

Factors Associated With The Utilization Of Skilled Delivery Services In The Ga East Municipality Of Ghana Part 2: Barriers To Skilled Delivery

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Abstract: There is the need to assess the constraints to skilled delivery as a guide to improve maternal health and thereby achieve the Millennium Development Goal (MDG 5). It is known that even with the best possible antenatal care, any delivery can become complicated. Therefore skilled assistance is essential (GSS 2009) and needs to be given the relevant attention, especially in developing countries. In the more developed countries, skilled attendance is about 99.5% whereas that of Africa is 46.5% (WHO, 2008) and Ghana was 59% in 2008 (GSS 2012) below the WHO target of 85% in 2010 (WHO, 2005). The Ga East Municipality of Ghana has a skilled delivery trend of 29.8% in 2008, 31.6% in 2009 and 37.5% in 2010 respectively (Ga East District Annual Report, 2010). The question is: what are the barriers to the utilization of skilled delivery services in the area? Barriers associated with this trend is unknown and needs to be investigated. The main objective of this study is to determine the constraints associated with utilization of skilled delivery services in the Ga East Municipality. A cross sectional descriptive study design was used. Quantitative research methods were employed using structured pretested questionnaire. A study population of women (15- 49 years) who have delivered within one year prior to the study in the Ga East Municipal area was used. Stratified sampling and simple random sampling were employed using a sample size of (394) participants. The data entry and analysis was done using the Statistical Package For Social Sciences (SPSS) software. Association between variables was determined using the Chi Squared Test. The findings showed that a majority of respondents 371 (94.1 %) attended ANC. About 79 % had skilled assistance at delivery with the remaining 21% delivering at home. Maternal education, occupation and household income as well as religion showed statistical association with the utilization of skilled delivery. The barriers to utilization of skilled delivery identified in the study include: transportation difficulties 43%, high cost of care 27.7%, others include: the influence of family decisions, poor attitude of health workers and poor quality care as some of the challenges. The rest were traditional / cultural or religious reasons. These challenges need to be addressed to improve skilled delivery services in the district.

Index Terms: Antenatal Care, Skilled Delivery, Traditional Birth Attendant.

1.1 Background

Access to skilled delivery care is key to reducing maternal mortality, [a major public health problem] particularly in sub-Saharan Africa, where half (50.4%) of all maternal deaths occur (WHO 2007). Maternal mortality is a health care *divide* between developed and developing countries with about 99% of all maternal deaths estimated to occur in the developing world. burden of this tragedy is felt by African countries, which account for 40% of the global total pregnancy related mortality (UNFPA, 2010). The lifetime risk of maternal death specifically due to pregnancy-related complications is 250 fold higher in developing than in developed countries (WHO 2003). It has however been estimated that 88-98% of these deaths invariably are avoidable with about 70% of these being related to five direct obstetric conditions, which are post-partum haemorrhage, puerperal sepsis, pre-eclampsia and eclampsia, obstructed labour and abortion (AbouZahr 2003).

Thus acquiring the aid and skills in the management of these complications is both an effective means to reduce maternal mortality as well key to improving maternal health. The risk of maternal death is said to be about 175 times greater in some parts of the developing world than in the industrialised countries as reported in a study by Hill et al., (2001). The context and causes of maternal mortality and morbidity as stated above are well known (Ronsmans and Graham, 2006); but there are also estimates that for every maternal death, another twenty (20) women will develop some form of life-long morbidity related to pregnancy and or childbirth which is very alarming (WHO 2004). The effect of maternal death on household income, household productivity, and household disintegration has been described and therefore relevant that timely and professional care and interventions during pregnancy, labour and post delivery periods are put in place which ultimately makes the difference between life and death of both mother and the newborn (WHO 2005). It is also reported in a study by Cotter et al., (2006), that in sub-Saharan Africa, although women attend antenatal clinics (ANC) yet they do not seek skilled attendance when they are in labour. This however means that a significant number of even those who received health services during the antenatal period still deliver without adequate obstetric care. The urgency and magnitude of the problem prompted the International community to include the improvement of maternal health in the Millennium Development Goals with the aim of reducing maternal mortality by 75% between 1990 and 2015. The strategies to address the problems of maternal mortality include one proven effective strategy which is the provision of access to basic emergency obstetric services by employing life saving skills such as assisted deliveries (Paxton et al., (2005). Access to these services is a key element in

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meeting the global target for skilled delivery of 80% by 2010 and 90% by 2015. It is however worthy to note that, in addressing the issue of expectant mothers having access to skilled attendants, it is important that there is provision of easy to reach health facilities with the necessary motivated workforce, equipment and drugs and enabling environment as well as adequate referral systems. In Ghana several efforts are being made in this direction by training more midwives to replace the large numbers of midwives going on retirement, new midwifery schools are being put up with some existing health assistant schools being upgraded to midwifery schools as well as the placement of non practising midwives to maternity units. Both local government and Ministry of Health (MOH) have collaborated to put up or expand existing health facilities to create space for more maternity units. In order to bring health services to the door step of the communities, the CHPS programme is being implemented in both rural and urban settlements although the implementation strategies vary slightly. The National Health Insurance Scheme (NHIS) and the Free Delivery Service concepts are also being implemented in all public health facilities as well as some accredited private clinics. The World Health Organization (WHO) estimated that skilled attendance have reached 99.5% in developed countries whereas that of developing countries is 46.5% for Africa and 65.4% for Asia (WHO 2008). Such information consequently has gone a long way to put all nations on their feet in a bid to improve skilled attendance services. The Ghana Demographic Health Survey (GDHS) report for 2008 however shows that, over nine in ten mothers (95%) receive antenatal care from a health professional whereas only 59% of deliveries were assisted by skilled personnel. Traditional birth attendants (TBAs) on the other hand assisted with 30% and about one in ten births is assisted by relatives or receives no assistance at all (GSS 2009). This brings to the fore that addressing the issue of maternal health should not be left at the doorstep of the health ministry and that it will take a concerted effort of government, nongovernmental agencies and inter sectoral collaboration. With these revelations it has been realised that a lot more proactive strategies are required to meet the set targets for the Fifth Millennium Development Goal (MDG 5) by year 2015.

