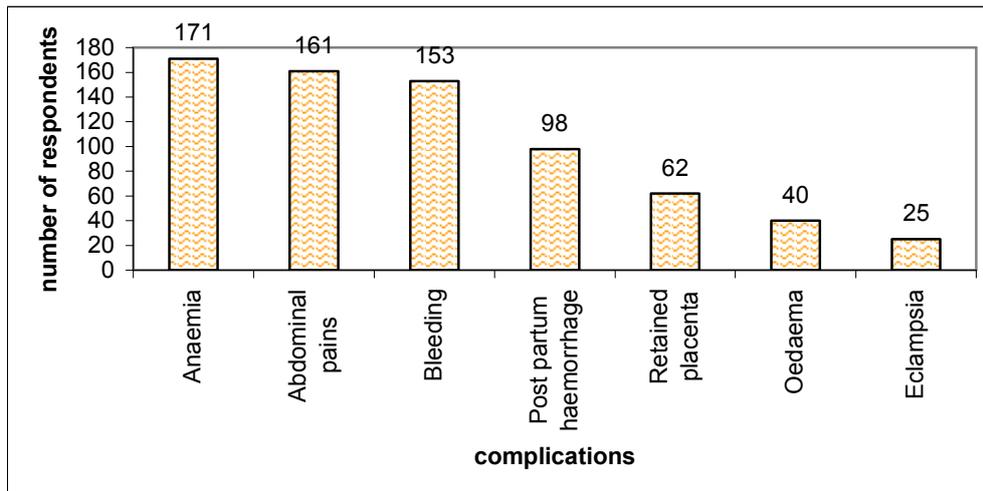
Figure 4: Occupation of partners of the respondents



Source: Author's field data

Among the complications of pregnancy identified by the respondents were, anaemia, 54.4%, abdominal pains, 51.6%, bleeding 49.0%, and post partum haemorrhage 31.4% as presented in the bar chart above (see figure 5 below).

Figure 5: Types of complications listed by respondents (N=312)



Source: Author's field data

#### 4.3 Quality of services

Over half (60.0%) of the sessions observed had less than 50 attendants and as detailed in table 5 below, sitting arrangement was observed to be comfortable (70.0%) and objectives set out was worthwhile and appropriate (80.0%). In 10.0% of the sessions observed no visual aids were used but were clear and appropriately used in 70.0%. There was audibility (90.0%) from the health professional and all of them understood the language used. Emphasis (90.0%) was also made and examples (80.0%) were given to buttress the points made. It was also observed that mothers were actively involved (90.0%). In 80% of the sessions observed, some clients were given individual counselling.

Table 5: Quality of IE & C

<b>Variable</b>	<b>Frequency (N=10)</b>	<b>Percentage</b>
<b>Number of mothers at session</b>		
- below 50	6	60.0
- 50 – 100		
- 100 and above	3	30.0
	1	10.0
<b>Sitting arrangement</b>		
- comfortable	7	70.0
- not comfortable	3	30.0
<b>Objective</b>		
- worthwhile and appropriate	8	80.0
- partially matches content		
- different from content	1	10.0
	1	10.0
<b>Visual Aids</b>		
- clear and appropriate	7	70.0
- different from topic		
- no visual aids	2	20.0
	1	10.0
<b>Voice of nurse</b>		
- audible	9	90.0
- not audible	1	10.0
<b>Important points</b>		
- emphasised	9	90.0
- not emphasized	1	10.0
<b>Examples</b>		
- given	8	80.0
- not given	2	20.0
<b>Involvement of mother</b>		
- actively involved		

- not actively involved	9	90.0
	1	10.0
<b>Individual counseling</b>		
- held	8	80.0
- not held	2	20.0

Source: Author's field data

#### 4.4 Access to health facility

Access roads to the health facilities were tarred (39.4%), and 54.8% and 5.8% were un-tarred and inaccessible respectively. Over two-thirds of the respondent walked to the health facilities. For those who used vehicular transport, 72.6% paid a transportation cost 30 GHp or more and over half (58.1%) considered it affordable as shown in table 6 below.

