KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI COLLEGE OF HEALTH SCIENCES SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF HEALTH EDUCATION, PROMOTION AND DISABILITY

KNUST

FACTORS INFLUENCING DELIVERY BY SKILLED BIRTH ATTENDANTS

AMONG WOMEN WHO HAVE HAD PREVIOUS BIRTHS IN THE EAST

MAMPRUSI MUNICIPALITY IN THE NORTH -EAST REGION, GHANA.

By

SANDRA SAASI

(BED. HEALTH SCIENCE)

ANSAR3

NOVEMBER, 2019

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI, GHANA

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A THESIS SUBMITTED TO THE DEPARTMENT OF HEALTH EDUCATION, PROMOTION AND DISABILITY, SCHOOL OF PUBLIC HEALTH, COLLEGE OF HEALTH SCIENCES, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF MASTER OF SCIENCE IN HEALTH EDUCATION AND PROMOTION

NOVEMBER, 2019

DECLARATION

I, Sandra Saasi, author of this thesis "Factors influencing delivery by skilled birth attendants among women who have had previous births in the East Mamprusi Municipality in the North-East Region, Ghana" herein declare that, this thesis does not contain material previously published by another person, nor material which has been accepted for the award of the same or similar degree of the University, apart from references from the internet, literature from past and current works, where due acknowledged.

The entire submission is my own work towards the award of the degree of Master of Science in Health Education and Promotion.

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(Head of Department)	Signature	Date

DEDICATION

This work is dedicated to God the Almighty, my lovely daugher, Carissa Lamuntin Batmong and my lovely sister, Mavis Saasi, the entire Saasi's family, co-workers and friends for their support, love and words of encouragement that inspired me throughout this academic exercise.



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I also acknowledge all other persons or departments for whom space could not allow for them to be singly mentioned.

Finally, I apologies for any errors or misrepresentation in this write-up and would personally accept them as short-coming for future improvement.

LIST OF ABBREVIATIONS/ ACRONYMS

ANC Antenatal Care

CHPS Community-Based Health Planning and Services

GDHS Ghana Demographic Health Survey

GHS Ghana Health Services

GSS Ghana Statistical Survey

KNUST Kwame Nkrumah University of Science and Technology

MCH Maternal and Child Health

MH Maternal Health

MHD Municipal Health directorate

MOH Ministry of Health

PHC Population and Housing census

TBA Traditional Birth Attendents

UNICEF United Nations Children"s Fund

ENS APS WY SANE

WHO World Health Organization

ABSTRACT

Background: Childbirth has been an important part of human race. It is a natural phenomenon, nonetheless it has been linked with a number of risks, which may result into untoward outcome such as maternal and neonatal mortality. The increased rate of unsupervised delivery in developing countries underpins the mortality surrounding childbirth. Maternal and neonatal mortality can be scaled down to 23–50% by 90% coverage of skilled delivery. Hence, delivery by skilled birth attendants puts women in better position to receive care and imparts positively on the delivery outcome of the mother and her child.

Objectives: To assess factors influencing delivery by skilled birth attendants among women who have had previous births in the East Mamprusi Municipality in the North-East Region.

Methods: Cross-sectional survey was conducted among 389 women within the East Mamprusi Municipality who have had previous births. A multi stage sampling technique was used for the study and primary data was collected with the use of a semi-structured questionnaire.

Results: Approximately 96.8% of the respondents were cognizant that skilled delivery is a delivery process which occurs at a health facility under the supervision of trained midwife or doctor. Also 65.8% considered the attitude/behaviour of midwives, doctor, nurses or other health personnel during health facility delivery to be friendly. On the whole majority of the respondents, 311 (83.2%), showed satisfaction to ANC services provided at the health facility at the time they gave birth to their last child. Educational level (p <0.001), religion (p <0.001), number of children (p <0.001), husband level of education (p <0.026) and availability of NHIS (p <0.001) were statistically associated with use of skilled delivery. Most of the respondents were of the view that availability

of TBA (58.0%), proximity to health facility (64.2%), night/ bad weather/ poor roads (73.5%), lack of transport to health facility (58.3%), realized or informed late (65.5%) and not having enough time to go (64.2%) are bottlenecks to delivery under skilled birth attendants.

Conclusion: Women within the East Mamprusi Municipality have a high knowledge with regards to skilled delivery and posit that skilled delivery is very important. Educational level of woman, religion, number of children, husband level of education and possession of NHIS are factors associated with utilization of skilled delivery.



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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter covers the background of the study, statement of problem, research questions, main and specific objectives of study, significance of the study, conceptual framework and the scope of the study.

1.1 Background of the Study

Childbirth has been an important part of human race. It is a natural phenomenon, nonetheless it has been linked with a number of risks, which may result into untoward outcome. Maternal mortality and neonatal mortality which result from pregnancy and childbirth related issues is very prominent worldwide with higher prevalence in developing countries. The increased rate of unsupervised delivery in developing countries and also the fact that healthcare delivery in these countries is characterised by poor medical care, an insufficient number of highly skilled health professionals, poor referral systems and wrong diagnosis and treatment underpins the mortality surrounding childbirth (Soma-Pillay *et al*, 2008).

Globally, studies thus far have shown that the number of women who die as a result of complication surrounding childbirth is around 287000 with an estimate of 85% of the total global burden of maternal death occurring in Sub-Saharan Africa and Southern Asia (WHO, 2013; Gedefaw *et al.*, 2018). In second class countries, one out of 41 women die prematurely from pregnancy. This is high as compared to the risk of dying in first class countries where the rate is one in 3,300. Maternal mortality is therefore a social equity indicator particularly in these countries (WHO, 2012; WHO, 2015).

Additionally, approximately 3.4 million babies die annually following the first of birth due to improper care and poor attention during the period of pregnancy, childbirth or afterwards (Asmamaw *et al.*, 2016).

According to Kinney *et al.* (2010), most maternal morbidity and obstetric complications occur around the time of delivery which is not easily predictable. Hence, the delivery day is described potentially as a risky moment of death for the pregnant woman and baby. Inasmuch as problems which do arise during the moment of childbirth difficult to envisage, if delivery is done under supervision of skilled birth attendants such problems can be managed when they occur (Kifle *et al.*, 2018).

Feyissa and Genemo (2014), indicated that skilled delivery puts women in better position to receive care and supervision of the delivery. This imparts positively on the delivery outcome of the mother and her child. Therefore, skilled delivery is imperative as early detection and treatment of complication which results during delivery can prevent mortality (Awoke and Abeje, 2013). Kifle and colleagues (2008) posited that in under developed and developing countries, the services of skilled birth attendants is best to be executed in a heath facility where there is a robust referral system.

1.2 Statement of the Problem

The problem of escalating rate of mortality resulting from delivery, coupled with the ascendency of infections, hemorrhage, and hypertensive disorders which also instigate death during the period of pregnancy explicitly spell out the relevance for women to seek skilled delivery (Campbell *et al.*, 2006; Filippi *et al.*, 2006). Skilled delivery describes the act of giving birth in hospitals, health centers or a clinic by the help of skilled birth attendants which could be medical doctors, Nurses, midwives or public health officers (Awoke and Abeje, 2013).

Notwithstanding the great public health effort, evidence shows that there is disparity in maternal health care service utilization between developed and developing nations. WHO (2012), reported that the proportion of skilled delivery was between 95% and 98% in developed countries. Then again, the proportion in developing countries was reported to be very low. In fact, studies have reported a proportion between 48% – 70% of skilled delivery in developing countries (Amano et al. 2012; Feyissa & Genemo, 2014; Kidanu et al., 2017). A report by Ghana Health Service shows the proportion of skilled delivery in Ghana to be around 56.2% which is below the national target of 80% (GHS, 2017). The above statistics indicates that women in developing countries, particularly Ghana, are still engaging in unskilled delivery. This is usually informed by factors such as cultural beliefs, social factors like educational background and income level of husband, easy accessibility and affordability as well as quicker service during delivery (Ogunlesi, 2005; WHO, 2010).

