SCHOOL OF PUBLIC HEALTH

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FACTORS ASSOCIATED WITH CHOICE OF PLACE FOR DELIVERY IN BUILSA NORTH DISTRICT

BY

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DECLARATION

I hereby declare that with the exception of the articles and books which have been quoted, cited and duly acknowledged in the references of this project, all information produced from this project is as a result of my own work and diligence in obtaining data. To the best of my knowledge, no part of this work has been obtained from previous publication or accepted for the award of any degree in any university or institution of higher learning except where due acknowledgement is made in this text.

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DEDICATION

I dedicate this work to my mothers Jinjong Kombian Bakiwaar and Jinjong KombianTeni and to my beloved late brother Jinjong KombianTanko. May His Soul Rest in Perfect Peace.

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This work would not have been a success without the immense contributions of certain individuals. Their support, commitment and encouragement cannot be over emphasized.

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ABSTRACT

Background

Poor utilization of health facilities during delivery by pregnant mothers is still major cause of maternal morbidity and mortality in Ghana. The objective of this study was to assess factors associated with choice of place for delivery in Builsa north district in Upper East Region of Ghana.

Method

This was a descriptive community-based cross sectional study of women aged 15-49 years and their partners who reside in Builsa north district. The study was to investigate factors associated with choice of place of delivery among women who delivered within the previous two years and their partners in Builsa north district using a questionnaire. Multi-stage sampling was used to recruit the respondents for the study. A total of 200 women in Builsa north district who delivered within the previous two years and their partners were interviewed directly in their own homes using a pre-tested questionnaire. Data were analysed and presented using descriptive statistics such as frequencies and percentages. Chi-Square test was used to show associations between variables using Statistical Package for Social Sciences version 16.

Findings

The study has shown that 82% of the women who gave birth in the previous two years delivered at the health facility. Distance, cost of transport and unavailability of transport are the main barriers to health facility delivery. The safety of women and their babies (72.3%) and that of health personnel education (71.8%) from ANC were the reasons why

women delivered at health facility. The study found out that there was poor satisfaction of care rendered at the health facility. About 68.5% (of women) and 57.5% (of men) were aware of the free ambulance service in the district but only 1.5% of them have ever used this service during labour.

Conclusion

Health education of both women and their partners during ANC attendance improves the utilization of services at the health facility in rural areas.

TABLE OF CONTENT Page

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

ANC	Antenatal Clinic
CHPS	Community-based Health Planning and Services
DHMT	District Health Management Team
GHS	Ghana Health Service
GDHS	Ghana Demographic Health Survey
GOVT	Government
GSS	Ghana Statistical Service
MMR	Maternal Mortality Ratio
SPSS	Statistical Package for Social Sciences
TBA	Traditional Birth Attendant
VA	Voluntary Agencies
WHO	World Health Organisation
UNICEF	United Nations International Children's Emergency Fund

DIFINITION OF TERMS

For the purpose of this study:

Health facilities all physical plants used in the provision of health services-usually limited to facilities that were built for the purpose of providing health care, such as hospitals, health centres, clinics and CHPS compounds.

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

Maternal mortality ratio is the number of maternal deaths during a given period per 100,000 live births during the same period.

Millennium Development Goal 5 is reducing the maternal mortality ratio (MMR) by three quarters between 1990 and 2015.

Traditional birth attendants are traditional midwives who usually learn their trade through apprenticeship, although some may be wholly self-taught. They are neither certified nor licensed

Skilled birth attendant is an accredited health professional such as nurse, midwife or doctor who has been educated and trained to proficiency in the skills needed to manage pregnancies, childbirth and immediate postnatal period.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Despite several decades of global health initiative focused on maternal health, approximately 53 million women worldwide give birth at home yearly without the help of skilled birth attendants. They deliver their babies alone, or with the help of a family member, friend, or a traditional birth attendant (TBA). In Ghana, 54 percent of women deliver in health facilities; however, 46.6 percent of babies in the Upper East Region are delivered in health facilities which are far below the national level of 60% (Ghana Maternal Health Survey, 2008). But giving birth at home is known to result in high maternal mortality (UNICEF, 2009). It is not surprising that Maternal Mortality Ratio (MMR) has proven to be an intractable problem. The millennium Development Goal indicator of maternal health shows that maternal mortality ratio, is declining slowly over the past 15 years, with an estimated annual decline of only 2.6% in sub-Saharan Africa since 1990 (WHO, 2012; Kinney M. V. *et al.,* 2012). This remains short of the progress required to meet the millennium Development Goal 5 target of 75% reduction in MMR by 2015.

The need to increase the use of skilled birth attendants to decrease maternal mortality ratio is key to maternal health. The current annual decrease of maternal mortality rate in Ghana is 2.6% (WHO, 2012) which is far below the MDG 5 target of 75% reduction by the year 2015. Government since 2001 has made institutional health delivery free in the

Builsa north district, but coverage of supervised delivery in the district continues to be low.

Further, the reasons for the choice of place for delivery are not known and this research sought to identify these factors. The purpose of this research therefore is to identify factors which are associated with choice of place for delivery in the Builsa north district. This research is to guide policy decisions in designing appropriate strategies to improve skilled birth attendants' delivery in the Builsa north district.

1.2 Problem Statement

The national target for supervised delivery is 60% (GHS, 2008); however, supervised delivery in Builsa north district is only 46.8% which is far below the national target of 60% (Ghana Maternal Health Survey, 2008).

In 2010, Builsa District recorded Antenatal Care (ANC) clinic attendance of 2905 with 1526 (52.5%) health facility delivery. In the year 2011, the district recorded 2856 antenatal clinic attendance and 1706 (59.7%) delivered at health facility (DHMT Report, 2012). These records show that there is only 7.2% increase in health facility delivery. The government of Ghana since 2001 has made health institutional delivery free in the Builsa north district, but coverage of supervised delivery in the district continues to be low. Further, the reasons for the choice of place for delivery are not much known and needs to be explored.

This study therefore sought to investigate factors associated with the choice of place for delivery in Builsa north district.

Conceptual Framework on factors associated with choice of place of delivery

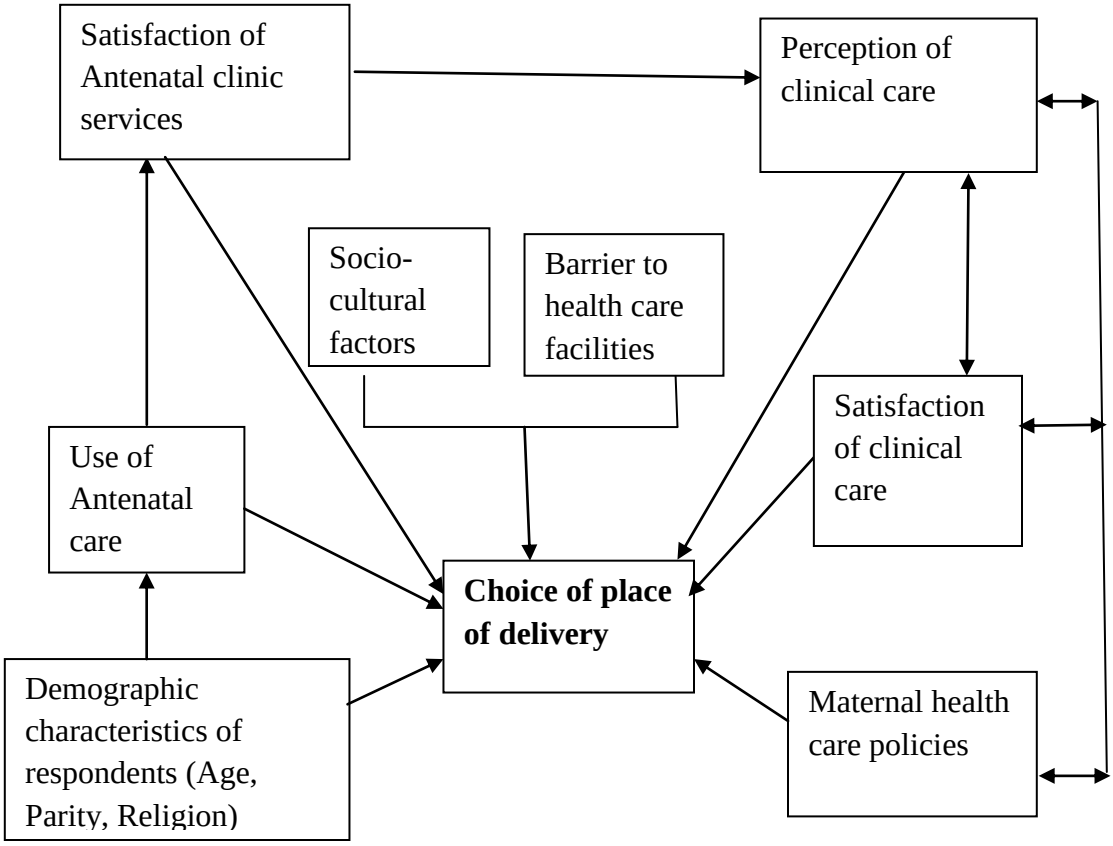

Figure 1.1**:** Conceptual Framework on factors associated with choice of place for delivery

The conceptual framework (Fig 1.1) was adopted from Ajzen 1991; Hulton *et. al.*, 2007 and Bertrand *et. al.*, 1995 and modified, it explains the choice of place for delivery and this depends largely on the factors listed. The demographic characteristics of the women and their partners which include their age, level of education, number of children, religion and occupation influence their choice of place for delivery. Women and their partners' perception of care rendered to them during delivery by the clinical staff also determine the place they choose to deliver.

The quality of antenatal clinic care as well as the satisfaction of care women derives from health facilities determine the place women choose to deliver during labour. Women who are satisfied with care rendered to them at the health facility are more likely to deliver in this health facility than their counterparts who are not satisfied with the care rendered to them at the health facility. Constraints like cost of delivery, non-availability of transport, cost of transportation and distance to the health facility determine where a woman will deliver when in labour.

1.4 Justification

Millennium Development Goal 5 calls for reduction of maternal mortality by 75% between 1990 and 2015 (WHO, 2005). To achieve this requires the services of skilled birth attendants (health professionals, i.e. - doctor, nurse, midwife) who are knowledgeable and capable of handling birth complications and appropriate referrals.

The knowledge acquired from this study would help to improve the quality of delivery care for the women in Builsa north district and the country at large. Also, this research would form the basis for people to embark on researches related to maternal health in the district.

The findings of this research would guide policy decision among stakeholders in designing appropriate strategies to improve skilled birth attendants' delivery and thereby reduce maternal mortality ratio in the Builsa north district.

1.5.0 OBJECTIVES

1.5.1 General Objective

The general objective of this study is to describe factors which determine the choice of place for delivery by women in Builsa north district.

1.5.2 Specific Objectives

The specific objectives of the study are to:

1. describe the demographic characteristics of women and their partners in Builsa north district.

2. describe women and their partners' perception of clinical care during delivery.

3. describe the level of satisfaction with delivery care among women and their partners in Builsa north district.

4. describe socio-cultural factors in relation to place of delivery.

5. describe the constraints associated with delivery at health facility.

6. describe women and their partners level of knowledge on the free maternal delivery and ambulance service policies in the district.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1Introduction

This chapter deals with literature review on the main study of women's choice of place for delivery in other parts of the world and it's relation to the objectives of the study in Builsa north district which is presented as follows: demographic characteristics of women, women perception of care they receive during delivery, socio-cultural factors, constraints to health facility delivery and satisfaction of clinical care and clients' knowledge of free maternal delivery services. They are presented as follows:

2.2 Demographic characteristics of respondents

There is a significant association between facility and non-facility delivery and socio-demographic characteristics (Onah *et. al.,* 2006). Attention placed on these factors will not only improve maternal utilization of health facility for delivery but will reduce maternal mortality rate (Onah *et. al.,* 2006).

Maternal Age

This is an important variable in understanding the level of utilization of health facility in general and maternal health care services in particular among pregnant women. Maternal age has been found to be positively associated with awareness and utilization of maternal health care services in many societies. Even though it has been documented that awareness and utilization of maternal health care services varies in Sub-Saharan Africa and Latin America with age between the young and the old (Gazali *et. al.*, 2012).