Table 6: Access to health facility

Variable	Frequency (N = 312)	Percentage
<b>Road to health facility</b>		
- tarred	123	39.4
- un-tarred		
- inaccessible	171	54.8
	18	5.8
<b>Means of transport</b>		
- vehicle	119	38.1
- truck		
- by foot (walk)	5	1.6
	188	60.3
<b>Transportation cost</b>	<b>(n=124)</b>	

- <30 GHp	34	27.4
- 30 – 40GHp		
- Above 40GHp	43	34.7
	47	37.9
<b>Affordability of transport fare</b>	<b>(n=124)</b>	
- affordable	72	58.1
- not affordable	52	41.9

Source: Author's field data

Table 7 below shows the relationship between access factors to health facilities and the use to skilled attendants by the women. The type of road to the health facility ( $p=0.00$ ), means of transport ( $p=0.00$ ) and ability to afford transportation cost ( $p=0.05$ ) were significantly related with the use or non-use of skilled attendants. However, the amount paid for transport did not have a significant influence ( $p=0.72$ ) on the use of skilled services for delivery. Persons who lived had access to tarred roads to the nearest health facility were 2.98 times and 13.61 times more likely to use skilled attendants compared to those living on un-tarred and inaccessible roads respectively.

Table 7: Relationship between access to health services and use of skilled attendants

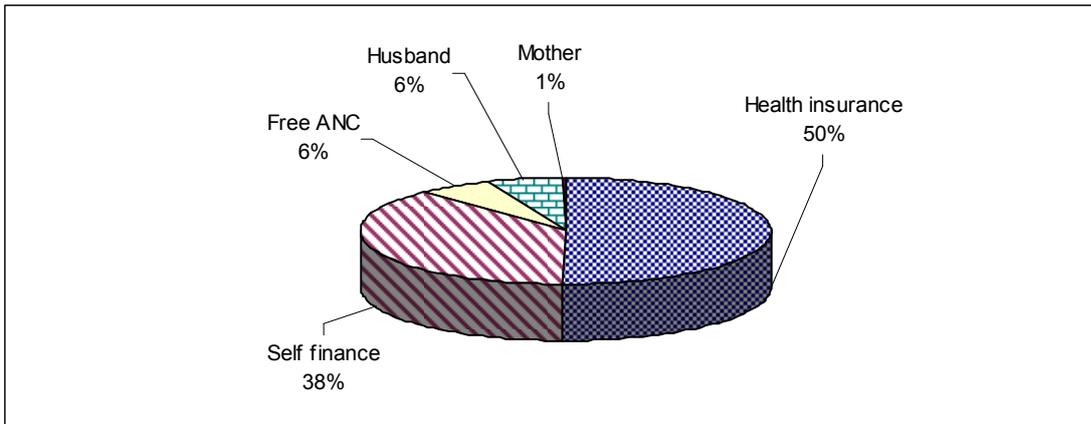
<b>Variable s</b>	<b>Used skilled attendants n (%)</b>	<b>Used non-skilled attendants n (%)</b>	<b>Chi-square (p-value)</b>	<b>Odds Ratio</b>
Road to health facility				
- tarred	95 (48.5)	28 (24.1)	18.10	-
- un-tarred				
- inaccessible	91 (46.4)	80 (69.0)	(0.00)	2.98

	10 (5.1)	8 (6.9)		13.61
Means of transport				
- vehicle	90 (45.9)	29 (25.0)	14.00	-
- truck				
- by foot (walk)	2 (1.0)	3 (2.6)	(0.00)	4.60
	104 (53.1)	84 (72.4)		2.50
Transportation cost				
- <30 GHp	23 (25.0)	11 (34.4)	1.36	-
- 30 – 40GHp				
- Above 40GHp	34 (37.0)	9 (28.1)	(0.72)	0.50
	35 (38.0)	12 (37.5)		0.72
Affordability of transport fare				
- affordable				
- not affordable	58 (63.0)	14 (43.8)	3.63	2.19
	34 (37.0)	18 (56.3)	(0.05)	

Source: Author's field data

Health insurance (50.0%), Self finance (38.0%) and payment by husbands (6.0%) were the means by which health bills were paid as shown in figure 6 above.