Failure to access or seek the service skilled delivery during delivery immensely jeopardizes the health of the mother and her baby. Complications shrouding pregnancy influence the outcome pregnancy. The level of care received during the period of pregnancy and the form of assistance provided during delivery is a significant determinant in the occurrence of untoward outcomes of pregnancy like stillbirth, neonatal death and maternal morbidity and mortality. Through institutional delivery, the above untoward outcomes will be mitigated. Therefore institutional delivery is of great significance to the survival of both mother and child. There exist similar relationship between place of birth and neonatal deaths compared to that of maternal deaths. Report reveals that maternal and neonatal mortality can be scaled down to 23–50% by 90% coverage of skilled delivery (Filippi *et al.*, 2006).

Inasmuch as it is imperative for women to deliver in health centers where there are skilled birth attendants to attend to them, they also need to seek antenatal and postnatal care. Filippi *et al.* (2006), has argued that deliberate efforts should be made to help women in greatest need, especially women living in rural settings. Sub-Saharan Africa and south Asia should continue to be priorities because maternal mortality ratio and lifetime risk of death are highest in these regions with infrastructure and human resource constraints also the greatest.

1.3 Research Questions

In order to achieve the aim and objectives of this study, the study will seek out answers for the following questions.

- What are the knowledge and attitude of women who have had previous birth towards delivery by skilled delivery in the East Mamprusi Municipality
- What are the perceived barriers to the skilled delivery in the East Mamprusi
 Municipality.
- What factors influence skilled delivery among women who have had previous birth in the East Mamprusi Municipality.

1.4 Objectives of the Study

1.4.1 General Objective

To assess factors influencing delivery by skilled birth attendants among women who have had previous births in the East Mamprusi Municipality in the North-East Region.

1.4.2 Specific Objectives

- To assess the knowledge and attitude of women who have had previous birth towards skilled delivery in the East Mamprusi Municipality
- To ascertain the perceived barriers to the skilled delivery in the East Mamprusi

Municipality.

 To determine the factors influencing skilled delivery among women who have had previous birth in the East Mamprusi Municipality

1.5 Significance of the study

Pertaining the issue of parturition, efforts are continuously made by Governments, NGO"s and other stakeholders to ensure that the all women across the globe seek the service of skilled delivery. However, the ability to achieve a wide and better global coverage of skilled delivery calls for the need to ascertain the factors which either impede or facilitate the utilization of the service. With such information on the desk, measures can then be taken to curtail and correct the negative factors which impede the utilization of the service whilst strengthening and improving upon the positive predictors as well. This study therefore seeks to assess the factors which influence skilled birth among women who have had previous births in the East-Mamprusi Municipality in the North East Region in Ghana.

The findings of this study would contribute to knowledge and greatly provide Governmental organizations such as Ministry of Health (MOH), Ghana Health Service (GHS) as well as non-governmental organization with information which would serve as a useful tool in the quest of working toward an increase in the utilization of health service during delivery in Ghana. Health facilities interested in establishing factors which drive women to opt for skilled delivery in order to up their service with regards to rendering skilled delivery would also find this research work useful.

Moreover, the findings would immensely serve a crucial source of reference material for students, academicians, researchers, policy makers and additional stakeholders interested in factors predicting skilled delivery of women particularly in Ghana. Other

researchers who would also gain interest in assessing factors influencing skilled delivery within the North East Region in Ghana would find this piece of work beneficial.

1.6 Conceptual framework

The Andersen Healthcare utilization model served as the basis of the conceptual framework used for the study. It is a conceptual model employed to ascertain determinants underpinning the use of health services. According to the model three factors that predicts utilization of health services. These are predisposing factors, enabling factors and need factors. The predisposing factors are influenced by the sociocultural characteristics of individual. The enabling factors encompass the logical aspects of obtaining care whereas the immediate reasons behind of healthcare utilization constitutes the need factors(Andersen, 1995).

From a theoretical perspective, myriad determinants underpinning the utilization of skilled delivery have already been defined. Some of these factors include maternal age, maternal education, availability of skilled birth attendants, distance to health facility, personal health beliefs, cost and quality of health service, and attitude of staffs (WHO, 2011; Kebede *et al.*, 2016).

In line with the study, the predisposing factors which predicts skilled delivery as indicated in Figure 1.1 below include age, religion, occupation, educational level, parity, the partner seducational level among others. Enabling factors which underpin skilled delivery also include partner support, access to health facility, proximity to health facility, price of health service, health insurance and knowledge on benefits of skilled delivery. Furthermore, need factors such as frequency of antenatal care attendance, perception of risk of pregnancy and concern for safe delivery influence

utilization of skilled delivery. These factors immensely determine a women's willingness to seek skilled delivery during childbirth.

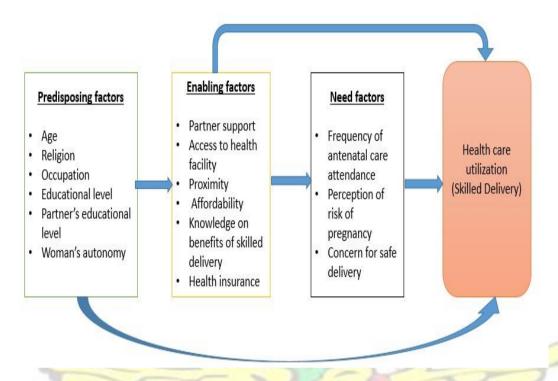


Figure 1.1 Conceptual framework; adapted from Andersen health utilisation model Source: Authors construct, 2019

1.7 Scope of the Study

The study in six chapters. The first chapter describes the background of study, statement of the problem, research questions, objectives of the study, significance of the study, and the conceptual framework underpinning the study.

The second chapter captures literature review whereas chapter three concerns the methodology of the study. Chapter four concerns results from the study whiles chapter five provides discussion to the findings/results. Chapter six entails the summary, conclusions and recommendations of the research.

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CHAPTER TWO

LITERATURE REVIEW 2.1 Knowledge level of women who have had previous births pertaining to skilled

delivery

It is crucial that women are made aware of the importance of the use of skilled delivery during birth. This is because it is only when they are aware of its importance that they will be willing and prepared to use it. Skilled delivery has been established to save lives of mothers and its use should be encouraged by health personnel at antenatal clinics.

According to Mpembeni *et al.* (2007), improving coverage of health facilities can be done by sensitizing people on the risk associated with pregnancy and unsupervised delivery. Also, counselling on the need and relevance of supervised delivery should be intensified. Whiles seeking to increase sensitization on the relevance of delivery under supervised delivery, there is also the urgent need to for the services of health facility delivery to be carried out in a form satisfactory to pregnant women.

It is really urgent to invest in educating women pertaining the risk and associated dangers of pregnancy especially resorting to unsupervised delivery. Through education women should be made to understand that its is equally as important to seek for skilled delivery as attending ANC clinics. A study on ANC counselling reveals that in Ouargaye, only 26.0% of women received education and counselling on the risk as well as danger signs associated with pregnancy and delivery at the baseline which elevated to 40.0% at endline. However, there was a decline from 28.0% to 14.0% in Diapaga. Though the figures obtained in Ouargaye is motivating, most women are deprived of such counselling with the same community. Hence, such women are not previewed to information regarding the risks and dangers associated with unsupervised delivery (Family Care International Burkina Faso, 2007).

2.2 Perceived barriers to the delivery by skilled birth attendants

2.2.1 Lack of privacy and confidential issues

One of the documented bottlenecks to supervised or skilled delivery is the lack of privacy and failure to keep information about delivery confidential. Some pregnant women who are elderly do not want to be attended to by younger midwives at health facilities who they think are like their daughters. This unfortunate condition hinders women to deliver in health facilities (Mrisho *et al.*, 2007; Shankwaya, 2008).

