Journal of Medicine, Physiology and Biophysics
ISSN 2422-8427 An International Peer-reviewed Journal
Vol.28, 2016
www.iiste.org

Contribution of Community Based Health Planning Service in Maternal Health Service Delivery in the Tamale Metropolitan Area, Ghana.

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Abstract
The fast approach of the end of the Millennium Development Goals (MDGs) by the end of 2015 has driven many countries to accelerate their efforts at achieving the goals. In line with the proposed means of measuring the success of the MDG 5 by World Health Organisation (WHO): to reduce country maternal mortality ratios and achieve universal reproductive health, Ghana has been implementing the Community based Health Planning Services (CHPS) strategy to address the MDG 4 and 5. This study sought to assess the contribution of the CHPS to the attainment of the MDG5 using the indicators of antenatal care, delivery services, postnatal care and community participation components of CHPS. Adopting qualitative and quantitative study approach and the cross sectional research design, the Tamale Metropolitan Area (TaMA) was brought into focus to have a snap shot view on the contribution of CHPS to maternal health. Three hundred and ninety five women of child bearing age (15-49 years), 31 Traditional Birth Attendants (TBAs) and six health professionals in the CHPS zones provided information for the study through questionnaire administration, focused group discussions and interviews respectively. The results revealed that, 80.8percent of the women attended antenatal clinic in their respective CHPS compound. All the CHPS in the study did not provide delivery services for the women due to lack of midwives. Further, 89 percent of the women were delivered by TBAs at home whilst the rest delivered in either a health centre or hospital because of complications in pregnancy. All respondents received the first 24 hours postnatal care from either TBAs, or nurses who worked in their respective CHPS compound and midwives in the health centres or hospitals. All respondents accessed general health services in their zonal CHPS. The study concludes that, for full implementation of the CHPS to effectively contribute to the achievement of the MDG5, the District Director of Health Services should post midwives to the CHPS compound to ensure that skilled delivery services are provided.

Keywords: Community based Heath Planning Service, Antenatal care, Delivery care and Postnatal care.

1.0 Introduction

Health is a major global concern which has attracted many interventions. This is evident in the prominence given to issues on health in the MDGs. The fifth goal of the MDG focuses on improving maternal health by way of reducing maternal mortality by 75 percent; and like all the other goals, it has received countless attention on both international and community levels, especially in recent times towards achieving the set target. To identify the extent of achievement of the targets, the international community has in 2000 developed two ways of measuring the targets (Hogan, 2010). The first is to reduce countries' maternal mortality ratios and the second is to attain universal access to reproductive health.

A report by WHO et al., (2012) reveals different efforts by countries in their quest to achieving the 75 percent reduction in maternal mortality target. They estimated that, world maternal deaths stood at 287,000 in the year 2010, out of which, developing countries had a 99 percent share with Sub Saharan Africa alone accounting for 56 percent. Meanwhile, a report by the Central Intelligence Agency (2013) ranked Ghana 32nd in the World Maternal Mortality Rate Index. According to WHO (2010), maternal health is the wellbeing of women during pregnancy, childbirth and postpartum period. The conditions that may cause maternal death has been classified into direct and indirect, referring to obstetric complications of the pregnant state and previous existing disease that developed during pregnancy respectively (Dean, 2006; Say and Chou, 2011).

A report by the Ministry of Health (MoH) (2012) in Ghana revealed that, maternal deaths have declined from 740 to 451 to 350 per 100,000 live births in 1990, 2008 and 2012 respectively. Consequently, the country was seen to be progressing in reducing maternal mortality, though this progress has been qualified as 'slow'. WHO (2009) have also revealed in a report by Ministry of Health (2011) that only 58 percent of births in Ghana have access to skilled attendance. Meanwhile, Ghana Statistical Service (2012) had revealed that 43 percent and 84 percent of women in rural and urban areas have access to skilled birth attendants respectively. Giving to the trend of decline, the country is expected to achieve 340 deaths per 100,000 live births by the end of 2015 which

is far above the UN-MDG target of 185 per 100,000 live births (MoH, 2012). That is, the country is not expected to achieve the MDG5 with the current rate of progress. Nevertheless, there are commitments towards striving to achieve the MDG5; however implementation of strategies to reduce maternal health still remains a major challenge in the country.

Before the implementation of the MDGs, the country was implementing Family Planning Services (1993) as a way of controlling maternal death. However, in the past decade after the development of the MDGs, the country has implemented policies such as Focused Antenatal Care (2006), Comprehensive Abortion Care (CAC) (2007) and free maternal care (2008) under the National Health Insurance Scheme (NHIS) to reduce maternal deaths. To implement the policies above, the Community based Health Planning Services (CHPS) programme was adopted. The CHPS evolved after the Alma Ata declaration in 1978 which emphasized the need for local resources and for beneficiaries to be actively involved in every stage of health planning and implementation (Russell, 2008). Decentralisation in health systems began after this time to successfully execute international and national health plans (Schaay and Sanders, 2008). According to a research conducted by the Centre for Social Health Services (CHeSS) (2013), CHPS has attracted international recognition as the best initiative for maternal and child survival. To effectively implement the CHPS programme, Bernis et al., (2009) and MoH (2008), have revealed some strategies such as High Impact Rapid Delivery (HIRD) approach and data gathering of maternal mortality using Maternal Mortality Survey, Maternal Death Notification and Maternal Death Audits, that may contribute to its success.

In Ghana, the CHPS was incepted by the Navrongo Health Research Institute in 1994, after which the Ghana Health Services adopted and applied to the Northern part of Ghana in 1999. This initiation came as no surprise, considering that Northern region had 29 percent of skilled attendants' birth while Greater Accra region had 80 percent (TMHD, 2012). The CHPS was set out to reduce geographical access barriers to health care, improving efficiency of health provision and ensuring quality of health delivery through mobile community based care (USAID, 2006). These qualities make CHPS capable of providing a better all- round health care at the community level (Ministry of Health, 2011). CHPS is seen to make health services available through close proximity to rural families, socially accessible through wide community participation, and affordable through free delivery system (Sakeah, 2012). In Ghana, CHPS has gone beyond the primary aim of reducing geographical barriers to accelerating progress towards achieving the MDG 4 and 5 which are to improve child and maternal health respectively (Awoonor-Williams et al., 2013).

Many studies including Sakeah et al., (2013) and Kyei-Faired et al., (2006) have been conducted on the subject of maternal health delivery in the three northern regions of Ghana. Each of these studies has different focus. For instance, Sakeah et al (2013) assessed the role of participating community members in the implementation of CHPS in rural areas in northern Ghana. Sakeah et al., (2013) basically identified the different roles played by Traditional Birth Attendance and community health volunteers in skilled delivery. Kyei-Faired et al., (2006) on the other hand, researched into the role of community–based surveillance in health outcome measures, using CHPS as the main setting. Kyei-Faired et al., (2006) discussed the need to define health problems in order to help community members understand the magnitude and effects of those problems and to find solutions for them. This study focused on factors such as the availability of antenatal care, skilled delivery, postnatal care services and community participation to assess the contribution of CHPS in maternal health delivery in the Tamale Metropolis. These indicators were selected to complement previous studies in order to contribute meaningfully to knowledge and to use the findings to inform policy formulation on the implementation of maternal health delivery.

