

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,  
KUMASI**

**DEPARTMENT OF COMMUNITY HEALTH  
SCHOOL OF MEDICAL SCIENCES**



**DETERMINANTS OF PLACES OF DELIVERY OF EXPECTANT MOTHERS IN  
ADIDWAN IN THE MAMPONG MUNICIPALITY OF ASHANTI REGION.**

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**M.SC (HEALTH SERVICES PLANNING AND MANAGEMENT)**

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**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**KNUST**

**DETERMINANTS OF PLACES OF DELIVERY OF EXPECTANT MOTHERS IN  
ADIDWAN IN THE MAMPONG MUNICIPALITY OF ASHANTI REGION.**

**A THESIS SUBMITTED TO THE DEPARTMENT OF COMMUNITY HEALTH,  
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KUMASI IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE  
AWARD OF MSC DEGREE IN HEALTH SERVICES PLANNING AND  
MANAGEMENT**

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**MSc (Health Services Planning and Management)**

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## DECLARATION

I, Emmanuel Akuafo Amenyah, declare that this thesis is my original work, which I have produced during the conduct of a research project. References made from other writers, publishers and researchers have been duly acknowledged. None of the materials contained in this thesis have been presented either wholly or partially to any institution for any degree or certificate.

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## **DEDICATION**

This piece of work is in honour of motherhood especially, mothers in rural communities, such as in the Adidwan sub municipality, where the study was carried. It's a lot of respect and love to you for the effort in sustaining our society at those costs.

# KNUST



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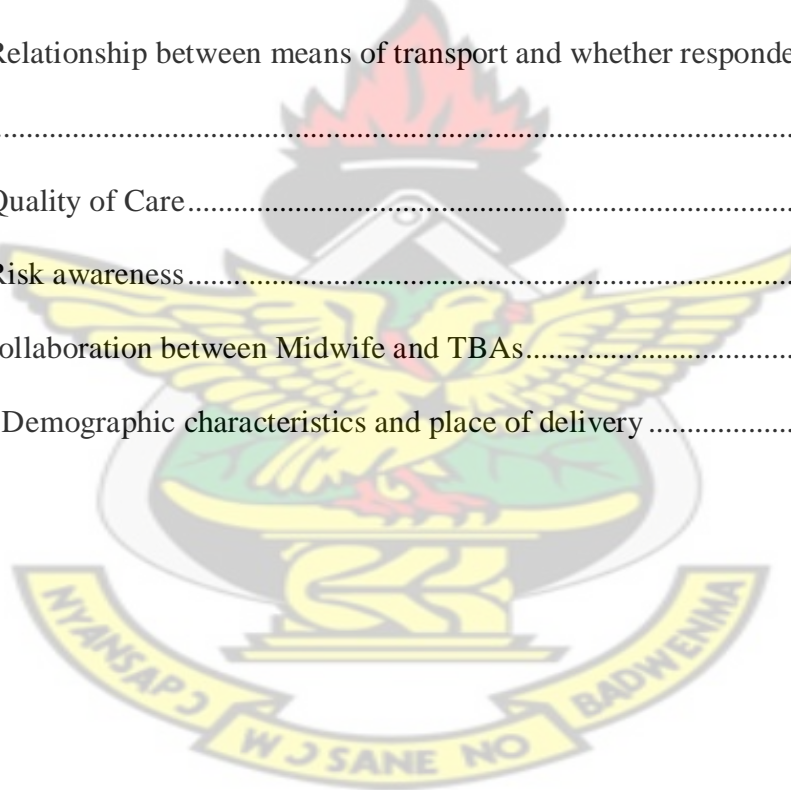


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## ABSTRACT

Places of child birth have direct impact on the mother and health of baby and post-natal period. The maternal casualties (institutional and non-institutional) recorded for the communities have given the cause for various concerns especially the places where the assistance has been given. Due to the poor handling of delivery cases, in certain places, the risk of contracting neonatal tetanus is rife. Because of inadequate tetanus toxoid (TT) immunization and inappropriate postnatal cord care mainly due to the un-institutionalised care which largely compromise comprehensive service provision. The main objective of the study is to determine the factors which inform the choice of place of delivery among expectant mothers. The study employed a descriptive cross-sectional study design as the main study approach which made use of multistage sampling method as method for its data collection. Out of the 500 samples, 26.0% delivered with TBA/Home and 74.0% delivered at the health facility. The home deliveries (130) and facility deliveries (370), they were mainly within the age group of 25 to 30 years representing 29.2% and 39.2% respectively. A substantial proportion of the married women prefer delivery with TBA/Home 105 (80.8%) while a similar proportion also deliver at the health facility 279 (75.4%), Both home and health facility had most clients having four or more deliveries representing 53.8% and 65.7% respectively. Test statistics indicated that there is no significant insurance and transport influence in determining a place of delivery among the mothers. It is thus established that Home/TBA contribution in the rural Asante Mampong is quite substantial. Whereas, numerous other births at home are not captured, the male involvement and public health education could be stepped up.

## LIST OF ABBREVIATIONS

GSS	-Ghana Statistical Service -
NMIMR	-Noguchi Memorial Institute for Medical Research
WHO	-World Health Organization
ANC	-Antenatal Care
CBVS	-Community Based Surveillance Volunteers
TBA	-Traditional Birth Attendants
WIFA	-Women in Fertility Age
MDHS	-Municipal Director of Health Service
MHMT	-Municipal Health Management Team
MCH	- maternal and child health
GHS	- Ghana Health Service
UNICEF	- United Nations International Children and Education Fund
HIV	-Human Immune Virus
AIDS	-Acquired Immuned deficiency Syndrome
EHU	-Eritrea Health Update
GHC	-Global Health Council

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

This segment of the study brings into perspective some historical antecedents in the area in question for which the study was conducted globally, regionally and locally. It captured the main problem of the study, the significance of the study and the study objects. The chapter projects the study with the scope and framework for better appreciation of what one should expect in the subsequent pages.

#### **1.1 Background Information**

Maternal and child health services (MCH) are essentially promotive and preventive and provide avenues for the early detection of mothers and infants at high risk of illness and mortality. As the majority of patients utilizing such services are usually not ill and pregnancy is most frequently an uneventful physiological process, it seems logical therefore to hypothesize that, given the slightest constraints, MCH services would be underused. Previous studies have implicated mothers' education, duration of marriage and certain physical-access variables as strong determinants in the use of MCH services in some countries of the eastern Mediterranean region. (Hogan, 2010) Skilled attendance is a process by which a woman is provided with adequate care during labour, delivery and post-partum periods. Skilled attendant refers exclusively to people with midwifery skills (for example doctors, midwives, nurses) who have been trained to be proficient in the skills necessary to manage normal deliveries and diagnose, manage or refer complications. They must be able to manage normal labour and delivery, recognize the onset of



complications, perform essential interventions, start treatment and supervise the referral of mothers and baby for interventions that are beyond their competencies. Society expects women to bear children and honour them for their role as mothers. Yet in most parts of the world, pregnancy and child birth is a perilous journey.

Maternal mortality is the death of a woman while pregnant or within 42 days of delivery, miscarriage or termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental causes (Agrawal et al 1994, Gertler et al, 2003).

The World Health Organization estimates that at least 600,000 women die every year from pregnancy-related causes, though the rate is difficult to calculate with accuracy (Osubor et al, 2006). Additionally, 200 million women become pregnant and about 15.0% is likely to develop complications that will require skilled obstetric care to prevent deaths (WHO, 2004). The life time risk of maternal death for a woman in a developed country is 1 in 1800, in Africa it is 1 in 16, in Asia 1 in 65 and Latin America 1 in 130 (WHO, 2004) in Ghana it is 1 in 45 (WHO, 2005).

Effective health systems make obstetric care available to all women including surgical and technical interventions required to treat life-threatening conditions during pregnancy, delivery and after birth. (Toan et al, 2006). Women face multiple delays in seeking and receiving life saving care when they need it. However, access to skilled assistance and well-equipped health facilities during delivery reduce levels of maternal mortality as well as improved pregnancy outcomes. Postnatal period could enhance overall maternal and infant health (Sibanda et al., 2009).



The global causes of maternal death are haemorrhage, infections, obstructed labour, pregnancy induced hypertension and the consequences of unsafe abortion. What makes the persistence of high levels of maternal mortality and morbidity more tragic, is that, cost effective intervention have been known for decades but are still not widely available or accessible in developing countries (Magadi, 2010). This calls for safe motherhood initiative to make pregnancy safer (WHO, 2006). Various research findings have identified cost of service (poverty), distance to service delivery points, unhygienic conditions, and quality of care as the main hindrance to access supervised delivery services particularly in the rural areas.

In many parts of the world, women's decision making power is extremely limited, particularly in matters of reproduction and sexual health. Mothers-in-law, husbands and other family members often make decisions about maternal care. They express a clear preference for traditional birth attendants in case of a normal birth, but viewed medical services as useful for diagnosing and managing problem related to deliveries. They access the services of the TBAs because they valued being able to choose birth positions and having relatives present during child birth (Matsumura, 2001). In Nepal, mothers-in-law attended to most deliveries, and additional help was sought only if the mothers-in-law decided that such care was needed. Indeed 45% of mothers-in-law did not believe in an antenatal check-up (Matsumura, 2001). WHO reports that in some countries, a woman cannot leave her village without the permission of her husband or a male relative, even if she was bleeding in childbirth and desperately needed medical care within an hour or two (Mariko, 2003).

In Ghana, a child in an urban area is twice more likely to have been delivered at a health care facility than a rural child. Only one in ten children in the northern regions of Ghana is delivered in a health care facility compared with three in four children in the south. Older women and women with many births are more likely to deliver without assistance (GSS/NMIMR/ORC Macro, 2004).

Cultural practices surrounding children and pregnancies are still strong in all communities in the Northern region. In the East Mamprusi district of Ghana, all pregnant women are given local concoctions by a sister-in law before being allowed to access antenatal care. Secondly, permission is granted before she attends hospital for care in case of any complications during pregnancy and childbirth (GHS, 2005).

WHO, 2004 report revealed that, delays in referring women from community health care facilities to hospitals is one of the most important factors that prevent women from receiving care that could otherwise save their lives. Staff at the community facilities could not recognize the seriousness of the problem. Even if they did, many rural health centres did not have the means to handle complications as with health care facilities offering more advanced care. In Tanzania, 21% of women delivered at home because of rudeness of health staff even though they thought delivery in a health care facility was safer (WHO, 2004). Some forms of abuse by doctors and nurses are physical and verbal. This affects access to health service given in terms of protocol compliance, quality and effectiveness. Positive interaction between expectant women and health care providers however, lead to client's confidence and compliance (D'elineira et al., 2002). Providing individuals and communities with information they needed through community-based strategies could help prevent harmful practices as well as promote appropriate basic care, including aseptic

delivery (Mariko, 2003). Training empowers the individual health personnel to effectively operate within defined roles, offer a framework for scrutiny of professional standard practice, through a non-confrontational approach. For effective use of maternal health services, the individual had to add value to the services rendered. (Mariko, 2003, Magadi, 2010).

A childbirth seeking behaviour study revealed that medical services for delivery were readily available but pregnant women chose TBAs for assistance with their births (Kogan et al., 2003). Knowledge and attitude play a vital role in the effective utilization of a health facility. In Sri Lanka, over 93% of the women have access to basic health care. Health services were provided free of charge. Maternal and child health services were available at the community level as part of an integrated reproductive health service. This has contributed immensely to a reduction in maternal and infant mortalities. Women from the poorest social background were three times more likely than women in the richest social background to undergo home delivery without trained attendants (Kogan et al., 2003).

The Ghana Demographic and Health Survey (2003) has it that the place of delivery is significantly affected by the wealth quartile of women for example 89% of women in the highest wealth quartile had an institutional delivery compared to 19% of women in the lowest wealth quartile (GSS/NMIMR/ORC Macro, 2004).

The poverty levels are generally high in developing countries and have been identified as a major barrier to skilled supervised delivery in many parts of Africa. It has been established that, the economic situation of a household is a significant predictor for choosing home delivery (Magadi, 2010).

## 1.2 Problem Statement

Most maternal deaths occur either during or shortly after delivery, yet this is the time when women are least likely to receive the health care they need (WHO, 2003). Recent estimations suggest that 51,500 women die annually of pregnancy related complications. This is in addition to the 3.9 million newborns that are lost every year (WHO, 2003). As many as 300 million women (more than one-quarter of all adult women), living in developing countries would suffer from short or long term illness related to pregnancy and childbirth (WHO,1998).

According to the 2003 Ghana Demographic Health Survey, 46% of births occurred in the health facilities with 36% in public health facilities and 9% in private health facilities. More than half of births (53%) occurred at home (Ghana Statistical Service [GSS]/Noguchi Memorial Institute for Medical Research [NMIMR]/ORC Macro, 2004).

In the year, 2006, haemorrhage was the highest cause of maternal deaths with a record of 22.8%. It was found out that married women had a significantly higher risk of dying from haemorrhage, compared with single women. However, married women showed reduced risk of dying from abortion compared to single women. Women aged 35-39 years had a significantly higher risk of dying from haemorrhage whereas they were at lower risk of dying from abortion. Though maternal deaths have direct and indirect causes most of the indirect causes were generally associated with the choice of places for the delivery. The indirect causes include malaria, HIV/AIDS, hepatitis, sickle cell disease, cardio vascular accidents, etc.