2.2.2 Transportation issues

Unavailability of transportation facilities is well-thought-out as one of the major hurdles to skilled or supervised delivery especially to women in rural areas. A lot of women in rural areas fail to plan ahead of time for means of transport to health facilities during time of labour. This therefore instigates greater proportion of women to give birth at homes because when labour abruptly sets in, they are unable to get vehicle to carry them to health facilities even if they had planned to deliver in health facilities (Mrisho *et al.*, 2007 and Magoma, 2010). A study by Hazemba and Siziya (2008) in rural Tanzania reveled that 34% of mothers who delivered at home were actually resolved to utilized health facility however transport issues and challenges instigated them to deliver at home. Transport issues can be eliminated from the picture of inhibiting the use of skilled delivery, however it appears not enough effort is invested into curbing it as a bottleneck to skilled delivery.

2.2.3 Negative attitude of health workers

Health provider behavior and attitudes are also a contributory factor for choice of delivery site for pregnant mothers, some of the health workers are very rude, using abusive language and refusing to assist the patients, these attitudes prevent the women from delivery in health facilities however positives attitudes of health workers attract women to deliver in health facilities. For example, in a study conducted by Mrisho *et al.* (2008), one woman during focused group discussion said when she visited a particular health facility for delivery she was impressed by the midwife who cared for her so much that she regarded the midwife as exceptionally human, polite and sympathetic. This encourages the women to further deliver in health facilities any other time should she become pregnant again. Improving skills and knowledge among health providers and increasing access of health services in rural areas will also increase access to pregnant mother to deliver in health facility.

2.2.4 Cultural inappropriateness of health care

Koblinsky and Campbell (2003) in their studies showed that women's reluctance to uptake skilled care at birth in developing countries stems from unprofessional of care, disrespectful and inhumane services, lack of emotional support as well as high cost. Pearson and Shoo (2005) indicates that in Sub-Saharan Africa, poor experience of quality in delivery care and the fear of being ridiculed for the first time to have delivered at the health facility deterred women from delivering in health facilities. Mills and Bertrand (2005) in their studies conducted in Ghana and Morocco also reveled that though women acknowledge the efficacy of up taken skilled care (Supervised delivery), nurses/providers denigrating attitudes toward women motivated many to deliver at home or not to reach the referral hospital.

2.2.5 Poor quality of care

Studies of ANC in Sub-Saharan Africa and India, nurses scolded women for talking; moving slowly, "deviant" or dirty and arriving late in labor (Mills and Bertrand 2005). In delivery, women are reprimanded, harassed, or insulted for not having an ANC card, for not knowing what to do at various stages of delivery (D"Ambruoso *et al.*, 2005). Women who intend to up take skilled care viewed midwives as rude, proud, negligent

and vulgar (Amooti-Kaguna and Nuwaha 2000). Some studies conducted in kenya by Behague, Victoria and Barros (2000) and Abbey and Hussein (2005) reports verbal abuse, slaps and beating of women during labor and delivery.

In a qualitative studies conducted by D"Ambruoso *et al.* (2005) in Ghana women indicated their preference to return to deliver in a facility where they had been treated well. The reasons why women may not deliver in health facilities or at particular facilities relate to the negative experiences that they have had with some health staff.

2.3 Factors influencing delivery by skilled birth attendants among women who have had previous birth in the East Mamprusi Municipality

2.3.1 High socio economic status

Household financial capacity is one of the major factors in the determination of places of delivery, and this depends on mother"s occupation and husband"s occupation. Women who are working and earning money may be able, to save and decide to spend it on a facility delivery as compared to those not working (Adam & Salihu, 2002). Several studies found that women in farming occupation were less likely to have skilled attendance at delivery than women in more lucrative occupations as such salaried workers partly due to limited financial resources and limited health services in rural areas (Hazemba, and Siziya, 2009). Wives of husbands with higher status occupations were more likely to pay for transportation to health centres and seek proper health care at health centres than the rural poor (Adeyemi, 2007)

2.3.2 Availability of maternal support

It is thus very much important that all health workers in hospitals and maternity homes should have necessary knowledge, and skills, commitment and the ability to support woman and the family, in order to take care of the woman in totality. Totality means to meet the

physical, psychological and social needs and to help women to choose their own ways and make own decisions also on their health issues. Health workers should take up the role model in providing nursing care to the woman during the laboring process so as to encourage them to deliver at health centres (Adeyemi, 2007).

2.3.3 Education on pregnancy complications

According to Hazemba *et al.* (2010) in ascertaining the relationship between pregnant women slevel of education and choice of places of delivery of next child, the findings showed that there was a strong association between education and health facility delivery as educated pregnant women made the choice of delivering in health centres as compared to home (Hazemba *et al.*, 2010). It was shown that educated women had a better understanding of issues of obstetric complications and were able to make their own decisions on matters concerning their health. For any woman to make an informed decision about choice of delivery site and also to be able to recognize complications or illness, she needs adequate information which is normally given by the health worker at health centres. The low health worker influence in women's decision making could possibly be the reason why there is under utilisation of health facilities for delivery among women globally (WHO, 2010).

CHAPTER THREE

METHODOLOGY

3.0 Introduction

In this session, methods that are specifically important for the purpose of the study and the data collection techniques are described. The various sections under this chapter are research setting, research design and approach, population and sampling techniques, instrument for data collection, procedure for administration of instruments, data analysis procedure, validity and reliability, and ethical issues.

3.1 Research setting

The study was conducted at the East-Mamprusi Municipality in the Northern part of Ghana.

3.2 Research design and approach

A cross-sectional study design was used for the study to examine the factors influencing skilled births among women who have had previous births by women in the East-Mamprusi Municipality in the Northern part of Ghana. This type of study is usually conducted to estimate the prevalence of the outcome of interest for a given population, commonly for the purpose of public health interventions. In this regards cross-sectional studies provides a "snapshot" of the outcome and the characteristics associated with it, at a specific point in time. The data was based on socio-demographic characteristics of participants, the social and cultural beliefs, knowledge of women who have had previous births on skilled delivery, attitude of women who have had previous births towards skilled birth delivery and factors influencing skilled delivery among women who have had previous births. Quantitative method was used to quantify all the measurable variables from the data.

3.3 Study population

Women who have had previous birth were the target population. The study included women who delivered with the assistance of skilled attendant. Their inclusion was appropriate because they are considered as key stakeholders as far as the factors influencing skilled births among women who have had previous births is concern.

3.3.1 Inclusion criteria

a) Women who are residents of the East-Mamprusi Municipality and have had previous birth were included in the study.

b) Another criteria was that women should also be capable and willing to provide an informed consent.

3.3.2 Exclusion criteria

a) The exclusion criteria was pregnant women in the municipality who have not given birth before.

3.3.3 Study variables

The study assessed the extent to which some of the independent-variables such as: Socio-demographic factors of the woman, knowledge, attitude, and access to health care facility could influence the outcome variable (dependent variable) supervised delivery.

3.4 Sample size

The study involved 389 women who were sampled from the selected communities in the East-Mamprusi Municipality

The Cochran"s (1977) formula below was used to calculate an appropriate sample size from the target population. As reported in the Ghana Demographic Health Survey, the rate of delivery by skilled birth attendants in Northern Region is 36.4% (GSS *et al.*, 2015: pp. 116).

$$N = z^2 p (1-p)/d^2$$

Where N = required sample size

Z = 95% confidence level of standard value of 1.96 from statistical table P = estimated proportion of 36.4% (0.36) d = margin error of 5% (0.05)

$$N = (1.96)^2(0.36)(1-0.36)/(0.05)^2 = 354$$

3.5 Sample technique

Multi stage

A multi stage sampling technique was employed for this study. According to the 2000 population and housing census, the East-Mamprusi district (now a Municipality) has 5 districts, 142 communities and 11, 281 households.

Simple random sampling technique was employed to select a community from each of the five (5) districts constituting the East Mamprusi Municipal. The communities selected were Nalerigu, Gambaga, Langbinsi, Sakogu, and Gbintiri.

Moreover, systematic random sampling technique was used to select households from the selected communities. The sampling interval for each community was estimated by dividing the number of households in each community by the number of households allocated to each community based on the sample size. Hence, communities with more households had higher representation.

After getting the sampling interval for the households, the first house was selected by taking a spin from any relevant landmark. The sampling interval was then used to select the remaining households.