To fully address issues of maternal health in TaMA, this study developed a conceptual framework to guide the research (see Figure 1). This framework adopted ideas from works of Nyonator *et al.,* (2005), WHO (2004), WHO (2006), WHO et al., (2007) and Thaddeus and Maine (1994). Service providers, the institutions, the services and inputs that are required in the implementation of the CHPS were reviewed. CHPS is seen to act as the institution by providing rules and regulations to govern the activities of the health professionals. The health professionals on the other hand, provide the needed services; antenatal care, skilled delivery and postnatal care to the community members. The institution provides the supplies of equipment, drugs, among other things needed for the implementation of the CHPS. Also, community leaders, community health volunteers and traditional birth attendants assist in the provision of maternal health care. For example, community leaders release land and provide labour for the construction of CHPS compound, while community health volunteers and TBAs carry out sensitization programmes. The framework reveals that, there is the need for constant supply of functional equipment and essential medication in order to promote the works of the health professional to help pregnant women and new-borns.

In recognition that CHPS play a major role in the delivery of maternal health care, this study sought to; examine the availability of CHPS facilities, functional equipment and drugs for the provision of maternal health service; examine the participation of community members and the benefits they derive from the CHPS in the provision of maternal health services; and finally assess CHPS services, their prospects and challenges encountered in their operations at TaMA.

2.0 Research Methodology

The study area for this research was the Tamale Metropolitan Area (TaMA) in the northern region of Ghana (see figure 2). TaMA is the most urbanised area and the commercial hub of the region. It doubles as regional and metropolitan capital and has many rural farming communities within its jurisdiction. Tamale Metropolis has been selected for the study because, according to the 2012 annual report of the Tamale Health Directorate, even though the number of skilled deliveries (62.7 percent) and antenatal visits (33.3 percent) has increased, maternal deaths (119) are still the major cause of deaths among women in the area. CHPS is known to be the main health facility providing general and maternal health care in the Metropolis, especially in the rural areas. Notwithstanding that it has also improved primary health care in the Metropolis especially in the area of neonatal and child health care, addressing maternal health is still a major concern in the Metropolis because, in the last four years maternal deaths is said to have increased after reducing drastically from 72 to 31 deaths in 2007 to 2008 (TMHD, 2012). One of the major causes of maternal deaths in the area is malnutrition and late report of complications to hospitals. Most mothers ignore postnatal care and prefer to have their babies at home mainly due to transportation cost (11 cedis per trip to hospital) (TMHD, 2012).

According to the 2012 annual report of the Tamale Metropolitan Health Directorate (TMHD), the metropolis has 47 health facilities which are managed at the Metropolitan health administration, sub-district and community management levels. In general, there are four of the sub-district health management teams under which the CHPS is operated. There are four CHPS zones in the Metropolis (TMHD, 2012). However, this study focused on three of them (see Plate 1). This is because the District Hospital is located in the Tamale zone, and is preferred by the majority of people living in this zone. Also, the Tamale zone did not portray rural characteristics and homogenous characteristics such as being in the same ethnic group, mostly being farmers and petty traders, having similar tradition and customs, belonging to the same religious affiliations and chieftaincy relation, and living in areas with poor transport system and bad road network, which was a main selection criterion.

The study combined both qualitative and quantitative methods of data collection and analysis, and adopted the cross sectional design through which it made its logical inquiries to come up with its findings. The cross sectional design was adopted to have a snap shot view of the subject understudy and given to the short time that was available to the researchers. Also, the cross sectional design is known to be more appropriate for issues of public health planning and measuring community needs of social services (Levin, 2006; Creswell, 2012). A non-probability sampling was used in selecting respondents. Specifically, purposive and snowballing sampling was adopted in selecting the three main target groups. The target groups were identified based on the specific roles they played in maternal health delivery in the Metropolis. These groups were: women of child bearing age 15-49 years who has been pregnant before; Traditional Birth Attendants (TBA), Community Health Volunteers (CHV) and Health professionals such as nurses and heads of CHPS zones. The women at the defined child bearing age who had been pregnant before and had visited the CHPS understudy were referred by the health officials, after which several others were identified through snowballing approach. Questionnaires were administered to this group in order to gather data on maternal health services rendered by the facilities, affordability of CHPS, and client satisfaction with CHPS. Through focused group discussion which involved Traditional Birth Attendance, community health volunteers and health professional, the level and type of communities' participation was revealed. Finally, information on supplies of drugs and equipment for skilled delivery, antenatal care services, staffing situations and challenges of CHPS operations were acquired from health professions of the three CHPS through in-depth interviews. The survey was carried out from April to July 2014.

The exponential method (1) of population projection was used to project the female population for each of the selected zones from 2010 to 2014 (Table 1), after which the mathematical formula was applied to calculate for the appropriate sample size for the study and proportions were used to determine the sample to be interviewed from each of the zones (see mathematical formula and Table 1 below). In total 395 women of child bearing age that has been pregnant before was interviewed from households. All Traditional Birth Attendance and Community Health volunteers in the communities were organized to have focused group discussions, with the aid of a guide. All heads of CHPS, General Nurses and/or Community Health Nurses in each of the CHPS zones were interviewed separately.

$$Exponential\ method: \quad N_t = N_o \times e^{r \times t} - - - - - - (1)$$

$$E.g.\ Bilpeila\ \ is\ N_t = 16174 \times 2.71828^{0.029 \times 4} = 18163$$

$$Mathematical\ formula \quad n = N/[1 + N(\alpha)]^2$$

$$Total\ Sample\ Size\ \ is\ 31788/[1 + 31788(0.05)^2 = 395$$

Where: N_t is projected population; N_o is the existing population; r is the growth rate; t is the time frame; e is a constant (2.71828); n is sample size; N is total population; and $\propto$ is confidence interval stated as 0.05 for this study. Using information from 2010: projected population of 197,933; 49.9 percent of females; and 52.2 percent women in the child bearing age cohort, calculations were made and the results has been depicted in Table 1 below. Statistical Package for Social Sciences (SPSS) version 22.0, Microsoft Word and Excel were employed in the analysis of the data collected and have been discussed in the subsequent section. It must be mentioned that, ethical considerations such as confidentiality and privacy, anonymity and informed consent were ensured in this study. For example, the purpose of the research was clearly explained to the respondents before the collection of data. Again, since this subject is a very sensitive one, respondents were not made to reveal their names. By way of ensuring their anonymity and privacy, confidentiality was also ensured.

3.0 Results and Discussion

3.1 Demographic and Socio-economic characteristics

The characteristics in this study included the ages of the respondents, the number of children they have had, their educational level and their employment status. These specific characteristics were selected to help in establishing the reasons for the patronage of antenatal care, skilled delivery and postnatal attendance.

3.1.1 Age Structure and Marital Status of the respondents

Out of the 395 women within the age of 15-49 interviewed, the study revealed that about 51.7 percent, 30.4 percent and 17.9 percent belonged to the age cohort 26-35, 36-49 15-25, and respectively (see Table 2). The study revealed that majority of women in all the zones gave birth within the ages of 26-35; this confirms the report by the 2010 census report which states that the average child bearing age in the Metropolis is 32.8.

About 80.3 percent of women interviewed were married. The remaining were divorced, separated, widowed or single. A Demographic and Health Survey (2008) conducted in Ghana indicates that, most women start giving birth only after they have been married. This shows a high positive correlation between child birth and marriage in the country. It was therefore not surprising that, majority (52.6 percent) of the women who had been pregnant before were within the 26-35 age cohort and 80 percent of the women interviewed were married. According to the 2010 census report, the average marriage age in northern Ghana was 18. However, the findings from this study can be attributed to the fact that, many women in Northern Ghana are in recent times avoiding early marriages (TaMA, 2012).