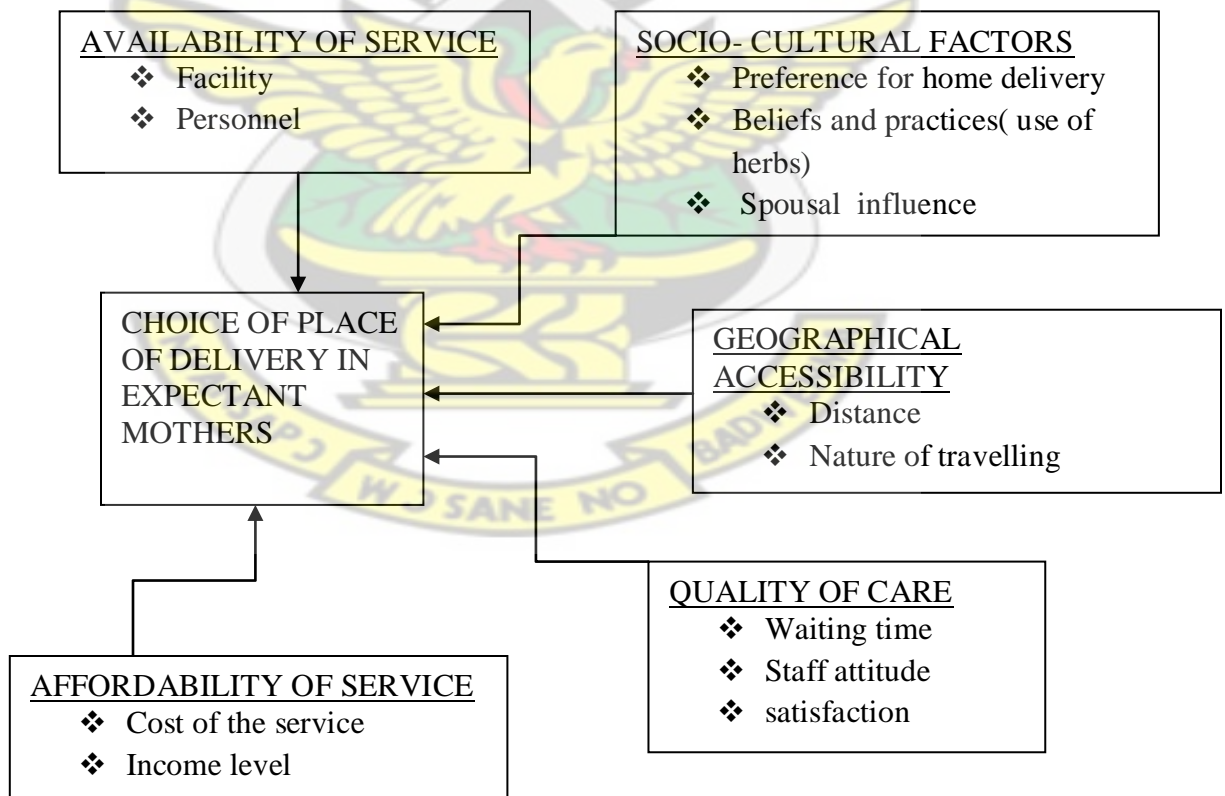
Mostly, due to the poor handling of delivery case in certain places the risk of contracting neonatal tetanus is rife. Managers have identified the barriers to utilization of institutional

supervised delivery as a research priority. This study is a contribution to the district and global effort towards improving utilization of maternal and child health services with the overall aim of improving maternal and child health as it evaluates the conditions that inform various choices made on places of delivery.

### 1.3 Rationale of this study

The rationale of this study is to help identify the main barriers to skilled attendance in the Adidwan sub municipality with the view of providing evidence-based data to inform the design and implementation of strategies to reduce the burden of maternal morbidity and mortality.

**Fig 1.0Hypothesis/conceptual framework**





### **1.3.1 Explanation of conceptual frame**

The conceptual framework is the graphical presentation of independent variables considered to be key barriers to the utilization of skilled service delivery in the Adidwan sub municipality. It seeks to link up the various factors that lead to the choice of place of delivery i.e. Quality of Care, Geographical Accessibility, Affordability of Service, Socio-Cultural Factors and Availability of Service

### **1.4 Research questions**

- Do mothers in Adidwan sub municipality have knowledge about the availability of skilled delivery services in the sub municipality?
- What are the key factors underlying choices of places of delivery relative to services available?
- What level of collaboration exists between the TBAs (trained / untrained) and the midwife in-charge of the Adidwan Health Facility?

### **1.5.0 General objectives**

To determine the factors which inform the choice of place of delivery among expectant mothers.

### **1.5.1 Specific objective**

- To determine the proportion of mothers who access the services of the traditional birth attendant (TBA).

- To determine the socio –economic background of the people in the community as influencing choices of places of delivery
- To assess the level of awareness on the risks involved in pregnancy among mothers.
- To evaluate general understanding on quality maternal and child care in respect of places choice for delivery.
- To identify the sort of partnership that exists between the midwife and the local birth attendant.

#### **1.6.0 Limitations of the study**

Translation of the research questions from English to “Twi” and back to English may change the actual meaning of the question. The sample size might not be representative enough to make desirable claims with it. It thus, allows margin of 5% tolerance of error.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This literature review looks at some studies done in this area and their significance to this study particular study. The related literatures which are reviewed are on various factors underlying women's decision to skilled or unskilled services in places where they deliver. It is established from around the world that education levels, occupation, cultural environment of women affect their health care status and the choice of places of delivery. The health facility-related factors include the attitude of health care personnel, the distance of health care facility from the homes of women in labour, equipments and drugs, the availability of skilled attendants during delivery, it essentially looks at the three delays:

- i. Delay in decision making
- ii. Delay in transportation to health facilities
- iii. Delay of care.

#### **2.1 Access to skilled attendant for delivery**

The World Health Organization estimates that in low income countries about 60% of births occur outside health care facilities with 47% occurring under the care of traditional birth attendants, family members and other times, no help from anyone (WHO 2004). The percentage of births attended to by certified nurses and midwives in USA for instance, has increased from 88% in 1991 to 90% in 1994 and those attended to in hospital to about 95% (Freedman et al 2007, Gabrysch and Campbell, 2009). The percentage of skilled attendants in the developing countries also increased from 42% to 52% from the years

1990 to 2000, a representation of 24% increment in developing countries.(Maternal Mortality Update 2004 – UNFPA and the University of Aberdeen). Deliveries attended to in designated health facilities are estimated at 63.1% of total births that are attended to by health professionals. (Globally, 59.1% in the more developed countries whilst 34.3% in the less developed countries (WHO, 2004). In Ghana, the proportion of births attended to by unapproved facilities in 2007 was 54% (WHO 2003). Getting access to skilled services in the early stages of pregnancy enable the detection of risk in pregnancy .That is why it is important for all pregnant women to seek antenatal care. This is in order to reduce maternal morbidity and mortality as well as to improve survival of the newborn. There is a substantial gap between knowledge of the quality of antenatal care and delivery under the supervision of trained personnel (Fatmi A. 2002, Karin et al, 2011). Perhaps the essence of access to skilled care and its rippling effect compelled the World Health Organization to suggest that at least every pregnant woman should access antenatal care not less than four times during her pregnancy. This was supported by Villar et al (2001) confirming that, four visits suffice for uncomplicated pregnancies and more visits are only recommended in case of complications (Villar et al, 2001, WHO, 2004). Health education is the key to ensuring the better understanding, importance and need for ANC for pregnant women. Health education can only improve ANC utilization if the communities at various levels are involved in information dissemination and active involvement of husbands and partners. This can be supplemented by home visits by the various health workers. (Ademuwagun, 2003). Fatmi A. (2002) as well as Griffiths et al (2004) suggests that when pregnant women attend antenatal clinics, they are provided with preventive services that monitor the pregnancy and have the potential of identifying risk factors and complications at their

earliest stages, arrange for appropriate delivery care, in order to reduce maternal morbidity and mortality.

## **2.2 Socio-economic determinants of a place for delivery**

Almost all maternal mortalities are avoidable. Death of a woman during pregnancy or childbirth is a violation of her rights to life and a social injustice to her, her family and community. (WHO, 2004). The health of a country is directly dependent on its socio-economic development. Socio-economic growth is based on the living conditions and access to quality health care by the citizen. The health indicators of a society or nation are therefore affected by the inequalities in economic and social conditions (WHO, 2003). Women in India are subordinate to men (socially, economically and culturally). They are largely excluded from decisions making, have limited access and control over resources, restricted in their mobility, and are often under threat or violence from male relatives (Deogaonkar, 2006). These situations may be due to the fact that in many instances men are not involved in health issues and due to their limited knowledge and understanding of events, they in turn behave inconsistently. A study in Swaziland found that men were not allowing their wives to use family planning methods because they lacked knowledge in family planning issues. (Isabella & Valerie, 2007). Indeed a participant in a study conducted by Mullick et al (2005) did not mince words by saying “Nurses will stop harassing us when men are involved in maternity care”.

The socio-economic factors that affect access to professional health care also cause mothers to seek local arrangements, which are detrimental to their health.( Betran et al 2005, Gage, 2007). Women take decisions on their health depending on their educational

level; occupation and education of family members. With the community, collective resources and wealth play important roles in the socio-economic aspects of the health needs of community members (Vick and Scott, 2004, Pembe et al 2010).

Studies have shown that mothers with less education have more difficulties in having access to health care facilities (Hove et al, 2009). Many patients still patronise TBAs because they are believed to be nearer, possess special powers and cheaper to consult. The training being given to the TBAs at the hospital will be more meaningful if they are aware that they are not trained to be doctors, and have limitations. They should quickly refer 'high risk' patients to the hospital for proper evaluation and treatment. The TBAs need to be further integrated into the maternity services if we are to achieve improved supervised deliveries. Place of residence has also been found to slightly determine place of delivery by pregnant women. Kishk (2002) found out that in Egypt, women who reside in the Urban towns have a significantly higher mean score of delivering with a trained personnel as compared to pregnant women who reside in rural dwellings. This finding is equally supported by York, Tulman and Brown (2009).

### **2.3 Literacy levels of expecting mothers in determining places of delivery**

Illiteracy in Eritrea was very high among mothers, that about two thirds, i.e., 59.3% did not have any form of education. The level of education one had increased the knowledge of the advantage of delivering in a health facility, approximately 78.2% for women who were uneducated to 93.1% for those who reached grade 10 – 12 (Eritrea Health Update, 2007). The level of education determined the practice of safe motherhood, for instance, the number of pregnancies (gravidity) per woman was inversely proportional to the level of

education, of the pregnant women (Donnay F, 2000). Among women who had no education, 38.6% were grand multi-parvours (having more than 4 children) and 13.8% reached grade 10 – 12. It was again found out that as the level of education of a woman increased, the skilled attendance at birth also increased. 24.3% uneducated women were attended to by skilled attendance compared to 83.9% for those who reached grade 10 – 12. Education is therefore key to the reduction of maternal mortality. (Soltani et al, 2007). Every pregnant woman is prone to some sort of danger at any point during the pregnancy so it is necessary to address them promptly when they occur. These dangers signs could lead to maternal death if unnoticed. In most instances, these danger signs are described as direct causes of maternal death (Abe and Omo-Aghoja, 2008). In a study conducted on Birth preparedness and paternal participation in maternity care in Northern Nigeria, dangers signs established by participants included bleeding (51.9%), convulsions (37.8%), loss of consciousness (33.2%), as well as anaemia, 21.6% (Iliyasu et al 2010). When mothers are knowledgeable, identifying these danger signs is easier. Subsequently attending or seeking care with a skilled attendant will alleviate any danger that these conditions may pose to both mother and baby. Similar assertions were raised by Ijadunola et al (2007) and Olsen (2008) where in determining risk factors for maternal deaths, it was suggested that demographic characteristics such as education, employment, marital status all play significant roles in determining where mothers mostly deliver.

#### **2.4 Cultural dimension to deciding a place of delivery**

A study conducted in urban and rural Zambia explored childbirth practices and beliefs. Thirty – six women accompanying women in labour to maternity units were interviewed



and these women have considered themselves to be traditional birth assistants. They advised women in labour on the use of traditional medicines and relied on traditional beliefs and witchcraft to explain complications. The women gave social support to the laboring women but lacked understanding of causes of obstetric complications and appropriate management of labour and delivery (Mwaniki et al, 2002, Maimbolwa et al, 2003). Studies over the years suggest that many pregnant women prefer delivering with Traditional Birth Attendants (TBAs) because their services are cheap and they treat expectant mothers with respect (Grossmann-Kendall et al 2001, Lee, 2008).

## **2.5 Facility – related factors that influence the use of skilled attendant**

Investing in human resources is crucial for improving skilled attendance at birth. Critical issues include “brain drain”, salaries benefits, supervision, management, and skills enhancement. Upgrading delivery care often begins with improving the quality of services offered in facilities. When facilities provide quality services, they become widely used and trusted by community members (Navaneetham K & Dharmalingam A 2005).

The human resource crisis is real, and the challenge is to post (retain) skilled and committed providers to district levels. There are too few skilled attendants to provide round – the – clock services at many rural health facilities (Global Health Council, 2008). It is recommended that one midwife for 5,000 population (Regional workshop on skilled birth attendants in South and West Asia, 2004). Essential competencies are also missing at the referral level. In Burkina Faso, for example, caesarean section had to be referred from the district level. Pre-service training institutions are not producing graduates with the

essential competencies of a skilled attendant – either for routine obstetric care or for emergency care (Global Health Council, 2008).