The number of households that were selected in each community was obtained by dividing the number of households in each community by the total number of households in the district.

In the chosen households, the simple random sampling technique was used to select a participant. Instances where there were more than one eligible participants in a household, a simple random method (the lottery method) was used to select one. That is "Yes" and "No" were balloted for the selection of the participants..

3.6 Source of data

Both primary data and secondary data were used. Semi-structured questionnaire was used to obtain the primary data. Literature sources including books, newspapers, journals, the internet etc. were be reviewed and the information used to discuss the results garnered from the analysis of the primary data.

3.7 Data collection technique

A semi-structured questionnaire was employed to gather primary data from the participants. Close ended questions were accompanied with very possible responses to allow participants easily select the most applicable to them while open ended questions were left open to allow participants to feed in their own responses.

3.8 Data analysis

The questionnaires were reviewed after collecting the data. They were examined to check completeness, accuracy and consistency of responses to detect and eliminate error. The data was then analyzed using STATA. Frequencies, percentages, means, cross tabulations and chi-square were used in the analysis. The association between respondents" socio-demographic characteristics vis-a-vis skilled delivery was tested for using chi square (χ 2) test at a significance level of 0.05. The results from the information was explicitly discussed with appropriate references to literature where necessary.

3.9 Validity and Reliability

Validity in this work was ensured by purposefully selecting the sample to minimize chances of getting irrelevant data. Also questionnaire were subjected to expert approval by the research supervisor for content validity.

Reliability was also ensured by pretesting the data collection tool using the same methodology.

3.10 Ethical Issues

In conducting a study, researcher pays special attention to ethical consideration and respect the dignity, autonomy, equality and diversity of participants involved in the research. Significant ethical issues that were regarded include;

Confidentiality: Confidentiality demand that, a researcher is committed to ensuring and guaranteeing participant that, the data provided received from them will not be disclosed to any person not directly engaged in the study (Jamison, 2007). This was ensured in the study as the researcher saw to it that the data that was obtained was not made available to any third party.

Informed consent: Informed consent as used in research connotes that, the participant must be made aware of processes and risks as well as benefits associated with the research prior to commencement of the research. They must also willingly consent to partake in the study (Trochim, 2008). This was ensured in the study as forms were made available to respondents to sign after they had been briefed on what the research entailed as an endorsement of their consent participate.

Voluntary participation: Respondents were also abreast of their right to choose to take part and drop out at any moment they deem fit.

Anonymity: Anonymity in this study implies that the respondent"s identity will not be included in any aspect of the research unless the respondents requested, probably to lay emphasizes (Trochim, 2008). The identity of the respondents was therefore ignored from this study.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents the results from the study. The findings from the study are structured and presented in frequencies, percentages, tables, bar graphs, pie charts and cross tabulations.

4.1 Socio-demographic characteristics of respondents

A total of 389 respondents were interviewed. However, 374 fully answered the questions yielding a response rate of 96.1%. The minimum and maximum age recorded were 18 years and 46 years respectively. By categorizing the ages, it was found that majority of the respondents, 237(63.4%) were within 20-29 years whereas minority of the respondents, 8(2.1%), fell below 20 years. The mean age was found to be 27.84 with a standard deviation of 5.44. Pertaining to marital status, majority of the respondents, 308 representing 82.4% were married. In terms of education, a little above one-third of the respondents, 126 representing 33.7%, had secondary education.

Moreover, more than half of the respondents, 195 representing 52.1%, were Christians. It was also found that 132 representing 35.3% of the respondents were self-employed. On data collected for number of children, the modal number was found to be 2 children. Also, 217 representing 58.0% of the respondents indicated that their average monthly income is less than GHC500. Moreover, 181 respondents representing 48.4% indicated that their husbands had attained tertiary educational level and also majority, 211 representing 56.4%, indicated that their husbands were government employees. The study also revealed that nearly all the respondents, 368 representing 98.4%, have registered with NHIS. Table 4.1 shows the socio-demographic characteristics of the respondents.

Table 4.1: Socio-demographic characteristics of Respondents

Variable	Frequency (N	Percentage
A (= 374)	(%)
Age (years)		2.1
<20	8	2.1
20-29	237	63.4
30-39	115	30.8
40+	14	3.7
Mean \pm S.D = 27.84 \pm 5.44		
Marital status		
Single	31	8.3
Married	308	82.4
Divorced	13	3.5
Cohabiting	22	5.9
Level of education		
None	55	14.7
Basic education	99	26.5
Secondary education	126	33.7
Tertiary education	94	25.1
Religion	24	23.1
Traditional	0	2.1
	8	2.1
Christian	195	52.1
Muslim	171	45.7
Occu <mark>pation </mark>		
Government worker	110	29.4
Unemployed	105	28.1
Self-employed	132	35.3
Other	27	7.2
Number of children	1	3
	87	23.3
2	163	43.6
3	74	19.8
$\frac{3}{4}$	35	9.4
5	10	2.7
6	5	1.3
Mean \pm S.D = 2.29 \pm 1.09		1.5
		121
Average monthly income	017	50.0
Less than GH©500	217	58.0
GHØ500-GHØ1000	128	34.2
More than GH¢1000	29	7.8
Husband's level of education	10	
Basic	59	15.8
Secondary	134	35.8
Tertiary	181	48.4
Husband's occupation		
Government worker	211	56.4
Self-employed	146	39.0
Unemployed	17	4.5
Onemployed	1 /	4.3

Are you registered with NHIS?

Yes	368	98.4
No	6	1.6

Source: Field data, 2019

4.2 Knowledge and attitude of women who have had previous births on skilled delivery.

With regards to the knowledge on skilled delivery, the study revealed that 96.8% of the respondents were cognizant that skilled delivery is a delivery process which occurs at a health facility under the supervision of trained midwife or doctor. This notwithstanding, 3.2% of the respondents were ignorant about what skilled delivery is about. Additionally, 93.6% of the respondents were aware of the nearest health facility where one can receive skilled delivery care in the district during their last child birth. Only 6.4% of the respondents were not aware of the nearest health facility where one can receive skilled delivery care in the district at the time they gave birth to their last child. Also, 97.9% of the respondents regarded health facility delivery (skilled delivery) as important whereas 2.1% viewed it as not important. The study also found that 97.6% of the respondents were cognizant of that ANC is a pathway to skilled delivery whereas 2.4% were ignorant in that regard. Moreover, 98.7% of the respondents knew that during ANC women are advised to attend a health facility for antenatal checkup whereas 1.3% of the respondents did not know. It was also found that majority of the respondents, 99.5%, were apprehensive that midwives, doctor, nurses or other health personnel should wash hands before assisting with delivery. It was also ascertained that, 98.1% of the respondents were also apprehensive that midwives, doctor, nurses or other health personnel should wear hand protection while assisting with delivery. Again, 90.4% of the respondents knew that midwifes, doctor, nurses or other health personnel should wash hands before cutting cord. Similarly, 90.4% of the respondents were cognizant that the position of the mother taken during delivery can affect the delivery process (Figure 4.1).

