

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

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF HEALTH POLICY, MANAGEMENT AND ECONOMICS



**ASSESSING THE CONTRIBUTION OF COMMUNITY-BASE HEALTH
PLANNING AND SERVICE (CHPS) IN THE REDUCTION OF
MATERNAL MORTALITY USING THE SISTERHOOD METHOD IN WA
MUNICIPALITY**

BY

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NOVEMBER, 2016

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**A THESIS SUBMITTED TO THE SCHOOL OF PUBLIC HEALTH, KWAME
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KUMASI IN PARTIAL FULFILLMENT FOR THE AWARD OF SECOND
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NOVEMBER, 2016

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DECLARATION

I BANIYENI ALEXIS hereby declare that this dissertation for the award of second degree Master in Public health is the result of my personal research. I hereby declare that this work has never been submitted elsewhere except the reference and quotations which have been duly acknowledged. I attest to the fact that my supervisor rendered me the necessary support in accordance to the KNUST guidelines.

Signature..... Date.....

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Head of Department Dr Peter Agyei-Baffour

DEDICATION

This work is dedicated first to the Almighty God for all the protection and guidance throughout the course of study. Secondly to my wife and children who sacrificed their comfort during the course of study and finally dedicated to the Baniyeni family.

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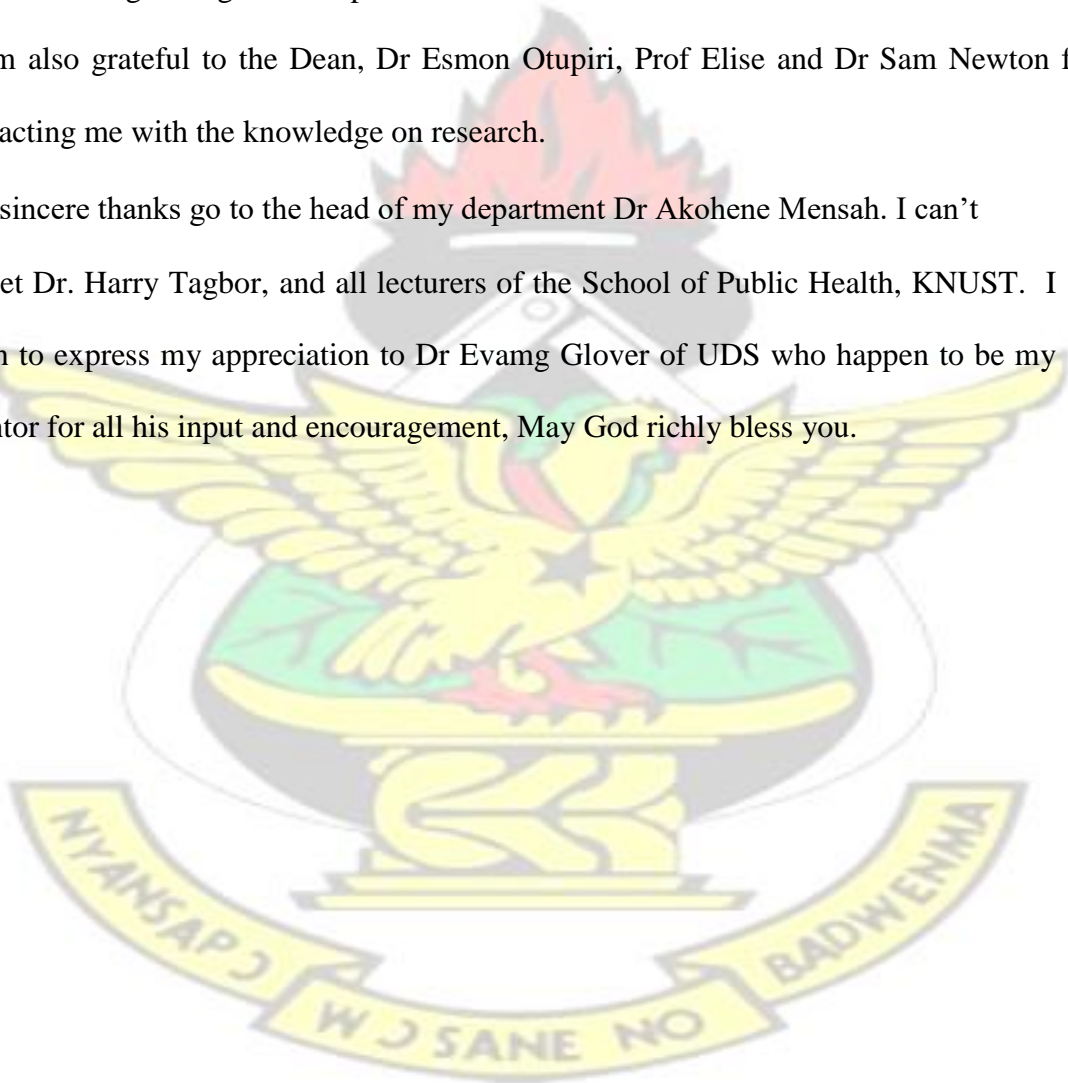
Work of this kind cannot be completed without challenges. However, God's protection and guidance has brought us this far.