Countries like Egypt, Malaysia, and Jordan with reduced maternal mortality emphasized on health system improvement in rural areas with increasing availability of skilled attendants, highly supervised and free referral to specialist and essential obstetric care and maintenance of standard in the private sector (Navaneetham K & Dharmalingam A 2005). Urban areas often offer a higher quality of care than rural communities, mainly due to proximity and accessibility to facilities and modern communication systems. Due to high vulnerability of adolescents during pregnancy, birth attendants should be oriented to provide youth friendly services (Navaneetham K & Dharmalingam A 2005).

An evaluation of Ghana's free delivery care policy on maternal mortality has these lessons for future: behavior change strategies for providers and users, improving clinical care and provider competencies, ensuring availability of funds to cover exemptions, creating an enabling environment to eliminate cultural barriers, identifying ways to improve the imbalance between the rich and the poor. (Ngogi, 2004).

In some areas, women feel reluctant to go for delivery in health facility because of negative attitudes of the health professionals, (poor reception, canning, shouting, and refusing to attend to women in pain) especially during weekends and at night. In Eritrea, for instance, some women with complications who did reach a health facility, critical gaps in provider skills, medical equipment, drugs and supplies often resulted in obstetric complications as encountered by a 20 – year – old fistula patient from Tigrinya ethnic group (Webster et al, 2010). “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” She told her story, (Campbell & Graham, 2006). The current public perception of nursing and midwifery care in Ghana may be explained as that of disappointment and regret, there is no public confidence in the “hands that care” anymore. Some nurses and midwives have been described as “callous, insensitive, cold, rude and evil” (Shakya & McMurry, 2001, Slavea et al., 2009). The attitudes of some health personnel do not compel one to go for health services despite free maternal health care (Olsen et al., 2008). In a study in Kalabo district in Zambia to determine the level of use of maternal health services and to identify and assess factors that influence women’s choices of where to deliver, it was found that although 96% of the respondents would prefer to deliver in a clinic, only 54.5% actually did because of poor staffing and ill – equipped institutions with poorly skilled personnel (Matua, 2004).

In Tanzania, 21% of women deliver at home because of rudeness of health staff, even though they thought delivery in a health facility was safer (WHO, 1998). Some forms of abuse by doctors and nurses are physical and verbal .These affects access to health care. Positive interaction between expectant mothers and health care providers tend to boost client confidence and compliance (D’elineira et al., 2002). This attitude is shown due to free services provided to pregnant women. Pregnant women have reported negative attitude of midwives towards them. Women including adolescents are sometimes reluctant to use maternal health services because health care providers are perceived to be rude and, insensitive to these young mothers. Pregnant women can also base their behaviour on

previous negative experiences and perceptions of care received (Okafor 2001, Ziyani et al., 2004).

In Ghana, 46% of deliveries occur in health facilities and the remaining 54% deliver at various places at home under the supervision of unskilled attendants. Some are of the view that high fee charged during delivery is a factor leading to less people making use of designated health facilities. This has proved to be wrong because even when the delivery is free exemption policy (2005) has increased utilization of delivery services, 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 this hinders access to skilled delivery (Osubor et al, 2006). Invariably, Another Kenyan study (Nganda, 2003) used monthly attendance data from selected public health facilities and found a decline in average utilization of delivery care services following an upward fee adjustment.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

This chapter describes the methods that were employed in carrying out the study, with emphasis on the study type and design, a profile of the study area, population, sampling techniques, sample size determination, variables studied, data collection procedure, data analysis and ethical consideration.

#### **3.1 Study type and design**

A descriptive cross-sectional study was adopted as mainframe design of the study. This was chosen in view of the probability sampling technique used. The design among other things has the characteristics of containing adequately the sample frame for the study.

#### **3.2 The study area**

Mampong municipality as one of the 27 districts in Ashanti Region of Ghana and unique geographical characteristics that directly or indirectly affect choices of places of delivery by the expectant mothers. Below is presented the profile of the sub municipality – Adidwan.

##### **3.2.1 Profile of Adidwan sub-municipal**

Adidwan sub municipality is one of the five zoned areas under Mampong Municipal Assembly and shares boundary with Ejura Sekyere -Dumase District, Krobo and Kofiase sub municipalities. It has nine (9) communities under it namely, Adidwan/Sataso,

Atonsuaagya, Dome, Woraso, Sekruwa, Bonsuso Bosomkyekye, Mpeso and Nobem. It also has seven underserved communities and hard to reach areas : Atonsusuagya forest, Adidwan forest, Adwesei, Dome, Woraso, Sekruwa, Bonosu- Ouagadugu, Serekyekuaa, Sekyerekukra and Kubesenase. These communities are mainly forest areas with high rainfall and have poor motorable roads.

### 3.2.2. Study population

The study population is women in fertility age (WIFA) 15 to 49 years who had children below one year or pregnant and resident in the study area. The health personnel were females at the health facility in the Adidwan sub municipality. Other key informants were the Municipal Director of Health Services (MDHS), nurses, midwives, women's group leaders, opinion leaders and community-based surveillance volunteer (CBSVs).

The sub -municipality has a population of 11,778

Children 0- 5 years	-	1,943
WIFA (23.2%)	-	2,732

### 3.2.3. Education

There are 15 pre –schools, 15 primary schools, 3 Junior High School in the sub municipality with no Second Cycle Institution.

### 3.2.4. Religious background

There are 3 religious groups namely, Christians, Moslems and traditionalists.

### **3.2.5 Economic background**

The inhabitants are mainly commercial farmers who cultivate: cassava, yam, maize, groundnut, beans, plantain and burn charcoal.

### **3.2.6. Water supply**

Their source of water supply is from wells, bore-holes and streams

### **3.2.7 Health**

The sub municipality has one health centre at Adidwan with one midwife, two community health nurses, one health assistant clinical, one orderly, one night – watchman but no doctor or medical assistants and no ambulance service. Their major hospitals for referral are Mampong Municipal Hospital and Ejura District Hospital. Adidwan lies midway between Ashanti Mampong and Ejura.

It also has seven community based surveillance volunteers (CBVS) who help in outreach services.

There are three trained TBAs, antenatal clinic coverage is low and supervised deliveries not encouraging.

### **3.2.8. Health related challenges**

Out of the eight communities under the sub – municipality, mostly, members from two communities, namely, Adidwan and Atonsuagya attend the health facility for ANC and delivery services. Most of the expectant mothers prefer Home delivery and others too cannot get transport to the centre for skilled assisted delivery.

### **3.2.9 The strategic health facility provides the following range of services**

Health promotion talks at churches and schools;

Integrated maternal and child health services;

School health services;

Disease surveillance; etc.

### **3.2.10 Climates and Vegetation**

The municipality has two main seasons: that is the rainy and dry seasons. The major rains start from April to July and the minor from September to October. The long dry season starts from November and lasts till March.

### **3.2.11. Ethnicity**

The main ethnic group is the Ashanti. The municipality is increasingly becoming a cosmopolitan society. Northern settlers constitute 17% and are mostly found in the Afram plains.

### **3.2.12. Socio-Economic Activities**

The main economic activities are farming and trading. The main crops are yam, plantain, cassava, cocoyam, maize. Livestock rearing is also part of the economic activities of the people. Animals reared include cattle, goats, sheep, pigs and chicken. Two major market centers are located within the Municipality. They are the Mampong Wednesday Market and the Kofiase Friday Market. Large varieties of farm produce are marketed in these



areas. The Mampong market is the biggest market, within the municipality. The Kofiase market, though not as large also trades in a large volume of agricultural produce.

### **3.2.13. Transport and Communication**

Most of the roads to the service points are untarred and difficult to use during the rainy season. Though thirty-five percent of the road network is tarred. The telephone system has improved. Most individuals have a mobile phone that makes communication easy. The municipality receives broadcasts from the National radio, Garden City Radio, one local FM radio station and a host of others transmitting from Kumasi i.e. Angel, Kessben, Fox, Hello, Nhyira and Light FM stations.

Looking at the spatial distribution of health facilities, the Mampong Municipality is well endowed with health service facilities including private, quasi-government and government. The facilities are strategically situated which eventually addresses transportation concerns.

### **3.3. Sampling techniques**

Multiple sampling techniques were employed to select the subjects for the study. The entire Adidwan communities were zoned into clusters. Each cluster was then coded and assigned a predetermined number. All the codes of the clusters were placed in a box, shuffled and without looking into the box, five clusters were randomly selected. For each cluster, hundred (100) respondents were selected, making a total of 500 respondents. Households in the selected clusters were chosen randomly. At the main lorry station of each cluster bottle was spun and the direction to which the opened end points, is followed



and randomly houses were chosen and from each house. Households were selected according to the criteria participants were chosen for the study. In each selected household, one eligible respondent was picked, in the event where there were more than one eligible respondent, one of them was randomly picked by writing “YES and NO” on pieces of paper depending on their number, making sure there is only one “YES” so that whoever picked the “YES” was included in the study. This was done in all the selected clusters until the required participants (500), 100 from each cluster, were obtained.

### 3.4. Sample size (n)

Estimating the sample size using the formular for the standard error,

$$N = \frac{f^2 z^2}{D^2}$$

Where D = specific level of precision say, + or – 5

Z= the confidence level of 95% associated z value = 1.96

F = standard deviation estimate of 57

Therefore  $f^2 = 57^2$

$$N = \frac{57^2(1.96)^2}{5^2} = 499.3$$

The study would round up the size to 500 participants for greater precision and to reduce the margin of error.

The only midwife in the community was included in the selection process. The key informants were selected from each sub-municipality giving their capacity to provide the necessary information. A house-hold was randomly chosen and systematic random selection was adopted to facilitate the selection of the other households.

### **3.5 Study variables**

Quantitative and qualitative methods were used in measuring both dependent and independent variables.

#### **3.5.1 Dependent variable**

Skilled attendance during childbirth

#### **3.5.2 Independent variables**

- a. Mothers' knowledge about skilled care during child birth
- b. Availability of skilled care in the district
- c. Accessibility to skilled care during childbirth
- d. Staff attitude during skilled care
- e. Socio-cultural factors that influence institutional care during childbirth

**Table 3.1 Study variables, measurements and data collection type**

Type of variable	Variable	Operational definition	Scale of measurement	Data collection tools	Data collection techniques
Dependent variables	Skilled attendance during childbirth	Factors influencing the type of care during childbirth.	Nominal response to question	Structured questionnaire and interview guide	Record review and interview
Independent variable	Knowledge about skilled attendance	Mothers able to mention the appropriate facility, personnel and benefits of skilled, attendance during pregnancy and childbirth.	Nominal response to questions	Structured questionnaire	Interview
	Staff strength	The number of skilled attendance, midwife and doctors on duty per schedule	Ratio: 1-2-low, 3-4-moderate 4-5-high	Structured questionnaire and interview	Interview records review
	Type of facility	Health facility that render skilled care in the district	Nominal Untrained TBA Trained TBA Clinic Hospital	Structured questionnaire and interview guide	Interview and observation
	Access to skilled care	Total distance in kilometers from home to a health facility How often a public transport is accessed Nature of roads.	Ordinal: Response Less than 2km-short, 2km,4km-moderate, 5km-7km-long,greater than 8km very long. Not available Once in 24hrs All the time	Structured question and interview guide	Interview and observation

			Once a week Motorable Un-motor able		
	Attitude of health staff Waiting Time at facility level	Affective behavior of health staff towards clients and relative Time spent waiting for the attention of the skilled attendant	Ordinal responses to Questions Poor Satisfactory Good Very good Ordinal Less than one hour- short, 1-2hours-moderate 2-3hrs-long and more than 3hrs very long.	Structured questionnaire and interview	Interview
	Traditional and religious beliefs and practices.	Harmful traditional and religious practices and beliefs that discourage the mothers from seeking skilled care.	Nominal Response to question	Structured questionnaire and interview guide	Interview
	Cost of service Cost of transport	Fees charged by the health staff officially and unofficially Cost of hired transport to health facility during childbirth.	Ordinal No fees charged Below 5 Ghana Cedis-low5- 10- moderate.10.1-15- highAbove 20 Ghana Cedis-high. Below 2 Ghana Cedis 2-4 Ghana Cedis 5-6 Ghana Cedis .Above 6 Ghana Cedis.	Structured questions and interview guide	Interview

### **3.6.0 Data collection**

The study explored the views of mothers in the study with the aid of structured questionnaire as the main tool for collation of the primary data. The questionnaire consists of open and close ended questions. Research assistance was trained for two days on the administration of the questionnaire. The study collected information on the demographic characteristics, reasons for the choice of place of delivery, cultural consideration and quality of care. Among those who could not read, the questionnaire was translated into the local language (Twi) and interviews conducted.

### **3.6.2 Pre-testing**

To determine the appropriateness of the data collection tools, the tools were pre-tested in Kyeremfaso in the Mampong Municipality which had similar characteristics with Adidwan. The results of the pre-testing indicated that there were no problems and that the instrument could be used.

### **3.6.3 Data handling**

Confidentiality of the respondent was maintained. The study was depersonalized in that names of the respondents were not recorded. Questionnaires were sorted out for various editing after they were processed for analysis.