1.2 Statement of the problem

Labour and delivery are the shortest and most critical period during pregnancy and childbirth because most maternal deaths arise from complications during delivery. Even with the best possible antenatal care, it is established that delivery could be complicated and therefore skilled assistance is essential to safe delivery care. For numerous reasons however, many women do not seek skilled care due to cost of service, the distance to the health facility, and quality of care thereby bringing about a low coverage of 59% skilled deliveries despite the various strategies being put in place (GSS, 2009). Assessment of the trend of skilled delivery services in the Ga East Municipal area compared to antenatal services shows that although antenatal services is at an appreciable level of 67% in 2010; skilled deliveries however is as low as 37.5% and a marginal increase of about 6% over the previous year's coverage. With the introduction of the 'free delivery services' which is in place to solve the problem of cost of services and the establishment of a CHPS compound, health education on benefits of utilization of maternity services, together with so many other activities towards improving

maternal health in the municipality; it is expected that expectant mothers in the district will take advantage of such strategies to have skilled attendance during delivery which will thereby show a corresponding increase in the coverage of skilled deliveries but this is however not the case. The coverage of 37.5% for skilled birth attendance which is below the national target of 60% and global targets of 85% in 2010, is a source of concern and this calls for the need for a study to find out the factors contributing to this low trend of skilled deliveries. In addition to the low trend of skilled deliveries, there were two (2) maternal deaths, in 2010 giving an MMR of 42/100,000 Live Births as compared to 24/100,000 Live Birth in 2009. With reference to the trend of skilled delivery in the Greater Accra Region it was observed that there was slight increase from 2006 to 2008 and then there was a sharp drop from 2008 to 2009 which altogether is lower than the global targets. It is expedient to make a close observation of the trend of national maternal health performance in order to compare the figures attained with global targets and also whether there are increases in the trend or not. Institutional maternal mortality fluctuated from 2006 to 2009 with the highest figure of 224 occurring in 2007 and declining significantly thereafter.

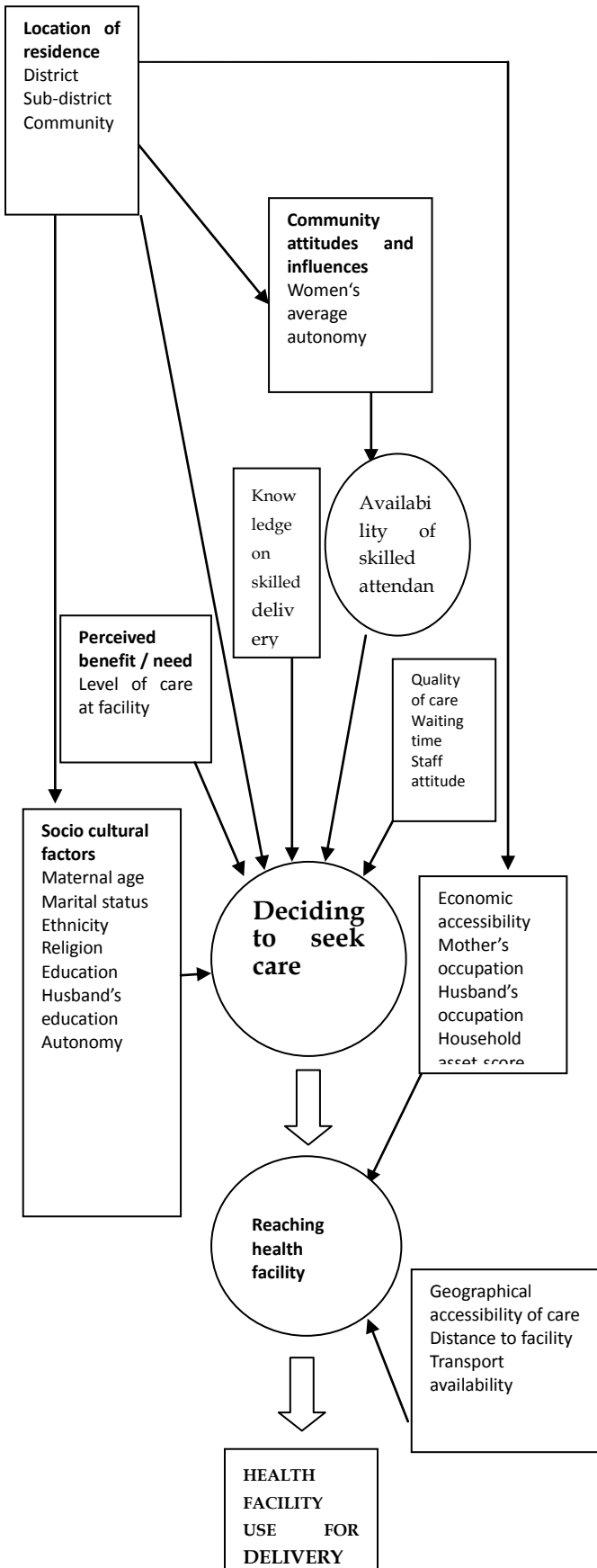


Figure 1 Conceptual Framework on Skilled Delivery

Conceptual framework on factors that influence skilled delivery use

This framework considers person related factors as well as health facility factors. The person related factors include the mother’s socio-demographic characteristics as well as socio-cultural factors and the perceived benefit and need of facility use. It also considers how community attitudes influence family decision making with the location of residence influencing most other factors. Knowledge on skilled birth attendance is also an important factor and all these together have influence on the decision to seek care. Economic and geographical accessibility mainly influence whether the woman actually reaches the facility. The health facility factors are related to availability of skilled delivery services as well as the quality of care rendered in terms of waiting time and staff attitude. (Gabrysch et al., (2011) [Figure 1].

1.4 Justification

The findings on factors associated with skilled delivery will equip local policy makers and stakeholders at the facilities with the relevant information to inform policy on their health services for quality improvement on health care.

1.5 Research Questions

In order to achieve the objectives of this research, the following research questions were formulated.

- What proportion of women in the district made use of skilled attendants during their most recent delivery?
- What are the general characteristics of women who delivered at facilities with skilled delivery services?
- What are the barriers to the utilization of skilled delivery services?

1.6 Objectives

1.6.1 General objective:

The general objective of the study is to determine factors that are associated with utilization of skilled delivery services in the Ga East Municipality.

1.6.2 Specific objectives:

The specific objectives of the study are:

To determine the proportion of births attended to by skilled birth attendants in the municipality.

To identify the socio- demographic characteristics associated with access to skilled delivery services in the municipality.