I owe my sincere gratitude to some individuals and groups for their unflinching support in diverse ways in contributing to the realization of this dream.

I am most grateful to my supervisor Mr. Emmanuel Nakua who spent most of his precious time in reading through the scripts.

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ABSTRACT

Background: The burden of maternal mortality is enormous and of great concern globally. Sub-Saharan Africa is leading in terms of maternal deaths with the highest maternal mortality rate of 890 /100,000 live births in 2010. Despite several interventions targeting in the achievement of MDG 5, most countries have failed to meet the set standard. Skilled birth attendance, ANC and family planning services have been identified as key interventions to influence the reduction of maternal death. The Community-Based Health Planning and Service (CHPS) had contributed in mitigating maternal death. These facilities are located closer to clients and render emergency delivery, ANC and family planning services resulting in an increased accessibility of health services in the Municipality.

Methods: This study employs a descriptive cross-sectional approach. In line with this, a household survey was conducted with women within the reproductive age (15-45 years) as the target group to find out how the services of CHPS contributes towards the reduction of maternal mortality. Variables such as antenatal care, family planning, referral systems, TBAS delivery and recourse to facilities were considered. If we enter a household and two or more women are qualified, we randomly select one for the interview.

Results: About 524 households were interviewed. Seventy-one percent of the respondents received FP at the CHPS Zone. Eighty-seven percent of respondents prefer receiving their ANC services at CHPS Zone and seventy-three percent of respondents prefer going for ANC service at CHPS Zone because of proximity. The CHPS Zone had referred seventy-two percent of respondents who visited the facility.

The study recorded maternal death of 139 deaths per 100,000 live births before the inception of CHPS and 12 deaths per 100,000 live births after the inception of CHPS in communities that CHPS operate within the Municipal.

Conclusions: This study has clearly demonstrated the positive impact of CHPS activities on the reduction of maternal mortality and should be embraced.

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ABBREVIATIONS

ANC: Antenatal Care

B/P: Blood Pressure.

CETS: Community Emergency Transport System

CHO: Community Health Officer

CHPS: Community-based Health Planning and Service

FP: Family Planning

GHS: Ghana Health Service

GSS: Ghana Statistical Services

HB: Blood Hemoglobin Level

ICD: International Classification of Disease.

MDG: Millennium Development Goal

MMR: Maternal Mortality Rate

PHC: Primary Health Care

TBA's; Traditional Birth Attendants

UNICEF: United Nations Children Fund.