Figure 6: Means of health financing by respondents (N = 312)



Source:

Author's field data

#### 4.5 Capacity

All the 6 maternity staff interviewed had had training. The training occurred in less than 6 months (50%), 6 months – 1 year (30%) and more than a year (20%). According 4 of them, they do not have adequate logistics at the delivery ward. Their challenges were: the lack delivery bed and inadequate space as detailed in table 8 below.

Table 8: Assessment of the capacity of staff in the district

Variable	Frequency (N = 6)	Percentage (%)
Attended training on delivery		
- have attended training	6	100.0
Last time training was attended		
- less than six months	3	50.0
- 6 months – 1 year		
- More than a year	2	30.0

	1	20.0
Equipment		
- have equipment	2	20.0
- don't have	4	80.0
challenges	(n=4)	
- lack of delivery bed	3	75.0
- inadequate space	1	25.0

Source: Author's field data

#### **4.6 Relationship between socio-economic characteristics and choice of place of delivery by respondents**

A cross-tabulation analysis of background information of respondents with choice of health facilities or other means for delivery showed that, there was a strong relationship between their religious status ( $p = 0.02$ ), education status of women ( $p=0.00$ ), and education of partner ( $0.00$ ) with the choice of place of delivery. The educated women were 3.15 times more likely to delivery at a health facility than those not formerly educated. This also reflected among the educated partners who were 2.15 times more likely to influence the use of health facilities by the wives/female couple for delivery services. There was no significant ( $p>0.05$ ) relationship between either the employment status of the woman or her partner and the choice of place of delivery as shown in table 9 below.

**Table 9: Relationship between socio-economic and the choice of delivery place**

<b>Variable s</b>	<b>Used skilled attendants n (%)</b>	<b>Used non-skilled attendants n (%)</b>	<b>Chi-square (p-value)</b>	<b>Odds Ratio</b>
<b>Religion</b>				
- Christian	153 (78.1)	88 (76.5)	7.52	-
- Moslems				
- Other	42 (21.4)	21 (18.3)	(0.02)	0.86
	1 (0.5)	6 (5.2)		10.43
<b>Education status</b>				
- educated	158 (80.6)	66 (56.9)	29.24	-
- not educated	38 (19.4)	50 (43.1)	(0.00)	3.15
<b>Employment</b>				
- employed	142 (72.4)	89 (76.7)	0.69	-
- not employed	54 (27.6)	27 (23.3)	(0.41)	0.79
<b>Husband's education</b>				
- educated	161 (82.1)	79 (68.1)	8.09	-
- not educated	35 (17.9)	37 (31.9)	(0.00)	2.15
<b>Husbands employment</b>				
- employed	166 (84.7)	96 (82.8)	0.20	-
- not employed	30 (15.3)	20 (17.2)	(0.65)	1.15

Source: Author's field data

## CHAPTER FIVE

### DISCUSSION

#### **5.1. Introduction**

This section of the study discusses observations made from the results, their implication and relevance to the promotion of maternal health services and also elaborates on the differences or similarities of the observation as may have be found by other authors. The discussion is arranged according to the objectives of the study.

#### **5.2. Background of respondents and its implication utilization of maternal services**

The women of the district are of relatively young age and have had some formal education even though majority finished the basic level with none in the tertiary level. About three out of 10 of the women had never had any formal education and this has implications for the achievement of better health status since being educated could stimulate ability to comprehend health issues and more importantly take educative measures in curtailing unhealthy events. In the context of this study therefore, educated women may be at a better position to appreciate the importance of use of skilled services and thereby make efforts to utilize it.