3.1.2 Education Level of Women

The highest level of education reached by the respondents was the Senior High school level, which about 4 percent had attained. About 10 percent had attained primary level of education and the remaining had reached the Junior high school level (see Table 2). About 74 percent of the respondents interviewed who happen to be the majority had never had any formal education. This confirms the assertion by the Tamale Metropolitan Assembly (2012) and UNDP and GOG (2010) that, majority of girls in TaMA are denied education due to cultural and financial reasons. Meanwhile, studies reveal that the level of education of a woman influences her attendance to antenatal and her choice for skilled delivery (Gitimu et al., 2015). This study confirmed this assertion, as it was revealed that majority (88.6 percent) of the respondents did not see the need for skilled birth attendants at birth and resorted to TBAs for such services unless they developed some form of complications during pregnancy or labour.

3.1.3 Number of Children

The number of children a woman has is an important demographic data necessary for calculating and projecting fertility rate. About 48 percent of the respondents were seen to be having 1 to 3 number of children (see Table 2). This figure was low as compared to the average 4.09 number of children per woman in the country (Central

Intelligence Agency, 2013). The figures were still low as compared to the 6.8 number of children per woman in the northern region of Ghana (GSS et al, 2009). Respondents attributed the low numbers of 1-6 children to the high cost of living and raising children in general. This low trend may lead to a reduction in the population if it continues. They revealed that, since education has become important to a good future of a child but the cost of education keeps increasing, there is the need to control the number of children one should have. The remaining share has been depicted in Table 2 below. It is worth noting that, there were women with over 11 number of children.

Such women mentioned that society does not permit a woman to deliberately stop child bearing without receiving approval from her husband since he is the head of the house, thus they have no control over the number of children they want to have. Further, some respondents explained that, they believe having more children gives one financial security in the future. That is, their children will take care of them in their old age.

3.1.4 Religious Affiliation of Respondents

The respondents belonged to one of the three main religious groups in Ghana (see Table 2). Islam was the predominant religion in all of the three selected zones representing about 82 percent of the total respondents and Traditional worshipers represented only 5 percent. The high percentage confirms Ghana Statistical Service's (2012) census report which indicates that majority (about 88 percent) of the people in the Northern region of Ghana belong to Islamic religion. The respondents belonging to at least one of the three religious groups in the area could be an avenue for health officials to sell their maternal health policies through leaders of these groups to increase their impacts on the decision of women in maternal and child health care.

3.1.5 Employment Status of the Respondents

Majority of respondents (82.3 percent) were gainfully employed and the remaining 17.7 percent were unemployed. This information confirms the Tamale Metropolitan Assembly's annual report (TaMA, 2012) which states that, majority (62 percent) of the economically active people in the rural areas in the Metropolis are employed while 4 percent are unemployed. Of those employed, 37 percent were into subsistent agricultural sector, while 0.8 percent were in the civil/public service sector. For the entire metropolis, 19 percent were engaged in the agricultural sector whiles 22 percent were engaged in the trade sector (GSS, 2012). Though employment level is seen to be high in the Metropolis, most of the respondents (37 percent) practised subsistent farming which does not yield much income (38 cedis per month) and thus renders them less powerful financially. They are therefore not able to take certain financial decisions that affect their lives and that of their children and constantly remain dependent on their husbands. This can lead to their inability to afford maternal health services outside their communities because of transportation cost and other medical expenses they might incur out of CHPS.

3.2 Maternal Health Delivery

To assess the contribution of CHPS in maternal health delivery in the selected CHPS zones, it was necessary to assess the various components of maternal health delivery services from both the providers and recipients end. Information gathered on maternal health delivery is presented in three sub sections under antenatal, skilled delivery and postnatal care.

3.2.1 Staffing at CHPS

According to GHS (2005) a CHPS zone is supposed to be served by a maximum of two Community Health Officers (CHO) for specified periods depending on the level of deprivation. Again each CHPS community must have at least two volunteers selected by the community and trained by the sub-district health team. Depending on the need of the district a midwife may also be posted to provide services in the compound. Based on the above, information on staffing at the CHPS facilities were gathered during the study to find out if the CHPS compound in the study area had the required staff to operate and manage it. The institutional interview conducted, revealed that apart from the volunteers all the selected CHPS compounds were under staffed. For example, in Choggu zone, two community health nurses were the main health officials. The zone lacked a midwife. Also, in Bilpeila, there was only one community health nurse who performed all the duties. She disclosed in an interview that, the facility needs additional community health nurse and a midwife. In Vittin, the CHPS compound was operated by an enrolled nurse and two community health nurses who also mentioned that they needed a midwife. Generally, the staff were providing antenatal, postnatal and child welfare services to the people. According to Sakeah et al., (2013), CHPS will effectively improve maternal health delivery service if midwives are introduced and nurses are trained to perform skilled delivery services.

3.2.2 Last Pregnancies of the Respondents
Majority of the antenatal inquiries were made on the last pregnancies of the respondents. In this regard, information on the last time of the respondents being pregnant was collected for analysis.

The study revealed that, about 63 percent of the respondents between the ages of 36-49 years had their last pregnancies 3-4 years ago whilst majority of the respondents within the ages 15-25 and 26-35 had their last pregnancies a year and below (see Table 3). Information on the last pregnancy of respondents is important because it is assumed that they may be well informed about the issues under discussion.

3.2.3 Place of Antenatal Care

All the women interviewed responded in the affirmative on their use of antenatal check-ups during their last pregnancy. Out of this number about 96 percent of respondents in Vitting zone attended antenatal at the CHPS within their zone. About 3 percent of the respondents revealed that, they first registered at the Vittin Health Center for their antenatal care and were later referred to the Tamale Teaching Hospital because of complications they encountered which could not be handled at the Health Center level. The remaining 1 percent had their antenatal care at the Health Center. In Bilpeila zone, 73 percent of the respondents went for their antenatal check up at the CHPS, 19 percent went to the Bilpeila Health Center, 6.2 percent went to the Central District Hospital and the remaining 1.8 percent went to the Tamale Teaching Hospital (see Figure 2). The reasons given by the respondents who attended antenatal care outside their CHPS were as follows: 79 percent of them mentioned that, there was no nurse or any health worker in the CHPS compound and thus they had to travel longer distances to the health center for antenatal care.

The remaining 21 percent revealed they went to hospitals because they developed complications during the pregnancy and were advised by family members and nurses at the health center to visit referral hospitals. In the Choggu zone, 87.9 percent of the respondents assessed antenatal care at the CHPS compound while 9.1 percent of the respondents went to the Choggu Health center because of convenience and positive attitude of staff. The other 3 percent went to the Tamale Teaching Hospital because of obstetric related complications. It can be concluded that, most of the respondents were depending on CHPS for their antenatal care services because of close proximity and affordability.

3.2.4 Number of Antenatal Visits
The WHO advocates at least four ANC visits for effective antenatal care. In Ghana, ANC visits are supposed to be four visits and two-postnatal visits (GHS, 2007). Obstetricians however, recommends monthly antenatal visits up to the seventh month and every two weeks to the eight month and every week after the eight month. Though the number of antenatal visits by respondents in all selected zones was not consistent (see Table 4), they all had at least one antenatal visit before delivery. This confirms a study by USAID (2007), which revealed that nearly 70 percent of pregnant women in developing countries will have at least one antenatal visit before they put to birth. Only 4 percent of women from all the selected zones had below four antenatal visits before delivery. When respondents who had less than four antenatal visits were questioned why they did not have at least four antenatal visits, which WHO recommends (Pell *et al.,* 2013), majority responded that, they did not have any complications and saw no need to go for regular antenatal check-up. Some added that, they had their previous children without going for a single antenatal check-up. Of the remaining respondents 44.1 percent of them had four to eight antenatal visits before birth whiles 51.8 percent of the respondents had above eight antenatal visits. The study revealed that there is no proper record keeping at the CHPS facilities and thus only the first and second quarters of 2014 records on antenatal visits were available due to inadequate qualified personnel and logistics.