WHO: World Health Organization

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Study

The World Health Organization WHO (2000) defines maternal mortality as death of a woman while pregnant or within 42 days of termination of pregnancy irrespective of duration whatever the cause of death with the exception of accident. The WHO (2000) report further showed that worldwide, about 800 women pass on daily with complicated childbirth. Africa and Asia record close to about 99% of world recorded maternal deaths. Of the few that survive, about 60 million sustain several degrees of reproductive health injuries and disabilities such as uterine prolapse, infertility and fistula (Ashoford et. al., 2002; Sakerah et.al. 2014). Developed countries, on the other hand continue to record low levels of maternal deaths. Countries like Finland recorded 5 deaths /100,000 live birth (2010), Estonia 3 deaths /100,000 live births (2010), Germany 7 deaths /100,000 live births (2010), and in Canada 12 deaths /100,000 live births (2010). The situation of maternal deaths in Africa and Asia within the same period was comparatively poor. Central Africa Republic recorded 890 deaths /100,000 live births (2010); Democratic Republic of Congo 540 deaths /100,000 live births (2010); Bhutan 180 deaths /100,000 live births (2010); Cote d'Ivoire 400 deaths /100,000 live births (2010); Ghana 350 deaths /100,000 live births (2010); and Indonesia 220 deaths /100,000 live births (Costello et.al., 2004; WHO/FHE/MSM, 1995; CIA Fact book January 2012).

The persistent high mortality due to complicated childbirth among women is a major concern worldwide. The launching of safe motherhood initiative in Nairobi Kenya in 1987 and Alma Atta declaration in 1978 were the pioneer international conferences that focus especially on the health of women. These conferences facilitated a dramatic focus

on reducing maternal deaths worldwide. Recently, this concern has been reiterated within the Millennium Development Goals (MDG). Specifically, in MDG 5, countries are entreated to strategically put in place universally acceptable interventions such as free maternal health services and to improve accessibility of maternal service by 2015. The records show that these efforts have brought some positive effects generally. Maternal mortality has reduced globally by 34% between 1990 and 2008 with an estimated reduction from 546,000 to 358,000 deaths. For the first time therefore, maternal mortality rate declined from 400 to 260 maternal deaths per 100,000 live births. Despite the global estimated annual rate decline of MMR within 1990 – 2008, it is important to note that this has 2.3% shortfall needed to meet the MDG 5 target. In addition, there are also considerable variations across countries in this success. In order to achieve the MDG 5 target in most of the developing world, considerable effort is needed to improve access to quality maternal health services including skilled attendant UNFPA (2013), emergency obstetric care as well as declining unplanned pregnancies through family planning (Sarah Zureick, Brown et.al., 2014).

In Ghana, the main cause of maternal mortality is poor accessibility to health facilities and inadequate access to skilled staff for conducting emergency delivery especially in rural areas (UNFPA 2002). Pregnant women in some rural communities walk long distances to access health services. Poor effective-referrals increase maternal deaths. This is especially the case where the few health facilities located in rural areas lack essential health professionals. Using the proportion of birth attendants to skill delivery as key indicator for assessing progress towards MDG 5, it could be said that much more needs to be done in especially rural areas in Ghana in order to meet the target.

For example, while about 88% of deliveries at the urban areas are attended to by skilled professionals; their rural counterparts can only access 57% of skilled attendant (Ghana Statistical service, 2011). According to the report, the MMR in Ghana is about 350 per 100,000 live births representing 40% reduction of maternal deaths. Despite the drastic reduction, it is obvious that the target of 85% has hardly been achieved. It was supposed to be 185 per 100,000 live births by 2015 (Fiifi Amoako, Johnson et. al., 2015). Poverty, lack of information on health and other negative cultural practices have greatly influenced the high maternal mortality rate in Ghana.

The Upper West Region of Ghana is one of the most deprived areas in the country, which is poorly served in terms of health facilities and personnel. The Regional Health annual report (2014) for example shows that Wa Hospital (the main referral point in the region) is grossly under resourced in terms of health personnel including midwives and obstetric gynaecologists. Out of nine districts, the region has only one gynaecologist who is situated at the regional hospital. The challenge is not only the pressure of work, but also the effect of the poor referral system on women.

In some cases, accessibility from rural areas is difficult not only for the distance, but also due to deplorable roads especially in the season of rains. With lack of transport, women with labour complications are often transported by motor bikes and bicycles across long distances. In some instances, some die on the way.

The health care burden is also a function of the fact that the Upper West region is invariably one of the poorest regions in Ghana (Jamison et.al., 2006). Wa, been the capital of the region for example, it is estimated that about 87.9% of the people living in the Municipality live below the poverty line. As argued by Andersson et. al. (2011), poverty complicates the health situation in most developing countries making accessibility difficult and notably a major cause of maternal death in those areas.