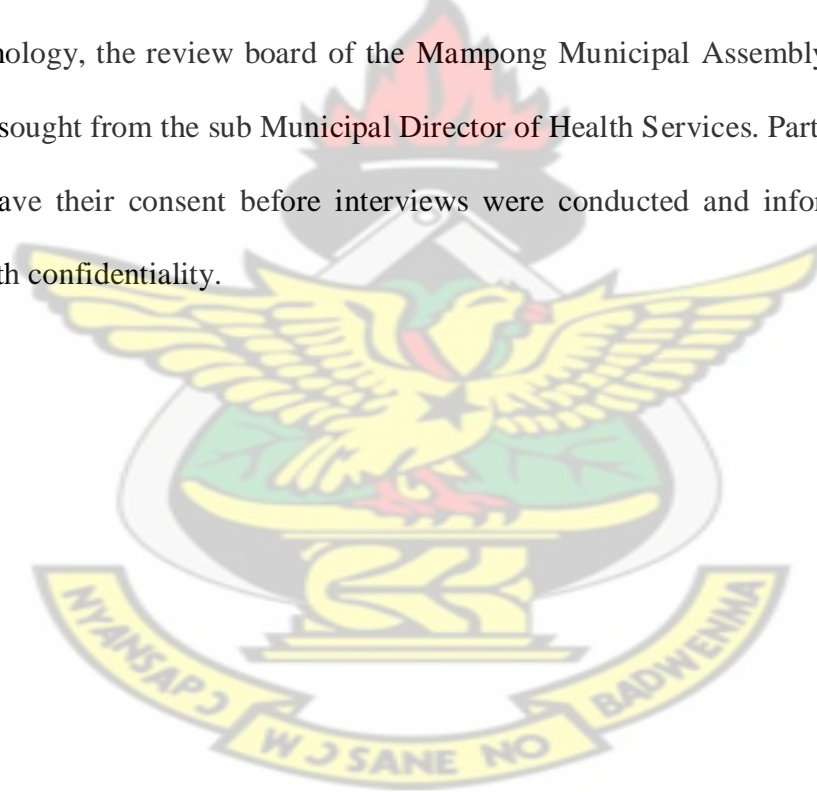
### **3.6.4 Data analysis and reporting**

The field data collected were organized and processed with STATA 20. The presentation took the form of tables graphs and pie charts for appreciation of the analysis. Categorical

variables were analyzed by means of chi-squared test. Comprehensive report was consequently generated and disseminated to all the major stakeholders the evidence of which is this material.

### **3.7.0 Ethical considerations**

The socio-cultural values and beliefs surrounding pregnancy and child birth among the people in the sub municipality were considered as issues of public concern. Ethical clearance was sought from the ethics committee of Kwame Nkrumah University Science and Technology, the review board of the Mampong Municipal Assembly. Administrative clearance sought from the sub Municipal Director of Health Services. Participants and their spouses gave their consent before interviews were conducted and information gathered treated with confidentiality.





## CHAPTER FOUR

### RESULTS

#### 4.0 Introduction

This chapter presents the findings of the study. Five hundred questionnaires administered merited inclusion for analysis. The presentation of the findings is in tables graphs and charts that are either preceded or followed by a narration. It is organized according to the socio-demographic characteristics of the respondents, male involvement in antenatal care, geographical access to health care, cultural considerations, and quality of care and risk awareness.

#### 4.1 Socio-demographic characteristics of respondents

The socio-demographic characteristics of the respondents are presented in Table 4.1. The minimum age of the respondents was 15 and a maximum of 50 years, more than 70% of the respondents were below 40 years with majority (29.7%) within 30 – 34 years, with a mean age and standard deviation of 29.5 years and 7.6 respectively, majority (76.8%) were married whilst 6.2% were single. Nearly half (47.2%) had never had any form of education and among those who had some form of education; most (31.2%) attained JHS/MSLC level. The respondents were predominantly farmers (50%). The main religion of worship among the respondents was Christianity (63%). The minimum and maximum family sizes were 1 and 15 respectively and a mean and standard deviation of 5.06 and 2.14 respectively about two-thirds (67.0%) of respondents were covered by the National Health Insurances.

**Table 4.1: Socio-demographic characteristics of respondents**

<b>Variable</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age groups (Years)</b>		
- 15 – 19	1	0.2
- 20 – 24	37	7.4
- 25 – 29	92	18.4
- 30 – 34	148	29.6
- 35 – 39	89	17.8
- 40 years and above	133	26.6
<b>Marital status</b>		
- Single	31	6.2
- Married	384	76.8
- Divorced	15	3.0
- Separated	14	2.8
- Widowed	2	0.4
- Cohabiting	54	10.8
<b>Educational level</b>		
- None	236	47.2
- Primary	91	18.2
- JHS/MSLC	156	31.2
- SHS/Tech	14	2.8
- Tertiary	3	0.6
<b>Occupation</b>		
- Farmer	250	50
- Trader	119	23.8
- Public servant	5	1.0
- Homemaker	42	8.4
- Dressmaker	57	11.4
- Others	27	5.4
<b>Religion</b>		
- Christian	315	63.0
- Islamic	162	32.4
- Traditional	7	1.4
- Others	16	3.2
<b>Family size category</b>		
- 0 – 2	43	8.6
- 3 – 4	195	39.0
- 5 – 6	164	32.8
- 7 – 10	98	19.6

<b>Delivery categories</b>		
- 0 – 3 deliveries	287	57.4
- More than 3 deliveries	213	42.6
<b>Covered by insurance</b>		
- Yes	335	67.0
- No	165	33.0

Source: Author's field data, 2012

#### 4.2: Male involvement in Antenatal Care (ANC)

Table 4.2 indicates that almost 95% of respondents attended ANC with 90.4% seeking permission from their husbands or the fathers of their babies before they attended ANC. Again, almost 92% were encouraged by the fact that their husbands or fathers of their babies were involved in the decision to seek antenatal care services.

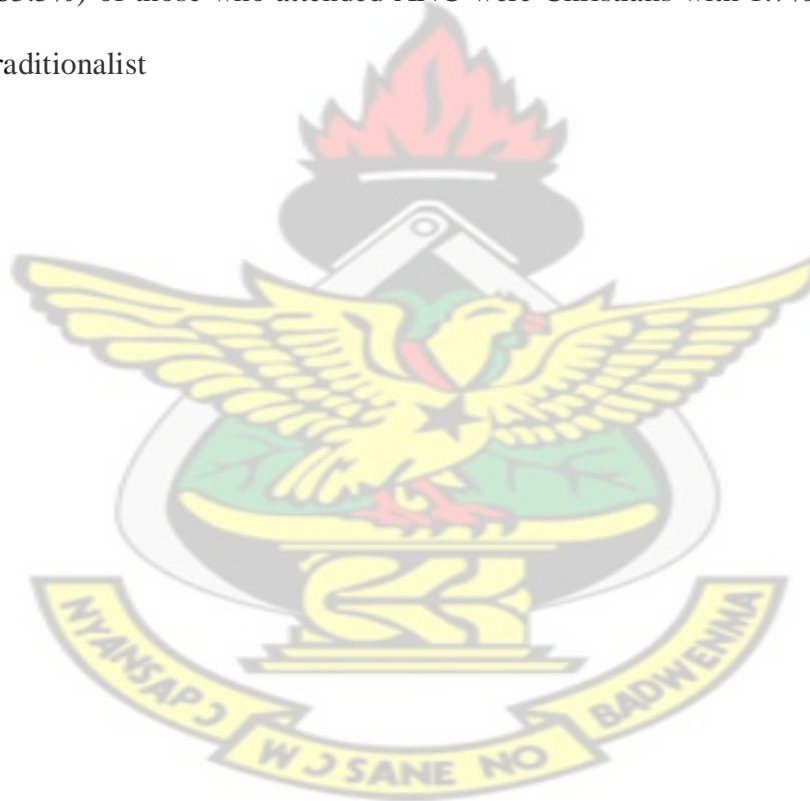
**Table 4.2: Male involvement in Antenatal Care (ANC)**

Variable	Frequency	Percent
<b>Whether attended ANC</b>		
- Yes	474	94.8
- No	26	5.2
<b>Permission of husband or father of baby before ANC</b>		
- Yes	452	90.4
- No	48	9.6
<b>Whether encouraged by involvement of husband</b>		
- Yes	459	91.8
- No	41	8.2

Source: Author's field data, 2012

#### **4.3: Relationship between selected demographic characteristics and ANC attendance**

Table 4.3 indicates that apart from marital status which shows significance to ANC attendance ( $p=0.03$ ), there was no association between education level (0.71), occupation (0.56) and religion (0.66). Meanwhile, for those who attended ANC, 77.6% were married whilst only 0.4% were widowed. Moreover, close to half (46.8%) of those who attended ANC had no form of education and only 0.6% had attained tertiary level. Again almost half (49.2%) of them were farmers whilst 1.1% were public servants. Concerning religion, majority (63.5%) of those who attended ANC were Christians with 1.7% belonging to the minority traditionalist



**Table 4.3: Relationship between marital status, educational level, occupation and religion to whether women attended ANC**

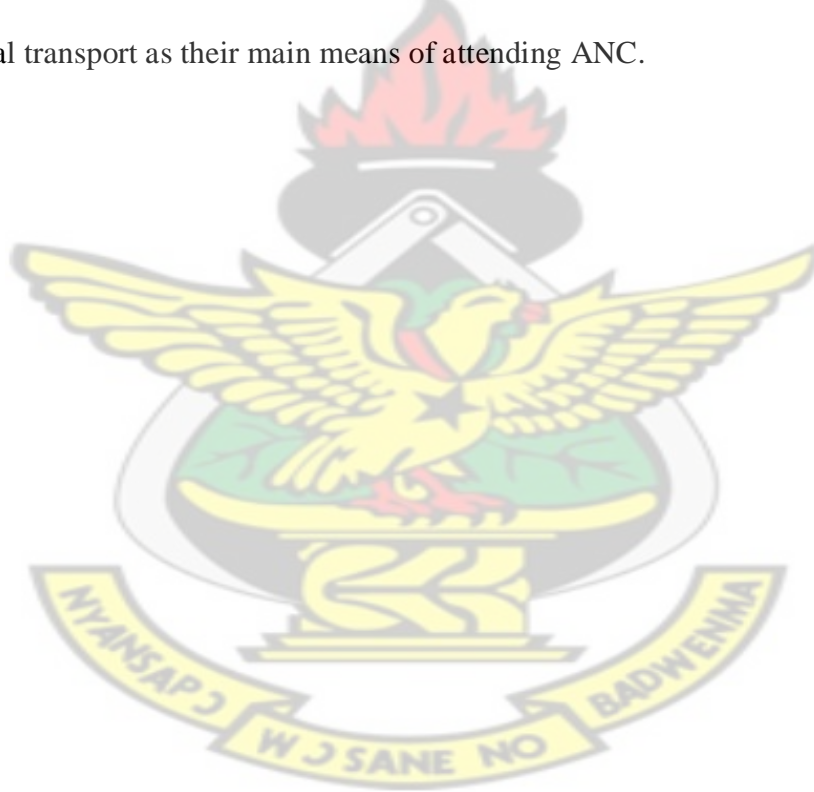
Variable	ANC Attendance n (%)	P-value
<b>Marital status</b>	<i>N=474</i>	
- Single	26 (5.5)	<b>0.037</b>
- Married	368 (77.6)	
- Divorced	15 (3.2)	
- Cohabiting	49 (10.3)	
- Separated	14 (2.9)	
- Widowed	2 (0.4)	
<b>Educational level</b>		
- None	222 (46.8)	<b>0.712</b>
- Primary	85 (17.9)	
- JHS/MSLC	150 (31.6)	
- SHS/Tech	14 (3.0)	
- Tertiary	3 (0.6)	
<b>Occupation</b>		
- Farmer	233 (49.2)	<b>0.561</b>
- Trader	116 (24.5)	
- Public Servant	5 (1.1)	
- Homemaker	40 (8.4)	
- Dressmaker	55 (11.6)	
- Others	25 (5.3)	
<b>Religion</b>		
- Christian	301 (63.5)	<b>0.656</b>
- Islamic	151 (31.9)	
- Traditional	7 (1.5)	
- Others	15 (3.2)	

Source: Author's field data, 2012

#### 4.4: Geographical access to Antenatal Care Services

Geographical access to ANC presented in Table 4.4. From Table 4.4, respondents pay a minimum of GHC 0 and a maximum of GHC 90.00 for transportation to a health facility to access antenatal care. This is linked to ones closeness and the type of transport used to the facility. About 80% paid less than GHC10.00 in getting to the health facility, more than

half (56.2%) of the respondents used more than 30 minutes to reach a health facility, the remaining 43.8% used less than 30 minutes to reach the health facility. The minimum and maximum minutes of reaching the health facility is 1 and 210 respectively with a mean and standard deviation of 35.7 and 33.6 respectively. The means of transport to the health facility ranged from walking to the use of commercial transport. Majority of the respondents, one-third (76.2%) of them used commercial transport in accessing health facilities. Table 4.5 further indicates that there is an association between the means of transport and whether respondents attended ANC ( $p\text{-value}=0.01$ ), with 79% using commercial transport as their main means of attending ANC.