To identify the barriers to the utilization of skilled delivery services in the municipality.

1.7 The study area

The Ga East Municipality [Fig 2] which is one of the eight (8) districts in the Greater Accra Region of Ghana. The area is located to the North Eastern part of the region and is one the newly created districts carved out of the former Ga District.

Demographic Characteristics

The district has a total population of 320,853 as at 2010 with a growth rate of 4% with the WIFA (15-49years) forming 28.5% of the total population (Table 1.4). The district is bordered on the north by the Akwapim South District in the Eastern Region

and on the west by the Ga West district, the south by Accra Metropolis and Ga South and in the east by the Adenta Municipal area with Abokobi as the capital. There are thirty – four (34) communities comprising mixed settlements, urban, peri-urban and rural areas with about 82% of the entire district settlement being urban. The economic activities are Public Services and trading being the dominant occupations in the municipality, followed by craftsmanship or artisanship with few engaged in subsistence farming. There are a few who are employed in small and medium scale enterprises as factory hands or casual workers. Some are engaged in hawking in goods for companies for some form of daily commission. A few of the work force in the district are unemployed reflecting the high poverty level and for that matter their inability to pay for the health care services offered. The district is a Ga community but could be said to be heterogeneous since it is made of a mix of many of ethnic groups in Ghana but with Ga – Adangbes, Akans, Ewes and people from the three northern regions of Ghana forming the majority. The Ga culture is maintained but then individuals also adhere to their own ethnic cultural practices. Two major festivals are celebrated in the district, namely Dokobi which is celebrated by the inhabitants of Sessemi and Homowo celebrated by the people of Boi, Teiman and the other Ga communities in conjunction with the people of Teshie and La. The district has been divided into Four (4) Sub- Municipal areas, which are Danfa, Madina, Dome and Taifa. Some important areas worth noting are Abokobi which is one of the initial settlements of the Basel missionaries in Ghana and is therefore an important landmark of the Presbyterian Church of Ghana. It is the political seat of the district and therefore has the Municipal Assembly as well as other decentralised departments including the Municipal Health Directorate. The town is well planned with quite good environmental sanitation and has a serene environment. The Ghana Atomic Energy Commission is located at Kwabenya (Taifa sub-district); The largest Psychiatric Hospital in Ghana is located at Pantang (Danfa sub-district) which has two Nurses Training Schools. The district has a total of about forty-three (43) health facilities made up of 6 public facilities (13.3%), One (1) quasi government (GAEC), one (1) faith based hospital (CHAG) and the remaining 35 (81.4%) are private facilities. There is one CHPS compound located at Taifa one of the sub-districts. All these health facilities render outpatient curative care services but then only eight (8) have skilled delivery facilities. There is collaboration between District Health Management Team (DHMT) and some of the private health care providers. Twenty five (25) of the private facilities send monthly reports to the Municipal Health Directorate. There is no district hospital but the Pentecost Hospital which is a Faith based hospital situated at Madina serves as the first referral point for emergency obstetric care. The Greater Accra Regional Hospital (Ridge Hospital) which is about 22 km away serves as the next referral level for emergency obstetric care. The municipal area has no ambulance but falls on one from the Pentecost Hospital. The major health problems in the district are malaria, poor sanitation and lack of potable water with malaria ranking first among the first ten top diseases. The Ga East Municipal Assembly collaborates with the health directorate to have quarterly review meetings to identify health problems and come up with strategies to address such problems. There are plans underway to provide more public health facilities especially within the Taifa and Dome sub districts where there are non in order to improve health

services within the district. The School of Public Health of the University of Ghana are in collaboration with the MHD in the supporting the CHPS programme in the district. Non governmental agencies such as 'Focus Region' also supports the MHD with logistics as well as financially. There were two (2) maternal deaths, in 2010 giving an MMR of 42/100,000 Live Births as compared to 24/100,000 Live Birth in 2009. One death was due to haemorrhage and the other due to amniotic fluid embolism.

3.0 Methods

3.1 Type of study

A cross sectional descriptive study was employed in the Ga East Municipal area which is one of the districts in the Greater Accra Region of Ghana.

3.2 Study population

The study was conducted among all women of reproductive age group of (15- 49 years) who have delivered within one year prior to the study in the Ga East municipality whether by skilled or unskilled attendance.

3.3 Study location

The study was conducted in the Ga East Municipal area [Figure 2] which is one of the districts in the Greater Accra Region of Ghana. The municipality has a total population of 320,853 as at 2010 which has been divided into (4) four sub-districts.



Figure 2. Map of Greater Accra Region illustrating the location of Ga East Municipality

3.4 Variables

The dependent variable is acceptance of skilled delivery and the independent variables include Socio - Demographic Characteristics such as Age, Marital status, Parity, Religion; Socio-economic status such as level of education of the

mothers, occupation, household income, accessibility to health care facility in terms of time spent from home to health care centre, availability of transportation, decision making, attitude of health care staff.

3.5 Sample size determination

The proportion of skilled deliveries in the Ga East Municipality in 2012 was 37.5%. To calculate the sample size n represents the required sample size, t the confidence level at 95% (standard value of 1.96) and p the estimated prevalence of 37.5% skilled delivery; m is the margin of error at 5% (standard value of 0.05).

The formula is

$$n = \frac{t^2 \times p(1-p)}{m^2}$$

$$n = \frac{1.96^2 \times 0.375(1 - 0.375)}{0.05^2} = 360$$

10% non – response will add up to a total of 396 participants.

3.5.1 Sampling method

A stratified sampling method was employed to select the sub district study sample according to the sub district categorization (4 sub-districts) The communities in each sub district were compiled and Simple Random Sampling was used to select one (1) community from each sub district. On facing each community from the main entry road, each house on the left as one entered the community was chosen as the starting point. Every third house was then selected and women who had children up to one year were identified in a household and interviewed. Where there were more than one eligible respondent only one of the lot who agreed to partake in the study was randomly selected to participate through balloting. The eligible respondents in each community were interviewed to give a total of 396 participants. In case of the absence of an eligible respondent, the interviewer moved to the next house until the target respondent was obtained. Out of this number two were rejected leaving 394 for data entry and analysis. The sample size per sub district according to the sub district population as follows:

Madina - Zongo 147 in the Madina subdistrict,

Adenkrebi 55 in the Danfa subdistrict,

(Kwabanya Abuom) 91 in the Taifa subdistrict

Grushietown) 103 in the Dome subdistrict which sums up to 396 respondents.