3.2.5 Services Provided during Antenatal Care
All 395 respondents affirmed that, they had examinations during antenatal visits, despite the health facility they patronised. The study revealed that blood investigation and urine examination were mainly done in the district and Teaching hospitals. In the CHPS compounds physical examinations such as blood pressure checking, pallor, respiratory rate, generalised oedema, breast examination, weight checking, abdominal examination and pelvic examination were carried out. Meanwhile, the CHPS had no midwives at the time of the study.

3.2.6 Supplies of Antenatal Medication
Antenatal medications are supplied quarterly from the sub-district health facilities. In an interview with the officers in charge of the CHPS compounds, they disclosed that, there is sometimes inadequate supply of iron and folic acid tablet; injection tetanus toxoid, anti-malaria drugs (SP) and vitamin which hampers the provision of antenatal care in the CHPS compounds. Table 5 shows the records of supplies of medications for the first and

second quarters of 2014. The previous information were not available to determine the trend of the supplies of the medications due to poor record keeping. The medications supplied to the CHPS excluded antiretroviral drugs for pregnant women who are HIV positive. The study revealed that, such women received their antenatal and postnatal care at the District and Teaching hospitals. This is because of the Ministry of Health's policy on the supply and distribution of antiretroviral drugs in accredited private, regional and district hospitals (MoH, 2008).

3.3 Maternal Health Education during Antenatal Care

One of the basic requirements during antenatal care is to educate mothers on women's rights and responsibilities, birth preparedness, complication readiness, diet, rest, infant feeding contraceptives, malaria prevention, HIV and AIDS, and other sexually transmitted diseases as indicated by the focus antenatal guide provided by WHO (2010). Interview with all of the 395 respondents revealed that, they had received such education during their antenatal visit to either the CHPS or any other health facility. According to those who attended CHPS facilities and as was confirmed by the researchers, there were the use of picture demonstration charts to educate clients on domestic violence, breastfeeding, use of contraceptives and malaria preventions.

3.3.1 Delivery Services

Skilled attendance at birth is one of the indicators for MDG 5, which is considered as the most critical intervention for ensuring safe motherhood. The lack of skilled attendant at birth has caused many women and new-borns to lose their lives (UNFPA, 2010). In this study, all the three CHPS facilities visited did not provide delivery services to pregnant women because they did not have midwives. Women who were put to birth by skilled attendance had developed complications during pregnancy and had to be referred to either the Teaching hospital or other hospitals within the Tamale metropolitan area. Skilled delivery was found to be treated as a not too critical maternal health intervention despite the fact that its absence can cause the lives of many women. For instance, Vittin CHPS did not have examination tables and also women who were referred to major health facilities for deliveries were sent without providing them with arranged transportation. Thus, the women in labour had to be transported on motor cycles to other health facilities. This is the case because; the role of the CHPS has been to provide close proximity general and maternal health care to community members by breaking geographical and physical access barriers (Adongo et al., 2013). In this regard, they are mainly good at providing antenatal and posnatal care to women. This is also because; they lacked the required health professionals for deliveries. However, they made deliveries in cases of emergencies even though they have not received adequate training in delivery. This puts both mothers and babies at risk of complications which may lead to mortality.

3.3.2 Place of Delivery

Thaddeus & Maine (1994) stated that the place of delivery has consistently been found to be associated with reduction in maternal mortality. Sari (2009) also assert that the presence or availability of skilled birth attendants during labour, delivery and early postpartum period could reduce an estimated 16 to 33 percent of deaths due to obstructed labour, haemorrhage, sepsis and eclampsia (UNFPA 2012). However in developing countries, many women are still assisted in delivery either by traditional births attendants, relatives or delivered by themselves.

From the data gathered, 87 percent of women interviewed delivered at home with assistance of on call TBA; the remaining gave birth in the Tamale Teaching Hospital (through caesarean section), the district hospital and at the various health centres (see Table 6). The ones who made deliveries at the hospitals were seen to have experienced complications during pregnancies. The government's policy on free deliveries for women is only covered with deliveries made at public, private and faith-based health facilities (Ofori-Adjei, 2007). Meanwhile the policy covered normal deliveries, assisted deliveries including Caesarean section and management of medical and surgical complications arising out of deliveries, including the repair of vesico-vaginal and recto-vaginal fistulae (Ofori-Adjei, 2007). Though all the respondents attended antenatal care, it is realised that only 11 percent were delivered through skilled attendants. This confirms the assertion by Esena and Sappor (2009) that majority of women in sub Saharan African countries attend antenatal clinic but do not seek skilled attendance at birth. According to the officers in charge, the facility is not providing delivery services because of many reasons. For example, at the Bilpeila and Choggu CHPS it was the absence of midwives; in Vittin zone it is the absence of a functional CHPS compound which is operated by an enrolled nurse and a community health nurse travels to the community once a month for antenatal and child welfare services. Several communities with poor transport services and very far from all the well-resourced health facilities mainly depend on CHPS for all their antenatal and post natal services

3.3.3 Delivery service used by respondents

Only 11 percent of the respondents interviewed had skilled attendants assisting their deliveries. Out of this 62 percent had normal vagina delivery assisted by midwives while the remaining 38 percent delivered through caesarean section performed by medical officers. About 87 percent of the respondents were delivered by

traditional birth attendants. According to the respondents, they opted for the TBAs instead of skilled attendants because the TBAs were very good and were in close proximity to the people. Also they had low cost of service provision while the skilled attendants charged high prices (as compared to TBAs requesting for only a pair of hand gloves and blade for their delivery services). Respondents who delivered in health facilities mentioned they received medications after delivery. The few 7 percent of the respondents who had normal vaginal delivery and others who went through caesarean section in hospitals were made to stay for about 3 more days after delivery.

In Vittin zone, there were a total number of 12 TBAs in all eight communities. Out of this number only two had received training in the year 2003 from the Ghana Health Service. They generally performed services like normal vaginal delivery, removal of placenta, cutting and dressing of cord and bathing the newborns in the homes of mothers. They mentioned that aside these services they encourage women to breast feed their new-borns immediately after birth, go for postnatal care and referred to hospitals when vaginal delivery becomes complicated. The TBAs pointed out that, the lack of integration and participation in the provision of maternal health services by CHPS hinders their smooth operations. Thus, they requested for regular training and the provisions of basic equipment such as gloves and a first aid box to enhance their work. At the Bilpeila and Choggu zones the situation was not very different from that in Vittin. There were nine and ten traditional birth attendants respectively. With only one trained in Bilpeila and three trained in Choggu. Three of the four trained TBAs did not have the right documentation to show the researchers, of the training they had received. Community health volunteers in all the zones collaborated with health officials at the CHPS compound to run certain health programs like malaria and immunizations campaigns. They also organized women occasionally for antenatal care and child welfare clinics.