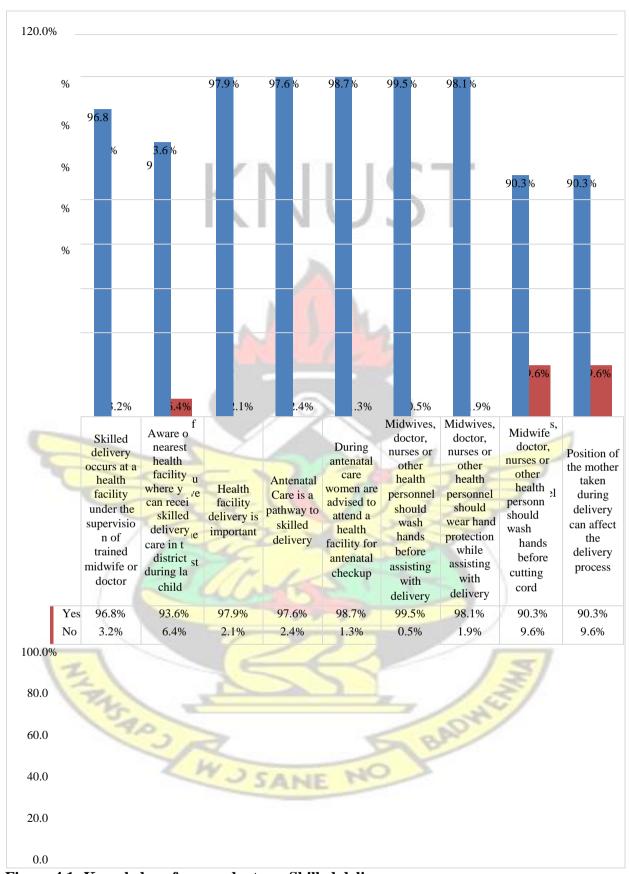


Figure 4.1: Knowledge of respondents on Skilled delivery

Source: Field data, 2019

In terms of attitude of respondents towards skilled delivery at the time they gave birth to their last child, the following findings were obtained. The study discovered that majority of the respondents, 246 (65.8%), considered the attitude/behaviour of midwives, doctor, nurses or other health personnel during health facility delivery to be friendly. More than half of the respondents, 211 (56.4%), also perceived the environment (room temperature, arrangement of equipment and beds) of the labourward in the health facility to be good. Similarly, 209 representing 55.9% of the respondents also held a good opinion about the environment (room temperature, arrangement of equipment and beds) of the laying-ward in the health facility. On data collected for the cost of delivering at health facility, 218 (58.5%) of the respondents considered it as being moderate. Moreover, 213 (57.0%) respondents in their opinion considered the time taken before they were attended to by midwives, doctor, nurses or other health personnel when labour set-in to be normal.

Additionally, the study found interestingly that 227 (60.7%) of the respondents considered, as good quality, the services provided by midwives, doctor, nurses or other health personnel at the health facility. On the whole majority of the respondents, 311 (83.2%), showed satisfaction to antenatal care services provided at the health facility at the time they gave birth to their last child. Table 4.2 details the findings.

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Table 4.2: Attitude of respondents on skilled delivery

Variable	Frequency (N = 374)	Percentage (%)
Opinion about the attitude/behaviour of midwives, doctors, nurses o		(70)
other health personnel during delivery	1	
Very unfriendly		
Unfriendly	16	4.3
Friendly	22	5.9
Very friendly	246	65.8
very mendry	90	24.1
Oninion shout the anvisonment (seem termonature assertance		
Opinion about the environment (room temperature, arrangement of equipment and beds) of the labour-ward in the health facility		
Bad		
Slightly bad	19	5.1
Neutral	17	4.6
	38	10.2
Slightly good Good	89	23.8
Good	211	56.4
Opinion about the environment (room temperature, arrangement		
of equipment and beds) of the laying-ward in the health facility		
Bad	12	3.2
Slightly bad	16	4.3
Neutral	48	12.8
Slightly good	89	23.8
Good	209	55.9
Opinion about cost of delivery at health facility	1	
Very expensive	29	7.8
Expensive	86	23.1
Moderate	218	58.4
cheap	46	10.7
Opinion about the time taken before attended to by midwives, doctor		7
nurses or other health personnel when labour set-in.	,	
The waiting time was very long		
The waiting time was normal	88	23.5
The time was very short	213	57.0
The time was very short	73	19.5
Opinion about the quality of services provided by midwives,		
doctor, nurses or other health personnel at health facility. Bad		
Slightly bad	8	2.1
Neutral	13	3.5
Slightly good		
Good	50	13.4 20.3
190	76	60.7
	227	00.7
Satisfied with the antenatal care services provided at the health		
facility Non-display	5	1.3
Very dissatisfied	13	3.5
Dissatisfied	7	1.8
Neither	311	83.2
Satisfied	38	10.2
Very satisfied		

Source: Field data, 2019

4.3: Delivery type among respondents during their previous birth

From the study it was also found that 366 (97.9%) of the respondents had skilled delivery during their last birth with a mere 8 (2.1%) having unskilled delivery (See Figure 4.2). Among those who had skilled delivery, 86.1% were assisted by Midwives, 11.5% assisted by Nurses and 2.4% assisted by Doctors. Also, 50.0% of those who had unskilled delivery were assisted by their neighbours with equal percentage (25.0%) being assisted by their mother and mother-in-law. Moreover, 44.4%, 26.3%, 13.4%, 12.1% and 3.8% of the respondents respectively outlined that decision on place of delivery came from both partner, solely the woman, a health worker, solely the man, and a relative.

4.4: Enabling/Need factors influencing skilled delivery among women who have had previous births.

Concerning enabling/need factors influencing skilled delivery, respondents were presented with certain factors and asked whether they consider those factors to contribute to the utilization of skilled delivery. With respect to each factor assessed, majority of the respondents indicated "Yes" with just few indicating "No". Figure 4.3 depicts the response obtained.

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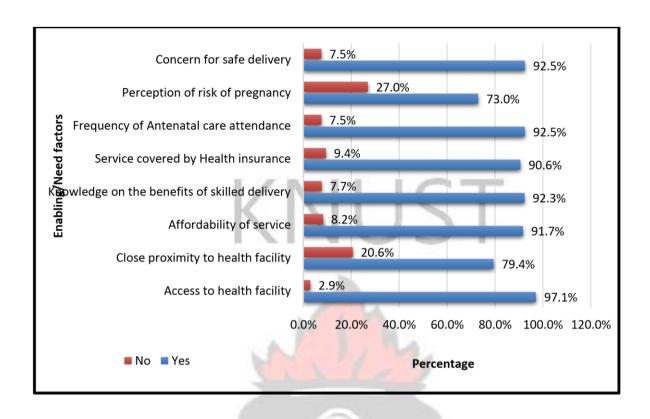


Figure 4.2: Enabling/need factors influencing skilled delivery among women who have had previous births.

Source: Field data, 2019.

Perceived barriers hindering utilization of skilled delivery among women who have had previous delivery

Respondents were also presented with certain factors and asked to indicate which among those factor they do perceive as barriers to the utilization of skilled delivery. The result from 387 respondents who responded is presented in Figure 4.4.

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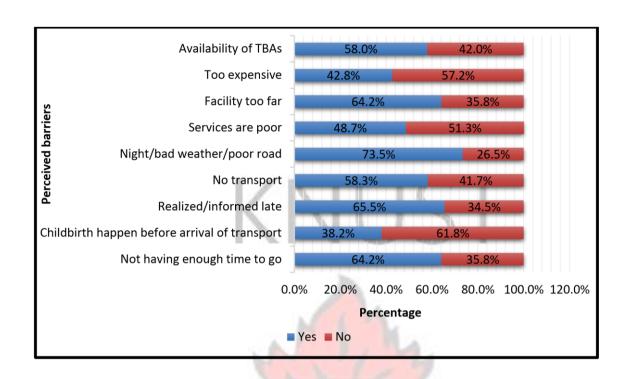


Figure 4.3: Perceived barriers to the utilization of skilled delivery among women who have had previous delivery Source: Field data, 2019

4.4 Association between respondents' socio-demographics and skilled delivery

From preceding finding, it has been ascertained that skilled delivery is used by majority of the respondents. Hence, the association between respondents" socio-demographic characteristics vis-a-vis skilled delivery was tested for. A chi square (χ 2) test was conducted to establish the association between these variables at a significance level of 0.05. It was revealed that a statistically significant association existed between socio-demographic characteristics including educational level, religion, number of children, husband"s level of education and possession of NHIS with respect to skilled delivery.

However, the analysis did not find a statistically significant association for age, marital status, respondents" occupation, respondents average monthly income and husband"s occupation vis-a-vis skilled delivery.

Table 4.3: Association between respondents' socio-demographic characteristics vis-a-vis skilled delivery.