Pilot study: The questionnaire was pre – tested in the Adenta Municipal area which has similar population to test for clarity, validity and reliability of the questions after which this was revised accordingly and finalised for use. The Principal Investigator closely monitored the field assistants during data collection to ensure that data were collected from participants as scheduled. Administered questionnaire were checked daily for completeness and accuracy. To ensure quality control, completeness of each questionnaire was checked to ensure internal consistency.

3.5.2 Data processing and analysis

Data cleaning was done manually to identify incomplete, incorrect and inaccuracies. Data analysis was done using the Statistical Programme for Social Sciences (SPSS) Version 16.

3.5.3 Statistical methods:

Data was analysed using descriptive analysis of frequencies and cross tabulations. Background characteristics were analysed using frequencies. Data were presented in tables, pie chart and histogram. The association between background characteristics and outcome were compared with the Chi Square test.

3.5.4 Ethical considerations / issues

Ghana Health Service - Ethical approval was obtained from the Ethical Review Board of the Ghana Health Service through the School Of Public Health, University of Ghana.

Approval from the study area- Approval was obtained from the Municipal Director of Health Services

Participants of the study - The study was conducted among women of reproductive age group of (15- 49 years) who have delivered within one year prior to the study in the Ga East municipal area.

Potential risks / benefits – The study was conducted in the participants own environment. **There was no threat of potential risk since no drugs nor chemicals were administered.** Participants benefited from the study since interventions on improvement of skilled delivery services will be put in place.

Privacy and confidentiality- Privacy was ensured during the data collection process and after the study. The researcher and assistants kept all information about participants to the study alone.

Compensation – Some form of refreshment was provided for participants of the study.

Data storage- A back-up storage facility in the form of hard disk of CD Rom was provided. All questionnaires were put in a well labeled sealed large envelope and kept in a metal cabinet under lock and key.

Voluntary consent – Participants were informed through a written informed consent that participation was voluntary and that she had the option to stay out of the study at any point and time during the study.

Conflict of interest- There was no conflict of interest in the study.

3.7 Limitations of the Study

Sampling bias may have been inadvertently introduced due to purposely restricting respondents to births within 1 year of survey

Recall bias – The recall period in the study was maintained at 1 year (12months), but this was still a sufficiently long period to be affected by recall bias. The views and opinions of respondents and the analysis represent the population.

3.8 Assumptions: To achieve the objectives of the study, the following assumptions were made:

- That the opinions expressed by the respondents would be fairly representative of the views of the general population and that these findings can be extrapolated to the general population
- That the respondents understood the questions.
- That the field workers were careful in the administration of the questionnaire and that the answers provided by respondents were not altered prior to entry.
- That the respondents were truthful and did not give socially desirable answers.
- That data entry for analysis was correctly done.

4.0 Result and Analysis

This chapter is a summary of the results of the research. For clarity, some of the findings of the study are presented in frequency tables and charts. In all a total of three hundred and ninety-four (394) mothers were interviewed.

Socio-Demographic Characteristics of Respondent

More than half (51.3%) of the mothers [Figure 3] were within the age group of 25- 34 years, with the younger age group of 16-20 years forming 37 (9.4%), the minimum age was 16 with maximum age at 43 years; the mean age was 28. On marital status [Figure 4] a relatively high proportion 294 (74.6%) were married with 67 (17.0%) cohabiting and 25(6.3%) being single, there were few who were separated or divorced 4 (1.0%) and widowed 4(1.0%). Most of the mothers had 2-3 children; 186 (47.2%). On relation to religion, majority 284 (72.1%) of the respondents were Christians; 284 (72.1 %) Moslems 88 (22.3%) and others were 22 (5.6 %). Ethnic groups were as follows: Akans 133 (33.8%); Ewes 84 (21.3%), Ga-Adangbes 75 (19.0%), Hausas 52 (13.2%) and others at 50 (12.7%). On Education, JSS level was 189 (48.0%) SSS were 60 (15.2%) and Tertiary level was 26 (6.6%). About 54 (13.7%) of them had no formal education. The major occupation among mothers was trading, 178 (45.2%). This was followed by others (mainly housewives and unemployed) at 100 (25.4 %) skilled workers were 64 (16.2%), professionals (mainly teachers, nurses) at 26 (6.6%) with unskilled workers at about 14(3.6%), and a few farmers at 12 (3.0%). The educational background of the respondents' partners showed that 21(5.3%) had no formal education, but then with the majority who were educated, about 185 (47%) had basic education (Primary & JSS) with the remaining being SSS 90 (22.8%) and 70 (17.8%) having received tertiary education [Figure 5]. The source of income of the main provider for the household was mainly by regular employment forming 252 (64.0) with a chunk of 135 (34.3%) being irregular. About a quarter of their husbands were artisans 100 (25.4%) with 67 (17.0%) being professionals and 52 (13.2%) being traders. The average monthly income per household had majority of it ranging between US\$ 69.77-US\$208.62 (47.9%) and about a quarter earning less than US\$ 69.77 (25.4%). About 72 (18.3%) earn US\$ 209.32-348.18 and a few 33 (8.4%) earning US\$ 348.87 or more [Figure 6].