Even though majority of the women were engaged in productive work for income, about one-third were unemployed. This could make them vulnerable in terms of making decisions to utilize better health services available during pregnancy. The inability to afford certain expenses required in accessing quality health services may be attributed to the poor economic status due to seasonal employments or not being employed. Despite the fact that majority of the partners of the women were said to be engaged in work, 16% were not. The latter group may not be in better position to assist their partners in times of financial assistance by using skilled services during pregnancy. On the contrary, due to the low economic circumstance a cheaper health services may be sought or not at all.

Over half of the women do not take decisions themselves to use health services. Thus, they are influenced by their husbands, mothers-in-law, mothers or fathers. It is expected that these close relatives who assist or contribute in the decision making process for the use of skilled or non-skilled attendants may have good intentions and wished the best. However, their best intentions may not be expressed based on the economic circumstance of the family. In addition, such influences are based on either cultural or traditional experiences of these close relative, which to extent exposes the pregnant

woman to the use of crude ways of pregnancy and delivery care including use of TBAs or even delivery at home. The level of women's empowerment in the district could be questioned. The ability for the woman to make informed but independent choice of the best and appropriate delivery services, in the context of this study, is of great concern. Better appreciation by relatives of the importance of using skilled delivery could influence positively on a woman's decision relative to the type of health service to choose from. On the other hand, a negative influence which may be enshrined in crude religious or traditional or cultural orientations may expose the pregnant woman to complications of pregnancy. This may be a reflection of the fact that about half of the women delivered at a TBA/Spiritualist site or at home. These sites of delivery pose great danger to women as it has been observed (Ransom and Yinger, 2002) that the use of these sites increases the risk of complications of delivery outcomes and more importantly, death of both mother and baby. This is so because most of attendants are un-trained on contemporary skills needed to assist the pregnant women and also monitor her and the baby before, during and after delivery.

### **5.3. Quality of Service**

Observations conducted during pre-natal service delivery showed that services provided to the pregnant women were of relatively average standards. The assertion of the relative average standard of the quality of care is based on the limited scope of the interactions observed. This was adduced from findings of the interactions between health services providers and pregnant women in the health facilities. The women were generally comfortable. This provides them the assurance (Macintyre and Hotchkiss, 1999) and confidence of good services from the health providers and hence could influence utilization. This is because discomfort resulting from even sitting arrangement could create dissatisfaction among the clients. The effects of the set-up and arrangement of clinic have also been

observed to affect the satisfaction of clients (Sally, 2000). During client education and interaction sessions, objectives set out for discussions with the women were worthwhile and appropriate, however, in some instances it was observed that it varied from the content. The later could create confusion among the clients, as to the purposes, and intended actions or desired behaviour expected of them at the end of the interaction. Most interactions with the women were supported by visual aids. These provided them ability to comprehend and conceptualise the issues being discussed. In one the sessions however, the discussion was not supported by this visual tool. Women in that session seemed confused and did not seem to have understood exactly what the nurse was emphasizing. In such state of misunderstanding, the women may either misapply or refuse to practice what has been discussed. The consequence is that the mal-practices could generate dissatisfaction, hence low utilization of the services. In addition, they would tend to seek for further information from others sources that are unreliable and dangerous to their health. Such sources include mother-in-laws, TBAs and Spiritualists among others.

#### **5.4. Access to health facilities**

The district is largely rural and therefore, most roads to and from health facilities have not been tarred. In fact, majority of the respondents indicated that they roads to the heath facilities were either un-tarred or in-accessible (i.e. foot paths). As a result of this, majority of the women walk by foot to the health facilities. Even for those who were assisted, trucks were used to facilitate the process. In developing nations, the nature of roads to health facilities account for the delays that contribute to the development of pregnancy complications and maternal deaths (UNFPA, 2004). In the district studied, this is likely. Women who were pregnant walked a long distance to the nearest health facilities to access skilled services. The difficulty in walking coupled with the uncertainties in receiving quality of care at the