Skilled do		lelivery		
Variables	(N = 3)	x^2	P - value	
	Yes	No		
Age				
<20 years	8	0		
20-29 years	232	5	0.6030	0.896
30-39years	112	3	0.0050	0.000
40+ years	14	0		
Marital status		116	_	
Single	31	0		
Married	301	7	3.1000	0.376
Divorced	12		3.1000	0.370
Cohabiting	22	0		
Level of education				
None	49	6		
Basic education	97	1	23.9557	0.001*
Secondary education	124	1		
Tertiary education	93	0		
Religion	3.4.3			
Traditional	4	4		
Christian	195		01.0207	0.0014
Muslim		0	91.8387	0.001*
	167	4		
Occu <mark>pation </mark>	7 4		1	
Government worker	108	2		
Unemployed	104	1	3.0650	0.382
Self-employed	127	5	3	
Other	27	0		3
Number of children	7	1000		
1	87	0		(c)
2	163	0		Α
3	I I would be to be a second			V
4	67	7	24.8228	0.001*
5	34	1		/
	10	0		
6	5	0		
Average monthly income	1			3
Less than GH¢500	213	4	1.3190	0.517
GHØ500-GHØ1000	124	4	13	4
More than GHC1000	29	0	200	
Husband's level of education	7	100	Br	
Basic	55	4		
Secondary	132	4	7.2620	0.026*
Tertiary	179	2	7.2020	0.026*
	1/9	<u> </u>		
Husband's occupation	200	_		
Government worker	209	2		
Self-employed	140	6	4.5101	0.105
Unemployed	17	0		

Has NHIS				
Yes	362	6	28.3464	0.001*
No	4	2		

Source: Field data, 2019

CHAPTER FIVE

DISCUSSION

5.1 Introduction

Findings from the study presented in the previous chapter is explicitly examined in relation to relevant literature. The discussion is structured based on the specific objectives of the study: specifically knowledge and attitude of women who have had previous birth pertaining to skilled delivery, perceived barriers to the delivery by skilled birth attendants, and factors influencing delivery by skilled birth attendants among women who have had previous birth.

5.2 Knowledge and attitude of women who have had previous birth on skilled delivery

5.2.1 Knowledge of women who have had previous birth on skilled delivery

According to the study, knowledge of pregnant women who have ever given birth with regards to skilled delivery is relatively high in the East Mamprusi Municipality. A very high percentage of the women were able to distinguish between skilled and unskilled delivery. In fact, 96.8% of the women knew that skilled delivery occurs under the supervision of a midwife, a nurse or a medical doctor. A similar percentage of the respondents were cognizant that skilled delivery is important. The relevance of skilled delivery lies in its ability to prevent death associated with child birth. WHO (2012), stipulated that skilled delivery is an imperative approach to reduce childbirth related deaths. Moreover, 97.6% of the respondents were apprehensive that ANC is a pathway to skilled delivery. Study conducted by Birungi and Ouma (2006) and Maureen and

^{*}Chi-Square statistic is significant at the 0.05 level

Peter (2008) established that women who attended ANC frequently admitted that they were going to have skilled delivery. Anwar (2008) asserted that the probability that a woman will utilize or seek for skilled attendance during delivery will increase if they use ANC regularly. A reason underpinning ANC as a pathway to skilled delivery is that pregnant women are advised and entreated during ANC service to utilize skill delivery during child birth. It can also be construed that women who go for ANC are educated on several thing pertaining pregnancy and child birth. Such women are sensitized with the risks associated with delivery done without the assistance of a trained birth attendant (home or unsupervised delivery). They are also fed with the benefits of skilled delivery services which enable them to develop interest in skilled delivery over unskilled delivery.

In addition, the respondents were also knowledgeable with regards to the practices of health personnel in assisting with delivery. A very high proportion of the women were cognizant that midwives, nurses and doctors are supposed to wash their hands and wear hand gloves before assisting with skilled delivery. They also knew that these health personnel are to wash their hands before cutting the umbilical cord. These practices are necessary in the practice of skilled delivery as it prevents infection from developing during delivery which in the long run causes mortality and morbidity.

5.2.2 Attitude of women who have had previous birth on skilled delivery

Apparently, respondents attitude towards skilled delivery was reflective in their satisfactory level of the skilled delivery services which they received during their last delivery. On the whole, approximately 83% of the respondents showed satisfaction with regards to the services rendered at health facilities during their last childbirth. This finding corroborates a that of Abdalla, (2018) and Bitew et al. (2015). The former

researcher revealed that in Tamale Metropolis, 80.0% of postnatal women present at various health facilities were satisfied with childbirth services whereas the latter reported that 81.7% of women in Debre Markos town of northwestern Ethiopia showed satisfaction to services of childbirth provided in government hospitals.

This study found that attitude portrayed by health personnel who assist in skilled delivery was considered to be friendly or very friendly by 89.9% of the respondents. Moreover, 60.7% of the respondents viewed the quality of services provided by health personnel during their last child birth to be good. It was also found that 56.4% and 55.9% of the respondents opined as good the environment of the labour-ward and the laying-ward in the health facility respectively. Most of the respondents (58.4%) also considered, as moderate, the cost of delivery at health facility. Also, a similar percentage of respondents considered the time taken before they were attended to by a health professional when labour set in to be normal. These attitudinal perception underscores the high rate of satisfaction of respondents toward skilled delivery during their last birth. A previous study by Dzomeku et al. (2011) and Avortri et al. (2011) in Ghana argued that interpersonal behaviour such as friendliness of health personnel; interpersonal skills such as providers skills and competence; therapeutic communication such as politeness, among others influence women's satisfaction with child birth services. And subsequently, satisfied women likely adhere to treatment, trust whiles using health care services confidently (Changole *et al*, 2010).

5.3 Perceived barriers to delivery by skilled birth attendants

According to Ghana Health Service, the proportion of skilled delivery in Ghana is 56.2% which is below the national target of 80% (GHS, 2017). However, this current study found interestingly that approximately 98% of the respondents sought for skilled birth attendant during their previous birth. In order words the above percentage of

women utilized skilled delivery during their last child birth. Respondents were presented with certain factors and asked to indicate which among those factors they perceive to militate against utilization of skilled delivery. Majority opined the following factors.

i. Availability and Accessibility of Traditional Birth Attendants (TBAs)

TBAs have been recognized as one of the significant blockades to the use of skilled delivery by most pregnant women. Most women opt for the services of TBAs during child birth because they are easily accessible. TBAs live with pregnant women in one community and hence closer to them than trained birth attendants who are stationed in health facilities. The services TBAs are also affordable in the sense that they do not have specific charges for their services. A study in Nigeria by Ogunlesi (2005) found that women utilized the services of TBA during delivery because they provide cheap services to them. TBAs are able to get pregnant women to prefer their services because they are sensitive to women's need, their cultural values and also preserve the dignity of

women. It has been observed by Birungi & Ouma (2006) and Ochako (2011) that normally TBAs are old, mature, with the necessary experience in dealing with birth cases and in most cases conduct deliveries to women within their community.