Coupled with this, the Ghana living standard survey report (GSS 2008) shows how marginalization of women and negative social cultural practices contribute to maternal health. Findings of various studies across districts of the three northern regions have also confirmed the negative effect of poor attitudes of health personnel as a major concern. Among other things, poor attitude of health staff, previous negative experiences of women who visited health service points, lack of information given at health facilities during ANC, negligence of health care workers, as well as lack of care and support during labour were reported. For example, in Bawku Municipal Hospital of the Upper East Region (Akum, 2013), The situation has been attributed, among other things, to the rather high volume of work for the few staff manning these health facilities in rural areas.

As part of measures to mitigate these challenges, the community-based health planning and service (CHPS) programme was established to provide primary health care to rural people and improve upon accessibility and quality services for individual households and communities. The concept was initiated and piloted in Navrongo in 1999. This brought much relief and within three years of its implementation remarkable improvement including increased acceptance of modern contraceptives and reduced under five years mortality by 38% (GHS policy document, 2005). The CHPS initiative is therefore targeted, among other things, at addressing high fertility rate, improve birth spacing and the reduction of teenage pregnancy. This resulted in improved access and affordable family planning services with health empowerment of women. The MOH/GHS has put in place modalities for Community Health Officers (CHO) to be trained with requisite skills as CHO midwives to enable them conduct skilled delivery in a bid to address the short fall of midwives that can impact positively in the reduction of maternal deaths (Amoako and Johnson. 2015).

1.1 Statement of the Problem

WHO report (2000) indicated that about 800 women die with pregnancy or childbirth related complications around the world every day. Sub-Saharan Africa is recording about 99% of these deaths. Most of these deaths are largely avertible. Maternal death is attributed to poor accessibility to health service, bad roads, ignorance, negative social-cultural practices, coupled with the health structure's incapability of handling complicated conditions, (Ghana Millennium development goal report 2010; (Gumanga, et al., 2011).

Inequitable distribution of health personal and facilities is one of the greatest challenges in developing countries. United Nations Children Fund (1986) observed that the vast majority of physicians, trained midwives, nurses and hospitals are located in urban areas with few resources available in the rural areas. **Maternal mortality ratio report (2000)** defines *maternal mortality ratio* as the number of women who die from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births. In line with this definition, the Ghana Health Sector Review (2009) indicates that Ghana has achieved much in reducing maternal mortality this varies across region. However, the indicators remain one of the greatest concerns for the country as far as achieving the MDG target is concerned. Although considerable progress has been made in reducing maternal mortality in Ghana from a high of 740 per 100,000 live births in 1990 to 451 per 100,000 live births in 2008, indicators for measuring progress towards the MDG 5 target has shown a poor state of affairs (GSS, 2013). Report based on the 2010 Population and Housing Census (PHC) shows that Ghana's MMR stands at 485 deaths per 100,000 live births.

Indeed, the achievements should however be read with a caveat. The records suggest that the modest gains have hardly been evenly distributed across different geographical settings, and that the differences between rural and urban settings in Ghana are obvious. Many rural areas have challenges in accessing health facilities, with shortage of health workforce, education and practice.

There has been an overall significant decrease in maternal mortality, the average marks widely differ in rates of improvements across the country. The very fact that the achievement of MDG 5 is less than half, 5.5 per cent rate is needed to achieve the three-quarters reduction in maternal mortality targeted for 2015, UNICEF (2014) poses a challenge. In order to meet the challenge, a new level of effort towards understanding the issues on the ground is needed in order to facilitate the realization of the objective. A number of questions have emerged from these challenges and answers need to be explored for designing a more culturally sensitive innovative strategy for meeting the shortfall. Do the CHPS strategies of improving access to health service for women especially pregnant women lead to the reduction of maternal deaths at CHPS zones? What are the views of pregnant women about quality of service? Have the training and technical supervision of TBAs translated into reduction of TBAs delivery? Are CHPS compounds well equipped to provide the quality of service required? Such questions need to be addressed at the grassroots level so as to help in designing timely and important remedies tailored for the purpose. Despite the fact that a number of studies (Arhin 2001; Maine, et al. 2001; Senah 2003) investigated the challenges, there is the need to encourage explicit details that could be useful (Sakeah et al., 2014).