Education

It is known that educated women are less likely to accept dangerous practices that will result into complications during pregnancy (Gazali *et. al.*, 2012). Among the Hausa people of Northern Nigeria, for example, *girishi* cuts are traditional surgical operation used to treat obstructed labour by cutting the vagina with an un-sterilized blade. Whilst this *girishi* cuts are commonly performed on the less educated women, the educated women vehemently opposed to this practice (Royson, 1998). Uneducated women are less likely to seek the help of professional health service because they are probably not aware of what is available, and probably find the culture of modern health care facility frightening (Gazali, *et. al.,* 2012).

Religion

Adetunji (1996) noted that, the use of modern health services is mostly influenced by the individual's perceptions of the efficacy of modern health services and the religious beliefs of the individual woman. According to Mekonnon (2002), there is a significant variation in the utilization of maternal health care services by religion. Addai, (1998), also showed that religion is an important predictor of maternal care utilization.

In Bono state of Nigeria, it is a common phenomenon among the Muslim for rituals to be performed to assist a woman in labour (Waziri, 2005). Mallams will read the Quran for their protection against all evil spirits relating to pregnancy and childbirth, after which a drink of Quranic verses are written on a plate washed and given to the pregnant woman to drink for safe delivery (Waziri, 2005). Consequently women tend to remain in the house

instead of going to the health facility for delivery because of the psychological satisfaction and assurance that nothing untoward will happen to them.

Parity

Number of births has been used as an explanatory variable for women's choice of place for delivery. It has been shown that the use of clinical care facility during delivery will be high for the first births (born) and expect to reduce as the number of births increases (Elo, 1992). Parity serves as impediment to utilization of maternal health care facility. This usually occurs when one has many children which consequently might cause resource constraints. Wong (1987) observed that having many children cause resources constraints, which negatively affects health care utilization.

2. 3 Perception of clinical care

Mathews *et. al.,* (2004) noted that, typical rural women are generally characterized by reliance on home deliveries, due to the perception of quality of care offered by home deliveries and the perception that these deliveries where local norms provided the main motivation for home birth. They therefore rely on traditional childbirth practices, and do not consider modern medical services for childbirth. The home delivery has become a cultural norm which they opt to follow (Mathews *et. al.,* 2004). An ethnographic study of childbirth healthcare-seeking behavior (in Chiapas, Mexico) found that, in spite of the availability of skilled birth attendants, women in this rural community preferred TBAs to attend to their deliveries (Hunt *et. al.,* 2003).

According to Dzomeku (2011), caregiver attitude was identified as a major concern of clients and this in turn influenced their usage or non-usage of the hospital for delivery. Positive and negative attitudes were identified.

Negative attitudes (example; scolding, slapping, disrespectfulness) tend to have a more powerful influence than the positive attitudes. This is because the negative attitude hinders the future use of the hospital for childbirth (Dzomeku, 2011). Ineffective communication (impoliteness, frowning, whispering, not explaining procedures) make clients uncomfortable. Neglected practices such as not attending to clients promptly, not involving clients in their care, unfriendliness, shouting, ignoring are the negative perceptions women have about caregivers and these greatly influence non-patronage of health facility during delivery (Dzomeku, 2011).

Perceived positive attitude of caregivers like not shouting at clients, welcoming clients with smiles make women think that he/she (caregiver) is kind and has a sense of humour. Positive attitudes lead to satisfaction and encourage future usage of health facility (Dzomeku, 2011).

Antenatal care is widely established and provides an opportunity to inform and educate pregnant women about pregnancy, childbirth and care of the newborn. It is expected that this would assist the women in making choices that would contribute to good pregnancy outcome. High antenatal coverage and relatively high frequency of ANC visits provide an opportunity for information, education and communication about the need to be attended by skilled attendant during delivery (Samuel *et. al.*, 2008).

In terms of global coverage, ANC is a success story. Currently, 71% of women worldwide receive ANC (Ornella *et. al.*, 2011). In sub-Saharan Africa, 69% of pregnant

women have at least one ANC visit. Coverage of ANC is usually expressed as the proportion of women who have had at least one ANC visit. ANC coverage is lower among women who need it most: those who are poor, less educated and living in rural areas (Ornella *et. al.,* 2011).

The main predictor of place for delivery by women during labour is advised by health providers during antenatal care to deliver at health facility. Therefore, health promotion is vital at ANC clinic (Fotso, *et. al.*, 2009).

2.4 Socio-cultural factors

Socio-cultural factors are associated with the traditions, norms and values of people that affect the way and manner in which they seek medical help on health related problems (Dolea, *et. al.,* 2009). He noted that, cultural norms and beliefs may also impede a women's ability to seek health care, especially during childbirth.

In communities where women's rights such as mobility are limited, women may not be able to seek care outside the home without permission from their husbands or mother- in-law even in the case of emergency (Kongnyuy *et. al.,* 2009). In some male dominance areas, women are not allowed to travel outside the home in the night because it is considered culturally inappropriate especially if she is in labour. She may not be allowed to leave the home unless accompanied by a male relative or she may not be permitted to receive treatment from a male healthcare provider (Kongnyuy *et. al.*, 2009).

A woman must ask her husband's permission to seek treatment even if obstetric emergency complication arises (Gazali *et. al.,* 2012). Gazali (2012) cited a case of a

woman with obstructed labour, who reside ten minutes walk to the hospital but who could not leave the house because her husband was away on a business trip. By the time the husband returned and gave permission for her to be taken to hospital, she had developed vesico vaginal fistula and the baby died in the uterus.

Traditionally, some people believe that a woman must give birth to her first child in her parent's home (Gazali *et. al.,* 2012). Women who live in the cities therefore, have to return to villages for delivery even though this means access to health facility will be more difficult at the village. Other cultures believe that delivering should be done in a squatting position; women should not push during labour for fear of after pains. They also believe that women should not cry out during labour, and the placenta must be buried to ward off evil spirits (Gazali *et. al.,* 2012).

Results from a study in Benin found that women giving birth unassisted were silently admired, and in West Africa childbirth is considered a woman's battle, this makes women believe that childbirth is a normal physiological process and therefore do not need to seek medical care (Stephenson *et. al.,* 2006).

In spite of the spread of formal health systems as well as the expansion of health services, one reason why women bypass the formal system in favour of traditional medicine is seen in their negative attitude towards the former. This in many cases results from bad experiences as reported by many of them (El-Safty, 2001). The situation occurs in relation to childbirth, when it becomes so complicated that the traditional midwife cannot handle. The woman is then sent to the clinic, when in most cases, it is too late. The resulted deaths/complications are consequently associated with the service providers at the clinic, hence the negative attitude towards health facilities (El-Safty, 2001).

An ethnographic study of childbirth healthcare-seeking behaviour in (Chiapas, Mexico) found that in spite of the availability of skilled attendants, women in this rural community preferred TBAs to attend to their deliveries (Hunt *et. al.*, 2003).

3.5 Level of satisfaction of care during delivery

Satisfaction is a good indicator of the quality of service received. Satisfaction is linked to communication, discipline, courtesy, respect and empathy by health providers (Samuel *et. al.*, 2008). A woman who experienced lack of privacy during her previous delivery is not likely to attend health facility again during labour (Samuel *et. al.*, 2005).

According to Mahdi and Habib (2010), the main reasons why women prefer to give birth in the home as compared to the hospital were safety and security. They also emphasized that social support and privacy were the predominant reasons why women give births at home rather than the health facility.

Dzomeku (2011) states that clients who had information during childbirth felt they have participated in their care and had contributed to the satisfaction of care rendered to them. A client who was not given information about her birth and was examined without her consent felt she was uninvolved and felt like a piece of rock. Caregiver attitude was considered the strongest factor in assessing maternal satisfaction of care. If clients interpersonal relationships with their caregivers were good (politeness, kindness and patience), they were satisfied with the care even when other factors were not addressed. If there was a positive care giver attitude to clients they would consider the health facility safe for future use. On the contrary, the health facility is not safe enough for future use if

the attitude of the care giver is found to be negative like shouting at the clients and ignoring them (Dzomeku, 2011).

3.6 Constraints associated with delivery at health facility

More than half of women in developing countries give birth at home, often far away from health facilities, where access to health care is difficult (Kongnyuy *et. al.,* 2009). Also, where health care is expensive many clients come to health facility to seek health care only when they are very ill. Despite the best efforts of staff in the facility, it may not be possible to save a woman's life in such circumstances (Kongnyuy *et. al.,* 2009). There are very few health providers to take care of the population in these countries. These researchers identified lack of affordable transportation, the cost of care and cultural norms and beliefs as factors that impede a woman's ability to seek care especially during labour.

Women who visit health facilities mostly do not have any other choice than to walk. The average distance to a health facility in a rural area in Africa is about eight kilometres, often on unpaved roads or pathways (Dolea *et. al.,* 2009). These roads are poorly maintained and hard to navigate. Many roads are not paved and cover difficult terrain. In some cases during the rainy seasons the roads are impassable. Most health facilities do not have ambulances to bring patients to the health facility. Because of lack of transportation options, many women are forced to walk to reach the nearest health facility on foot while in labour, risking the chance of delivering or dying from complications on their way to the health facility (Dolea *et. al.,* 2009).

Distance and means of transport were main factors affecting geographical accessibility (Faye *et. al.,* 2011; Kongnyuy *et. al*., 2009). The accessibility to the health facility is a big challenge in rural Africa. Walking or animal-drawn vehicles are the main means of transport for many pregnant women (Faye *et. al.*, 2011; Kongnyuy *et. al*., 2009).

The cost of transportation is a major problem in rural areas in Africa, even when there are transportation options than walking; the cost can be prohibitively high thereby making families decide not to bother seeking transport (Dolea *et. al.,* 2009). Gazali (2012) revealed that, there is positive relationship between distance and utilization of health facility in general. He found that patients who resided close to a health facility were most likely to utilize the facility than those who are residing away because of travel time and transportation cost.

Skilled and professional health services are only available to a small number of people in rural settings thereby making the inhabitants resort to other means of seeking health care (Essien, 2006).

3.7 Free Maternal Service and Ambulance Service policy

A good maternal health policy is important because it creates the platform for the removal of barriers to accessing emergency obstetric care. Having to pay for emergency health services does not only prevent women from receiving health care but may exacerbate poverty and long-term indebtedness (Storeng *et. al*., 2008). Health policies that are supportive to maternal health can facilitate access to quality emergency obstetric care. These include a policy of free maternal health services and free or subsidized emergency transport to health facility during labour (Kongnyuy *et. al.,* 2009).

There is evidence to support that fees charged for maternal health care do not contribute significantly to revenue and should be abolished (Gilson *et. al*., 2005). In most of the countries where maternal mortality is low people do not pay for health services at the delivery point as the services are either free or are covered by good health insurance system (Adanu, 2008).

CHAPTER THREE

3.0 METHODS

3.1 Study Design

The study was a community-based descriptive cross sectional study of women's choice of place for delivery in Builsa north district. Face to face interview was conducted using pre-tested questionnaires for women who reside in Builsa north district and gave birth between the years 2011 to 2012 and their partners on their last delivery. The partners of the women were involved in the study because most of the decisions especially pertaining to health are taken by the men in northern Ghana.

The SPSS program was used to analysed the data. In the first section, tables, frequencies and percentages were used to present the results. In the second section the variables were cross – tabulated to measure their associations using a chi-square test at 95% significance level ($p < 0.05$). This study has a sample size of 400 respondents with equal proportions by sex (200 males and 200 females).

3.2 Study Area

The study took place in Builsa north district (fig 2.1) of the Upper East Region of Ghana which has an area of 2,054.2km^2. The Builsa district was carved out of Kasena-Nankana district in 1975. It is one of the eleven districts in Upper East Region of Ghana. The Builsa north district created out of the Builsa district in 2012, is located in the South-Western part of the region, between longitudes 1^0 05" West 1^0 35" West and latitude 10^0 20" North and 10^0 50" North. The population of the district is 60,186. The district has a

mean monthly temperature ranging between 21.9^0C and 34.1^0C and rises to 45^0C in March, while the lowest are recorded in January. Rainfalls are very torrential and range between 85mm and 1150 mm per annum (GSS, 2002). Between July and October each year, most rivers and streams overflow their banks and cut off settlements; thereby, hindering transportation of clients to health centres. The dry season is long and characterized by harmattan winds, which is similar to other districts in Northern Ghana; it is largely rural with dispersed settlements (Binka *et. al.,* 1996).