Proximity to Health Facility

Proximity to health facilities influence choice of place of birth. Usually most pregnant women would hesitate to travel far distances to seek for skilled delivery. Far distance to health facilities is also reported by Tiimob (2017) as a bottleneck to skilled delivery. According to Tiimob, 75% of respondents indicated that long distance to health centers compelled women to opt for home delivery. Indeed, where there is far distance to a

health facility, women may have to board a vehicle to the facility. This becomes a hindrance in instances where a woman cannot get a vehicle to the facility or even foot transportation cost. Therefore, under such situation, a woman will eventually resort to home delivery.

iii. Night/ bad weather/ poor roads

It was also revealed that 73.5% of the respondents perceived night, bad weather and poor nature of roads linking communities and health facilities to potentially impede skilled delivery utilization. As a result of bad weather and poor roads, women who will even want to have skilled delivery will not be able to achieve that expectation. When roads leading to health facilities are in bad shape, drivers do not show interest in driving or working on such roads. Only few vehicles tend to ply on such roads and as such during emergencies, for instance during period of abrupt onset of labour at night or during bad weather, it becomes difficult getting a vehicle to convey pregnant women to health facilities. If it becomes possible to even get access to a vehicle, the bad nature of road itself will impede achieving the skilled delivery as pregnant woman can deliver whiles en route to health facility. Sudden labour onset at night and a bad weather condition also makes access to skilled delivery impossible as during such conditions, it becomes difficult and also there is no enough time moving from one"s residence to health care center to deliver.

iv. Lack of Transport to Health Facility

Another barrier identified by women in East Mamprusi Municipality to militate against skilled delivery was challenges associated with transport. In fact transport unreliability and inability of pregnant women to plan in advance for proper means of transport to

nearest health facilities makes a high percentage of women who desire skilled delivery to resort to home or unskilled delivery. A study by Hazemba and Siziya (2008) in rural Tanzania reveled that 34% of mothers who delivered at home were actually resolved to utilized health facility however transport issues and challenges instigated them to deliver at home. Transport issues can be eliminated from the picture of inhibiting the use of skilled delivery, however it appears not enough effort is invested into curbing it as a bottleneck to skilled delivery.

v. Realized/informed late

Utilizing skilled delivery is hindered when information about it is not communicated early enough to pregnant women. In various communities, women are generally accustomed to giving birth at homes. It takes a lot of effort through education to get women develop interest in seeking skilled delivery. Therefore, inability to feed pregnant women with such information early enough for them to deliberate upon it, will definitely result in those women delivering at home.

vi. Not having enough time to go

Majority of women do not utilize skilled delivery because they do not have enough time to move from their homes to health facilities. Typically, in case of sudden onset of labour, local birth assistance are called in to assist pregnant women to deliver instead of moving to health facility to give birth.

5.4 Factors influencing delivery by skilled birth attendants

Educational level, religion, number of children, husband level of education and availability of NHIS were found as factors having association with use of skilled delivery.

Educational background of pregnant women have been identified through previous studies to influence place of delivery. Hazemba *et al.* (2010) found a strong association between skilled delivery viz-a-viz education. Hazemba and colleague also found that women who were educated were comprehensive about issues of obstetric

complications and could take personal decisions on issues relating to their own health. A similar study by Kitui *et al.* (2013) reported on women who had attained higher education to be 7.46 times probably to make use of skilled delivery than those without education. Tiimob (2017) also found that 87% of respondents claimed that educational level of women could influence where they seek for delivery. These respondents further articulated that educated women know that they would be better taken care of at the health facility. It can be inferred that women who have higher education better understand the importance of skilled delivery and hence utilize it during delivery.

Moreover, husband"s level of education as influencing place of delivery, in this case skilled delivery, can be associated to a similar reason that men with higher education are apprehensive of the merits that come with skilled delivery.

Religion of pregnant women also significantly influence the use/patronage of skilled delivery. A study conducted in Kenya, found that religion predicts place of delivery (Kitui *et al.*, 2013). Kitui and colleagues found that place of delivery differ with respect to religious associations. According to their report, Muslim women as well as women belonging to no religion were less probably to give birth in a health facility than those women who are Protestants or their other Christians.

Number of children is also associated with skilled delivery. According to Kitui and colleagues (2013) women having children were unlikely to utilize the service of health facilities during delivery as likened to women without a child. A feasible reason for deterring women with children who have ever had skilled delivery from latter seeking

skilled delivery could be linked to the unfriendly treatment they receive at the health facility. The rude and unfriendly behaviour of health workers towards pregnant women which later deter them from using skilled delivery have been reported by Adeyemi, (2007) and Kabakyenga *et al.*, (2012).

NHIS also was found to influence skilled delivery. Kitui *et al.* (2013) reported on a similar finding, that having insurance cover increases the probability of seeking skilled delivery in a health facility. Insurance has an influence on skilled delivery because women who possess NHIS card are exempted from the payment of certain fees and charges as they utilize the service of health facilities during delivery. Women who do not possess NHIS card on the other hand bear full cost of service delivery when they patronize the services of skilled birth attendants at various health facilities. Hence women without NHIS card would not show interest in delivering at health facilities due to the cost which may be deemed exorbitant for them, whiles those enrolled on NHIS will not have to bother about any cost and hence fully utilize skilled delivery.

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CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 Introduction

This chapter is presented in two folds. The first deals with summary of the study and the second phase presents on recommendation realized during the course of the study.

6.2 Conclusion 6.2.1 Knowledge and attitude of women who have had previous birth on skilled

delivery

Women within the East Mamprusi Municipality have a high knowledge with regards to skilled delivery and posit that skilled delivery is very important. They are also cognizant of the health safety practices depicted by health personnel during skilled delivery. Respondents also know that that ANC is a pathway to skilled delivery.

Interestingly, there is a high utilization of skilled delivery among women in the East Mamprusi Municipality as the study brings to light that 97.9% of the respondents accessed skilled delivery during their last birth. Also, the study reveals a high level of satisfaction with regard to the service of skilled delivery among women in the Municipality.

6.2.2 Perceived barriers to delivery by skilled birth attendants

Factors perceived as barriers by the women which impede the utilization of skilled delivery were identified to encompass availability of Traditional Birth Attendants (TBAs), far distance to health facilities, night/bad weather/poor nature of roads leading to health facilities, transport challenges to health facilities, realized or informed late on skilled delivery, and not having enough time to go to health facilities due to sudden onset of labour.

6.2.3 Factors influencing delivery by skilled birth attendants

Enabling/Need factors that influence skilled delivery among women within the Municipality include access to health facility, close proximity to health facility, affordability of service, knowledge on the benefit of skilled delivery, service covered by health insurance, frequency of ANC attendance, perception of risk of pregnancy, and concern for safe delivery. Additionally, educational level of woman, religion, number of children, husband level of education and possession of NHIS are also sociodemographic ascertained to have an association with utilization of skilled delivery.

6.3 Recommendation

The following recommendations are made taken into consideration findings from the study.

- i. The study found that long distance to health facilities hinders skilled delivery.

 Hence the Ministry of Health in collaboration with Ghana Health Service should ensure that health facilities especially CHPs are sited nearer to communities so that pregnant women are able to access it at any point in time without having to go through the hustle of travelling far distance to access the health facility.
- ii. The Municipal Health directorate (MHD) should ensure that midwives and other health staffs are encourage to be more friendly to their clients who use the facility for delivery.
- iii. Married people alongside farmers and unemployed in the municipality need to be targeted for sensitization on the relevance associated with skilled delivery. iv. All members of the society should be encouraged to register for the national health insurance scheme to help women in accessing skilled care during childbirth.

- v. The Municipal Health directorate (MHD) should also sensitize women who make decisions themselves on the use or otherwise of the health facility on its importance and the need to be attended by a professional midwife to help prevent maternal and infant mortality.
- vi. Finally, another study is recommended to look in-depth into the influence of culture and religion, cost of transportation, availability of drugs and equipment at the facility level on skilled delivery in the municipality.



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APPENDICES

APPENDIX 1: QUESTIONNAIRES

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI, COLLEGE OF HEALTH SCIENCES.

SCHOOL OF PUBLIC HEALTH,

DEPARTMENT OF HEALTH PROMOTION AND EDUCATION

Dear Participant,

This instrument is meant to collect information on Factors influencing skilled birth delivery practices among who have had previous births in the East-Mamprusi district of the north east region of Ghana as part of my postgraduate programme. Therefore, I would like you to respond to all the stated questions as accurately as possible by ticking the box that represents your choice. All information provided will be treated with strict confidentiality and used only for academic research purpose.