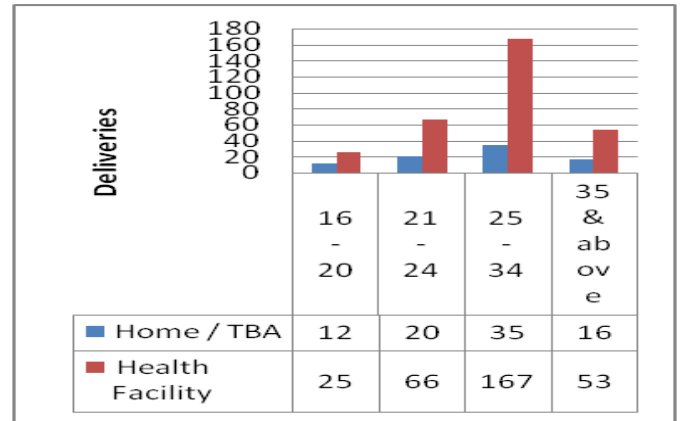


Figure 3: Socio-Demographic characteristics associated with skilled delivery

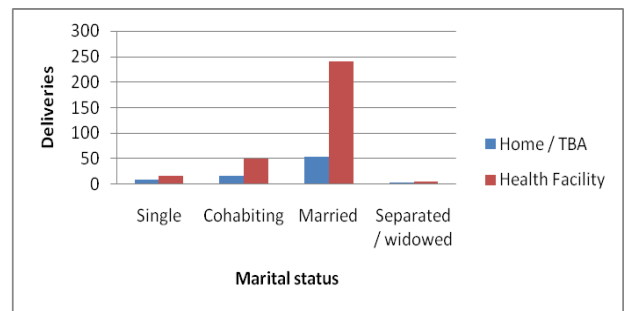


Figure 4: Marital status and place of delivery

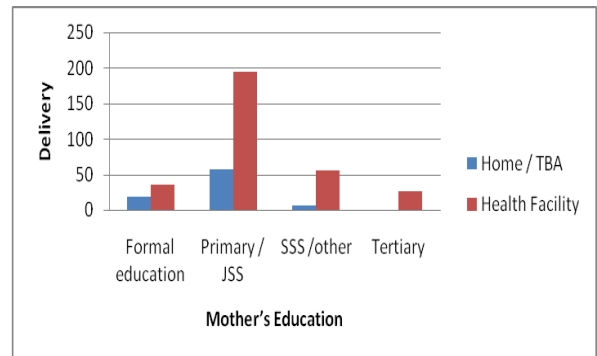


Figure 5: Mothers Education and Place of Delivery

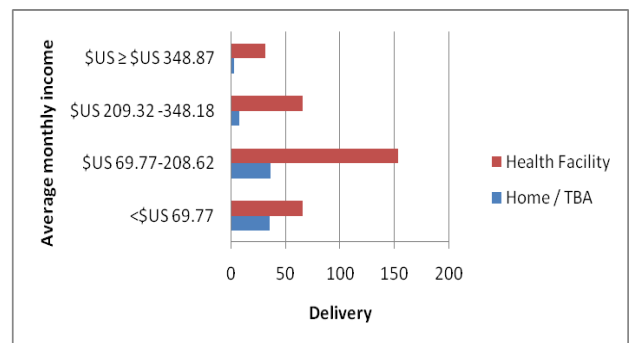


Figure 6: Socio-economic determinants of skilled delivery

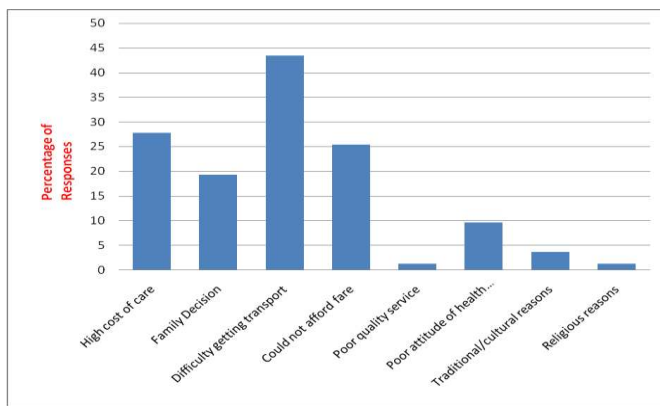


Figure 7: Barriers to Skilled Delivery

5.3 Barriers to skilled delivery

Certain barriers were identified to have inhibited respondents from utilizing skilled delivery services [Figure 7]. Out of the 83 respondents who did not utilize skilled delivery services 36 (43.3%) responses showed that transportation difficulties was their major problem. About 23 (27.7%) cited perceived cost of care at clinic as too high; 21 (25.3 %) said they could not afford transport fares. Some 16 (19.3%) responses showed that it was the family's decision that they deliver at home. A few cited poor attitude of health workers and poor quality care as some of the challenges as well as traditional, cultural or religious reasons. Transportation difficulties which are usually due to its unavailability and or affordability in terms of cost may prevent pregnant women from utilizing skilled delivery services during labour. This serves as a major deterrent to non utilization of skilled delivery mostly in rural areas; however it is worrying if such difficulties occur in an urban and peri-urban area. It is important to engage the women in employable skills to improve their economic status. Delays in accessing health facility is associated with the problems or constraints that women face which is usually due to poor road and communication networks, distant health facilities and lack of transportation and inadequate community support (GHS, 2006). Transport costs according to Borghi et al., (2006) have been estimated at half of total expenditure for a normal delivery and 25% for a complicated delivery in studies in Tanzania and Nepal. Stekelenburg (2004) working in rural Zambia found that although 96% of respondents preferred delivering in a health facility, only 54% actually did, because of long distances and the lack of transport. A study by Thaddeus and Maine (1994) has shown that distance to health services serves as a disincentive to seeking care as a result of which many pregnant women do not attempt to reach a facility for delivery because walking many kilometres is difficult in labour and impossible if labour starts at night, and transport means are often unavailable.

Decision on place of delivery

Issues of decision making for seeking skilled delivery were however quite favourable since majority (44.1%) took a collective decision by both respondent and partner with a few having a collective decision taken by the family. In finding out who took the decision on place of delivery, majority 138(35%) said it was a collective decision by respondent and partner with 111 (28.2 %) citing partner only and 79 (20.1%) taking a personal decision. Less than a quarter 66 (16.7%) had a collective decision by the family. Studies by Seljeskog et al., (2006) however showed that many women in many

communities in Africa lack decision making capacity and the final decision as to where to deliver rests on the household head especially if cost will be incurred. Mills & Bertrand (2005) also working in northern rural Ghana found that although all the women groups interviewed were knowledgeable about the life threatening signs and symptoms of complications of pregnancy and labour, decisions about place of delivery were generally made only after the onset of labour.