**Table 4.4: Geographical Access**

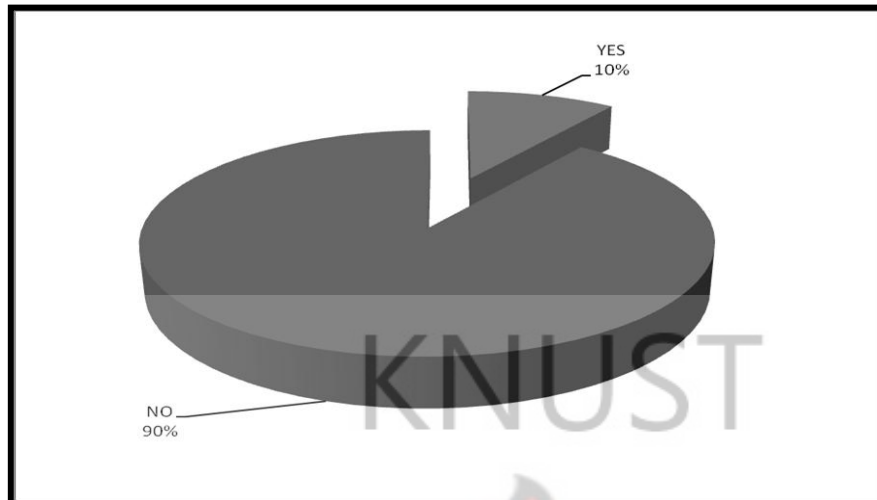
Variable	Frequency	Percent
<b>Transportation in Ghana</b>		
<b>Cedis (GHC)</b>		
- 0 – 9	400	80
- 10 – 19	12	2.4
- 20 – 29	7	1.4
- 30 – 39	13	2.6
- 40 – 49	30	6.0
- 50 – 59	6	1.2
- 60 cedis and above	32	6.4
<b>Time to reach ANC</b>		
<b>(Minutes)</b>		
- 0 – 9	86	17.2
- 10 – 19	90	18.0
- 20 – 29	43	8.6
- 30 – 39	138	27.6
- 40 – 49	32	6.4
- 50 – 59	5	1.0
- 60 minutes and above	106	21.2
<b>Means of transport</b>		
- Walk	116	23.2
- Motorcycle	3	0.6
- Commercial transport	381	76.2

**Table 4.5: Relationship between means of transport and whether respondents attended ANC**

Means of transport	ANC attendance N (%)	P – value
Walk	104 (21.9)	<b>0.017</b>
Motor cycle	3 (0.6)	
Commercial transport	367 (79.3)	
Total	474 (100)	

Source: Author's field data.2012

### Pie chart



Source: Author's field data, 2012

**Figure 4.1: Whether custom bond to visit local birth attendant for pregnancy care and delivery**

### Pie chart



Source: Author's field data, 2012

**Figure 4.2: Whether recommended by local birth attendant before visiting midwife**

#### 4.6 Cultural considerations

The cultural considerations relating to ANC and deliveries are presented in Figures 4.1 and 4.2. It is demonstrated in the figures 4.2 that almost all the respondents (90%) were not bound by any customs to visit the local birth attendant for care and delivery with only 10% feeling being custom bound. Similarly, 90% were not recommended by the local birth attendant before they visited the midwife.

#### 4.7 Quality of Care

The summary of the quality of care rendered to respondents is outlined in Table 4.6. From the table almost all (99.2%) felt attended to on visiting the health facility. Again, whilst 96.6% were given chance to state their problems and ask questions, another 98.2% were of the view that they were treated with respect. Significantly, whilst about 98% trust health professionals, another 98.8% were given privacy during their visit to the health facilities. More than one-third (74%) delivered at the clinic whilst 26% delivered at home. None delivered with the TBA. Majority (39.6%) defined cutting access to the skilled services available as insult and disrespect. About 61.2% believed that the practice of cutting access to skilled services can be improved with whipping up sense of ownership of the facility in the community as the main measure to improving the practice with a percentage of 41.3.

**Table 4.6: Quality of Care**

<b>Variable</b>	<b>Frequency</b>	<b>Percent</b>
<b>Whether feel attended to</b>		
- Yes	496	99.2
- No	4	0.8
<b>Whether given chance to state problem and ask questions</b>		
- Yes	483	96.6
- No	17	3.4
<b>Whether treated with respect</b>		
- Yes	491	98.2
- No	9	1.8
<b>Whether trust health workers</b>		
- Yes	490	98.0
- No	10	2.0
<b>Whether given privacy</b>		
- Yes	494	98.8
- No	6	1.2
<b>Place of delivery</b>		
- Home	130	26.0
- Clinic	370	74.0
- TBA	0	0.0
<b>Definition of cutting access to skilled services</b>		
- Unconventional money collection	138	27.6
- Insult and disrespect	198	39.6
- Distance	129	25.8
- Others	22	4.4
- Don't know	13	2.6
<b>Whether practice can be improved</b>		
- Yes	306	61.2
- No	23	4.6
- Don't know	171	34.2

<b>Measures to improve practice (N=477)</b>	197	41.3
- By whipping up sense of ownership in the communities	126	26.4
- By training local birth attendants to refer	66	13.8
- By opening up the village through road network	88	18.4
- By holding up series of community meetings and durbars for effective interaction		

Source: Author's field data

#### 4.8: Risk Awareness

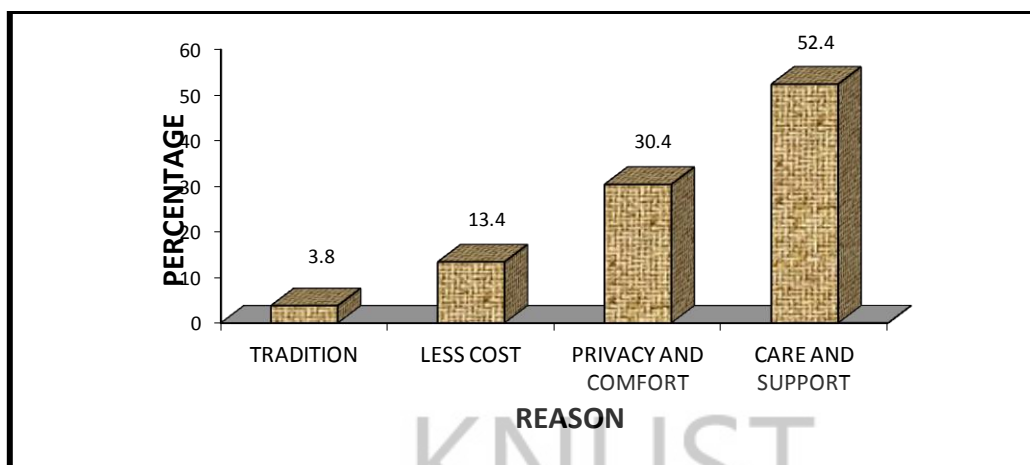
Respondents' awareness to risks during pregnancy is summarized in Table 4.7. Table 4.7 indicates that 84% of respondents were aware of risks in pregnancy. Again, the table stipulates that because majority (90%) believed the safest place to deliver was a health facility, 86% normally go to the health facility to deliver. Apart from this notion, a little over half (52.4%) delivered at their respective places of delivery because of care and support they received from the facilities where they delivered as shown in Figure 4.3. Almost close to one – third (72.2%) entertained some fears during pregnancy and when this fear is entertained, almost half (49.9%) talked to their husbands or partners.

**Table 4.7: Risk awareness**

<b>Variable</b>	<b>Frequency</b>	<b>Percent</b>
<b>Whether aware of risk in pregnancy</b>		
- Yes	420	84.0
- No	80	16.0
<b>Safest place of delivery</b>		
- Chemical shop	7	1.4
- TBA	17	3.4
- Health facility	450	90.0
- At home	22	4.4
- Others	4	0.8
<b>Where normally go for delivery</b>		
- Chemical shop	13	2.6
- TBA	7	1.4
- Health facility	430	86.0
- At home	50	10
<b>Whether entertain some fears when pregnant</b>		
- Yes	361	72.2
- No	139	27.8
<b>Whom talked to when afraid (N=361)</b>		
- Pastor	24	6.6
- Native doctor	9	2.4
- TBA	13	3.6
- Husband	180	49.9
- Midwife	129	35.7
- Others	6	1.7

Source: Author's field data, 2012





Source:

Author's field data, 2012

**Figure 4.3: Reasons for choice of place to deliver**

**Table 4.8 Collaboration between Midwife and TBAs**

Variable	Frequency	Percent
<b>Able to consult midwife on challenges</b>		
- Yes	405	81.0
- No	95	19.0
<b>Whether discuss health comments of TBA to midwife and vice versa</b>		
- Yes	73	14.6
- No	427	85.4
<b>Whether met with midwife to learn more on health issues</b>		
- Yes	244	48.8
- No	250	50
- Don't know	6	1.2
<b>Relationship between TBA and Midwife</b>		
- Very cordial	128	25.6
- Cordial	132	26.4
- Satisfactory	105	21.0
- Not cordial	30	6.0
- Don't know	105	21.0

Source: Author's field data, 2012

#### **4.9 Collaboration between Midwives and Local Birth Attendant**

Table 4.8 indicates that about 81% of respondents were able to consult their midwives when faced with challenges but 85% were unable to discuss health comments of TBAs or local birth attendants to the midwife and neither were they able to discuss health comments of midwife to local birth attendants. Similarly, half (50%) of respondents never met with the midwife to learn more on health issues. About 52% of the respondents described the relationship between TBA and midwife as cordial but 21% could not tell the relationship between the TBAs and Midwife.



**Table 4.10: Demographic characteristics and place of delivery**

Variable	Place of delivery		P-value
	Home N (%)	Health facility N (%)	
<b>Marital status</b>	<i>N=1</i>	<i>N=370</i>	
- Single	10 (7.7)	21 (5.7)	<b>0.025</b>
- Married	105 (80.8)	279 (75.4)	
- Divorced	4 (3.1)	11 (3.0)	
- Cohabiting	8 (6.2)	46 (12.4)	
- Separated	1 (0.8)	13 (3.5)	
- Widowed	2 (1.5)	0 (0.0)	
<b>Educational level</b>	<i>N=130</i>	<i>N=370</i>	
- None	77 (59.2)	159 (43.0)	<b>0.004</b>
- Primary	22 (16.9)	69 (18.6)	
- JHS/MSLC	26 (20.0)	130 (35.1)	
- SHS/Tech	3 (2.3)	11 (3.0)	
- Tertiary	2 (1.5)	1 (0.3)	
<b>Occupation</b>	<i>N=130</i>	<i>N=370</i>	
- Farmer	76 (58.5)	174 (47.0)	<b>0.031</b>
- Trader	27 (20.8)	92 (24.9)	
- Public servant	0 (0.0)	5 (1.4)	
- Homemaker	14 (10.8)	28 (7.6)	
- Dressmaker	11 (8.5)	46 (12.4)	
- Others	2 (1.5)	25 (6.8)	
<b>Religion</b>	<i>N= 130</i>	<i>N=370</i>	
- Christian	75 (57.7)	240 (64.9)	<b>0.183</b>
- Islamic	51 (39.2)	111 (30.0)	
- Traditional	2 (1.5)	5 (1.4)	
- Others	2 (1.5)	14 (3.8)	

Source: Author's field data, 2012

Table 4.10 indicates that the place of delivery (either a health facility or home) is significantly associated with marital status (p-value=0.025), educational level (p-value=0.004), occupation (p-value=0.031). There is however no association between religion and place of delivery (p-value=0.183). Whilst 72.7% of married respondents

delivered in the health facility, 27.3% delivered at home. Again, whilst 59.2% of respondents who never had any form of education delivered at home, 43% of them (no education at all) delivered at the hospital.

Table 4.5 shows risk factors predicting place of delivery. Single women are less likely to deliver  $AOR=0.65(0.32, 1.31)$  at the health facility after accounting for the effect of other variables. Even though inclusive, economic reason is likely to play a significant role in their decision of deciding for a place of delivery. The ages between 25-30, the crude odds ratio was  $AOR=1.44(0.53, 3.91)$  times more likely to deliver at the health facility compared with the youngest age group of delivering at home after adjusting for the effect of other covariates. This is not conclusive as it is not statistically significant. In the univariate analysis, women with basic education  $OR=2.01(1.32, 3.04)$  were two fold times likely to deliver at the health facility compared to those without education. Moreover, women who did not attend ANC during pregnancy are less likely to deliver at the health facility compared with those who attended ANC  $AOR=0.29(0.11, 0.74)$  after adjusting for other covariates. This indicates that women who did not attend ANC are 71% likely not to deliver at the health facility.

## CHAPTER FIVE

### DISCUSSION

#### 5.0 Introduction

This chapter presents a discussion of the outcome of the study in relation to published literature. The discussion is organized under the various objectives of the study. It also reveals the conclusions of the study and subsequent recommendations by the researcher.