At the North, it shares boundary with Kasena-Nankana West district, to the East with Kasena-Nankana East. To the West it shares boundary with Sisala East of Upper West region and to the south with Builsa South district. The main ethnic groups are mainly Builsas, Kasenas and Kantosi. The people are predominantly farmers and traders. The district has one hospital located at Sandema the district capital.

There are four sub- districts with three health centres and a hospital. These include; Chuchuliga health centre, Wiaga health centre, Siniensi health centre and Sandema hospital. The district has 14 Community-based Health Planning Services (CHPS) compounds which include: Chiok, Farinsa, Kom, Muteensa, Achanyeri, Goayie, Naamonsa, Yipaala, Nanjiupung, Zundema, Yipieng, Kalijisa, Kori, Sanwaasa and Kandema. There is neither a private clinic nor a maternal home in the district.

Table 3.1: Distribution of Health Facilities in Builsa North District

Type of Health Facility	**Owner**		**Total**
	Govt	**VA**	
Hospital	1	0	1
Health Centre	1	2	3
CHPS	14	0	14
Drug Store	0	3	3
TOTAL	16	5	21

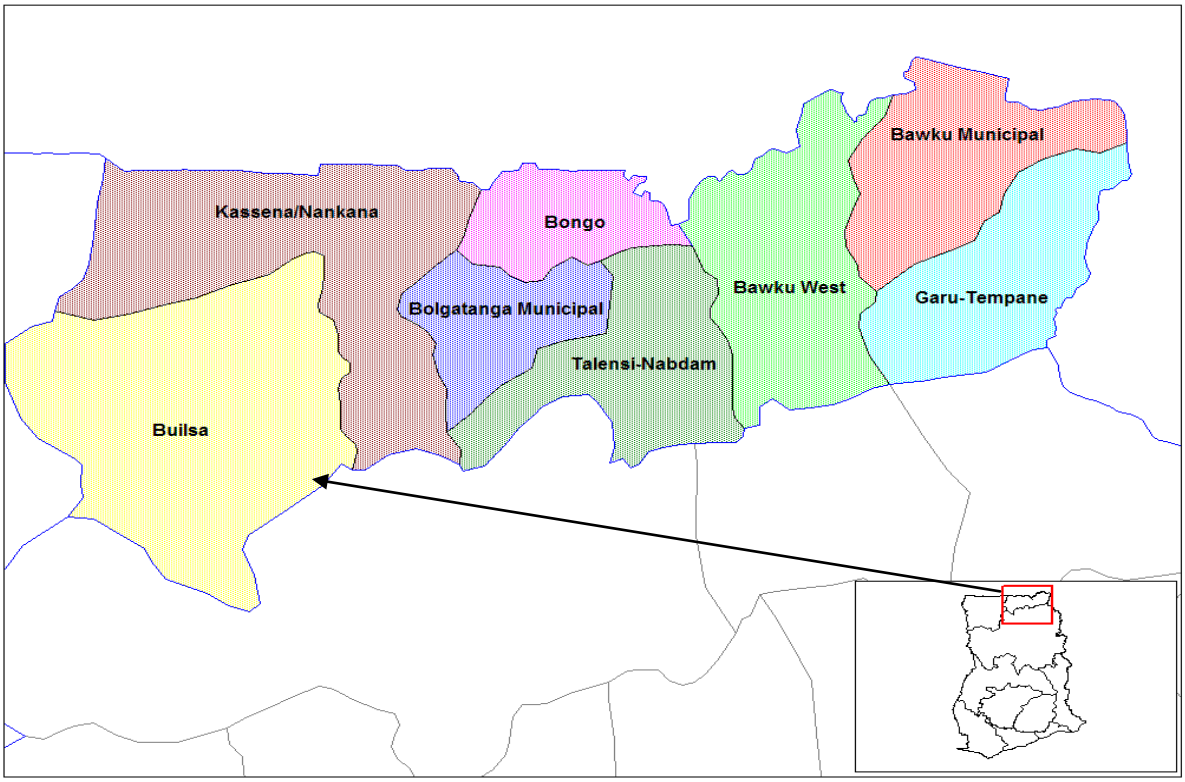

Figure: 2.1 Map of Builsa District (Study Area) of the Upper East Region of Ghana

3.3 Dependent Variable

The dependent variable for this study is a choice of place for delivery.

3.4 Independent Variables

The independent variables are: Demographic characteristics (age, education, religion, occupation, marital status, income, ethnicity, and parity), antenatal care attendance, household decision making of place of delivery, traditional beliefs. Others are, level of satisfaction of care, distance to clinic, cost of transport, and availability of transport to health facility, respondent's knowledge level of free maternal delivery and ambulance services.

3.5 Study Population

All women who gave birth within the last two years (2011-2012) in Builsa north district and permanently reside in the district as well as their partners formed the population for this study. The total study population was 13,951 (DHMT, 2012).

Inclusion criteria

All women of reproductive age (15-49 years) who reside in Builsa north district and gave birth either in the health facility or anywhere in the district within the period 1st January, 2011 to 31st December, 2012 and their partners are qualified for the study. If a woman gave birth twice within the last two years she was interviewed on the last born.

Exclusion criteria

A person was not included in the study if she gave birth in Builsa north district within the previous two years but do not reside there or gave birth somewhere and currently resides in Builsa north district.

3.6 Sample Size

From the formula $N = P (1-P) / e^{2.}$ Where:

N = Sample size

Z = confidence level at 95% = standard value of 1.96

e = standard error at 2.5%

P = population of women of childbearing estimated to be 23% a baseline study.

Source: Varkervisser *et. al.*, (2013)

$N = 23 (100 – 23) / 2.5^2 = 283$

If 10% non response rate is added it sums up to 311 respondents. But a sample size of 200 women and their partners were used for the study because of limited resources and time constraints.

3.7 Sampling Method

This study used multi-stage sampling techniques for the 200 women and their partners. Proportionate sampling was used to calculate the sample for each sub-district. The populations of the women of reproductive age and the sample (based on ratios) from the respective sub-districts are as follows:

Table 3.2: Sub districts with sample sizes

Sub district	**Women of reproductive age**	**Sample size**
Sandema	4,851	70
Chuchuliga	3,037	44
Wiaga	4,813	68
Siniesi	1,250	18
Total	**13,951**	**200**

The communities' were cluster into sub districts. Two communities in each sub district were selected for the study. This was done by writing the names of the communities on pieces of paper of same size, shape and colour. They were folded and mixed up in a box.

A blindfolded selection of two papers from each sub district was made and the two communities picked from each sub district were selected for the study.

The geographical centre of each community selected was identified. A pencil was tossed and the first house at the direction of the tip of pencil was selected and visited and women who reside in Builsa north district and gave birth within the last two years [2011-2012] were identified and interviewed with their partners. After each house visit the pencil was tossed again and the next house at the direction of the tip of pencil was visited until the required sample was met.

In a house where more than one woman met the eligibility criteria, one Yes and No were written on pieces of paper of the same size, shape and colour and put in a box. They women were made to ballot and any woman who picked Yes and her partner were then interviewed separately.

Women, who delivered twice within the last two years, were interviewed only on the last delivery. The questionnaire (Appendix 2) was used to interview respondents on face-to-face interactions. Both women who delivered at the health facility and those who did not deliver at health facility were interviewed.

3.8 Data Collection Techniques/Methods

An interviewer administered questionnaire was used to collect data from the participants. The interview was conducted using the local language (Builli) and the responses of the respondents during the interview were recorded. The women and their partners were interviewed in their own homes separately as per interview schedule. The purpose of the study was explained to the women and their partners and verbal consent sought from

them to be the part of study. They were given the option to participate or decline to be part of the study.

3.9 Quality Control

i. Eight nurses (research assistants) who understood the local language very well were trained on how to collect the data for this study.

ii First, they were trained on the theory aspect, each item in the questionnaire was read in English and translated in Buili and discussed thoroughly to the understanding of the research assistants. They were also trained on how to approach respondents and make the respondents feel relaxed to answer the questions.

iii Secondly, they conducted mock interview among themselves and the necessary corrections discussed before they went to field for data collection.

iv. The questionnaires were scrutinized for any missing items before data entry. Questionnaires with missing items were sent back to the field for respondents' to complete the missing items before data entry was done.

v. The investigator paid regular visits to the field to supervise how the interviews were conducted and few anomalies observed in the field were discussed and necessary corrections made.

3.10 Pretest or Pilot Study

The questionnaires were pretested in the Kasena-Nankana district which has the same environment and demographic characteristic like Builsa north district and the necessary corrections made before the questionnaires were sent to the field for data collection.

3.11 Data Processing and Analysis

The SPSS version 16.0 was used for the data analysis. Data was analyzed and the results presented in tables, pie chart, bar charts, frequencies and percentages. Chi-square was used to test for significance of associations between variables.

3.12 Ethical Consideration

Ethical clearance was obtained from Ghana Health Service Ethical Review Committee on Research Involving Human Subjects (GHS-ERC; 59/03/13) before carrying out the study. The consent of the Regional Director of Health Services Upper East, the District Director of Health in Builsa North District and approval from the chiefs of the various villages of the study were sought prior to data collection. Informed verbal consent (appendix 1) was obtained from respondents before participation in the study and respondents had the right to discontinue with the study at anytime if she or he so wishes. Respondents were assured of confidentiality of any information given by them.

I declare that there is no conflict of interest, apart from the academic and public health importance of this study.

3.13 Limitations

Since the research assistants who conducted the interview were health personnel (nurses) this might have influenced the women and their partners' replies to questions related to health thereby introducing information bias.

Population-based health seeking behaviour data rely mostly on women and partners recall, with a 2-week recall period is often recommended in interview surveys (Kroeger, 1985). This study was for respondents to recall what happened between the period of one to two years and this is sufficiently long to be affected by selection bias.

There were limited time and resources which could otherwise have extended the coverage of the study. However, these limitations did not affect the interpretation of the findings nor inference to the entire population.

CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

This chapter presents the results of the study. There are five major factors: demographic characteristics of the respondents, perception of clinical care, socio-cultural factors, satisfaction of care, constrains to health facility delivery and respondents knowledge of free maternal and ambulance service.

4.2.0 Demographic characteristics of the respondents

4.2.1 Age of the respondents

The distribution of the respondents in five year age group is presented in Table 4.1. The minimum age was 15 and the maximum age was 75 years. The overall average age was 33 years. The average age of the men and the women were 38 and 28 years respectively.

4.2.2 Marital status of the respondents

The marital status of the respondents was also explored. From Table 4.1, all the males (100%) and all the females (100%) were married.

Table 4.1: Demographic characteristics of respondents in the Builsa North District by sex

Variable	Women		Men	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Age				
15 – 24	57	28.5	13	6.5
25 – 34	108	54.0	78	39.0
35 – 44	34	17.0	64	32.0
45 – 54	1	0.5	20	10.0
55 – 64	0	0	17	8.5
65+	0	0	8	4.0
	Average age = 28 years		**Average age = 38 years**	
Marital Status				
Single	0	0	0	0
Married	200	100	200	100
Education level				
No education	73	36.5	91	45.5
Primary	34	17.0	35	17.5
Middle/JHS	42	21.0	23	11.5
Secondary/SHS	34	17.0	17	8.5
Technical/Vocational	1	0.5	3	1.5
Tertiary	16	8.0	31	15.5
Ethnicity				
Builsa	184	92.0	198	99.0
Kantosi	3	1.5	1	0.5
Kasena	12	6.0	0	0
Nankana	1	0.5	1	0.5
Religion				
Traditional	29	14.5	97	48.5
Christian	160	80.0	88	44.0
Muslim	7	3.5	10	5.0
None	4	2.0	5	2.5
Occupation				
Formal employment	27	13.5	32	16.0
Farming	84	42.0	129	64.5
Trading/Selling	38	19.0	14	7.0
Craftsmanship	8	4.0	10	5.0
Service	31	15.5	9	4.5
Student	11	5.5	5	2.5
No work	1	0.5	1	0.5
Monthly income (GH¢)				
<100	168	84.0	159	79.5
100-999.99	31	15.5	41	20.5
≥1000	1	0.5	0	0
Parity				
1	54	27	41	20.5
2	52	26	43	21.5
3	39	19.5	44	22.0
4+	55	27.5	72	36.0

4.2.3 Educational attainment of respondents

Education plays a vital role in terms of enhancing people's knowledge on place of delivery during labour; hence the level of education was explored. This research (Table 4.1) shows that, females had higher levels of education than males. Ninety-one (45.5%) of the males had no formal education, and 73 (36.5%) of the females also had no formal education.