5.0 Discussion of Results

This study discusses the important findings in relation to the study objectives, literature review and the key variables. The discussions were based on the socio-demographic background, economic characteristics, the barriers to skilled delivery and presented as follows:

5.1 Socio-economic characteristics of skilled delivery

Maternal education

More than 60% of the mothers have had some form of formal basic education, but this trend though an achievement, still needs more to be done in terms of improving education for the girl child, since most of those who used unskilled delivery (about 90%) were within this educational status bracket. Findings from the study showed that all the 26 respondents who attained tertiary education (100%) utilized skilled delivery services. Majority of the mothers attained primary and JSS levels out of which 15.1% delivered at home while (66.3%) delivered at the health facility. Mothers who attained the SSS level had 1.6 % of them delivering at home with 18% delivering at the health facility. For those who had no formal education 4.6% delivered at home with 4.6% delivering at the health facility. This educational trend sends a signal that probably a high proportion of the women in the municipality do not continue schooling after the primary and JSS level. Also in relation to the findings of this study, those who reached the secondary and post secondary levels used more skilled attendance. This confirms what was described in some studies done by (Ahmed et al., 2010; Ensor & Cooper (2004) who established a link between maternal education and use of skilled delivery services and that it improves the individuals' ability to have a better insight into health issues. Collin et al., (2007) showed that in reviewing data from four DHS in Bangladesh also observed that maternal education has a strong correlation with utilizing skilled assistance during childbirth. The Ghana DHS report for 2003 & 2008 shows a similar trend. As was the case in this study the number of years spent in school also showed a significant association with seeking of skilled care during delivery with women who have more schooling years having a higher proportion of deliveries attended by skilled personnel compared to those with fewer schooling years or those who did not go to formal school. Women with knowledge about risk factors were more likely to use health facilities for delivery compared to those with no knowledge. And it is also expected that a better informed individual is better placed to make reasonable decisions (Mpembeni et al., 2007). A study by Yanagisawa et al., (2006) on the determinants of skilled delivery in rural Cambodia also confirmed that maternal education had a strong effect on facility delivery. With women who had at least seven (7) years of schooling being six times more likely to deliver babies at a health facility than those who did not attend school.

Occupation

Findings from the study showed that out of the 26 professionals among respondents all of them (100%) utilized skilled delivery services. Out of the 268 Non professional (7.1%) delivered at home while (66.8%) delivered at the health facility. Out of the 100 unemployed mothers, almost 30% of them delivered at home with 24.3 % delivering at the health facility. Since socio-economic status is known to correlate with education, it can be deduced from the study that even though the majority of the mothers were employed, about a quarter 100 (25.4%) were unemployed and this possibly reflected on their inability to pay premiums for NHIS and ultimately prevent them from seeking appropriate medical care. As a result of this the mothers and their families are exposed to the risk of poor nutrition and its effect on their health in general, as well as giving rise to the use of substandard means of health care. The GDHS 2008 showed that 75% of the women who participated in the survey were currently employed and 25% unemployed.

Average household monthly income

Mothers who fell within the average household monthly income of US\$ 69.77-208.62 were the majority with 153(38.8%) having skilled delivery as against 36 (9.1%) having home deliveries. Those with <US\$69.77 had majority delivering at the health facility. About 16.5% of those in the US\$ 209.32-348.18 bracket had skilled delivery as against 1.8% having home deliveries. About 7.8% of those in the US\$ \geq 348.87 bracket also had skilled delivery with 0.5% having home deliveries. Several studies substantiate this observation that a woman's socio-economic status by and large, determines whether she will seek skilled assistance during delivery or not with women in the highest quintile using skilled assistance more than those in the lowest wealth quintile. It is clear that socioeconomic disadvantage can have a detrimental effect on maternal health and that indicators such as level of household wealth and level of education are associated with women's utilization of all maternal health care services (Kunst and Houweling, 2001).

Antenatal attendance and place of delivery

The trend presented in national as well as regional figures showing high uptake of antenatal care (ANC) and low uptake of skilled delivery services held mostly true in the findings from the Ga East Municipality. Majority of the mothers 371 (94.1%) attended ANC with 23 (5.8%) not attending. Of those who attended 188 (50.6%) attended 4-7 times; 134 (36.6%) attended 8-10 times and 20 (5.5%) attended 11 or more times, with 24 (6.6%) attending 2-3 times, with 5 (1.3%) attending only once. Among the respondents 371 (94.1%) who attended the antenatal clinic, 306 (82.4%) used skilled delivery services whereas 65 (17.5%) of them used unskilled delivery. Interestingly, out of those who utilized ANC services 65 (17.5 %) of them still delivered at home and at the TBAs. These findings are similar to findings from many studies by Bulatao and Ross (2000) which confirms the assumption that generally higher uptake of ANC seen in most countries compared with delivery care could be due to the greater availability of antenatal services through lower level health facilities and mobile services, which may be due to the lower cost of providing ANC compared with delivery care. In addition, unlike ANC, the precise timing of a delivery is unpredictable, making it more difficult for women without access to transportation to

reach delivery care. It is also the case that user charges are levied less frequently for ANC than for delivery care. A study by Yanagisawa et al., (2006) showed that antenatal care attendance was a significant determinant of facility delivery when attendance was four times or more. Another study by Taguchi et al., 2003 showed that maternal mortality was higher among women who attended ANC less than four times. Frequent ANC attendance certainly would have a positive effect on maternal mortality since there will be early detection of obstetric conditions as well as influencing women's decision to seek for skilled assistance. Anwar (2008) in his study in Bangladesh brought to bear the fact that women will use skilled attendance during deliveries if they make use of antenatal care. This tends to buttress the fact that most ANC attendants especially with more than four visits will understand the benefits of skilled delivery with time and more so when they understand that the services are free. Some other studies invariably have indicated that reducing ANC to four times does not affect maternal or perinatal outcome (Carroli et al., 2001), (Villar et al., 2001). It is also reported in a study by Cotter et al., 2006, that in sub-Saharan Africa, many more women attend antenatal clinics (ANC) but do not seek skilled attendance when they are in labour although this varies from country to country. This however means that a significant number of even those who received health services during the antenatal period still deliver without adequate obstetric care. For those who did not attend they gave reasons such as use of herbs 7 (30.1%) financial constraints 4 (17.2 %) with one person 1 (4.3%) complaining of no clinic in the community. Yet another 1 (4.3%) complained of lack of transport; interestingly, one other respondent 1(4.3%) complained that her husband died and was not allowed to go out. Response on Impression about ANC services showed that majority 316 (86.6%) liked the services given with 49 (13.4%) not liking services.