Section A: Socio-demographic information

1.	Age:
2.	Marital status: Single [] Married (customary/legally) [] Divorced []
3.	Widowed [] Cohabiting [] Level of education: None [] Basic education []
٥.	Secondary (Voc./Technical education) completed [] Tertiary completed []
4.	Religion: Traditional region [] Christian [] Moslem []
5.	Others (please tell us):

	Others (please indicate)
6.	Number children:
7.	Average monthly income Less than C500 [] C500- C1000 [] More than C1000
8.	Husband"s level of education Basic [] Secondary [] Tertiary []
9.	Husband"s occupation Government worker [] Self-employed []
	Unemployed
10.	. Are you registered with the National Health Insurance Scheme? Yes [] No []
	Section B: Knowledge and attitude of women who have had previous births on skilled
	delivery.
11.	. Were you aware of the nearest health facility where you can receive skilled
	delivery care in the district at the time you gave birth to your last child?
	Yes [] No []
12.	. In candid opinion, do you think health facility delivery is important?
	Yes [] No []
12	Automotel Come is a motherway to abilled delivery
13.	
	Yes [] No []
14.	. During antenatal care women are advised to attend a health facility for antenatal
	checkup
	Yes [] No []
15.	. Midwives, doctor, nurses or other health personnel should wash hands before
	assisting with delivery

	Yes [] 1	No []
16.	. Midwive	es, doctor, nurses or other health personnel should wear hand protection
	while ass	sisting with delivery
	Yes []	No []
17.	. Midwife	s, doctor, nurses or other health personnel should wash hands before
	cutting c	ord
	Yes []	No []
18.	. Position	of the mother taken during delivery can affect the delivery process
	Yes [] 1	No []
19.	. Skilled d	lelivery is a delivery process which occurs at a health facility under the
	supervisi	on of trained midwife or doctor
	Yes []	No []
	16. At the time	you gave birth to your last child, what opinion did you hold about the
	attitude/behavio	our of midwifes, doctor, nurses or other health personnel during health
	facility delivery	7?
	1. Very unfrien	dly[]
	2. Unfriendly [SA S
	3. Friendly []	WU SANE NO BA
	4. Very friendly	/[]
	17. At the time	you gave birth to your last child, what opinion did you hold about the

environment (room temperature, arrangement of equipment and beds) of the

labour-ward in the health facility?
1. Bad []
2. Slightly bad []
3. Neutral []
4. Slightly good []
5. Good []
18. At the time you gave birth to your last child, what opinion did you hold about the
environment (room temperature, arrangement of equipment and beds) of the
laying-ward in the health facility?
1. Bad []
2. Slightly bad []
3. Neutral []
4. Slightly good []
5. Good []
19. At the time you gave birth to your last child, what opinion did you hold about the
cost for delivering at the health facility?
1. Very expensive []
2. Expensive [] 3. Moderate []
4. Cheap []

20. At the time you gave birth to your last child, what opinion did you hold about the
time taken before you were attended to by midwives, doctor, nurses or other health
personnel when labour set-in?
1. The waiting time was very long []
2. The waiting time was normal []
2. The time was very short []
21. At the time you gave birth to your last child, what opinion did you hold about the
quality of services provided by midwives, doctor, nurses or other health personnel at
the health facility? 1. Bad []
2. Slightly Bad []
3. Neutral []
4. Slightly good []
5. Good []
22. At the time you gave birth to your last child, how were you satisfied with the
antenatal care services provided at the health facility?
1. Very dissatisfied []
2. Dissatisfied [] 3. Neither []
4. Satisfied []
5. Very satisfied []

Section C: Determining factors influencing skilled delivery among women who have had previous births

23. Who decided where you gave birth (latest birth)?
1. Myself []
2. My partner []
3. Both of us []
4. A health worker []
5. A relative []
6. Others []
24. What was the type of delivery for your last birth?
1. Skilled delivery []
2. Unskilled delivery []
25. If "skilled delivery" to Question 24, who assisted you?
1. Midwife []
2. Nurse []
3. Doctor [] 4. Health officer []
5. I don"t remember []
26. If "unskilled delivery" to Ouestion 24, who assisted you?

1. My mother []
2. My mother in law []
3. My neighbour []
4. TBA []
5. I don"t remember []
27. What was the outcome of the last delivery you had?
1. Normal delivery []
2. Still birth []
27. Were you satisfied with the quality of care that you received during your last
delivery?
1. Yes []
2. No []
28. Delivery assisted by midwife/medical doctor/nurse is a very safe than unskilled
delivery?
1. Strongly agree []
2. Agree [] 3. Neutral []
4. Disagree []
5. Strongly disagree []

In your cnadid opinion, do you consider the following to also contribute to the utilization of skilled delivery?

Enabling/Need factors	Yes	No
29. Access to health facility		
30. Close proximity to health facility		
31. Affordability of service		
32. Knowledge on the benefits of skilled delivery	1 20	
33. Service covered by Health Insurance		
34. Frequency of antenatal care attendance		
35. Perception of risk of pregnancy	\mathcal{I}	/
36. Concern for safe delivery		

Perceived barriers hindering utilization of skilled delivery among women who have had previous delivery

37. Not having enough time to go No				Yes	
38. Childbirth happened before arrival of tra	nsport	Yes		No	
39. Realized/informed late No			1	Yes	
40. No transport No		5	3	7	Yes
41. Night/bad weather/poor road	*	تحدر-		Yes	No
42. Services are poor	1	Yes	No		
43. Facility too far	Yes	No			
44. Too expensive	Yes	No			
45. Availability of TBAs	-	0		Yes	No
121	7				3

APPENDIX 2: ACCEPTANCE LETTER

GHANA HEALTH SERVICE, EAST MAMPRUSI MUNICIPAL

GHANA HEALTH SERVICE

OUR CORE VALUES

- 1. People Centered
- 2. Professionalism
- 3. Team work
- 4. Innovation
- 5.Dicipline 6. Integrity

Our Ref No: GHS/NR/EMM/19/3

COLLEGE OF HEALTH SCIENCE SCHOOL OF PUBLIC HEALTH DEPARTMENT OF HEALTH PROMOTION AND EDUCATION-KNUST.

Dear Sir/Madam,



MUNICIPAL HEALTH DIRECTORATE

> P.O. BOX 2 GAMBAGA

Tel: +233-71-23794

24th May, 2019

ACCEPTANCE LETTER

With reference to you letter dated 6th of May 2019 Concerning SANDRA SAASI, an MSc student in the department of Health Promotion and Education, The municipal Health Directorate write to welcome the above student for the study.

Hoping that the study will come out with findings and recommendation that will be used to improve health Service delivery in the East Mamprusi Municipality.

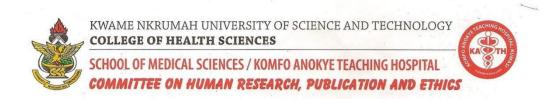
Thank you.

Yours faithfully

MR. MARK A. ABUGRI

MUNI... DIR. OF HEATH SERVICE

APPENDIX 3: LETTER OF APPROVAL



Our Ref: CHRPE/AP/599/19

4th October, 2019.

Miss Sandra Saasi Department of Health Promotion, Education & Disability Studies School of Public Health KNUST-KUMASI.

Dear Madam, .

LETTER OF APPROVAL

Protocol Title: "Factors Influencing Delivery by Skilled Birth Attendants among Women Who have had

Previous Births in the East Mamprusi Municipality in the North East Region, Ghana."

Proposed Site: East Mamprusi Municipality, North East Region, Ghana.

Sponsor: Principal Investigator.

Your submission to the Committee on Human Research, Publications and Ethics on the above-named protocol refers.

The Committee reviewed the following documents:

 A notification letter of 24th May, 2019 from the East Mamprusi Municipal Health Directorate (study site) indicating approval for the conduct of the study at the Municipality.

A Completed CHRPE Application Form.

Participant Information Leaflet and Consent Form.

Research Protocol.

Questionnaire.

The Committee has considered the ethical merit of your submission and approved the protocol. The approval is for a fixed period of one year, beginning 4th October, 2019 to 3rd October, 2020 renewable thereafter. The Committee may however, suspend or withdraw ethical approval at any time if your study is found to contravene the approved protocol.

Data gathered for the study should be used for the approved purposes only. Permission should be sought from the Committee if any amendment to the protocol or use, other than submitted, is made of your research data.

The Committee should be notified of the actual start date of the project and would expect a report on your study, annually or at the close of the project, whichever one comes first. It should also be informed of any publication arising from the study.

Thank you, Madam, for your application.

Yours faithfully,

Osomfo Prof. Sir J. W. Acheampong MD, FWACP

Chairman

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