health facilities could influence the women in deciding to use or not to use the public health facilities. The cost of transport, that is if the woman had access to a vehicle to the health facility, was considered not affordable by about half of the women. Similar observation was made by Nahar and Costello (1998) that cost of transports contributed significantly to the low utilization of maternal services. This observation may have been informed by the seasonal trends of their occupation, farming, which also do not provide them enough funds to save in times of needs, such as during labour. In Morocco, Hotchkiss and Gordillo (1999) observed similarly, that women had difficulty in getting funds to access health services and even those who could make it had to access the little savings made by the household. In addition, the harvested yields were not commercial in quantities hence since they also live by the little harvested, little funds was accrued from the small amount of harvest sold. Their financial status, considering the geo-economic background of the district could account for the inability of women to afford transportation cost to health facilities. Gutierrez and Ochoa, (1994) identified cost of services as a barrier in seeking medical services including maternal health services.

It is worthy of note that the nature of roads from the woman's abode to the nearest health facility had significant association with the use of skilled attendants. Thus, households with un-tarred roads or inaccessible routes to health facilities may have difficulty in getting assistants in terms of vehicles to the service point (Koblinsky *et. al.*, 2000). It follows therefore, as has been observed in this study, that access to vehicle to the health facility also has a strong association with the use of skilled delivery. Those who did not get access to vehicles, had little option but to delivery at home or with a TBA. Even though the cost of vehicle transportation was not related to the use of skilled attendants, it was related in terms of the women's assessment as to whether it was affordable or not. Thus, women who indicated that they could afford transportation cost were 2.19 times more likely to use skilled attendants than those

who said the cost was expensive. The tendencies among the later group suggest that they are more unlikely to use skilled services if the cost of transport becomes un-affordable hence a barrier.

### **5.5. Capacity**

Quality maternal care encapsulates the presence of adequate and skilled personnel to provide services to women (Dayaratna et. al., 2000). The district had only a medical officer and few midwives and general nurses who assisted in pregnancy management, especially delivery. Training had been provided for all the staff, however, this seemed not to be regular since majority of them had their last training more than six months ago. The lack of regular training contributes significantly to the poor skill development as a result of outdated knowledge about current events and or procedures for safe management of pregnancies. Skilled development is an essential ingredient in the prevention of obstetrics complication (Dayaratna, et.al. 2000). Considering the complex nature of pregnancy development and its associated services required during delivery, the lack of regular knowledge updates could influence not only incidence of complications in pregnancy due to clinical mismanagement of cases, but also create dissatisfaction amongst the women.

Adequately furnished health facilities, in most developing countries should have minimum equipment of managing pregnancies. Only 20% of the public health facilities in the district had basic equipment for the management of deliveries. The lack of delivery beds among 80% of the health facilities is of great concern. The delivery bed serves a great purpose of providing the health provider a better environment of monitoring the delivery process and also identifies, treat and or prevent complications in the process.

It also supports the mother by providing her a comfortable position. In Egypt, substandard service equipments accounted for the increase in poor delivery outcomes.

#### **5.6. Relationship between socio-economic characters and choice of attendant**

Religious background of the women influenced the choice of skilled attendants. Religious beliefs about modes of delivery and who to perform it could influence women decision to use or not use skilled attendants. Even though there is a strong relationship between the religious background of the women and their choice of skilled attendants, there was no evidence to support this relationship and such evidence may require further research. Medhet et.al. (1998), admits to such difficulties due to the complex nature of religion on human behaviour.

The educational status of the women and that of their partners had strong relationship with the choice of skilled attendant. Educated women presumably have better sense of appreciation and concern for their health (UNFPA, 2004) and therefore may act appropriately for their safety. An educated husband would also provide the needed support financially and socially for the women to use skilled attendants. On the other hand, the uneducated may lack a sense of understanding of the issues relating to the importance of practices needed to sustain a better health. In addition, this category of women are more swayed and convinced by different messages about their health either than those received from health workers. Thus, due to their low educational status, they are influenced by their peers, relatives, religious leaders about the choices of health interventions including delivery options (Starrs, 1998). Their situation is worsened when their partners are in the same category. It is worth indicating that, educated women were 3.15 times more likely to use skilled attendants than non-educated women. In addition,

educated husbands were 2.15 times more likely to allow their partners to use skilled attendants than un-educated husbands.