Cost of skilled care

Health facility user fee is one of the proximate determinants of utilization of skilled delivery services. In resource-poor countries, the high cost of user fees for deliveries limits access to skilled attendance, and contributes to maternal and neonatal mortality and the impoverishment of vulnerable households, (Witter et al., 2007). Out of the number of respondents who sought skilled delivery services majority 184 (59.5%) did not pay for the services but then a high of 125 (40.5%) had to pay for the services. For those who did not pay majority 172 (55%) had their services covered by NHIS with 7 (2.2%) paid by their employers. Similarly out of those who paid for the services, majority 73 (65.2%) paid cost of services ranging between GHC21-79 with about 13(11.6%) paying less than or equal to GHC20.00; A maximum amount of GHC375 - 433 was paid by 2 (1.8 %) respondent. A surprising situation is the fact that over a quarter (27.7%) of respondents cited perceived cost of care at clinic as too high. It is however surprising that some of the mothers were unwilling to take advantage of governments' delivery exemptions policy since 2005. It is however common knowledge that even where formal charges are nonexistent studies shows that women incur other unofficial expenses, including cost of care for accompanying family members who help them out. Borghi et. al (2006), reports on studies that show that women in labour sometimes have to purchase detergents like bleach for sterilization of instruments, bed sheets, gauze gloves, and sanitary pads on admission for delivery services. Furthermore,

indirect costs associated with the value of relatives' time spent travelling to the hospital and waiting there with the woman were not included, although there is evidence to suggest these costs can be significant (Borghi et al., 2000) , (Levin et al., 2000). The fact that about 60% of respondents did not pay user fees is in line with the study conducted by (Witter et al., 2007) which showed that even though the policy of exemptions for pregnant women is faced with many challenges, more women are utilizing health facilities for free maternal health services. (Witter et al., 2007) The increase in uptake of delivery care observed in a study by Bosu et al., 2007 suggest that institutional deliveries increased by up to 111% between 2002 and 2004 following the introduction of the exemption policy. (Central Regional Health Directorate. Annual Report 2004) In a concurrent household survey by IMMPACT 2006, it was found that the proportion of deliveries conducted in health facilities in the Central Region increased from 51.7% to 63.6% while that in the Volta Region increased from 45.6% to 50.6% after the implementation of fee exemption, but the increase was not statistically significant in the Volta Region. (Penfold et al., 2006) Also consistent with their findings, an analysis of administrative data showed a 28% increase in health facility deliveries following the abolition of user fees in Uganda (Deininger & Mpuga 2005)

Health providers' attitude

The mothers' impression about skilled delivery services responses showed that majority 317 (80.4%) liked the services given however about 19.6% did they not like the services rendered .For those who liked skilled delivery services majority (50.8%) responded that the staff were nice and friendly, with (45.1%) saying they did their best A few (4.0%) however responded that they were harsh .When assessing the rate of services majority 188(60.1%) rated the health providers' attitude as good , 36 (11.6%) as excellent ;whiles 71 (22.8%) rated as 16(5.1%) average and poor respectively. The mothers' impression about skilled delivery services showed that majority 317 (80.4%) liked the services given for skilled attendance however 19.6% did not like the services rendered. This time round it is encouraging to have these findings showing that a few (4.2%) rated health providers' attitude as poor although there may be limitations of not asking many questions on this. However issues on barriers to health facility in this study also showed a similar result. This may be a sign of improvement in motivation of staff vis- a-vis the improvement in monitoring and supervision by the DHD although there is no scientific evidence in the municipality to support this assertion. Many studies have shown that negative interactions with health personnel is one of the factors that influence care seeking behaviour by women in labour according to a review of literature on barriers to care with skilled assistance by Koblinsky et al., (2006), the same series of studies reports of women preferring to deliver at home because health personnel use offensive and demeaning language, ridicule women because of their faded old clothing, high parity and poor personal hygiene. Kyomuhendo (2003) in Uganda found from respondents that, a lack of skilled staff at the primary health care level, verbal abuse, neglect and poor treatment in hospital and poorly understood reasons for procedures, plus health workers' views that women were ignorant, explained the unwillingness of women to deliver in health facilities. In a work in the Greater Accra region of Ghana, D'ambrosio et al., (2005) cited poor staff attitudes as

one of the reasons for non-acceptability and low utilisation of delivery care service. The women confirmed that they expected a humane, professional and courteous treatment from health professionals as well as a reasonable standard of physical environment else they consciously change their place of delivery and make same recommendations to others if they experience degrading and unacceptable behaviour from health professionals.

Time taken to access health facility

The time taken for a woman in labour which is used to connote the distance of a health facility from the home is one of the factors associated with skilled assistance. A study by Mpebeni et al., 2007 cited that the closer a health facility is to the home of users, the more likely that it will be patronised during labour. Taking into consideration the time taken to get to the nearest health facility, it took almost half 196 (49.7%) of the respondents 30-40 minutes to get to the nearest health facility. The rest of the mothers 58(14.7%) spent from 40-60 minutes with 22(5.6%) spending more than one hour. In considering the time taken to access a health facility and the place of delivery, majority spent 30- 40minutes with 162 (41.1%) delivering at the health facility with 34(8.6%) at home, For those who spent 10-20 minutes, 84 (21.3%) delivered at the health facility with 34 (8.6%) at home. Furthermore respondents who spent 40 - 60 minutes were 51 (12.9%) and had their deliveries at the health facility with 7(1.8%) at home. A few mothers who took more than one hour, 14 (3.6%) delivered at the health facility with 8(2.0%) delivering at home. An observation made from these findings fall in line with similar studies. Delays in accessing health facility is associated with the problems or constraints that women face which is usually due to poor road networks, distant health facilities and lack of transportation and inadequate community support (GHS, 2006). The cost of transport to nearest health facility had majority 238 (60.4%) spending US\$ 0.69-2.09 and a quarter 100 (25.4%) spending US\$ 2.79-4.18 This however could be overwhelming especially in an emergency situation and also during odd hours. Transport costs according to Borghi et al., (2006) have been estimated at almost half of total expenditure for a normal delivery and 25% for a complicated delivery in studies in Tanzania and Nepal. A study by Mpembeni et al., (2007) in Southern Tanzania also confirmed that the proportion of women with skilled attendants at delivery was also seen to decrease with increasing distance to the health facility which provide delivery care from 50.1% among women residing within 5 km of a health facility to only 20.2% among those residing more than 5 km from a health facility. Stekelenburg (2004) working in rural Zambia found that although 96% of respondents preferred delivering in a health facility, only 54% actually did, because of long distances and the lack of transport. A study by Thaddeus and Maine 1994 has shown that distance to health services exerts a dual influence on use by serving as a disincentive to seeking care in the first place , as well as an actual obstacle to reaching care after a decision has been made to seek it. Many pregnant women do not even attempt to reach a facility for delivery since walking many kilometres is difficult in labour and impossible if labour starts at night, and transport means are often unavailable.