#### 5.1 Socio-demographic characteristics

The study reveals that the respondents were aged between 15 and 50 years with most of them (70%) below 40 years. With this, majority were in the age group of 30 – 34 years (29.7%). It is important to note that, about 27% were 40 years and above and only 1 (0.2%) was between 15 – 19 years. Since the purpose of the study was strictly on women, all the respondents were females. The study also gathered information on the marital status of the respondents and as shown in Table 4.1, majority (76.8%) were married and living with their partners. Interestingly, this study further revealed that 10.8% of the respondents were not married but were cohabitating with their partners. This is not very strange in Ghana and especially in the region where the study was conducted because even though it is not “official”, it is assumed that such couples are likely to marry in the near future. Some even cohabitate and bear several children before the man performs the rites to traditionally and “by law” own the woman. About 6% were single at the time of this survey and may be attributed to the about 7.6% whose age were less than 25 years. Information on educational status indicated that of the 500 respondents, majority (47.2%) had no form of formal education and this reflected the number whose main occupations were farming (50%) and



trading (23.8%) that does not require any specialized skills. Those who had some form of education namely primary (18.2%), JHS/MSLC (31.2%), SHS/Tech (2.8%) and 0.6% (Tertiary), were involved in jobs such as dressmaking (11.4%), homemaking (8.4%), public works (1%) and other forms of work (5.4%). As in many studies conducted in Ghana, majority of the respondents were Christians (63%), affirming the Christian nature of the Ghanaian society, followed by the Islamic religion (32.4%). With an average family size of 5, majority had family size of less than 6 (80.4%). Significantly, almost 20% (19.6%) had family sizes of between 7 and 10. For the mothers involved in this study, most of them (57.4%) had had at least three episodes of delivery with the remaining 42.6% having more than 3 deliveries. The National Health Insurance has been adopted as the best option for financing health care in Ghana and so it is refreshing to note that in the study community, 67% of the respondents were covered by the health insurance at the time of the study.

## **5.2 Male Involvement in Antenatal Care**

In Ghana and like in most African countries, most decisions taken in the households are the prerogative of the husbands or partners who are seen as the bread winners. In situations where women take decisions without consulting their husbands or partners, these women are tagged as disrespectful. The situation is aggravated when the women are not employed and hence depended solely on their husband or partner for survival. The decision to access health care is not an exception and therefore it is imperative that health care providers consider involving males in areas where hitherto were considered “females areas” such as pregnancy and childbirth as well as family planning. Indeed Isabella and Ziyane (2007) suggest that men in Swaziland prevented their wives from using Family Planning methods



and subsequently were indifferent to whether their wives will go for antenatal care during pregnancy or not just because they did not have adequate knowledge on these issues due to the fact that they were not involved. This study therefore looked at the involvement of males in antenatal care and its influence on their wives. To establish this, data was gathered from the respondents on whether they themselves attend antenatal care services during pregnancy because according to Karin et al (2011), antenatal care greatly helps to reduce maternal morbidity and mortality as well as improving newborn survival and health and as shown in Table 4.2. Even though this study did not look at the frequency of ANC attended as elucidated by a WHO report (2004) and Villar et al (2001), about 95% attended ANC, the chances of many attending up to four times may be high. Information was therefore sought from the respondents on whether they need the permission of their husbands or fathers of their babies before attending ANC and interestingly 90% responded in the affirmative. This may be attributed to the respect they have for their partners or for the fact that they may require some form of assistance from their spouses before they will be able to attend ANC. This seems to be in line with Ademuwagun (2003) who stressed that with the active involvement of men, ANC will be improved if they are given health education that are tied to the intrinsic values of the people themselves. More refreshing is the fact that the respondents are deeply encouraged by the involvement of their husbands or fathers of their babies (91.8%), as shown in Table 4.2. This perhaps gives them the satisfaction that the raising of the babies will be a shared responsibility of both mother and father. Similarly, this was supported by Mullick et al (2005) where the women believed that nurses will stop harassing them once their husband are involved in maternity care.

### 5.3 Geographical Access

One of the indirect causes of maternal death is associated with delays in reaching the health facility during labour and this could be as a result of distance, unavailability of vehicle or transportation. In situations where the vehicle is available, the means to hire these vehicles have often times impeded quick access to health facilities. Access to health facility may compromise a woman's decision on where to deliver during labour as the most readily available option will be chosen. Indeed Akofa (2008) reiterated that some of these factors that affect access to professional health care consequently cause mothers to seek local arrangements, which inevitably have dire consequences on their health. For this reason, the researcher's main interest was in finding out some key factors that may affect access to health facility and these factors include cost of transportation, time of travel, distance and main means of transport. From Table 4.4, with an average of about GHC 7.00, majority (80%) pay less than GHC 10.00 as transportation from their homes to receive ANC services. In many homes in Ghana and especially a community like Adidwan, spending an average of GHC 14.00 as in and out fares for receiving ANC is not a small amount, taking into consideration the fact that they were not sick before attending ANC. This is also in view of the fact that they are dependent on their spouses (Deogaonkar, 2006) and so restricted in their movement and are often under threat of violence. Depending on where they seek care, the time used in reaching the facility may differ. Some may opt to seek care from the big hospitals in the cities and this may inadvertently affect the time they spend because they may be affected by the flow of traffic to the bigger towns unlike the small facilities where the traffic flows without hindrance. Averagely, respondents used about 36 minutes to reach the health facility for ANC even

though majority (27.6%) uses between 30 – 39 minutes to reach where they receive antenatal care. Almost 44% used less than 30 minutes to reach the health facility. This suggests that the time in reaching a health facility may not deter women in Adidwan from accessing ANC during pregnancy. Data gathered also revealed that the main means of transport for respondents to go for ANC services was through commercial transport (76.2%) whilst another 23.2% walked. An in depth analysis will however reveal that the relationship between means of transport and attending a health facility for ANC services was significantly related ( $p\text{-value}=0.01$ ). A further analysis between marital status and ANC attendance indicate an association ( $p\text{-value}=0.03$ ) between a woman's likelihood of attending ANC due to the fact that for all those who attended ANC, about 88% were married. However, the educational level ( $p\text{-value}=0.71$ ) occupation ( $p\text{-value}=0.56$ ) and religion (0.66) were not significantly related to ANC attendance. In sharp contrast, Milind (2005) points out that women with less education often times have difficulties in accessing general health.

#### **5.4 Cultural Consideration**

According to Jimoh (1997), some of the reasons attributed to why some women are still patronizing TBAs include proximity and their possessing special powers and being cheaper to consult compared to other health professionals. Again, Manju and Sudhanshu (2012) suggested that pregnant women were more likely to visit health professionals because they were aware that certain maternal and neonatal services are important and could be obtained only from trained health professionals some of which are immunization and vitamin supplementation, rest hygiene, breastfeeding and weaning, nutritional education, family

planning, antenatal care as well as delivery under the supervision of a trained personnel. This study tried to enquire from respondents whether they were under any cultural obligations to visit the local birth attendants for antenatal care and delivery. Data was collected regarding whether respondents were custom bound to visit the local birth attendant for pregnancy care and delivery as well as whether they are recommended by the local birth attendant before they visited the midwife. The study revealed in Figures 4.1 and 4.2 that whilst 90% were not custom bound to visit the local birth attendant, similar percentage did not receive the recommendation of the local birth attendant before they saw a midwife. Such decisions rest solely on the respondents and perhaps, their partners. This implies that, with correct and effective health education as suggested by Ademuwagun (2003), most, if not all pregnant women will freely visit the health care professional for quality health care during pregnancy and delivery.

### **5.5 Quality of Care**

The study again looked at the quality of care that the respondents received upon reaching the health facility. This inevitably determines whether the respondents will revisit the facilities they initially visited based on whether they were satisfied or not. The quality they received not only influences their choice of health facility but also determines what they will say about the facility to their colleagues who may need similar care. There are many aspects of quality but this study focused on whether respondents were attended to, given chance to state their problems and ask questions, treated with respect, privacy and whether they can trust the health workers who attended to them. These and many more reflect the attitudes of health staff, especially nurses towards clients that in the long run determine the

satisfaction of clients. Indeed as elucidated by Slavea et al (2009), many are those that are disappointed because the confidence reposed in the “hands that care” is no more. This is because some nurses and midwives have unfortunately be described as unfeeling, callous, insensitive, cold, rude and even evil. Perhaps this could account for the reasons why even with free maternal care, some people do not go for health care at hospitals (Olsen et al, 2008). However, this study refutes the above findings as Table 4.6 revealed that almost all respondents felt attended to (99.2%) when they visited the health facility. Another 97% affirmed that they were given the chance to state their problems and were even allowed to ask questions regarding the care rendered to them on their visit to the health facility. Even though Matua (2004) revealed that 54% of participants delivered at the clinic out of the 96% who preferred to do so because of staff attitude, this study showed that 98.2% of respondents were treated with respect, 98% trust health workers whilst 98.8% were given privacy. It is therefore not surprising when almost three-quarters (74%) actually delivered at the clinic, contradicting the 54% by Matua (2004). This positive revelation is in line with D’elineira et al (2002) where positive interaction between expectant mothers and health care providers will lead to client confidence and compliance and satisfaction. This can also influence the future behaviours of clients as far as receiving care is concerned, Ziyani et al (2004).

The researcher was also interested in what constitute access to skilled services as this will inform the perception of the respondents on what skilled services are. To this, data was collected from respondents regarding their knowledge on access to skilled services and it was not surprising when clients felt that insults and disrespect hinders access to skilled services (39.6%), followed by unconventional collection of money (27.6%), and distance



(25.8%). It is imperative that out of these definitions outlined by the respondents, about 67% can be attributing to poor attitude of health staff (insult and disrespect, unconventional money collection). It is therefore not out of place when 61.2% alluded to the fact that these practices that cut access to skilled services can be improved by cultivating sense of ownership of the facility by the communities (41.3%) and training local birth attendants who will refer promptly. If the community is able to assert its authority on health facility, the staff will be accountable to the community.

### **5.6 Risk Awareness during Pregnancy**

Pregnancy is one of the most important milestones in the life of every woman. When a woman becomes pregnant, the household is filled with joy because of the expectation of the new life. This period is not without challenges partly as a result of physiological changes in the woman as well as the ability to manage the situation especially in young couples. Even though pregnancy is a happy moment, there are some risks associated with it which must be anticipated in order to put in measures to effectively prevent their occurrence and when they do occur, manage it to prevent complications. It is as a result of the knowledge and existence of risks associated with pregnancy that Griffiths et al (2004) suggested that early attendance to antenatal clinic by pregnant women will pave the way for these risk factors to be identified early for corrections. Abe and Omo-Aghoja (2008) attests to the fact that every pregnant woman is prone to risks during pregnancy. Some of these danger signs or risks are further enumerated by Iliyasu et al (2010). This study therefore inquired from respondents whether they are aware of some risks during pregnancy to which 84% responded in the affirmative with the remaining 16% saying



otherwise. This was further reinforced when majority (72.1%) of the respondents attested to the fact that they indeed entertain some fears when pregnant and in such times, the people they mostly talked to are their husbands (49.9%), midwife (35.7%), Pastor (6.6%), TBA (3.6%), native doctor (2.4%) and others (1.7%). Even though this study has explained the value of male involvement in antenatal and maternal health issues, it is pertinent to mention that, data was also gathered on where respondents perceived as the safest place of delivery and consequently where they normally go for deliveries. The study explicitly revealed that the safest place of delivery was a health facility (90%) and indeed 86% followed this notion by actually delivering at health facilities. Even though 3.4% were of the view that the TBAs is the safest place to deliver, only 1.4 % actually delivered there. This contrasts the studies by Grossmann-Kendall et al (2001) and Lee (2008) where it was revealed that pregnant women rather preferred TBAs. Information was also gathered to elicit reasons for the choice of place delivery by the respondents and as demonstrated in Figure 4.3, the main reason had to do with care and support (52.4%) as well as privacy and Comfort, unlike Grossmann-Kendall (2001) and Nganda (2003) where the reasons were that TBAs were less costly and also because they treated pregnant women with respect.

### **5.7 Collaboration between Midwife and TBA**

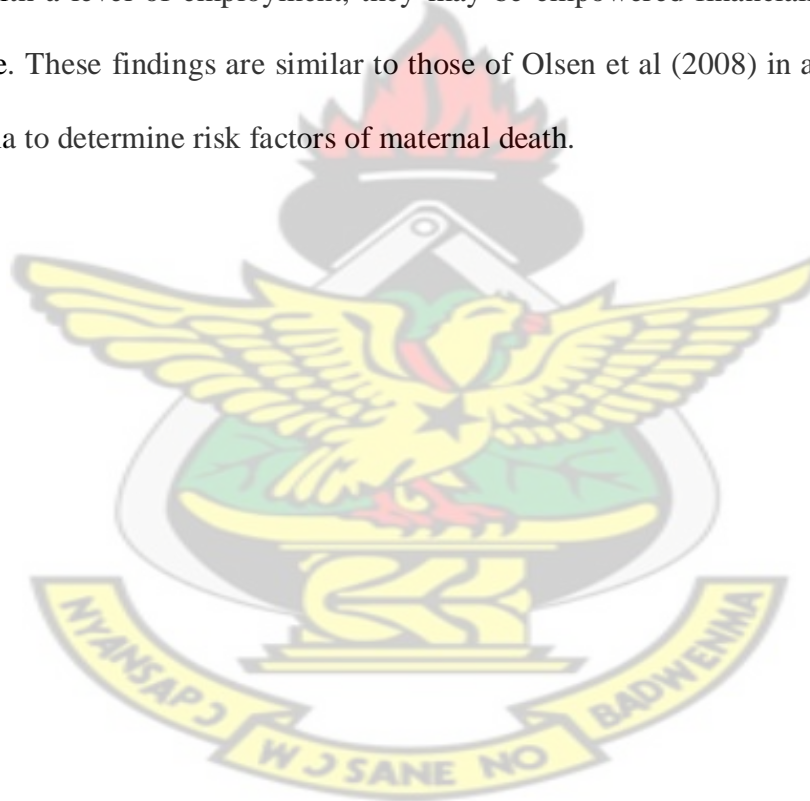
It is very important to note that whilst delivering under the supervision of trained personnel is the ideal situation, the role TBAs play in the health care of pregnant women, especially in typical villages where it is uncommon to find health professionals cannot be over emphasized. Indeed there have been arguments that it is not tenable to get rid of TBAs from the system. Therefore, it will be in the interest of the people in the rural communities

at least to give the TBAs some form of training so that they will be in a better position to detect danger signs early, try to manage and promptly refer when necessary, instead of trying to trivialize their existence and consequently losing pregnant women through the activities of some untrained TBAs. If they are trained and supervised by the health professionals, they will see themselves as partners and not competitors, working together to promote health of mothers and babies. These and many reasons informed the researcher to assess the level of collaboration between midwives and TBAs or local birth attendants in the study area. The study revealed that whereas 81% of respondents are able to consult the midwives in their localities when faced with challenges, 85% were unable to discuss or convey health comments of the local birth attendant to the midwife, neither are they able to discuss or convey health comments of midwife to local birth attendants. Table 4.8 further reveals that exactly half (50%) of the respondents had never met with the midwife in their locality to learn more on health issues, perhaps because they only visit the midwife when they are seeking care. Respondents concluded that the relationship between TBA and Midwife was cordial (26.4%), very cordial (25.6%), and satisfactory (21.0%). Another 21% cannot actually tell how the relationship is like whilst 6% described it as not cordial.