The main objective of this study is to ascertain whether the CHPS strategy of improving access to health service in the areas of ANC, Family planning and women empowerment. It seeks to assess the whether skilled delivery attitude on women and

the conduction of emergency deliveries, has led to the reduction of maternal mortality at the CHPS zone of study.

1.3 Research Questions

- Has CHPS contributed to the reduction of maternal mortality in Wa Municipality?
- What is the mortality rate before and after the inception of the CHPS system?
- Has TBAs delivery reduced with the inception of the CHPS strategy?
- Are the CHPS compounds well equipped to function optimally?

1.4 Study Objectives

1.4.1 Principal Objective

- To determine if CHPS has contributed in the reduction of maternal mortality in Wa municipality

1.4.2 Specific Objectives

- To assess CHPS' contribution in the reduction of maternal mortality in Wa Municipality.
- To assess maternal mortality rate before and after the inception of the CHPS.
- To assess whether TBAs delivery has reduced with the inception of the CHPS.
- To evaluate if CHPS compounds are well equipped to function optimally.

1.5 Significance of the Study

The study's reason is to discover how the CHPS programme is contributing to the reduction of maternal death in Wa municipality. From a practice standpoint, a study of this nature is timely and relevant for the healthcare sector especially because of its bearing on the policy to enhance quality service. It is especially important for all

stakeholders both within communities as direct beneficiaries and also health personnel providing services generally. The findings of this study fall in line with operations research and therefore would have its recommendations ploughed back directly into programme development.

1.5 Profile of study area Wa Municipal

1.5.1 Wa Municipal Health Service

Wa Municipal is the districts capital of the Upper West Region. It attained its municipal status in August 2004, when the then Wa District was split into three districts, Wa East, Wa Municipal and Wa West.

1.5.2 Demographic Characteristics

The Municipality had a projected population of 117,769 for the year 2015 and 127 communities.

Table 1: 2015 Projected Populations of Sub-districts in the Municipality

Sub Municipal	Total Pop	< 1 year	< 5 years	< 15 years	WIFA	Expected deliveries	Expected pregnancies
		4%	18.50%	45.00%	24%	4%	4%
Bamahu	10,116	405	1,872	4,552	2,428	405	405
Busa	9,102	364	1,684	4,096	2,184	364	364
Charia	9,433	377	1,745	4,245	2,264	377	377
Charingu	11,072	443	2,048	4,982	2,657	443	443
Kambali	15,666	627	2,898	7,050	3,760	627	627

Wa	62,380	2,495	11,540	28,071	14,971	2,495	2,495
Central							
Wa Municipal	117,769	4,711	21,787	52,996	28,265	4,711	4,711

The major ethnic groups in the municipality are the “Waala” and “Dagaabas”, and other tribes in the minority. It is a male dominated community with polygamy and discrimination against women in life’s choices including health, education and engagement in economic activities.

The municipality is located in the savannah high plains with a rather short rainy season that is from May to September each year. The erratic nature of the rainfall impacts poorly on crop production. Temperatures are lowest in the early parts of the dry season (December/January and highest in the latter part of the dry season (March/April) with average monthly maximum of 38.5C and a daily highest temperature of 43C in March. With the exception of Wa, the remaining settlements are predominantly rural, 80% of the people are engaged in subsistent farming and little scale livestock and poultry rearing.

Agricultural production is mainly rain fed during a short spell of rainy season (May – October) followed by a prolonged dry season.

Commercial activities like Shear butter extraction, local soap manufacturing, Pito brewing, weaving, dress/smock making, carpentry, masonry etc. are on small scale and mainly done around Wa.

The unemployment rate especially among the youth is unacceptably high and this accounts for a lot of migration to the commercial towns in the south.

There is high poverty rate in the municipality, at the individual, household and community levels. There is empirical evidence that the Upper West Region has a high incidence of poverty (86% of the population fall below the U.N accepted poverty line.