The employment status of women empowers them to take not only economic decisions but also social and health decision to improve their lives. Such decisions are better implemented if the husband is also economically empowered. Utilisation of maternal health services demands that some financial commitments are made in relations to the total care of the woman before, during and after pregnancy. Ability to afford these needs depends on the income earned by the household, and the woman in particular. Such incomes are earned when one is gainfully employed. The employment status of the women did not influence the use of skilled attendants. This could be due to the fact that users and non-users of skilled attendants have similar jobs which are seasonal and also earned them little income. Their choice of skilled or unskilled attendants therefore is influenced by other factors either than their earnings. This also reflected in the employment status of their husbands. This is indicative in that the work engaged by the husbands does not provide sufficient income to reflect a difference in the maternal care preferences of the women. In other words, the incomes earned by the husbands are not so different to provide further support for women to use skilled delivery which may require income such as that for transportation.

The women of the district have several socio-economic factors affecting them and influencing the choice of maternity care during pregnancy. These factors which include decision making, economic status, educational status, access roads, quality of services and affordability of transportations influences the use or utilization of skilled attendants in the district.

## **CHAPTER SIX**

### **CONCLUSION AND RECOMMENDATION**

#### **6.1 Conclusions**

##### **6.1.1 Quality of Service**

The quality of services based on observation of the interaction could be said of average standard because even though most of the women were well engaged in the discussion about their health some expressed discomfort and dissatisfaction about the service provided.

##### **6.1.2 Access to health facilities**

Lack of road is a major hindrance to pregnant women in Ahafo-Ano south in terms of access to health facilities. Those who use health facilities do so by foot on a relatively long distance.

Lack of transport to health facility is also a significant contributory factor to low utilization of skilled delivery services in the district. Majority of the women desired to use health facilities for delivery purposes but for want of vehicle they delivered at home.

The perception of women in relation to the expensiveness of the cost of transportation to the health facilities affected significantly the use of skilled or non-skilled attendants. Such perception however, is not supported by the actual cost of transport.

### **6.1.3 Capacity**

The district has a low capacity in the management of delivery. The lack of delivery beds, shortage of staff coupled with poor training regimen for the few staff available, pose a challenge in meeting the standards and coverage expected in the management of maternal health services, especially, delivery.

### **6.1.4 Relationship between socio-economic characters and choice of attendant**

The educational status of women influenced their decision to use or not to use skilled attendants. This decision is supported depending on the educational status of the husband.

The economic status of women and that of their husbands do not influence their choice of place for delivery purpose.

## **6.2 Recommendation**

### **6.2.1 District Assembly**

- The district assembly in collaboration with the other sectors should intensify its empowerment efforts for women. The empowerment should centre on improving economic returns of women's occupation and encouraging fiscal savings among them.
- The assembly should also take the fore-front in ensuring that critical staff available is available for maternity services in most parts of the districts. This could be done through sponsoring eligible indigenes to undergo training in midwifery and nursing. This could reduce the burden on the scanty skilled attendants in the district and also attract more women to deliver at health facilities.
- The district assembly should provide at least feeder roads to connect most communities to available health facilities. This when done could attract vehicles to such communities, encourage women to use skilled attendants and discourage indecision to use skilled attendants as a result of lack of vehicles.

### **6.2.2 District Health Directorate (DHD)**

- The district health directorate should lead efforts in sensitizing and educating women to use the health facilities for delivery purpose.
- The DHD should propose measures of attracting skilled staff to the district and seek the support of the district assemblies, opinion leaders and chiefs for its implementation.
- The DHD should make efforts in providing basic delivery beds at health facilities.