### **5.8 Demographic characteristics and place of delivery**

A further analysis of the study between the demographic characteristics and place of delivery revealed that, the choice of place of delivery is determined by the marital status of respondents, their level of education and economic status. Table 4.10 clearly states that the tendency of married pregnant women delivering at a health facility is high or in other words, there is a significant relationship between marital status and delivering at a health

facility (p-value=0.025) in that a higher percentage (72.3%) of all married pregnant women delivered at the health facility whereas only 27.3% delivered at home. The table again shows that the chances of women who had any form of education delivering at a health facility is higher than those without any form of education (p-value=0.004) because whilst 59.2% of those who never had any form of education delivered at home, 43% delivered at the health facility. Another important revelation was the fact that occupational status of pregnant women was also significantly related to health facility delivery (p-value=0.03), perhaps with a level of employment, they may be empowered financially to seek quality health care. These findings are similar to those of Olsen et al (2008) in a study conducted in Tanzania to determine risk factors of maternal death.



## CHAPTER SIX

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.0 Introduction

The findings suggest that ANC attendance, parity and distance to the nearest place of delivery were the factors that influence the choice of delivery place. Maternal and child health services (MCH) are essentially promotive and preventive and provide avenues for the early detection of mothers and infants at high risk. As the majority of patients utilizing such services are usually not ill, and pregnancy is most frequently an uneventful physiological process, it seems logical therefore to hypothesize that, given the slightest constraints, MCH services would be underused. This ultimately may have a negative influence on health of mothers and babies. One of the important components of maternal health and child services has to do with antenatal care and delivery. A mother may go through pregnancy successfully but may not come out of the delivery wholly. She and her baby or one or both may lose their lives. This study looked at the factors that determine choice of places of delivery of expectant mothers.

#### 6.1 Conclusions

##### 6.1.1 Socio – demographic characteristics of respondents and antenatal care attendance

The participants in this study were mostly below 40 years and therefore matured enough to have some experience as far as maternal issues were concerned. Incidentally majority were married as at the time of the study. The educational level of participants was low as most had never had any form of education. This had a relative effect on the choice of occupation

and place of delivery. The average number of deliveries for the study participants was about 3 and almost all of them were covered by the national Health Insurance Scheme. Married women were more likely to attend ANC. The attendance of ANC does not have any relationship with women's educational level, occupation and religion.

#### **6.1.2 Male involvement**

The rate of antenatal care attendance by participants was very encouraging. Similarly male involvement in maternal issues was impressive. This is likely to influence choice of place of delivery.

#### **6.1.3 Geographic Access and Cultural Considerations to health care**

The study revealed that, even though access to health care facilities is easy due to the limited time they took in reaching the health facility as well as availability of commercial transport to convey them, it is relatively expensive considering the number of times a pregnant woman will have to attend antenatal clinic. This might deter some of them who have financial difficulties from delivering at a health facility. However, the means of transport has a strong association to a woman attending health facility for antenatal care and delivery. Interestingly, there are no cultural restrictions to accessing health at the health facilities or delivering at a health facility.

#### **6.1.4 Quality of Care**

It can be concluded from the study the quality of care rendered to the pregnant women when they visited the health facilities was very encouraging. This stems from the fact that



many of them felt respected and attended to, given privacy and even allowed to ask questions. This incidentally led to many of them preferring to deliver at a health facility and consequently delivering there. It is thus concluded that when pregnant women are satisfied with the care they received at the health facilities, they will eventually choose to deliver there.

#### **6.1.5 Risk awareness**

The study revealed that most pregnant women were aware of the risks involved in pregnancy and as a result resorted to the health facility as the safest place to deliver. It can thus be concluded that with adequate knowledge on risk associated with pregnancy, more women will tend to deliver at the health facilities since they consider the health facilities to be safe. Again this study revealed that women are now shifting from delivering with TBAs to delivering at health facilities. When they have access to the hospitals or health facilities through improved transportation system even though the cost of transportation may be high to them, they will still use the health facility. From this study, it can be concluded that pregnant women are now delivering at the health facilities because they want care and support as well privacy and comfort.

#### **6.1.6 Collaboration between midwife and TBAs**

The study concludes that the level of collaboration between the midwives and TBAs is not encouraging.



### **6.1.7 Summary**

Determining a place for child birth is marked by several factors including the state of the mind of the expectant mother. This is because a well-informed mother who has a sound state of mind is in a better position to make a better choice. The study has looked at factors relating to how the involvement of male partners of mothers will determine their decisions regarding choices of place of delivery as well as access to health facilities influencing their choices of place of delivery. Aside looking at the socio-cultural issues that may affect choice of place of delivery, the study also looked at the contribution of the health care system. The study revealed that even though knowledge and utilization of health care system as far as place of delivery was concerned, efforts must be put in place to improve collaboration between health professionals and local birth attendants, as well as involving some key stakeholders like the pastors and relatives of expectant mothers, in determining places for delivery. It is equally important to intensify education of mothers to make it a point to talk to their health care providers in the event of fear when they are pregnant. Health workers are better placed to assist in whatever is causing the fear through education and counseling instead of the pastors.

### **6.2 Recommendations**

The study recommends robust public health education in communities like Adidwan to whip up confidence in the institutional health care system. This will go long way to inculcate some sense of ownership in the people to own and as well patronize the health facilities, where obstetric complications could be diagnosed early enough for the necessary

interventions. Public health education is crucial giving the low literacy rate in Adidwan and its environs which affects choices and preferences for quality of care.

A well-structured interaction is also recommended for pastors and other spiritual leaders whose influence on women in society is largely felt and cannot be under estimated. Considering the percentage of expectant mothers that confided in their pastors compared to the TBAs, it is obvious that, the focus is not entirely on TBAs as their influence on expectant mothers is gradually declining. But as a result of spiritual connotations to pregnancy and delivery, attention is now being shifted to pastors and other faith based personalities. The interactions between these and especially husbands would facilitate the understanding between what goes for spiritual and medical for prompt care and support.

It is also recommended that the existing TBAs who have not been trained at all be identified. So that they can be trained on issues that will alleviate their inclinations to superstition which leads to multiple infections and preventable deaths of expectant mothers. This training will ensure that they are able to detect early danger signs, manage those they can and promptly refer those they cannot to the appropriate health institutions. In the said trainings, those who have been previously trained could be given regular refresher training to update their knowledge and skills on safe delivery. This training, with the involvement of the local health personnel will even enhance the collaboration that existed between the local birth attendants and the midwives as they will see themselves as partners and not competitors.

Investing in human resource capacity building is also crucial for improved performance in assisting child birth. A good number of midwives and medical assistants could be trained adequately to contain the increasing number of expectant mothers. This would check the

community gaps created by distance and financial challenges. The focus will be to foster commitment in the medical personnel to do domiciliary midwifery which brings services to the door steps of the people.

Motivating staff through continuous professional development via short courses, work incentives for rural working staff, special study leave package would inspire greater acceptance of posting to remote parts of the country.

The Municipal Assembly could give scholarships to such underserved communities for brilliant and committed health staff who accepted postings to these communities to access the package. This will address the posting challenges of health staff to the remote communities.

Continuous development schemes should be put in place to correct attitudinal lapses occurring mostly after a long stay on the work.

Service providers who extort monies from expectant mothers should be identified and punished to deter others from such acts. This would completely address financial barriers which pose challenges to accessing quality care.

Policy implementation should be closely monitored and progress assessed towards meeting and attaining expected maternal health outcomes. The free delivery policy should be looked into to identify lapses and correct them.

It is also recommended that since care ,support, privacy and comfort were the major issues that motivated expectant mothers to deliver at the health facilities, stringent efforts should be put in place to ensure that health care providers at all levels improve on their attitudes right from the entry point to exit point so that their client will be satisfied as always and be willing to come back when they want to deliver and again as well as, advice others who

for some reasons or due to their previous experiences would not want to come to the health facility rescind their decision and visit the health facility for care.

One of the main practices that improve collaboration is communication and transparency.

It is therefore recommended that at the local level, the Municipal Health Directorate facilitate regular meetings and interactions between the local birth attendants and the health staffs, especially the midwives to bridge the gap that exists between them. When these meetings are regular, all bottlenecks that exist would be removed and they will all accept each other as partners and hence collaborate to take good care of their pregnant mothers without reservations.



## REFERENCES

- Abe, E. & Omo-Aghoja, L.O. (2008). Maternal Mortality at the Central Hospital, Benin City Nigeria: A Ten Year Review. *African Journal of Reproductive Health*, vol 12, (3), pp: 17-26.
- Ademuwagu, (2003). Utilization of antenatal services at the provincial hospital in Mongomno, Equitorial Guinea.
- Betran, A.P, Wojdyla, D., Posner, S.F, & Gulmezoglu, A.M. (2005). National estimates for maternal mortality: an analysis based on the WHO systematic review of maternal mortality and morbidity. *BMC Public Health*, vol. 5, pp: 131-141
- Campbell, O. M., & Graham, W. J. (2006). “Strategies for reducing maternal mortality: getting on with what works. *Lancet Maternal Survival Series steering group*, vol. 368, pp:1284-1299.
- D’elineira, A., Schellenberg, A.J., & Adiel, K.M. (2002). *Factors affecting home delivery in Tanzania*. Tanzania: Tanzanian Press
- Donnay, F. ( 2000). Maternal survival in developing countries: what has been done, what can be achieved in the next decade. *International Journal of Gynaecology and Obstetricst* , 70(1), pp:89-97.
- Fatmi, A. (2002). Demographic, socio-economic and environmental determinants of utilization of antenatal care in a rural setting of Sindh, Pakistan. *Journal of Pakistan Medical Association*, pp:138-142.
- Freedman, L.P.,( 2007) Practical lessons from global safe motherhood initiatives: time for a new focus on implementation. *The Lancet*, 370 (9595), pp:1285–1287.



- Gabrysch, S. & Campbell, O.M.(2009). "Still too far to walk: Literature review of the determinants of delivery service use. *BMC Pregnancy and Childbirth*, vol. 9, (34)
- Gage, A.J. ( 2007). Barriers to the utilization of maternal health care in rural Mali. *Social Science and Medicine*, vol. 65, (8), pp:1666–1682.
- Gertler, P., Rahman, O., Feifer, C. & Ashley, D. (2003). Determinants of pregnancy outcomes and targeting of maternal health services in Jamaica. *Soc Sci Med* 1993, 37:199-211.199-211: Jamaican Health Journal.
- Ghana Maternal Health Survey. (2008). *Timing of Postnatal Care*. 2007: GHS.
- GHS, A. (1996). *Ghana Health Service Act*.
- GHS-Mampong. (2010). *Year 2009 Annual Report*. Mampong: GHS.
- GHS-Mampong. (2011). *Year 2010 Annual Report* . Mampong: GHS.
- Griffiths, P.L., Brown, J.J & Smith, P.W.F. (2004). A Comparison of Univariate and Multivariate Multilevel Models for Repeated Measures of Use of Antenatal Care in Uttar Pradesh. *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, Vol. 167, (4), pp: 597-611.
- Grossmann-Kendall, F., Filippi, V., Koninck, M.D. & Kanhonou, L. (2001). Giving Birth in Maternity Hospitals in Benin: Testimonies of Women. *Reproductive Health Matters*, Vol. 9, (18), pp: 90-98
- Hogan, M. C., et al (2010). Maternal mortality for 181 countries: a systematic analysis of progress towards MDG 5. *The Lancet*, vol.375 (9726), pp: 1609 – 1623.