4.2.4 Ethnicity of respondents

Four major ethnic groups were identified from the study. They are the Builsa, Kantosi, Kasena and Nankana. As shown inTable4.1, the majority of women, 184 (92.0%) and men 198 (99.0%) of the respondents were Builsas. Less than a tenth women (9.0%) and men (2.0%) were Kantosi, Kasena or Nankana.

4.2.5 Religious affiliation of respondents

Among the respondents, 160 (80%) of the females were Christians compared to 88 (44.0%) for males. While 97 (48.5%) of the males were affiliated to the traditional religion only 29 (14.5%) of women were traditionalist.

4.2.6 Occupation of respondents

From Table 4.1 it shows that, the respondents were mostly farmers: this was dominated by the males. Males 129 (64.5%) have farming as their occupation. Also a higher proportion of women 38 (19.0%) were traders and 31 (15.5%) provided services such as hairdressing. Some of the females 11 (5.5%) were students.

4.2.7 Monthly income of respondents

It can be seen from Table 4.1 that on the average, the males had greater proportion 41 (20.5%) of those who received between GH¢100 (US$50) and GH¢ 999.99 (US$500) monthly as compared to 15.5% of females. However, it was observed from the data that less than 1 (0.5%) of the females received a monthly income of over GH¢1000 (US$500).

4.2.8 Parity of respondents

The number of children born by the respondents was also explored, since the study seeks to explore the factors regarding the choice of place of delivery. It can be seen from Table 4.1 that about 20% each of both sexes reported having children in all the categories (1, 2, 3 and 4 and above). However, higher proportions of males 72 (36.0%) reported that their partners had three or more children as well as the females 55 (27.5%).

4.3.0 Antenatal care practices

Women were asked how old was the pregnancy (in months) when they first attended antenatal clinic, while male respondents were asked about how old their partners pregnancy was when they first visited antenatal clinic. Generally, the males 182 (91.0%) had no knowledge on the months in which their partners attended antenatal clinic. On the other hand, 141 (70.5%) females attended antenatal clinic in the first trimester and 49 (24.5%) of them attended antenatal clinic within second trimester.

About 75% of the females had visited the antenatal clinic for more than four times, and a few more of them did so less than five times (6.0%, 3.5%, 1.5% and 1.0% for four, three, two and one visits respectively). The case of the males was contrary to that of the

females. It can be seen that 176 (88%) of the males did not know the number of times their partners received antenatal care, although 20 (10.0%), acknowledged that their partners had received antenatal care for more than four times.

It can be seen from Table 4.2 that over half of the females visited antenatal clinic on their own: while 68.5% of the females reported visiting antenatal care alone, about 73.5% of the males did not know who accompanied their partners for antenatal care. However, there were also some of the partners 36 (18.0%) who accompanied their spouses during the antenatal visits. Only 1 (0.5%) of the females reported being accompanied by traditional birth attendance (TBA).

Table 4. 2: Antenatal care practices

Variable	Women		Men	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Trimester visit (months)				
One – three	141	70.5	13	6.5
Four – six	49	24.5	5	2.5
Seven – nine	0	0	0	0
Don't know	10	5.0	182	91.0
Receiving antenatal care				
One	2	1.0	0	0
Two	3	1.5	0	0
Three	7	3.5	1	0.5
Four	12	6.0	3	1.5
More than four	150	75	20	10.0
Don't know	26	13.0	176	88.0
Partner visit for antenatal care				
No one	137	68.5	24	12
Husband/Partner	36	18.0	12	6.0
Relative	18	9.0	17	8.5
TBA	1	0.5	0	0
Neighbour	4	2.0	0	0
Don't know	4	2.0	147	73.5

The study also explored the kinds of education/care received during the antenatal care. Generally, the majority of females reported being educated on issues such as delivering with a nurse or midwife or doctor 192 (96.0%), danger signs of pregnancy 183 (91.5%), free maternal delivery service 181 (90.5%), family planning 165 (82.5%) and free ambulance service 149 (74.5%) as shown in Table 4.3.

Table 4.3: Percentage distribution of antenatal care education

Variable	Women	
	Frequency	Percentage (%)
Family Planning		
Educated on family planning	165	82.5
No education on family planning	35	17.5
Delivery with Nurse		
Education on skilled attendant	192	96.0
No education on skilled attendant	8	4.0
Danger signs of Pregnancy		
Counseled on danger signs	183	91.5
No education on danger signs	17	8.5
Free ambulance Service		
Educated on free ambulance	149	74.5
No education on free ambulance	51	25.5
Free maternal delivery service		
Educated on free maternal service	181	90.5
No education on free maternal service	19	9.5

The place of delivery is presented in Figure 4.1. The majority of the females and their male partners reported delivering at a health facility 328 (82%). About 15% also delivered at their own homes. Very few 12 (3%) of the deliveries were done at the TBA's home.

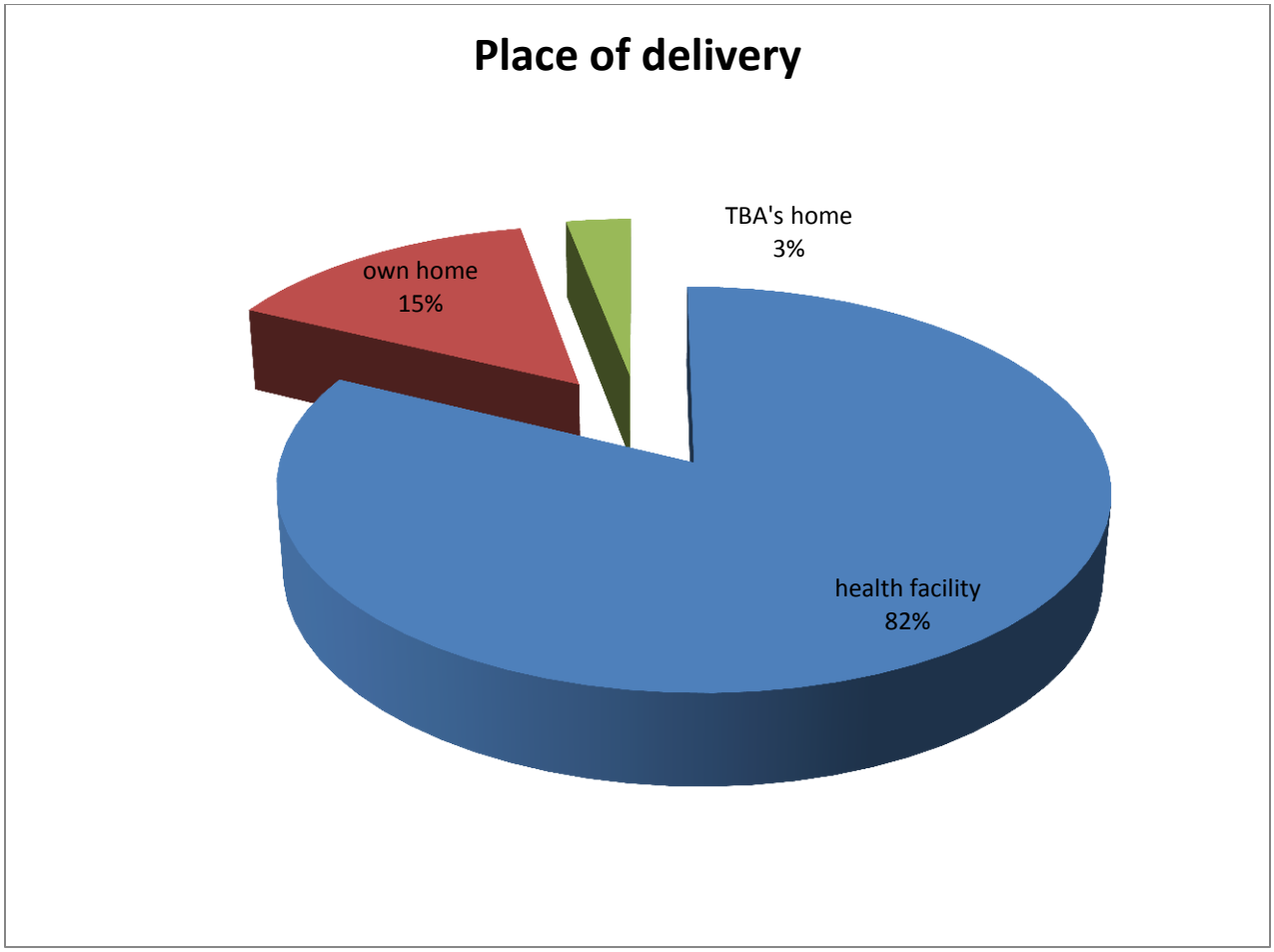

Figure 4.1: Place of delivery of last child

4.4 Perception of Clinical care

Generally, the females had a higher perception about clinical care compared to the males. A greater proportion (97.3%) of the females compared to the males (92.1%) had a good perception of clinical care. There was good perception of the health facility delivery among respondents. The majority of the women 166 (90.2%) and men 101 (88.6%) reported that the doctors and midwives were capable of finding out problems with their pregnancy. Women 91 (49.7%) and men 21 (24.1%) said that, waiting, examination and delivery rooms were adequate. This is shown in Table 4.4.

Variable	Females		Males	
	Frequency	Percentage (%)	Frequency	Percentage (%)
The doctors are … at finding out problems				
Capable	166	90.2	101	88.6
Somewhat capable	11	6.0	12	10.5
Not capable	7	3.8	1	0.9
The waiting, delivery rooms are				
Adequate	91	49.7	21	24.1
More or less adequate	46	25.1	32	36.8
Inadequate	46	25.1	34	39.1
Pregnant women cared for				
Recovered well	157	86.3	94	87.0
Recovered relatively well	23	12.6	13	12.0
Did not recover	2	1.1	1	0.9
Doctors examine their patient				
Well	171	92.9	92	46.0
Somewhat well	13	7.1	6	6.1
Not very well	0	0	1	1.0
Doctors and midwives are				
Open	167	90.8	76	72.4
Somewhat open	14	7.6	27	25.7
Not very open	3	1.6	2	1.9
Doctors and midwives are				
Respectful	163	87.6	76	71.0
Somewhat respectful	18	9.7	27	25.2
Not very respectful	5	2.7	4	3.7
Number of doctors/midwives are				
Adequate	96	52.2	35	33.3
More or less adequate	53	28.8	24	22.9
Inadequate	35	19.0	46	43.8
Doctors and midwives are				
Well suited	153	83.6	63	67.0
Relatively well suited	24	13.1	17	18.1
Not well suited	6	3.3	14	14.9

Table 4.4: Perception of clinical care

4.5 Satisfaction of care

Concerning satisfaction of delivery care, almost all the respondents showed that they were not satisfied with the delivery care at the health facility. About 96.9% of women and 89.7% of men were not satisfied with delivery care at the health facility.

Despite the low satisfaction of care at the health facility, Table 4.5 showed that, women 174 (87.0%) and men 142 (71.0%) were likely to recommend or deliver again at the health facility**.**

Table 4.5: Recommendation of health facility for delivery

Variable	Females		Males	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Likely to recommend facility				
Very likely	174	87.0	142	71.0
Somewhat likely	5	2.5	15	7.5
Not sure	14	7.0	30	15.0
Somewhat unlikely	2	1.0	4	2.0
Unlikely	5	2.5	9	4.5
Likely to deliver again at facility				
Very likely	165	82.5	144	72.0
Somewhat likely	8	4.0	17	8.5
Not sure	19	9.5	28	14.0
Somewhat unlikely	0	0	2	1.0
Unlikely	8	4.0	9	4.5

4.6 Socio-Cultural Factors

Largely, it was reported that health personnel assisted with the delivery. About 79.5% of females and 69.5% of males mentioned that nurses or midwives assisted with delivery of the last child. Women 11 (5.5%) and men 22 (11.0%) reported that, Traditional Birth Attendants assisted with the delivery of the last child. This is illustrated in Figure 4.2.