3.4 Postnatal Care

The post-delivery period has been described as a delicate period in the lives of the mothers and new-borns (Ibekwe et al., 2011). Statistics has it that majority of women and new-borns die within this period than any other period. Postnatal care has been analysed in three phases. The first phase of postnatal is the care received by mothers and new-borns within the first 24 hours after delivery, the second phase is the first week postnatal care and finally the six weeks postnatal care as recommended by WHO (2006).

3.4.1 First 24 hours Postpartum Care.

Respondents who had their babies in health facilities confirmed that the necessary checks and examinations were performed on their new-borns and that they had a comprehensive first 24 hours postpartum care. All the 11 percent of respondents stated they had the following examinations as mentioned also by Warren et al., (2006) were performed on them: wrapping babies with dry cloth, monitoring babies for breathing, providing cord care, weighing of babies, complete removal of placenta, checking of blood pressure, body temperature, checking for excessive bleeding, tears and discharges, education on diet, maternal and new-born well-being, and importance of postnatal visits. Eighty seven percent of respondents and their new-borns that had their first 24 hours postpartum care in their homes went through the following examinations and checks provided by TBAs: cord care, bathing of babies and provision of a warm environment for babies. They were also educated on diet and breastfeeding.

3.4.2 First Week Postpartum

The first week postpartum care is equally important as the first 24 hours postpartum care. During this period of postnatal care, among other things BCG (Bacille Calmette-Guérin) and the first dose of poliomyelitis vaccines are given to the new-born. Aside those, baby's skin, eyes, mouth and feeding are examined by the health officials. The general well-being of the mother, checking of vagina for swellings and excessive bleeding and education on hygiene and postpartum care are also provided. All the respondents knew about the importance of the first week postnatal care and the necessary immunizations babies receives yet, not all attended the first week postpartum care. About 18 percent of respondents did not attend their first week postpartum care, majority (64.8 percent) were from the Vittin zone. The remaining 82 percent of respondents went for their first week postnatal care and admitted to have been provided with the above mentioned care. In Bilpeila zone, a total of 81 percent of respondents went for their first week postnatal at the Banvim CHPS compound; the remaining 19 percent went to the Bilpeila health center for their postnatal care. In Choggu zone, all the respondents went for their first week postnatal care at the Malshegu CHPS compound. In Vittin the situation was totally different; 61.4 percent of respondents did not go for their first week postnatal care whiles the remaining 38.6 percent of respondents went for their first week postnatal care at the Vittin health center. This was because the health officials who occasionally came from the health center to provide antenatal and child welfare services at the Zou (located in Vittin zone) CHPS compound do not go back for postnatal services. For this reason, the number of times respondents accessed postnatal care is reduced.

3.4.3 Six Weeks Postpartum

In total 67.5 percent of the respondents went for all six weeks postpartum visits, out of this number, 39.6 percent were from the Bilpeila zone, 21.2 percent from Choggu zone and 6.7 percent from Vittin zone. The remaining 32.5 percent of respondents were not regular in their postpartum attendance; out of this, 9.4 percent of the respondents were from Vitting zone, 10.0 percent from the Choggu zone and 13.1 percent from the Bilpeila zone (see Figure 3). Aside respondents from the Vittin zone who complained of transportation cost as the main hindrance to their postnatal visits, the remaining 59.4 percent of respondents did not have any reason for their irregular postnatal visits aside being busy with farm work. This confirms the report by the Tamale Metropolitan Health Directorate (2012) that, even though postnatal coverage has increased over the years, most mothers in the area are still not consistent with their postnatal visits. All respondents interviewed said they only received education on family planning methods, diets and personal hygiene. This revelation however goes contrary to what is provided in the six weeks postnatal guide provided by WHO (2006) and adopted by the Ghana Health Service. The guide states that the temperature, blood pressure and general well-being of mothers should be checked during the six weeks postnatal care. Aside this, health officials should examine the pelvic and haemoglobin level of mothers. According to the respondents, babies were well taken care of. They received second dose of poliomyelitis including diphtheria and tetanus vaccines. Their weight and temperatures were also checked. The respondents also stated that all services received during their pregnancy through to delivery and then postnatal care was free. Drugs given to them were also free, they just needed an active or had to renew National Health Insurance Card otherwise they were asked to get the drugs themselves from pharmacy shops.

3.5 Provision of Maternal Health Delivery

Antenatal care which begins the safe motherhood process was provided by all selected CHPS compounds. Majority of the respondents 80.8 percent attended their antenatal care at CHPS compounds in their various communities. The number of antenatal visits varied, only 16 percent paid less than 4 visits. The remaining 82 percent paid for 4-8 visits or above eight visits. All respondents received the required examinations, medications and checks as stipulated in the antenatal guide. Blood and urine examinations as well as scans were not performed in CHPS compounds. Respondents were referred to higher health facilities for such examinations. CHPS did not perform such task because they lacked the capacity to do so. Data collected on skilled delivery services revealed that none of the selected CHPS compound rendered such services. Most respondents about 88.6 percent therefore sorted to the services of TBAs during delivery. Majority of the TBAs, 83.9 percent, had never received any form of training from the Ministry of health on maternal health delivery the remaining 16.1 percent trained TBAs received their training about 11 years ago. Only 11.4 percent of women interviewed were delivered by skilled attendants in the Teaching hospital, other government hospitals and health centers in the metropolis.

3.6 Supplies in CHPS

The provision of functional equipment, supplies and drugs demands the presence of human resource. According to WHO et al., (2007), a basic health facility with emergency services for maternal health requires the regular supply of basic drugs to aid the provision of maternal health services. From the institutional interviews conducted, such drugs were supplied to the CHPS to perform their duties. Also, the recommended constant supplies of antiseptic solutions, dressing supplies including (bandages, adhesive tapes and dressing buckets), hypodermic needles and syringes, IV infusion set and fluids, and soap for washing by WHO et al., (2007) were all being provided. All these items according to the in-charges at Vittin, Choggu and Bilpeila zones were constantly and adequately supplied to them by their sub health centers. Infection preventive items such as surgical gloves, utility gloves, bucket with chlorine and sharps, and waste disposable containers were supplied regularly. Meanwhile, the in-charges at the various CHPS compound said they were woefully inadequate for their work. Table 7 shows detail supplies of these preventive items. Other examination equipment which aids the work of health professionals in the provision of maternal health services includes examination table, adjustable light, festoscope, weighing scale and speculum which were only available in Bipeila and Choggu CHPS. Vittin however had fetoscope, weighing scale and speculum.

3.7 Community Participation

Community participation is very necessary in the CHPS concept. Aside the provision of land and labour for the construction of CHPS compounds, community members are required to take active interest in the health care services they receive at these facilities. For maternal health delivery services, community members participated in various ways. All respondents said that, delivery services were solely provided by TBAs. Meanwhile, antenatal and postnatal services were received from CHPS compounds in all of the three zones except for Vittin zone where postnatal services were not provided.

3.8 Quality of Maternal Health Services by CHPS

Rating of the quality of maternal health services were only required from respondents who had their antenatal and or postnatal care at the CHPS facilities. In Vittin zone, 90 percent of respondents were not satisfied with the services of the CHPS facility and rated it as bad. The reasons given by them was that, the CHPS compound in Zou, built to serve eight other communities have been abandoned by the health officials who have been assigned to the facility. According to them, the nurse in charge comes once every month for antenatal and child welfare services which to them is not enough. Sometimes information on the date of their visits is not well communicated and thus leads to their missing out of antenatal care for that period. The remaining 10 percent respondents said the antenatal services received from the CHPS facility was good because they received all the necessary drugs for pregnant women for free. In Choggu all respondents rated the antenatal and postnatal services received from the CHPS facility as good. They added that, they need not pay any transport cost to receive similar services from the District hospital which is located farther from them. In Bilpeila, 6.6 percent of respondents rated the services of CHPS in the area as bad. The main reason for their rating was because not all maternal health services were provided. The remaining respondents 71.7 percent and 21.6 percent rated their services as good and very good respectively.