### **6.2.3 Community members**

- Leaders of the communities should educate the women to use skilled attendants.
- Leaders of the communities should also assist in finding out religious beliefs that affects women decision in using skilled attendants and also provide a framework to discourage such beliefs.
- Women in the district should seek for skilled attendants care during pregnancy.
- The women in the district should make efforts to stay closer to health facilities getting to the time of delivery, for instance, they can stay with a close relative when they are 28 weeks. This

would curtail for the difficulties encountered during labour as a result of lack of vehicle or un-accessed road or walking for long distances.

- Relatives of women who are pregnant in the district should provide the social and financial support for the women to deliver safely. This support could be in the form of giving support to the use of skilled attendants and providing funds to hire vehicles to the health facility.

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INSTRUCTION:

Please tick [ v ] the appropriate column.

SECTION A

SOCIO-ECONOMIC DATA

1. Age .....

2. Religious background of mother

Christian

Islam

Others, specify

3. Educational background of mother

No formal Education

MSLC /JSS

Secondary / High School

University

Others, specify

4. Employment status of mother

Yes

No

Others, specify

5. Educational background of Husband

No formal Education

MSLC / JSS

Secondary / High School

University

Others, specify

6. Employment status of Husband

Yes

No

Others, specify

7. Who decides on place for your delivery

Husband

Mother – in – law

My mother

Personal decision

8. What is the birth order of your baby?

1<sup>st</sup> baby

2<sup>nd</sup> baby

3<sup>rd</sup> baby

Others, specify

9. Where did you go for Labour

Clinic

TBA / spiritualist

Home

Others, specify

10. Mention 5 life threatening situation that pregnant woman may encounter (during pregnancy / labour)

a. ....

b. ....

c. ....

d. ....

e. ....

SECTION B - ACCESSIBILITY

1. Nature of road commuting between community and health facility

Tarred

Untarred

Inaccessible uuring

2. Means of Transportation

Vehicle

Truck

By Foot (walk)

bicycle

Others, Specify

3. What is the transport fare from your community to clinic?

20 GHp

30 – 40 GHp

50 GHp

Others, specify

4. Is the transport fare affordable?

Yes

No

5. How do you pay for your health service

Health insurance

Self finance

Others, specify



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DEPARTMENT OF COMMUNITY HEALTH

INTERVIEW GUIDE FOR HEALTH WORKERS

INTRODUCTION:

This questionnaire / checklist is aimed at investigating factors contributing to low utilization of skilled delivery in Ahafo Ano South District. It is hoped that findings will help review and improve some of the strategies employed in maternal health service delivery in the district.

All information provided will be treated confidential.

Your co-operation will be appreciated.

TOPIC: FACTORS CONTRIBUTING TO LOW UTILIZATION OF  
SKILLED DELIVERY IN AHAFO ANO SOUTH DISTRICT.

HEALTH WORKERS

Capacity

1. What category of Health Staff operate at he facility. State number of each category.

Doctor                      Number:

Midwives                  Number:

Nurses                      Number:

Others, specify          Number:

2. Who conducts delivery at the facility

Male Health worker

Female Health worker

3. Do you go for u[dates on service deliver eg. Workshop, seminar etc

Yes

No

If yes how often

4. Is the clinic adequately equipped with logistics and modern tools work with

Yes

No

5. What time do you report for work?

State:

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Worthwhile and appropriate to match content

Partially matches content

Different from content

4. Visual Aids

Clear and appropriate of content topic

Different from Topic

No Visual Aids

5. Was the nurse audible?

Yes

No

6. Were the words / language used easily understood?

Yes

No

7. Were important points emphasized?

Yes

No

8. Were many examples given?

Yes

No

9. Were all mothers actively involved in discussion, answering questions or practicing skills etc.

Yes

No

10. Was relationship between nurse and mothers relaxed and non-authoritarian

Yes

No

11. Were individual counseling sessions held

Yes

No