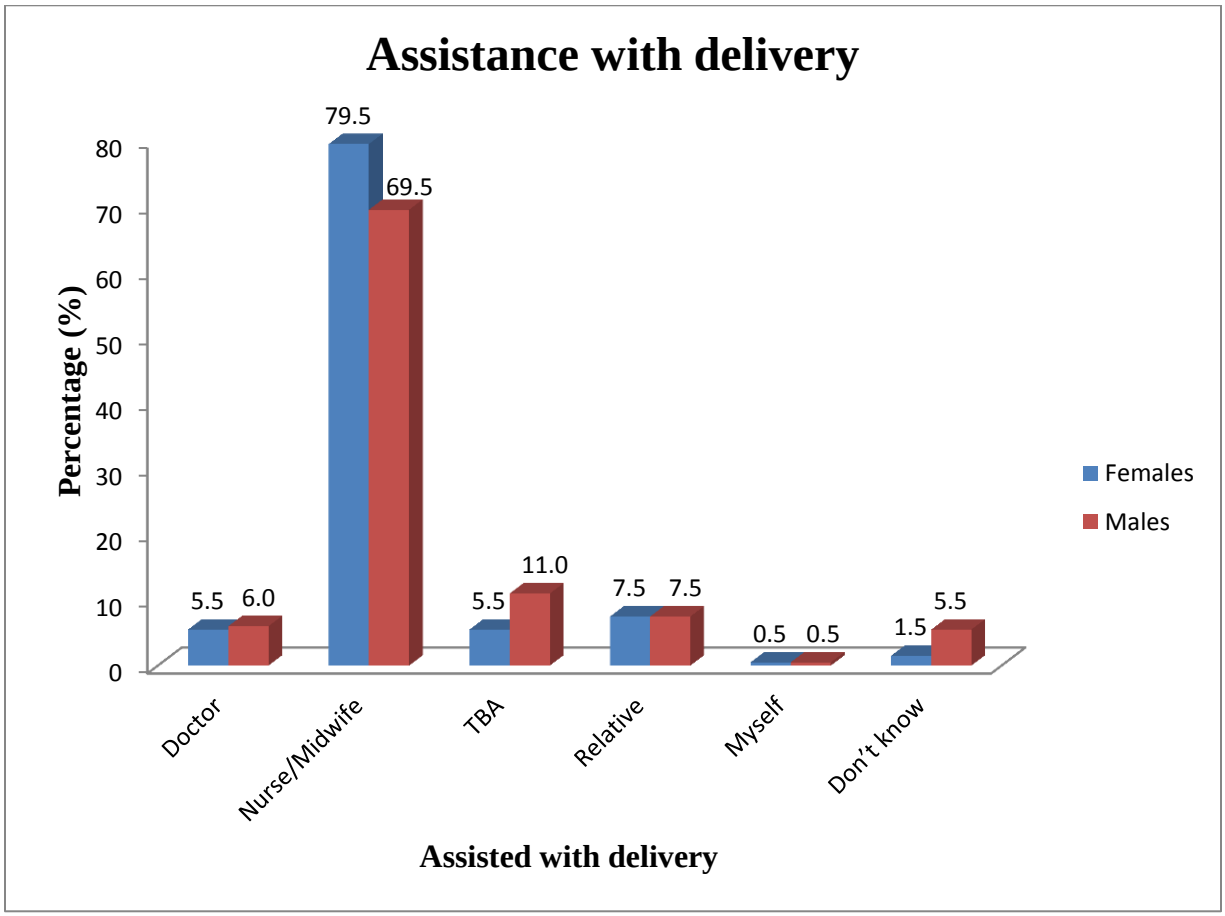

Figure 4.2: People who assisted with last delivery

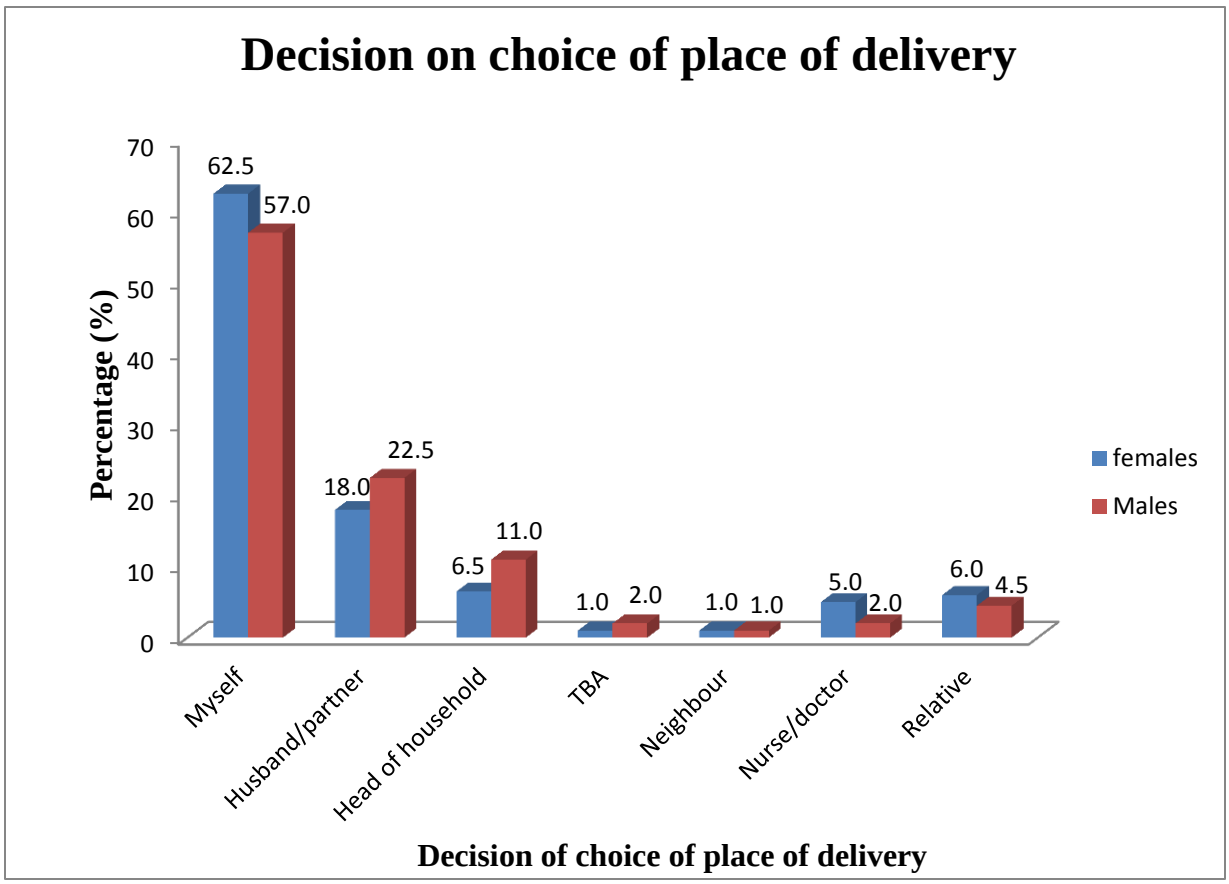

Figure 4.3: Decision on choice of place of delivery

Decision making on choice of place of delivery as shown in Figure 4.3 indicates that 62.5% of females made the decision on their own on choice of place of delivery; while 22.5% of males reported deciding for their wives.

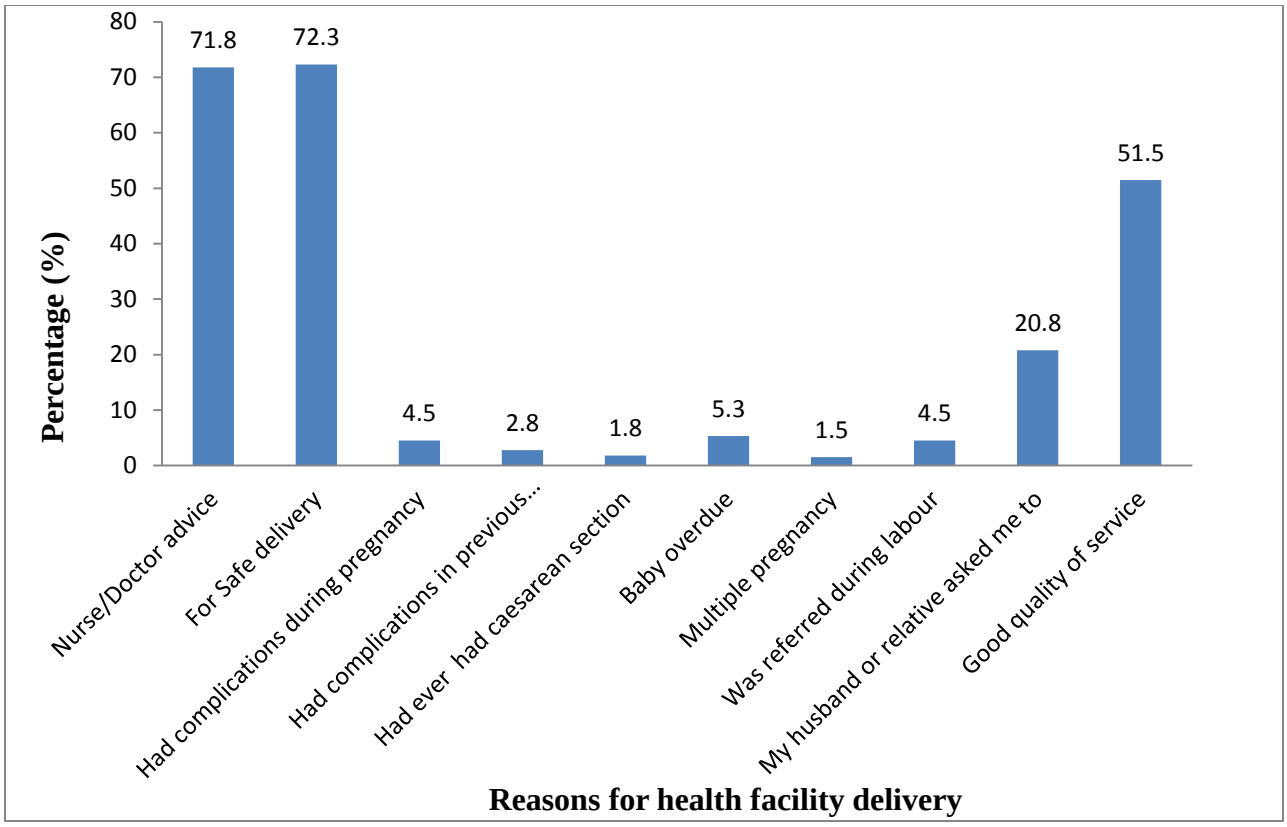

Figure 4.4: Reasons for health facility delivery

Among women who delivered at health facility and their partners, the reasons for their choice of health facility for delivery were explored as shown in Figure 4.4. Their choice was based on the following: safety 289 (72.3%), a nurse or doctor advice 287 (71.8%) and because of complications during pregnancy18 (4.5%).

Unavailability of transport constituted the highest proportion 33 (8.3%) of the reasons why women and their partners did not choose health facility for delivery. This was followed by the distance to the health facility 23 (5.8%), normal pregnancy 20 (5.0%), successful previous home delivery 17 (4.3%) and cost of transport 12 (3.0%).

4.7 Constraints to health facility delivery

Access to the place of delivery depends on the means of transport to the health facility. The results show the means of transport to the health facility as follow; by foot 71 (17.8%), bicycle 35 (8.8%), motor king 181 (45.2%) and car 76 (19%). It was noted that the women mostly patronized the motor (45.2%) to travel to the health facility. This was followed by car (19.0%), by foot (17.8%) and by then by bicycle (8.8%).

Women 55 (28.8%) and men 61 (33.3%) said the distance to the health facility was short. Similarly, about the same proportion perceived the travel time to the health facility as short. However, a higher proportion perceived getting transport to the health facility to be difficult, this was high for both male 37.5% and female 43.7%. On the contrary, women 74 (48.7%) and men 76 (48.4%) perceived the cost of transportation to be affordable. Women 71.7% and men 54.9% mentioned the fees paid by the pregnant women were affordable. The female respondents165 (87.8%) and males 105 (77.2%) perceived that, the opening hours of the health facility to be suitable. Greater proportions of women 171 (90.0%) and men 96 (73.8%) considered the staff at the hospital facility to be honest.