3.9 Major Challenges of CHPS in Maternal Health Delivery Services

During the focus group discussions in all the selected zones, one of the major challenge that came up was, low collaboration among health officials and community members. On the other hand, all the 395 women interviewed in all the three selected zones said their challenge in the patronage of the CHPS was the lack of skilled delivery services in the CHPS compounds. At the institutional level, in-charges at all selected CHPS compound mentioned the following as their major challenges in the provision of maternal health delivery services: inadequate supply of medications and equipment to deliver antenatal and postnatal services; and lack of midwives in all selected zones. Specifically, staff at the Vittin and Choggu CHPS zones mentioned the lack of community participation and the lack of running water for providing their services and also for cleaning the facility, thus, they had to go into the communities to fetch water daily for such duties. Finally, they mentioned that, no in-service training has been provided for them in the field of maternal health delivery service.

3.10 Major Prospects of CHPS in Maternal Health Delivery Service

All respondents interviewed believed that, CHPS had the potential to improve maternal health delivery services in their various communities. This they said will spare them the transport cost of travelling to either health centers or the Teaching Hospitals which were located far away from them for maternal health services. They also added that, CHPS has the prospects of handling emergency situations at nights provided health officials accept to live in the communities where they work. From the institutional point of view, the CHPS have the capacity to provide the necessary health services required of them to all the women in their jurisdiction. However, they require all stakeholders to perform their duties very well in order to achieve the aim of CHPS.

4.0 Recommendation

In view of the findings and taking cognisance of the fact that there is the need to have a holistic approach towards improving maternal health delivery services provided by Community-based Health Planning Service, the following strategic recommendations are made based on the indicators discussed in the study.

- Full Implementation of Focus Antenatal Care
  Antenatal services provided by CHPS by far were the best maternal health delivery service they provided. It was however not fully implemented as indicated in the guideline for focused antenatal care. Blood and urine screening and scans were done in other facilities. There is therefore the need for the Ghana Health services to provide CHPS with the necessary antenatal equipment like malaria and pregnancy test kits not forgetting the required staff like midwives to enhance the antenatal services provided by CHPS.
- Improving the supplies of Medications and Equipment to CHPS
  Ghana has come a long way in the implementation of CHPS to provide primary health care and for that matter maternal health services at the community level. Health officials without the necessary medications and equipment to perform their duties will not yield the needed result of achieving MDG5 by 2015. The Ghana Health service should ensure the regular and adequate supply of these medications and equipment to improve maternal health services by CHPS. This can be achieved by fulfilling the request of CHPS in terms of medications and equipment.
- Providing Skilled Delivery Services
  The Ghana Health service through the Regional and District Health Directorate should deploy midwives and other supporting staff to the CHPS to improve the percentage coverage of skilled delivery service in the Metropolis. Regular monitoring from these directorates will serve as checks on the health officials

in the CHPS and prevent them from going back to their zonal health centers to work. The MoH/GHS should resume capacity building of TBA's in order to enhance their services and also perform their role under the skilled attendant strategy. The infrastructure for skilled delivery service should also be provided by the community with the help of the Metropolitan Health Department.

- Scaling up CHPS to provide Postnatal Services
  As it has been established in literature, postnatal services for newborns and mothers are equally important as antenatal and skilled delivery services. The Ministry of Health through the District Health Directorate should ensure that all CHPS has the required staff and facilities to perform postnatal care. For Vittin zone, the directorate should look into the rehabilitation of the CHPS compound and incentivise health officials to reside within CHPS in order to enhance postnatal services. There should be timely and regular supply of vaccines for newborns. CHPS should be given these vaccines to keep and administer to ensure proper and timely administration of vaccines to newborns. Postnatal care should extend from only babies to mothers as well. A comprehensive postnatal care should be provided as recommended by WHO (2006) guidelines.
- Improving Community Participation
  Community members should be educated on the services of CHPS in maternal health delivery services and be encouraged to take ownership of CHPS. The collaboration among community health volunteers, TBAs and health professionals at CHPS should be encouraged through meetings and advocacy programmes organised by community leaders.
- Formulation and Implementation of Periodic Monitoring and Evaluation Framework
  For CHPS to achieve the aim of its establishment there is the need for regular monitoring and evaluation of the health care provided by the facility and if possible sanctioning of health officials who are not found at post because of reasons like the remoteness of the communities where they are employed.
- Improve Collaboration among Stakeholders
  Community members, health officials and Non-Governmental Organisations all have to collaborate effectively to achieve the objective of CHPS in maternal health delivery services. NGOs and Community based Organisations can serve as the mouth piece of community members to expose the weakness and strength of CHPS in other to strengthen and improve the concept and the services of CHPS.

5.0 Conclusion

Maternal health service provision plays a very vital role in the achievement of the health of women and children and thus towards the achievement of the MDGs 4 and 5. In this regards, the study sought to assess the contribution of Community-based Health Planning Service in Maternal Health Delivery services in the Tamale Metropolis. The indicators used include antenatal care, skilled delivery and postnatal care not forgetting community's participation in the delivery of these services. The community members were said to be actively involved in the CHPS services from the construction level to the time of implementation of the services. The people enjoyed free services in all the health facilities, but this was dependent on their registration into the National Health Insurance Scheme. In general, antenatal care was by far the most achieved indicator, postnatal care was partially achieved, as one out of the three selected CHPS compounds did not provide this service. Community participation in CHPS activities was inadequate and this is solely because there was very little collaboration among health officials and community members. The study concluded that, there is progress in the implementation of the strategies to achieve the aims of the maternal health services. However, equipment, drugs and other supplies that are needed for the provision of the services needs to be provided. Also, delivery services, antenatal care and postnatal care for the new-borns and the mothers need to be enhanced and provided in all the CHPS in the communities for better achievement of the maternal health services' aims. It was revealed in the study that majority of women located in these communities relied on CHPS for their maternal health care and were therefore found in a difficult situation when they had to travel elsewhere for such services.

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Table 1: Calculation of Sample size

Community	Population Of Zones			Sample Size Calculation	
	2010		2014		
	Total Population	Child Bearing Females (15-49)	Child Bearing Females (15-49)	Calculation of Sample Size	Sample Size Per Community
Bilpeila	62,094	16,174	18,163	(18163/31788)*395	226
Choggu	27,168	7,077	7,947	(7947/31788)*395	99
Vitting	19,406	5,055	5,678	(5678/31788)*395	70
Total	197,933	28,306	31,788	(31788/31788)*395	395

Source: Adapted from Ghana Statistical Services (2012)