Poor service quality

Quality of service from the clients' perspectives in terms of client-provider encounter is said to play a major role in health seeking behaviour. Badly delivered and poor quality health care services have been seen to compromise "access to services, compliance and effectiveness" (d'Oliveira et al., 2002). It has been demonstrated through several studies that health systems factors, service delivery and the inter-personal aspects of care also play an important part in the utilization of skilled attendance. (WHO 2002), (Tchibindat et al., 2004) There are also problems with referrals between community, health centres and district hospitals which make it difficult for women in emergency situations to get appropriate care (GHS 2006). Delays at health facility (said to be the third delay) occurs between the time of arrival of the client at the health facility and the facility's response in providing the needed care. At the health centres, response to obstetric emergencies is generally inadequate in terms of skilled attendants, equipment, logistics, and drugs, and low motivated staff (GHS 2006) All countries where skilled attendance is higher than 80% have MMRs less than 200, and the WHO points to the development of professional midwifery (during the 20th century) as the cause for the dramatic declines in maternal deaths within industrialised countries according to claims by The World Bank (Van Lerberghe & De Brouwere, 2001). In a research [in the Greater Accra region of Ghana] D'ambruso et al., (2005) cited poor staff attitudes as one of the reasons for non-acceptability and low utilisation of delivery care service. The women in this study confirmed that they expected a humane, professional and courteous treatment from health professionals as well as a reasonable standard of physical environment else they consciously change their place of delivery and make same recommendations to others if they experience degrading and unacceptable behaviour from health professionals. Perceived quality of care, which only partly overlaps with medical quality of care, is thought to be an important influence on health care-seeking. A study by Thaddeus and Maine confirmed that assessment of quality of services "largely depends on people's own experiences with the health system and those of people they know". Although some elements such as waiting times can be measured objectively, the perception of whether these are a problem and affect quality is more subjective. Elements of satisfaction cover satisfaction with the outcome, the interventions and with the service received including staff friendliness, availability of supplies and waiting times. In many cases, the woman may dislike the health facility protocols such as the situation when family members are not allowed to be present, supine birthing position is imposed or privacy not respected; this may lead to perceptions of poor quality (Thaddeus and Maine 1994)

Socio-cultural factors

Socio – cultural factors such cultural norms, either social or religious in origin and other acceptability factors can affect utilization of delivery services by women in labour even when these services are within reach. Lack of autonomy for women is one of the barriers to skilled attendance, in that certain cultures maintain that women must wait for approval from male relatives before seeking help which further compound the situation (GHS, 2006). When asked about what prevented the women who delivered at home from seeking care at the health facilities, traditional practices rarely came into the picture. About four (4) responses were on traditional and cultural

reasons (3.6%) and 1.2% for religious beliefs. This however demands further studies to ascertain the magnitude of such beliefs. Ethnicity and religion are often considered as markers of cultural background and are thought to influence beliefs, norms and values in relation to childbirth and service use and women's status. Moreover, certain ethnic or religious groups may be discriminated against by staff, making them less likely to use services (Glei et al., 2003). In Ghana, no ethnic differences were detected but members of traditional religions are less likely to use delivery services as compared to Christians (Gyimah et al., 2006). A study by Gabrysch et al., (2011) also indicated that socio - cultural factors and perceived benefit and need of facility use influence the decision to seek care and also considers how community attitudes influence family decision making. Kyomuhendo (2003), found in Western Uganda that traditionally, pregnancy is considered as a test of endurance and maternal death if it occurs; although sad, it was a 'normal' event; the use of primary health units and the referral hospital was to be patronized only when complications occurred and then used as a last resort.

6.0 Summary and Conclusion

The barriers limiting women to access skilled birth attendance are a major cause of low uptake in skilled delivery. This study identified multiple and inter-connected factors contributing to the low uptake of skilled care in Ga East Municipality. Although, ANC attendance was found to be high, yet the number of skilled deliveries in health facilities were comparatively low. The factors that motivate home delivery and thereby discourage institutional delivery were established to conclude that, high costs skilled care (real or perceived), lack of transport as well as its high cost, poor attitude of medical personnel and family members decision on home delivery, presented the greatest obstacles to the uptake of skilled attendance. Most of the mothers who delivered at home wished to have used health facilities but for want of vehicle, there was no other option but to deliver at home or with a TBA. The issue of the role of cost in skilled care is a major factor, considering the average household income levels and occupation of families in the municipality. Misperceptions of costs as well as entrenched poverty take precedence over all other factors that impede the use of accessible facilities regardless of the benefits of skilled attendance or proximity to health facilities, the inability to pay medical bills will still remain a challenge to be addressed.

Recommendation

In view of the findings, strategies to increase the availability and accessibility of health services should be a priority in the Ga East Municipality. Assemblymen, Unit Committee Members and various transport unions such as the GPRTU should support expectant mothers in labour with arrangements for transport in terms of in areas where there are transportation difficulties. Local political leaders must vigorously address the poor road network problems in the municipality. There is the need for the district assembly to complete the projects started on health infrastructure in the district especially in the Dome and Taifa sub districts that lack delivery facilities. The CHPS programme being initiated at Dome and Madina Zongo should be facilitated for staff to have a closer interaction with community members especially the household heads so as to

make better decisions in addressing the health issues of the family. There is also the need for the MHD to promote domiciliary midwifery by training more Community Health Officers (CHOs) and providing them with delivery kits and motor bikes especially in areas where there are no health facilities. Safe motherhood support groups must be formed to hold advocacy meetings on the importance of skilled birth attendance with chiefs, opinion leaders and above all, elderly women in the communities to encourage expectant mothers to go for good skilled attendance during delivery. It is also important that health promotion activities on maternal health issues are enhanced. It is also expedient to have continuous programmes for health staff on human relations and communication skills in order to improve upon services rendered. Advocacy on educating the girl child must be strengthened by the Ghana Education Service (GES) as well women's advocacy groups both locally and at the regional level and efforts made to enrol, as well as retain them in school to the tertiary level or train them in the acquisition of vocational skills. All these when implemented will help improve the uptake of skilled delivery in the district.

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