Table 4.6: Constrains to health facility delivery

Variable	Females		Males	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Distance to health facility is				
Short	55	28.8	61	33.3
Somewhat long	64	33.5	57	31.1
Long	72	37.7	65	35.5
Travel time to health facility is				
Short	55	28.8	62	33.7
Somewhat long	68	35.6	62	33.7
Long	68	35.6	60	32.6
Getting transport is				
Not at all difficult	55	31.1	52	31.1
Somewhat difficult	47	26.6	42	25.1
Difficult	75	37.5	73	43.7
Cost of transportation is				
Affordable	74	48.7	76	48.4
Somewhat affordable	45	29.6	48	30.6
Not affordable	33	21.7	33	21.0
Fees paid by pregnant women are				
Affordable	33	71.7	39	54.9
Somewhat affordable	6	13.0	24	33.8
Not affordable	7	15.2	8	11.3
Opening hours of health facility is				
Suitable	165	87.8	105	77.2
Somewhat suitable	13	6.9	20	14.7
Not very suitable	10	5.3	11	8.1
Doctors and midwives are				
Available	167	87.9	92	68.7
Somewhat available	18	9.5	37	27.6
Not available	5	2.6	5	3.7
People in the hospital are				
Honest	171	90.0	96	73.8
Somewhat honest	17	8.9	29	22.3
Not very honest	2	1.1	5	3.8

4.8 Knowledge of Free Maternal and Ambulance Service

The respondents understood free maternal delivery to be a pregnant woman accessing clinical care services in the hospital for free including delivery care. This was the view of 156 (78.0%) female and 136 (68.0%) male respondents.

Respondents did not make any payments for delivery services. However, males 4 (2%) said to have made some payments for their spouses during delivery as compared to 3 (1.5%) of the women.

The majority of women 137 (68.5%) and men 115 (57.5%) mentioned free ambulance services to be linked to conveying women in labour to the hospital for delivery. Surprisingly, it was noted that only 6 (1.5%) of the respondents had ever used the free ambulance service.

Bivariate analysis of choice of place for delivery and the independent variables at 95% significance level ($P < 0.05$) using Chi- Square is shown in Table 4.7. The table showed that there was association between age, occupation, traditional beliefs, parity, month of starting ANC, number of ANC visits, and distance to health facility, satisfaction of care and place of delivery. However there was no association ($P > 0.05$) between place of delivery and education, religion and ethnicity as shown in table 4.7 below.

Table 4.7: Bivariate analysis of factors associated with choice of place of delivery among women and their partners in Builsa North District.

Variable	n (400)		P-Value
	Others (Home deliveries)	Facility Deliveries	
Age			**P = 0.002***
15-24	9 (12.86%)	62 (87.14%)	
25-34	19 (10.22%)	167 (89.78%)	
35-44	25 (25.51%)	73 (74.49%)	
45-54	7 (33.33%)	14 (66.67%)	
55-64	1 (5.88%)	16 (94.12%)	
65-75	2 (25.00%)	6 (75.00%)	
Education			**P = 0.236**
No education	31 (18.90%)	133 (81.10%)	
primary	11 (15.94%)	58 (84.06%)	
Middle/JHS	10 (15.39%)	55 (84.62%)	
Secondary/SHS	9 (17.65%)	42 (82.35%)	
Technical/Vocational	0 (0.00%)	4 (100%)	
Tertiary	2 (4.26%)	45 (95.74)	
Religion			**P = 0.686**
None	1 (11.11%)	8 (88.89%)	
Traditional	22 (17.46%)	104 (82.54%)	
Christianity	36 (14.52%)	212 (85.48%)	
Islam	4 (23.53%)	13 (76.47%)	
Ethnicity			**P =0.767**
Builsa	61 (15.97%)	321 (84.03%)	
Kantosi	0 (0.00%)	4 (100%)	
Kasena	2 (16.67)	10 (83.33%)	
Nankana	0 (0.00%)	2 (100%)	
Marital status			**P =0.539**
Married	7 (15.94%)	3393 (84.06%)	
Single	0 (0.00%)	0 (00.00%)	
Occupation			**P = 0.030***
Formal employment	4 (8.78%)	55 (93.22%)	
Farming	46 (21.60%)	167 (78.40%)	
Trading /Selling	89 (15.38%)	44 (84.62%)	
Craftsman	1 (5.56%)	17 (94.44%)	
No work	3 (7.50%)	37 (92.50%)	
Service	1 (6.255)	15 (93.75%)	
Month for starting ANC			**P < 0.001***
One-three	14 (9.09%)	140 (90.91%)	
Four-six	5 (9.26%)	49 (90.74%)	
Seven-nine	44 (22.92%)	148 (77.08%)	
Parity	10 (10.53%)	85(89.47%)	**P < 0.001***
One	10 (10. 53%)	85(89.47%)	
Two	13 (15.66%)	70(84.34%)	
Three	30 (23.62%)	97(76.38%)	

Number of ANC visits			**P < 0.001***
One	1 (50.00%)	1 (50.00%)	
Two	2 (66.67%)	1 (33.03%)	
Three	0 (0.00%)	8 (100%)	
Four	2 (13.33%)	13 (86.67%)	
>four	15 (8.82%)	155 (91.18%)	
Don't know	43 (21.29%)	159 (78.71%)	
Last child delivered by			**P < 0.001***
Doctor	1 (4.35%)	22 (95.65%)	
Nurse/ midwife	2 (0.67%)	296 (99.33%)	
TBA	30 (90.91%)	3 (9.09%)	
Relative	19 (73.08%)	7 (26.92%)	
Decision of place of birth			**P < 0.001***
Myself	16 (7.27%)	204 (92.73%)	
Husband/partner	10 (11.76%)	75 (88.24%)	
Head of household	13 (37.14%)	22 (62.86%)	
TBA	0 (0.00%)	6 (100%)	
Neighbour	1 (25.00%)	3 (75.00%)	
Traditional beliefs			**P < 0.001***
Yes traditional beliefs	9 (100%)	0 (0.00%)	
No traditional beliefs	54 (13.81%)	337 (84.25%)	
Satisfaction of care			**P < 0.001***
Strongly Agree	0 (0.00%)	9 (100%)	
Agree	0 (0.00%)	12 (100%)	
Not sure	0 (0.00%)	11 (100%)	
Disagree	0 (0.00%)	60 (100%)	
Strongly Disagree	5 (3.16%)	153 (96.84%)	
Not applicable	58 (38.67%)	92 (61.33%)	
Distance to health clinic			**P < 0.001***
Short	11 (9.48%)	105 (90.52%)	
Somewhat long	14 (11.57%)	10 (88.98%)	
Long	26 (18.98%)	111 (81.02%)	
Not applicable	12 (46.15%)	14 (53.85%)	
Satisfaction of care			**P < 0.001***
Very likely	15 (4.75%)	301 (95.25%)	
Somewhat likely	4 (20.00%)	16 (80.00%)	
Not sure	31 (70.45%)	13(29.55%)	
Somewhat unlikely	5 (83.33%)	1 (16.67%)	
Very unlikely	8 (57.14%)	6 (42.86%)	

Abbreviations; n = total number of respondents,*statistically significant association at P < 0.05

CHAPTER FIVE

5.0 DISCUSSIONS

5.1 Introduction

This chapter discusses the findings of the research in relation to the objectives of the study and the conceptual framework of the study. It is an evaluation of factors associated with choice of place for delivery in Builsa north district. Understanding the choice of place of delivery will improve the health services delivery and assist in directing efforts towards better use of resources. The discussions are presented as follow:

5.2 Demographic characteristics of respondents

The overall mean age was 33 years and the mean age for women and their partners were 28 and 38 years respectively. The majority of the men and women were between 15 and 44 years implying that, the respondents were mostly youthful. The age range in this research is similar to the national age distribution structure where the population bulges in the age group of 12 to 44 years and peaks with the aged (GSS, 2009).

The finding indicates that, there was a significant association between age and place of delivery ($P< 0.001$) supporting Shemika *et. al.,* (2012) finding in Ethiopia that mothers with age group of 15–24 years were more likely to deliver in health institutions than mothers with age group 35 and above.

Education plays a vital role in terms of enhancing people's knowledge of their health; hence the level of education was explored. The study shows that males 91 (45.5%) and the women 73 (36.5%) had no formal education. The finding show that, there was no association between level of education and place of delivery ($P = 0.236$), but this finding

is contrary to a study in Kenya by the assertion of Wanjira *et. al.,* (2011) that there is significant association ($P < 0.001$) between education and place of delivery.

The findings of this research show that there was no association ($P > 0.05$) between respondents' ethnicity, monthly income, religion and place of delivery. However, this finding is contrary to other studies which indicate that there is strong association between these demographic characteristics and choice of place for delivery (Adetunji, 1996, Mekonnon & Mekonnon, 2002; Addai, 1998). This may be explained by the fact that the majority of the respondents (80% of the women) are Christians and do not have superstitious beliefs of health facility delivery. Also it could be due to the free maternal service, since government bear the full cost of delivery; therefore finance is not a problem.

It is clear from this study that, there was a strong association between the number of children and place of delivery ($P < 0.001$); but this finding was contrary to other studies that showed that the use of clinical care facility during delivery is high for the first borns and reduces as the number of births increase due to resources constraints (Elo, 1992; Wong, 1987). Possibly, women in Builsa north district become more conscious of their health as the number of births increase.

5.3 Women and partners perception of clinical care during delivery

Generally, there were higher proportions of female (97.3%) with positive perceptions about the place of delivery. This may be explained by the fact that, most of the males hardly visited antenatal care clinics with their spouses hence they may not be able to describe how antenatal care is carried out. About 87.9% of women and 68.7% of men thought that the doctors and midwives were available at the hospital to care for them.

Again, about, 90.0% of women and 73.8% men believed that the people at the hospital were honest.

The majority of women reported being educated on issues such as delivering with a nurse or midwife or doctor 192 (96.0%), danger signs of pregnancy 183 (91.5%), free maternal delivery service 181 (90.5%), family planning 165 (82.5%) and free ambulance service 149 (74.5%) during antenatal clinics. This finding is in support of a study carried out in Kenya that showed that the main predictor for place of delivery during labour is education by health providers during antenatal care to deliver at health facility (Fotso *et. al.*, 2009). Thus, education by healthcare providers during ANC is closely linked to the choice of place of delivery as depicted in the conceptual framework.

Again, this current study revealed that there was significant association ($P < 0.001$) between the number of antenatal clinic attendance and place of delivery. This finding is in line with other finding that shows that women are more likely to give birth with skilled attendant if they have had at least one ANC visit (Ornella, *et. al.*, 2011). This finding could be explained as a result of education the health personnel give to women who regularly attend ANC on the dangers of home deliveries.

5.4 Socio-cultural factors

Assistance during delivery of the last child was also assessed, and it was found out that, women (79.5%) and men (69.5%) mentioned that nurses or midwives assisted with the delivery of the last child. The percentage of women attended to by skilled birth attendants in this study was higher than cross sectional studies done in Zambia (42.8%) and Tanzania (46.7%) among mothers who utilized health facility for childbirth (Hazemba &

Siziya, 2008; Rose *et. al.,* 2008).This finding could be attributable to the free maternal health service policy that was implemented in the Builsa north district in 2001.

This study shows that, only 5.5% of the women said they were attended to by Traditional Birth Attendants. This is contrary to an ethnographic study of childbirth healthcare-seeking behaviour (in Chiapas, Mexico) where women in rural communities preferred to be attended by TBAs (Hunt *et. al.,* 2003). The low utilization of TBAs services for delivery in the district may be explained by the fact that, the women in the district were well informed about complications associated with TBAs deliveries.

The reasons for choosing health facility for delivery were based on the following: safe delivery (72.3%), a nurse or doctor advice (71.8%), for good quality service (51.5%) and also the advice from husbands and other relatives (20.8%). This finding is consistent with other studies conducted in Iran which showed that safety and social support were the reasons why women choose where to give birth (Shahoei *et. al.,* 2011; Madhi and Habib, 2010).

Most of the respondents made the decision on their own on the choice of place of delivery: while 62.5% of women reported making decisions on their own, 22.5% of men reported deciding for their wives. This finding is closely in line with a study that was carried out in Senegal, indicating that more than 50% of decisions regarding female treatment were made by men (Post, 1997).This may be explained by the fact that, the males are heads of household in the district and therefore, make final decisions pertaining to any issue in the house.

5.5 Level of satisfaction during delivery

Concerning satisfaction with delivery care, almost all the respondent showed that they were not satisfied with the delivery care at the health facility.