Table 2: Socio-Economic Characteristics of the Respondents

Age Structure of Respondents					
Age Cohort		**CHPS Zone**			**Total**
		Bilpeila	**Vitting**	**Choggu**	
15-25	Frequency	43	13	15	71
	%	19.0	18.6	14.6	17.9
26-35	Frequency	112	36	56	20.4
	%	49.6	51.4	56.7	51.7
36-49	Frequency	71	21	28	120
	%	31.4	30.0	28.9	30.4
Marital Status of the Respondents					
Marital Status		**Bilpeila**	**Vitting**	**Choggu**	**Total**
Single	Frequency	28	11	7	46
	%	12.4	15.7	7.1	11.6
Married	Frequency	181	54	82	317
	%	80.4	77.1	82.8	80.3
Divorced	Frequency	4	1	3	8
	%	1.8	1.4	3.0	2.0
Separated	Frequency	9	3	5	17
	%	3.6	4.3	5.1	4.3
Widowed	Frequency	4	1	2	7
	%	1.8	1.4	2.0	1.8
Educational Level of the Respondents					
Educational Level		**Bilpeila**	**Vitting**	**Choggu**	**Total**
No Formal Education	Frequency	173	50	69	292
	%	76.9	71.4	69.7	73.9
Primary	Frequency	19	7	15	41
	%	8.4	10.0	15.2	10.4
Junior High School	Frequency	25	9	11	45
	%	11.1	12.9	11.1	11.4
Senior High School	Frequency	9	4	4	17
	%	3.6	5.7	4.0	4.3
Number of Children of the Respondents					
Number of Children		**Bilpeila**	**Vitting**	**Choggu**	**Total**
1-3	Frequency	112	42	35	189
	%	49.8	60.0	35.4	47.9
4-6	Frequency	105	23	51	178
	%	46.1	32.9	51.5	45.1
7-10	Frequency	5	3	7	15
	%	2.3	4.3	7.1	3.8
11 +	Frequency	4	2	6	12
	%	1.8	2.9	6.0	3.6
Religious Affiliation of the Respondents					
Religious Affiliation		**Bilpeila**	**Vitting**	**Choggu**	**Total**
Christianity	Frequency	26	9	20	55
	%	11.5	12.9	20.2	13.9
Islam	Frequency	192	53	78	323
	%	85.0	82.9	78.8	81.7
Traditional	Frequency	8	3	11	22
	%	3.5	4.3	11.0	5.4
Employment Status of the Respondents					
Employment Status		**Bilpeila**	**Vitting**	**Choggu**	**Total**
Agriculture	Frequency	88	32	24	144
	%	61.1	22.2	16.7	36.5
Trade	Frequency	61	15	13	89
	%	68.5	16.9	14.6	22.5
Civil/ Public	Frequency	2	1	0	3
	%	66.7	33.3	0	0.8
Food	Frequency	27	13	8	48
	%	56.3	27.1	16.7	12.2
Artisans	Frequency	4	2	2	8
	%	50.0	25.0	25.0	2.0
Self Employed	Frequency	18	3	12	33
	%	54.5	9.1	36.4	8.3
Unemployed	Frequency	26	14	30	70
	%	37.1	20.0	42.8	17.7

Source: Authors Field Survey June 2014

Table 3: Last Pregnancy of Respondents

Ages / Last Pregnancy	15-25		26-35		36-49		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
1year and below	48	68.6	102	50.0	17	14.2	167	42.4
1-2years	19	27.1	82	40.2	27	22.5	128	32.5
3-4years	3	4.3	20	9.8	76	63.3	99	25.1

Source: Author's Field Survey June 2014

Table 4: Number of Antenatal Visits

CHPS Zones / Antenatal visits	Bilpeila		Choggu		Vittin		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Below 4 Times	10	4.4	4	4.0	2	2.9	16	4.1
4-8 Times	97	42.9	47	47.8	30	42.9	174	44.1
Above 8 Times	119	56.7	48	48.2	38	54.2	205	51.8

Source: Authors Field Survey, 2014

Table 5: Supplies of Antenatal Medication for the First and Second Quarters of 2014

Zones / Medications	Bilpeila		Choggu		Vittin	
	1st	2nd	1st	2nd	1st	2nd
Iron folic acid (Tablets)	500	500	650	500	500	300
Injection tetanus toxoid (Injections)	200	200	500	500	300	300
Anti-malaria drugs (SP) (Tablets)	200	200	300	300	300	300
Multivate (Tablets)	500	500	600	600	500	500

Source: Bilpeila, Choggu and Vittin CHPS Compounds, 2014

Table 6: Respondents Place of Delivery

Zones / Place of Delivery	Bilpeila		Choggu		Vittin		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Home	194	85.8	89	89.9	67	95.7	350	88.6
Teaching Hospital	5	2.2	3	3.0	3	4.3	11	2.7
Other Gov't Hospital	13	5.8	2	2.0	0	0	15	3.8
Health Center	14	6.2	5	5.1	0	0	19	4.9

Source: Author's Field Survey June, 2014

Table 7: Supplies for Infection Preventives Items.

Zones / Supplies	Bilpeila		Vittin		Choggu	
	No. Existing	No. Required	No. Existing	No Required	No Existing	No. Required
Surgical gloves	20	50	20	35	25	50
Utility gloves	20	30	15	35	12	30
Bucket of chlorine	1	2	1	1	0	1
Sharps disposal containers	1	2	1	2	2	5
Waste buckets	1	2	1	2	1	2

Source: Bilpeila, Vittin and Choggu CHPS Compounds, 2014

Table 8: Rating of Maternal Health Services Provided by CHPS Compounds

Zone / Rating	Bilpeila		Choggu		Vittin		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Very Good	49	21.6	0	0	0	0	49	12.4
Good	162	71.7	99	100	7	10	268	67.8
Bad	15	6.6	0	0	63	90	78	19.8

Source: Authors Construct June, 2014.