- Hove, I., Siziya, S., Katilo, C., Tshimanga, M. (2009). Prevalence and associated factors for non-utilization of postnatal care services: Population-based Study. *African Journal of Reproductive Health*. Vol 3, pp: 25-32
- Iliyasu, Z. et al (2010). Birth Preparedness, Complication Readiness and Fathers' Participation in Maternity Care in a Northern Nigerian Community. *African Journal of Reproductive Health*, vol. 14(1), pp: 129-133
- Isabella, S., & Valerie, J.E. (2007) Swazi Men's Contraceptive Knowledge, Attitudes, and Practices: *Journal of Transcultural Nursing*, vol. 18,(1), pp: 5-11
- Ijadunola, K.T. et al (2007). Unavailability of essential obstetric care services in a local government area of south-west Nigeria. *J Health Popul Nutrition*, 25(1), pp:94–100.
- Jimoh A.A.G. (1997). Bio sociocultural Factors in the Reproductive Health Amongst Women in Mongomo, Guinea Equatoria. *C Afr J Med*.
- Karin G., Joanna A. S., Flora K., Constanze P. & Brigit O. (2011). Antenatal care in practice: an exploratory study in antenatal care clinics in the Kilombero Valley, south-eastern Tanzania. *BMC Pregnancy and Childbirth Journal* 11(3), pp: 342 – 345
- Kishk, N., (2002). Knowledge, Attitudes and Practices of Women towards Antenatal Care: Rural-Urban Comparison. *J Egypt Public Health Association*; 77 (5 – 6), pp: 479 – 498.
- Kogan, M.D., Leary, M. & Schaetzel, T.P. (2003). Factors associated with postpartum care among -Massachusetts users of the Maternal and Infant Care Programme. *Family Planning Perspective*. Vol 22, pp: 128 – 130

- Lee, R.B. (2008). Delivering Maternal Health Care Services in an Internal Conflict Setting in Maguindanao, Philippines. *Reproductive Health Matters*, Vol. 16, (31), pp: 65-74
- Maimbolwa, M., Ahmed, Y., Diwan, V. & Arvidson, A.B.R. (2003). Safe Motherhood Perspectives and Social Support for Primigravidae Women in Lusaka, Zambia. *African Journal of Reproductive Health*, vol. 7 (3), pp: 29-40
- Mariko, M. (2003). Quality of care and the demand for health services in Bamako, Mali: the specific roles of structural, process, and outcome components. *Social Science and Medicine*, vol. 56 (6), pp:1183–1196.
- Magadi, D. (2010). The determinants of delivery care in Kenya. *Masai Medical Journal*, vol.47, pp:164-188.
- Manju S. & Sudhanshu, S. (2012). Knowledge, Attitude and Belief of Pregnant Women towards Safe Motherhood in a Rural Indian Setting. *Social Sciences Directory*. India
- Matua, A.G. (2004). Determinants of maternal choices for place of delivery in Ayiru County, Uganda. *African Journal of Nursing and Midwifery*, pp:33 – 38
- Matsumura, G. (2001). Women's Status Household Structure and the Utilization of Maternal Health Services in Nepal. *Asia-Pacific Population Journal*, vol. 1 (2), pp: 52-54.
- Ministry of Health Nepal, N. E., ERA, N., & 2002., O. M. (2002). Macro Nepal Demographic and Health Survey 2002. *Ministry Macro Nepal Demographic and Health Survey* , New Era.

- Mullick, S., Kunene, B. & Wanjiru, M. (2005). Involving Men in Maternity Care: Health Service Delivery Issues. *Agenda Special Focus: Gender, Culture and Rights*, pp: 124-135
- Mwaniki, P. K., Kabiru, E.W. & Mbugua, G.G. (2002). Utilization of antenatal and maternity services by mothers seeking child welfare services in Mbeere District, Eastern Province, Kenya. *East African Medical Journal* , vol.79,(4), pp: 184-187.
- Navaneetham K, & Dharmalingam, A. ( 2005). Utilization of maternal health care services in southern India. . *Soc Sci Med* , vol. 55, pp:1849-1869.
- Nganda, B.M. (2003). *Pricing in Public Health Facilities: A Report Prepared for the Ministry of Health Policy Project*. Nairobi: Nairobi Ministry of Health
- Ngogi, N. (2004). Ethnicity and the use of Health Services in Benin City, Nigeria. *Journal of Biosocial Science*, vol. 26, pp:165-77.
- Okafor, C.B. (2001). Availability and use of services for maternal and child health care in rural Nigeria. *International Journal of Gynaecology and Obstetrics*, vol. 34,(4), pp: 331-346.
- Olsen, E.B. et al (2008). Risk factors for maternal death in the highlands of rural northern Tanzania: a case-control study. *BMC Public Health*, vol. 8 (52), pp: 1471-1484
- Osubor, K.M, Fatusi, A.O. & Chiwuzie, J.C.(2006). Maternal health-seeking behavior and associated factors in a rural Nigerian community. *Maternal and Child Health Journal*, vol. 10, (2), pp:159–169.
- Pembe, A.B. et al (2010). Effectiveness of maternal referral system in a rural setting: a case study from Rufiji district. Tanzania: *BMC Health Services Research*, vol 10, (3), pp: 26.

- Shakya, K, McMurry, C. (2001). Neonatal mortality and maternal health care in Nepal: searching for patterns of association. *Journal of Biosocial Science*, vol. 33, pp: 87-105.
- Sibanda, J. Q., Saungweme, I., Nleya, C., Mutyambizi, M. P. & Rutgers, R. A. (2009). Postnatal care in Bubi district deserves more attention. *Central African Journal of Medicines*, vol. 47, (4), pp: 103-108.
- Slavea, C., Sulzbach, S. & Francois, D. (2009). Impact of Mutual Health Organizations: Evidence from West Africa. *Oxford Journal of Health Policy and Planning*
- Soltani, M. S., Sakouhi, M., Belguith, Z., Salem, B. K., Gacem, H. & Bchir. (2007). Evaluation of mothers' knowledge in pre-and postnatal preventive care in the Tunisian Sahelo. *Sante Pluque. Sante Plaque*, vol. 11,(2), pp:203-210.
- Toan, N. V., Hoa, H. T., Thach, N. T., Hojer, B. & Persson, L. A. (2006). Utilization of reproductive health services in a Mountainous area in Vietnam Southeast Asia. *Journal of Tropical Medicine and Public Health*, vol. 27,(2), pp:325-332.
- Villar, J. et al.,(2001). WHO Antenatal Care Randomized Trial for the Evaluation of a New Model of Routine Antenatal Care. *The Lancet*, vol. 357(9268), pp: 1551–1564.
- Vick, S, & Scott A. (2004). Agency in Health Care: examining patients' preferences for attitudes of doctor-patient relationship. *Journal Health Econ*, vol. 17, (5), pp: 587-605.
- Webster, J., Pritchard, M. A., Linnane, J.W.J., Roberts, J. A. & Hinson, J. K. (2001). (2010). Postnatal depression with health care providers. *Journal of Quality in Clinical Practice*, vol. 21, pp:144-148.

- World Health Organization (1998). *Improve the quality of Maternal Health Services*. Geneva: World Health Day Safe Motherhood
- World Health Organization. (2004). Gender inequalities in health in the Third World: Uncharted ground. *Social Science Medical.* , Vlassoff C. Gender inequalities in health in the T39:1249–1259.
- World Health Organization. (2004 ). Making Pregnancy Safer: Why is this Issue Important? Retrieved from: <http://www.who.millenniumgoalsformaternalhealth.htm> on 08/01/2013
- WHO UNICEF, UNFPA and The World Bank, Geneva. (2010, September 15). *Trends in Maternal Mortality: 1990 to 2008: Estimates Developed by WHO*,. Retrieved 2012, from <[http://whqlibdoc.who.int/publications/2010/9789241500265\\_eng.pdf](http://whqlibdoc.who.int/publications/2010/9789241500265_eng.pdf)>.,.
- World Health Organization. (2003). *WHO Fact sheet*. Retrieved September 11, 2008, from Geneva: <http://tinurl.com/5mrd5>
- World Health Organization. (2003). *WHO Highlights*. Retrieved December 17, 2008, from WHO: [www.who.int/features/2003/05b/en](http://www.who.int/features/2003/05b/en)
- WHO, ICM, and FIGO. ( 2004). Making Pregnancy Safer: The Critical Role of the Skilled Attendant: A Joint Statement.
- York, R., Tulman, L. & Brown. (2009). Postnatal Care in Low-Income Urban African American Women: Relationship to Level of Prenatal Care Sought. . *Journal of Perinatology*, vol. 20, (1), pp: 34-37.
- Ziyani, I. S., King, L., & Ehlers, V.J. (2004). Using Triangulation of Research Methods to Investigate Family Planning Practices in Swaziland. *African Journal of Nursing and Midwifery*, pp: 12 – 17.



## APPENDIX

### SEMI – STRUCTURED INTERVIEW WITH EXPECTING MOTHERS

Name of interviewer: .....

Name of community: .....

Date:

NB:

Introduction of study and interview

Consent requested

### SOCIO – DEMOGRAPHIC CHARACTERISTICS

1. Age ..... Years

2. Marital status

- i. married ( )
- ii. Single ( )
- iii. Divorced ( )
- iv. Separated ( )
- v. widowed ( )

3. Educational level

- i. Primary ( )
- ii. Secondary / technical ( )
- iii. Tertiary ( )
- iv. None of the above ( )

4. What is your Occupation / profession?

- i. Farmer ( )
- ii. Trader ( )
- iii. Civil / Public ( )
- iv. Servant ( )
- v. Homemaker ( )
- vi. Seamstress/ Dressmaker ( )

Other specify: .....



5. What is your Monthly income / daily wage? .....

6. Religion

- i. Christian
- ii. Islamic
- iii. Traditional
- Other.....

7. What is the size of your Family? .....

8. How many deliveries have you ever had?.....

9. Did you get covered by insurance on your last pregnancy? Yes ( ) No ( )

**(PERMISSION OF SPOUSE/ SUPPORT)- MALE INVOLVEMENT IN ANTENATAL CARE**

10. Do you attend ANC? Yes ( ) No ( )

11. Do you need the permission of your husband or the father of your baby before attending ANC? Yes ( ) No ( )

12. Will the involvement of your husband or the husband or the father of your baby encourage you to attend ANC? Yes ( ) No ( )

**GEOGRAPHIC ACCESS**

13. How much do you pay for transport from your home to the ANC? GH¢ .....

14. How many hours do you spend in traveling from home to ANC? GH¢ .....

15. How many kilometers do you travel from residence to the clinic? .....Km

16. What is the means of transport from your resident to the clinic?

- i. Walk ( )
- ii. Motor cycle ( )
- iii. Private transport ( )
- iv. Commercial transport ( )

## CULTURAL CONSIDERATIONS

17. Are you custom bonded to visit the local birth attendant for pregnancy care and delivery? Yes ( ) No ( )

18. Would you always have to be recommended by the local birth attendant before you visit the midwife. Yes ( ) No ( )

## QUALITY OF CARE

19. Do you feel attended to? Yes ( ) No ( )

20. Are you given chance to state your problems and ask questions? Yes ( ) No ( )

21. Are you treated with respect? Yes ( ) No ( )

22. Do you feel you can trust the health workers? Yes ( ) No ( )

23. Do you have privacy during counseling? Yes ( ) No ( )

24. Where do you want to deliver?

- i. TBA ( )
- ii. Home ( )
- iii. Clinic ( )

25. And why? .....

26. What in your opinion is cutting access to the skilled services available to you?

- i. Unconventional money collection ( )
- ii. Insult and disrespect ( )
- iii. Distance ( )
- iv. Fear (inferiority complex) ( )
- v. Multiple responses allowed ( )

27. Can the practice be improved? Yes ( ) No ( ) I don't know( )

28. If yes how?

- i. By whipping up the sense of ownership of the facility among women in the community ( )
  - ii. By engaging local birth attendant meaningfully to refer cases without delays ( )
  - iii. By opening up our hamlets/ villages to the clinic through the road ( )
  - iv. By hold series of community meeting and durbar for effective interaction ( )
- Others specify .....

### RISK AWARENESS

29. Are you aware of some risk in pregnancy? Yes ( ) No ( )

30. Where is the safest place of delivery/ pregnancy care?

- i. Chemical/ Pharmacy Shop ( )
  - ii. TBA ( )
  - iii. Health (centre) facility ( )
  - iv. In the home ( )
- Other specify .....

31. Why do you prefer your choice above?

- i. Less cost ( )
- ii. The trust of the community mothers in it (her) ( )
- iii. Privacy and comfort ( )
- iv. Care and support ( )

32. Do you entertain some fears when pregnant? Yes ( ) No ( )

33. If yes, whom do you talk to?

- i. A pastor ( )
- ii. A native doctor ( )
- iii. TBA ( )
- iv. Midwife ( )
- v. Elderly women ( )

**ASSESSING THE LEVEL OF COLLABORATION BETWEEN MIDWIFES AND  
LOCAL BIRTH ATTENDANT**

34. Are you able to consult your midwife in the locality on challenges? Yes( ) No ( )

35. Have you conveyed your health comments of TBA to the midwife and the midwife to the TBA before? Yes ( ) No ( )

36. Have you had any meeting (durbar) with the midwife to learn more on your health issues? Yes ( ) No ( )

37. What relationship exists between the midwife and the TBA?

- i. Very cordial ( )
- ii. Cordial. ( )
- iii. Satisfactory ( )
- iv. Not cordial (hostile) ( )