Despite the low satisfaction of care, respondents were likely to recommend or deliver again at the health facility**.** This may be due to the fact that those health facilities are the only available ones in the district. There is strong association (P< 0.001) between satisfaction and place of delivery from this study. This is in line with the conceptual framework and a similar study conducted in Ashanti Mampong (Ghana) that indicates that clients' satisfaction is associated with use of the health facility (Dzomeku, 2011).The findings however, is inconsistent with a study in Tanzania which indicated that there was no significant association (P = 0.19) between satisfaction and place of delivery (Kruk *et. al.*, 2009).

5.6 Constraints associated with health facility delivery

The reasons for not choosing to deliver at the health facility were explored. Unavailability of transport constituted the highest proportion (8.3%) of the reasons for not delivering at a health facility. This was followed by the distance to the health facility (5.8%), normal pregnancy (5.0%); cost of transport too much (3.0%) and traditional beliefs (2.3%).

Findings of this present study corroborate with other studies that revealed that unavailability of transport, distance to health facility and cost of transportation are the reasons why women do not deliver at health facility (Dolea *et. al.*, 2009; Kongnyuy *et. al.*, 2009; Ensor and Cooper, 2004; Gazali, 2012). The possible reasons for these findings

may be explained by the poor state of road network linking one village to another and the low income status of the inhabitants of Builsa north district.

5.7 Knowledge of Free maternal and Ambulance Service

Concerning the payment of delivery services, respondents did not make payment for delivery services; only 2.0% of the men and 1.5% of women mentioned to have made some payments during delivery. The findings of this study showed that 96.0% of women and 86.6% of their partners attested that they used maternal service without making any payment. This supported the assertion that, there was an increase in uptake of delivery care observed in the study of data from routine reports and a community survey in Central Region of Ghana (Bosu *et. al.*, 2004). However, it is in contrast with estimates from Northern Ghana that suggested that following the implementation of the free obstetric care policy, only 38% of women delivered with the assistance of a health professional, in spite of the fact that 98% of them had attended ANC (Mills *et. al.*, 2008). The reason for increased use of health facility for delivery was due to the fact that payments for delivery service which was a major problem to women and their spouses had been abolished.

More than half 68.5% and 57.5% of the women and men respectively mentioned free ambulance services to be linked to conveying women in labour to the hospital for delivery for free. While males mentioned the free ambulance service to be related with governments' responsibility of paying the cost for the transport of women who are in labour, some of the respondents had no idea about the free ambulance services.

Despite the fact that the respondents had knowledge of the free ambulance service, it was noted that only 1.5% had ever used the ambulance service.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

- The study shows that 82% of the women in Builsa north district deliver at health facility, implying a high utilization of health facility for delivery by women in Builsa North District.
- Distance, cost of transport and unavailability of means of transport to health facility are the problems hindering utilization of health facility for delivery.
- Only few men (18.0%) accompanied their partners to ANC visit and health facility for delivery.
- Women who attend ANC regularly deliver at the health facility. This could be attributed to the fact that those women receive adequate education from health workers about dangers associated with home deliveries.
- Although, there was low satisfaction of care rendered at the health facility, the women recommended the utilization of the health facility.
- Knowledge on the use of free ambulance services is lacking; although most (96.0%) of the respondents have knowledge of free ambulance service, only 1.5% of them have ever used this service.

6.2 Recommendations

- In order to encourage the use of modern health facilities during delivery, there is the need to increase health facilities to provide skilled delivery care, especially in the rural areas and underserved regions.
- It is known from this research that, only women with high parity used the services of skilled birth attendants. It is therefore important to educate women of low parity to use skilled birth attendants.
- There is the need to strengthen antenatal clinics by improving the provision of health education and information on complications of pregnancy and complications during labour to the women and especially their partner and the need to use maternal health services during pregnancy and delivery.
- Staffs of health facilities need to have frequent in-service training on communication and good interpersonal relationship with their clients and endeavour to provide services that meet the expectations of these clients.
- More studies are required to investigate the reasons why women and their partners do not patronise ambulance service (for delivery) despite their knowledge of free ambulance service. These studies should not only be multidisciplinary but also qualitative in nature.

REFERENCES

Adanu, R. (2008). The challenge of meeting the Millenium Development Goal for maternal health. *International Gynecolology Obstetrics* , 102 (1): 1-2.

Addai, I. (1998). Demographic and socio-cultural factors influencing use of maternal health services in Ghana. *An Africa Journal on Reproductive Health 2(1),* 73-89.

Adejunji, J. (1996). 'Preserving the Pot and the Water: A Traditional Concept of reproductive health in a Yoruba Community, Nigeria'. *In Social Sciences and Medicine*.

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes,* Vol. 50, 179-211.

Bertrand, J.T., Hardee, K., Magnani, R.J. and Angle, M.A. (1995). Access, quality of care and medical barriers in family planning programs. *International Family Planning Perspectives,* Vol (21) 2, 64-69.

Binka, F. N., Kubaje, A., Adjuik, M., Williams, L.A., Leneler, C., Muade, J. H., Armah, G. E., Kajihara, J. H. & Smith, P. G. (1996). Impact of permthrin impregnated bednets on child mortality in Kasena-Nankana district, Ghana: a randomized controlled trial. *Tropical Medicine and International Health* .

Bosu, W.K., Jacqueline, B., Margaret, A. R. & Janet, A. T. (2007). Effectiveness of delivery care user fee exemption policy on institutional and maternal deaths in Central and Volta Regions of Ghana. *Ghana medical Journal 41(3), 121.*

DHMT. (2011). Annual Performance Review, 2010. Builsa District Health Administration. *Unpublished* .

DHMT. (2012). Annual Performance Review, 2011. Builsa District Health Administration. *Unpublished* .

Dzomeku, M. V. (2011). Maternal satisfaction with care during labour: A case study of the Mampong-Ashanti district hospital maternity unit in Ghana. *International Journal of Nursing and Midwifery Vol. 3(3)* , 31-33.

El- Safty, M. (2000). Culture, Public Health and Community Development. *Health and Environments Education Association of Egypt* (HEEA). O U P, London.

Elo, I. T. (1992). 'Utilizationof Maternal Health Care Services in Peru:' The Role of Women's Education. *In Health Transition Review Vol.2 No.5*, 49 - 69.

Ensor, T. & Cooper, S. (2004). Overcoming barriers to health services access: influencing the demand side. *Health Policy and Planning* 19 (2), 69-79.

Essien, D. (2006). Reduction of Maternal Mortality in Akwalbom State. *Nigeria, Akwalbom State Council for Health* .

Faye, A., Mariam, N. & Ibrahim, B. A.(2011). Home birth women who have given birth at least once in a health facility: contributory factors in a developing country. *ACTA Obstetricia et Gynecologica.*

Fotso, J. E., Ezeh, A., Madize, N., Ziraba, A. & Ogollah, R. (2009). What does access to maternal care mean among the urban poor? Health services in the slum settlement in Nairobi, Kenya. *Maternal and Child Health Journal* , 1330-1337.

Gazali, W. A., Falmata, M. & Gana, M. M. (2012). Barriers to utilizaion of maternal health care facilities among pregnant and non- pregnant women of childbearing age in Maiduguri Metropolitan Council and JereWiloud Journal lgas of Borno. *Wiloud Journal*,14-18.

GHS. (2008). Reproductive Health Strategic Plan 2007-2011. *Reproductive and Child Department* .

Gilson, L. & Mclntyre, D. (2005). Removing user fees for primary care in Africa: the need for careful action. *BioMediacal Journal* . Vol.331(1):762-5.

GSS. (2009).Ghana Demographic Health Survey. Noguchi memorial Istitute for medical research ORC Macro. *Calverton, maryland* .

GSS. (2002). Population and Housing Census, summary report of final results. Accra, Ghana. *Ghana Statistical Service Special Report* .

GSS. (2008). Ghana Maternal Health Survey. Macro International Inc. Calverton Maryland, USA. *Ghana statistical Service Report* .

Hazemba, A.N. & Siziya, S. (2008). Choice of place for childbirth: prevalence and correlates of utilization of health facilities in Chongwe district. *Zambia Medical Journal Zambia*, **35** (2):53–57.

Hunt, L. M., Glantz, N. M. & Halperin, D. C. (2002). Childbirth care-seeking behaviour in Chiapas. *Health Care for Women International 23, 98-118.*

Hulton, L.A., Matthews, Z. and Stones, R.W. (2007). Applying a framework for assessing the quality of maternal health services in urban India. *Social Science and Medicine,* Vol. 64 (10), 2083-2095.

Kinney, M. V., Kerber, K. J., Black, R. E., Cohen, B.& Nkrumah, F. (2010). Sub-Saharan Africa's Mothers, Newborns and Children: Where and Why Do They Die? *PloS Med 7(6).*

Kongnyuy, E. J. Hofman, J.J. & Van den Broek, N. (2009). Ensuring effective Essential Obstetric Care in resource poor settings. *BJOG An International Journal of Obstetrics and Gynaecology*. Vol. 116 (1). 41-47.

Kruk, M. E., Mbaruku, G., McCord, C. W., Moran, M., Rockers, C. P. & Galea, S.(2009). Bypassing primary care facilities for childbirth: a population-based study in rural Tanzania. *Health Policy and Planning*. **24**, 279-288.

Kroeger, A. (1985). Response errors and other problems of health interview surveys in developing countries. *World Health Statistics Quarterly report* **38,** 15-37.

Mahdi, S. S.& Habib, O. S. (2010). A study on preference and practices of women regarding place of delivery. *Eastern Mediterrranean Health Journal. Vol. 16(*8), 875-877

Matthews, Z., Ramakrishna, J., Mahendra, S., Kilaru, A. and Ganapathy, S. (2005). Birthrights and rituals in rural south India: care seeking in the intrapartum period, *Journal of Biosocial Science,* Vol. 37, 4. 385-411.

Mekonnen, Y. & Mekonnen A. (2002). Utilization of maternal health cares services in Ethiopia. *ORC Marco Calverton Maryland USA* .

Mills, S., Williams, J. E., Adjuik, M. & Hodgson A.(2008). Use of health professionals for delivery following the availability of free obstetric care in northern Ghana. *Maternal and Child Health Journal,* 12 (4), 509-518.

Onah, H. E& Iloabachie G. C. (2006). Factors associated with use of maternal services in Enugu Southeasthern Nigeria. 63(7). *In Social Science and Medicine* , 1870-1875.

Ornella, L., Seipati, M. A., Gommez, P. & Munjanga, S. (2011). Antenatal Care. *Opportunities for Africa's Newborns,* 51-62.

Post, M. (1997). Preventing maternal mortality through emergency obstetric care. *Washington, DC: SARA Project, Academy for Educational Development*

Rose, N.M.M., Japhet, Z.K. Melkzedeck, T.L., Siriel, N.M., Albrecht, J., Declare, M. & Hassan M . (2008). Use pattern of maternal health services and determinants of skilled care during delivery in Southern Tanzania: implications for achievement of MDG-5 targets;http//:www.biomedcentral.com.

Royson, E. & Armstrong S. (1998). Preventing Maternal Mortality. *World Health Organization, Geneva* .

Samuel, E. A., Hydara, A. & Jatieh, L. E. S. (2008). Antenatal care in The Gambia: Missed opportunity for information, education and communication. *BioMed* , 1-4.

Shahoei, R., Riji, H. M. & Saeedi, Z. A. (2011). 'Safe passage' : Pregnant Iran Kurdish women's choice of childbirth method. *Journal of Advance Nursing,* 67 (10), 2130-2138.

Shimeka, A., Mazengia, F. & Meseret, S. (2012).Institutional delivery service utilization and associated factors among motherswho gave birth in the last 12months in Sekela District, North West of Ethiopia: Acommunity - based cross sectional study. *BioMed Central*. 12(71), 1-21.

Stephenson, R., Baschieri, A., Clements, S., Hennink, M. & Madise, N. (2006). Contextual influences on the use of health facilities for childbirth in Africa. *American Journal of Public Health,* Vol. 96, 1, 84-93.

Storeng, K. T., Abaggbey, R. F., Ganaba, R., Quattara, F. & Akoum M. (2008). Paying the price: the cost and consequences of emergency obstetric care in Burkina Faso. *Socal Science Medicine* . 66(3): 545-457

United Nation's Children Emergency Fund. (2009). Access by all pregnant women to prenatal care, trained attendants during childbirth and referred facilities for high-risk pregnancies and obstetric emergencies. http://www unicef.org. Retrieved 10/1/2013

Varkervisser, C. M., Indra, P. & Brownlee, A. T. (2003). Designing and conducting health systems research project. *International Research Development Centre, Canada,* Volume 1. module 11.