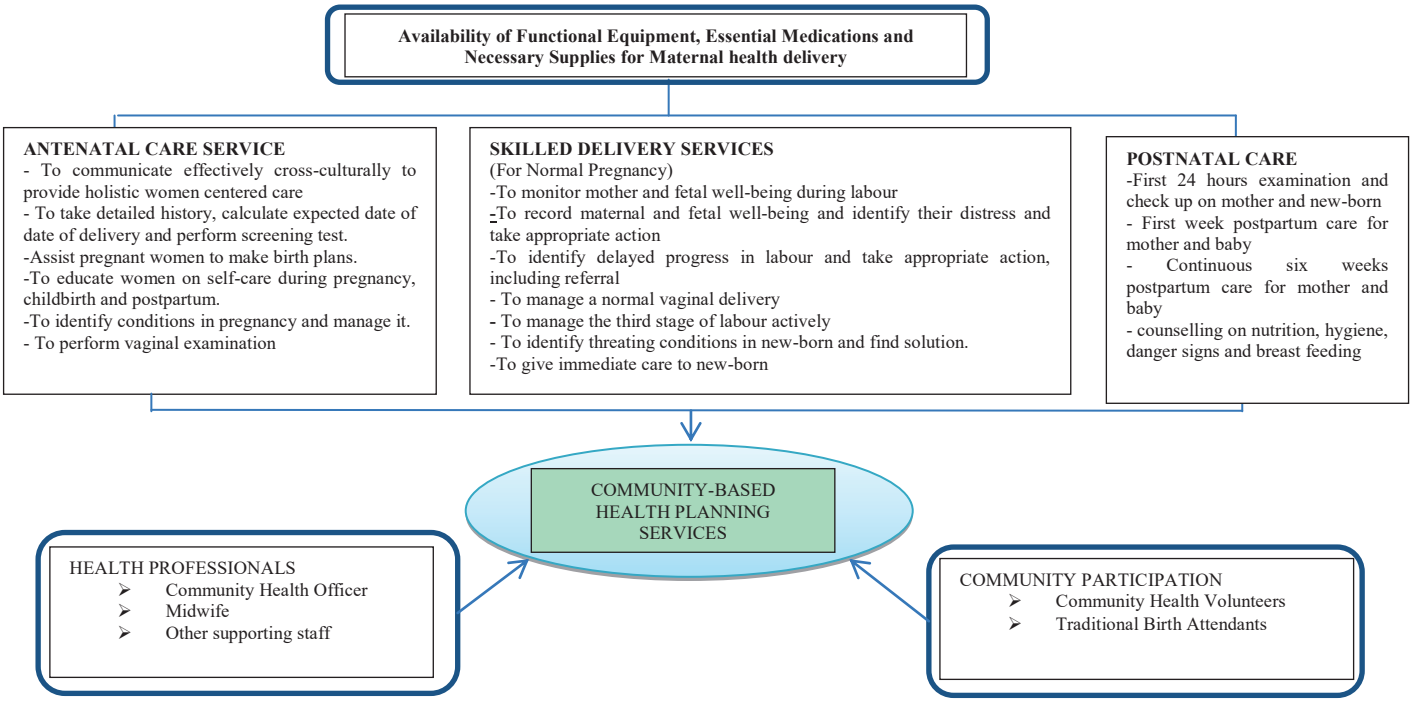

Figure 1: Conceptual Framework of the Study
Source:Authors Construct, 2014

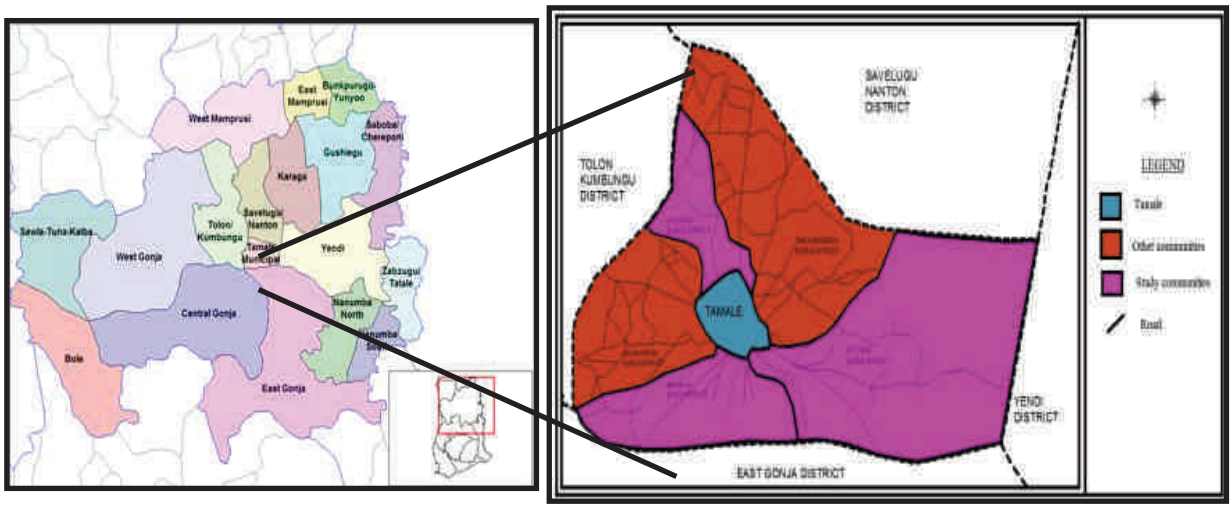

Plate 1: Sub-Zonal Map of Tamale Metropolis (Not Drawn to Scale)
Source: Adopted from Tamale Metropolitan Assembly (2012)

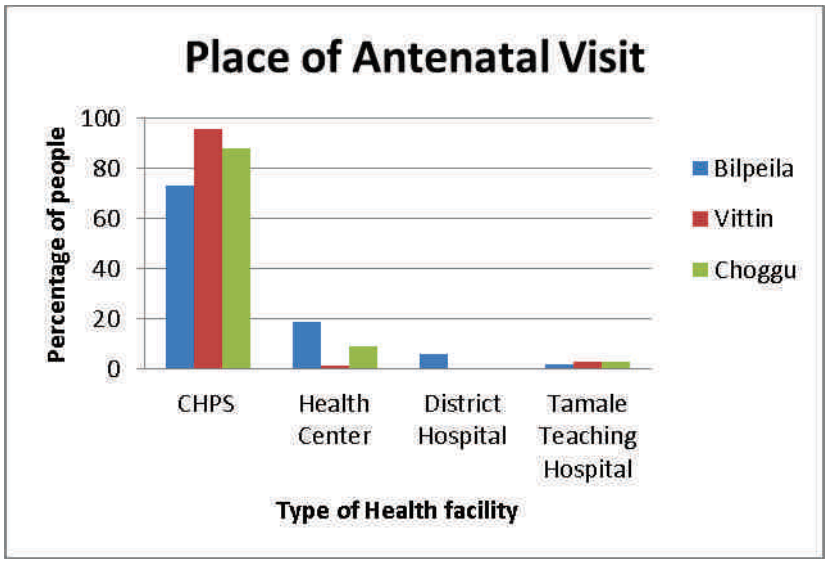

Figure 2: Place of Antenatal Care of the Respondents
Source: Author's Field Survey June 2014

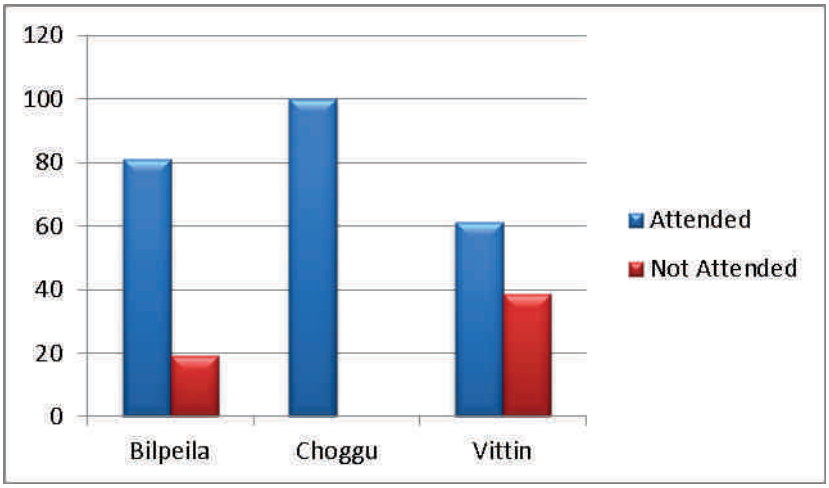

Figure 3: First Week Postnatal Attendance
Source: Author's Construct, June, 2014

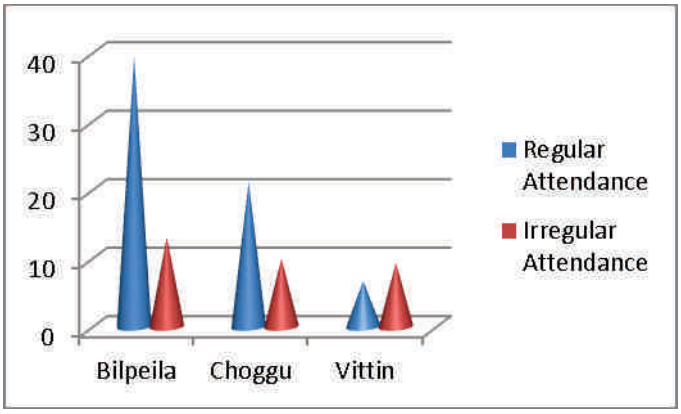

Figure 4: Six Weeks Postpartum Attendance of Respondents
Source: Author's Field Survey June, 2014