Wanjira, C., Mwangi, M., Mathenge, E., Mbugua, G. & Nganga, Z.(2011). Delivery Practices and Associated Factors among Mothers Seeking Child Welfare Services in Selected Health Faciliies Nyandurua, South District, in Kenya. *BMC of Public Health,* 11(360); 4-9.

Waziri, M. (2005). Reproductive Health and Gender Indicators: Report on 2004 Baseline Survey of United Nation Population Fund (UNFPA) Assisted States in Nigeria-Borno State.

World Health Organization (2012). Trends in Maternal Mortality: 1990 to 2010. WHO, UNICEF, UNFPA and the World Bank Estimates. Available: http://whqlibdoc.who.int/publications/2012/9789241503631_eng.pdf. Accessed December 17 2012

WHO. (2009). Women and Health: Today's evidence tomorrow's Agenda. *Bulletin of the World Health Organization*, 42.

Wong, E. L., Popkin, B. M., Guilkey, D. K. & Akin, J. S. (1987). Accessibility, Quality of Care and Prenatal Care use inthe Philipines. *In Social Socience and Medicine* .Vol. **24,** 927-944.

APPENDICES

Appendix 1: Participant Informed Consent Form

Study title: Factors associated with choice of place for delivery in Builsa north district

Principal investigator: Kombian Bisianin

Address: School of Public Health, College of Health Sciences, University of Ghana – Legon.

General Information about the Research

This research is a survey to assess factors associated with choice of place for delivery in Builsa north district. It is purely an academic research which forms part of my work for the award of a Master of Public Health Degree. I am very please if you could listen to the explanation of the consent so that you may decide if you wish to be part of this study.

Accepting to take part in this study will take about 30 minutes of your time to respond to some questions. Taking part in the study is voluntary. You can stop taking part in answering the questions at any time. You do not have to answer any question that you do not want to. If you decide not to take part, it will not affect the health care you or your family receive at any health facility or health centre.

Risk and Benefits

The study does not involve any risk. There is no monetary reward for participation in the study. The information may help improve the quality of delivery care in your community in the future. There may be no direct or immediate benefit to you.

Confidentiality

Only research assistants working on this study will receive the information from the interview and this will be kept confidential. Afterwards, the questionnaires will be kept in locked cabinet. The information from this will be kept on password – protected computers. Three years after the study is finished, the questionnaires will be destroyed. If you have questions you may contact Dr James Sarkodie, Builsa District Medical Superintendent, on Telephone Number: 0244293925.

Respondent's consent

I have read/listened to all the necessary information I need to know concerning this study and have fully understood it. I have decided on my own accord without any coercion to take part in this study. However, by deciding to participate in this study, am not waiving any of my personal rights by signing or thumb printing this consent form.

Signature or thumb print of respondents:…… Date: …… / ……. / ……

Appendix 2: Questionnaire on factors associated with choice o place for delivery in Builsa north district.

Introduction

This questionnaire is to gather data for the study of factors associated with choice of place for delivery. Please answer these questions as honestly and sincerely as you can. Your responses will be kept as confidential and will be used only for the purpose of the study. Thank you.

Demographic characteristics

Sex…….

1 How old are you now?..... (Years)

2 What is the highest level of your education?

a No education [ ]

b Primary [ ]

c Middle/JSS [ ]

d Secondary/SHS [ ]

e Technical/ Vocational [ ]

f Tertiary [ ]

Other (specify)……..

3 What is your religion?

a Traditional [ ]

b Christianity [ ]

c Islam [ ]

d None [ ]

Other (specify)…….

4 Which ethnic group do you belong?

a Builsa [ ]

b Kantosi [ ]

c Kasena [ ]

d Nankana [ ]

e Frafra [ ]

Other (specify)……

5 What is your marital status?

a Married [ ]

b Separated [ ]

c Divorced [ ]

d Windowed [ ]

e Single [ ]

6 What kind of work do you mainly do?

a Formal employment [ ]

b Farming [ ]

c Trading/selling [ ]

d Craftsmanship [ ]

e No work (unemployed) [ ]

Other (specify)……..

7 Do you earn cash from this work?

a Yes [ ]

b No [ ] what do you receive?.....

8 How much money do you usually earn from this work per month?

a Ghana cedis……..

b Nothing

9 What work does your husband do?

a Formal employment [ ]

b Farming [ ]

c Trading/selling [ ]

d Craftsmanship [ ]

e No work (unemployed) [ ]

Other specify……

10 How much money does your husband earn for this work per month?

a Ghana cedis……..

b Nothing

c Do not know

11 Does your household have any of the following?

	Yes	No
a Electricity	1	2
b Cattle	1	2
c Radio	1	2
d Television	1	2
e Refrigerator	1	2
f Bicycle	1	2
g Motorbike	1	2
h Car or Truck	1	2
i Mobile phone	1	2

12 How many times have you given birth?

a One [ ]

b Two [ ]

c Three [ ]

d More than three [ ]

Antenatal care (skip if man)

13 How many months were you pregnant when you first received antenatal care during your last pregnancy? (*Grouped according to trimesters of pregnancy*)

a One –three [ ]

b Four - six [ ]

c Seven - nine [ ]

d Don't know [ ]

14 How many times did you receive antenatal care during your last pregnancy?

a One [ ]

b Two [ ]

c Three [ ]

d Four [ ]

e More than four [ ]

f Don't know [ ]

15 Who accompanied you to the health centre/hospital//health professional on your first visit?

a No one [ ]

b Husband/ partner [ ]

c Relative [ ]

d TBA [ ]

e Neighbour [ ]

16 During any of your antenatal visits, did the doctor/nurse/ or service provider tell you about any of the following?

	Yes	No
a Family planning	1	2
b Delivery with Nurse/ midwife/doctor	1	2
c Danger signs of pregnancy	1	2
d Free ambulance service to health facility during labour	1	2
e Free maternal delivery service	1	2

17 Where did you give birth at during your last pregnancy?

a Health facility [ ]

b Health professional's home [ ]

c My own home [ ]

d TBA's home [ ]

Other (specify)…….

Perception of Clinical Care

Now I would like to ask about your overall experience with antenatal care. Please indicate how much you agree or disagree with the following statements. The response are "Strongly Agree", "Agree", "Not Sure", " Disagree", and "Strongly Disagree

Q	Overall antenatal care…	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	NA
18a	The providers explained your health status in clear understandable terms	1	2	3	4	5	9
18b	The providers explained what to expect during labour and delivery	1	2	3	4	5	9
18c	The providers listened to your concerns	1	2	3	4	5	9
18d	The providers were respectful of you	1	2	3	4	5	9
18e	The providers scolded or shouted at you	1	2	3	4	5	9
18f	The providers received you nicely at the health facility	1	2	3	4	5	9

19 Do you have any other concern apart from those listed above? Yes/ No, if yes please provide information……

20 By what means of transport did you travel to the health facility?

	Yes	No
a By foot	1	2
b Bicycle	1	2
c Motor king	1	2
d Car	1	2

Other (specify)…….

I will like to know your opinion on the services provided at the health facility where you delivered your last born (baby). Now am going to read you several statements about the health facility and the health staff who work there. Please consider the statement carefully and tell me your opinion. Remember there are no wrong or correct answers. I am simply interested in your opinions.

	Travel to health facility and conditions at health the health facility	1	2	3	9
21a	the distance from your home to the nearest health facility	short	Somewhat long	long	NA
21b	the travel time from your home to the nearest health facility is	short	somewhat long	long	NA
21c	it is… to get transport from your home to the nearest health facility	Not at all difficult	Somewhat difficult	Difficult	NA
21d	the cost of transportation to the nearest health facility is	Affordable	Somewhat affordable	Not affordable	NA
21e	the fees that pregnant women are charged at the nearest facility are	Affordable	Somewhat affordable	Not affordable	NA
21f	the opening hours of the nearest health facility is	Suitable	Somewhat suitable	Not very suitable	NA
21g	the doctors and midwives are	Available	Somewhat available	Not available	NA
21h	the people who work in this hospital/clinic are	Honest	Somewhat honest	Not very honest	NA

	Travel to health facility and conditions at the health facility	1	2	3	9
22a	Are the doctors and midwives…. of fining out the problem with a pregnancy	Capable	Somewhat capable	Not capable	NA
22b	The waiting rooms, examination rooms and delivery rooms are	Adequate	More or less adequate	Inadequate	NA
22c	The pregnant women cared for in the hospital/clinic…	Recover well	Recover relatively well	Do not recover well	NA
22d	The doctors and midwives in the hospital/clinic examine their patients…	Well	Somewhat well	Not very well	NA
22e	The doctors and midwives in the hospital/clinics are…with the pregnant women	Open	Somewhat open	Not very open	NA
22f	The doctors and midwives are… towards the pregnant women	Respectful	Somewhat respectful	Not at all respectful	NA
22g	The number of doctors and midwives in the hospitals/clinics are..	Adequate	More or less adequate	Inadequate	NA
22h	The doctors and midwives in the hospitals/clinics are…to deliver pregnant women	Well suited	Relatively well suited	Not well suited	NA

23 Do you have any other concern about the health facility and health providers? Yes/No, if yes please provide information.

……
……
……
……

Socio-Cultural Factors

24 Who assisted with the delivery of your last child?

a Doctor [ ]

b Nurse/midwife [ ]

c Traditional birth attendant [ ]

d Relative [ ]

Other (specify)……..

26 What are the reasons you decided to deliver at the facility? (For those who delivered in health facility)

Multiple responses

a Nurse/ Doctor told you to [ ]

b For safe delivery [ ]

c Had complications during pregnancy [ ]

d Had complications in previous pregnancy [ ]

e Has ever had Caesarean Section [ ]

f Baby overdue [ ]

g Multiple pregnancy [ ]

h Was referred during labour [ ]

I My husband or relative asked me to [ ]

J Good quality of service [ ]

Other (specify)……

27 Who were the main people involved in making the decision of where you delivered?

a Myself [ ]

b Husband/partner [ ]

c Head of household [ ]

d TBA [ ]

e Neighbour [ ]

Other (specify)……..

28 Who accompanied you to the place of delivery?

a No one [ ]

b Husband/partner [ ]

c Relative [ ]

d TBA [ ]

e Neighbour [ ]

Other (specify)…….

29 What are the reasons you decided not to deliver at health facility? (For those who did not deliver in health facility)

Multiple responses

a Pregnancy was normal [ ]

b Traditional beliefs [ ]

c Cost of delivery care too much [ ]

d Cost of transport [ ]

e Health facility is too far [ ]

f Unavailability of transport [ ]

g No one was available to accompany me [ ]

h Poor service at the health facility [ ]

i Family did not allow me to go [ ]

j Did not want to be delivered by a male [ ]

k Previous birth at home was successful [ ]

Other (specify)……..

Satisfaction of Care

Now I would like to know about your overall experience with delivery care. Please indicate how much you agree or disagree with following statements. The responses are "Strongly Agree", "Agree", 'Not Sure' '"Disagree", and "Strongly Disagree"

	During your labour and delivery in the health facility	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	NA
30a	You were given adequate privacy during examinations by the nurse or doctor	1	2	3	4	5	9
30b	The provider listened to your questions or concerns	1	2	3	4	5	9
30c	The providers left you alone for long period of times	1	2	3	4	5	9
30d	The providers asked for your consent before during clinical procedures	1	2	3	4	5	9
30e	The providers scolded or shouted at you	1	2	3	4	5	9
30f	The providers commented on your sexual behavior in a way that offended or embarrassed you, if so what did she/he say?	1	2	3	4	5	9
30g	The providers slapped you during labor	1	2	3	4	5	9

31 Do you have any other experience you want to share during your last delivery?

……
……

	Satisfaction with delivery care	Very Likely	Somewhat Likely	Not Sure	Somewhat Unlikely	Very Unlikely	NA
32a	Thinking about your experience, how likely are you to recommend this facility for delivery care to your family or friend?	1	2	3	4	5	
32b	Thinking about your experience, how likely would you deliver again in this facility?	1	2	3	4	5	

33 Give reasons for your responses to 32a – 32b

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Knowledge of Free Maternal and Ambulance Services

34 What do you understand by free maternal delivery service?

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……

35 Did you make any payment or otherwise during your last delivery? [Probe cost]

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……
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36 What do you understand by free ambulance services?

……
……

37 Did you make any payments during your last delivery? [Probe cost]

……
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Thank You.