Health Infrastructure

The Municipality has been sub-divided into 6 Sub-district with a total of 26 government health facilities including CHPS and 4 private facilities as summarized below.

Table 2: Number of facilities by type in the Municipality

No.	Type of Facility	Number
1	Health Centers	6
2	Functional/Operational CHPS Zones	19
3	Clinics	2
4	Completed CHPS Compounds	14
5	Ear-marked for CHPS	5
6	Adolescent Health Centre	1
7	Private Health Facilities	3
	Total	50

There are three hospitals in the Municipal. There is one public hospital which is serving as the district and regional hospital. There are two private hospitals, SDA and Islamic hospital.

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CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

In this chapter relevant literature is reviewed to serve as the background against which subsequent discussions of the study could be pitched. In line with this, the study objectives were used as the main themes of this chapter.

2.2 Millennium Development Goal 5

In line with WHO (2004) policy on delivery, skilled attendance should be in the presence of trained midwives. Midwifery skill is seen as providing the enabling environment needed to meet the goal. There is the need for the midwife to holistically examine obstetric complex cases requiring operation or transfusion. However, a skilled attendant is expected to hasten timely delivery of emergency obstetric and childbirth. This reduces complications which threaten the survival of the pregnant woman and her baby. It is important to note that WHO (2004) observed that up to fifteen per cent (15%) of all births are complicated by a potentially deadly situation and that majority of per-natal deaths occur during labour and delivery or within the first forty-eight hours after delivery. Expertise personnel (Health Professional) are therefore trained to identify danger signs early, to intervene and manage complications, or to stabilize the condition before referring the patient to a higher level for care. Expertise attendant is also vital for protecting the health of newborns.

Despite this, in the developing world, only about fifty-eight per cent (58%) of all deliveries are reported as attended by expertise personnel (WHO 2004). And in many of those cases, the female in labour do not have access to life-saving emergency care should something go wrong (Harvey et al., 2007).

2.4 Global Maternal Mortality trends.

Maternal mortality is of great concern internationally. In poor countries its reduction is problematic irrespective of well-structured intervention policies (Rosenfield and Maine, 1985). The literature (Boerma, 1987) noted that since 1980 maternal mortality became an essential development focus after some study unearth some complications that are associated with pregnancy and childbirth which has increased the death of females within reproductive age. The study finding noted the insufficient attention put in place to curb these avoidable deaths. WHO projected that about 500 females pass on yearly from maternal death causes (Rosenfield and Maine, 1985).

In recognition of these challenges, the Safe Motherhood Conference in Nairobi (1987), declared that within a decade, all poor countries should have reduced maternal deaths by half. By ensuring that FP services are universally accessible since it is one of the best methods in achieving this goal. Rendering of prenatal care by trained assistance at delivery, and ensuring access to emergency obstetric care will influence the promotion of safe motherhood (Mahler, 1987).

In 1990, other international conferences, including the World Summit for Children, the International Conference on Population and Development in 1994, and the Fourth World Conference on female in 1995, also called for efforts towards reducing maternal mortalities. In September 2000 The United Nations Millennium Declaration was adopted in UN General Assembly, detailed specific goals were tabled for adoption. Millennium Development Goals (MDGs) were set at the 2000 Millennium Summit to accelerate global progress in development. Sexual and reproductive health is a prerequisite of all goals, particularly those related to gender and health. Progress is monitored for the achievement of two targets and their associated indicators for monitoring MDG 5. Maternal mortality ratio is the number of women who die

from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births (Hogan et al., 2010). The Millennium Development Goal (MDG) 5 specifically called for a three-quarters reduction between 1990 and 2015 in the maternal mortality ratio (MMR), the number of maternal deaths per 100,000 live births (Attaran, 2005).

2.3 Regional Trends in Maternal Mortality

Reports show that programme interventions fostered by MDG5 brought a level of improvement in maternal health generally. The total number of maternal deaths observed annually has reduced drastically from 546,000 in 1990 to 358,000 in 2008, a 34% decline over this period (Zureick-Brown et al., 2013). Despite the obvious improvements, WHO (2015) estimated that close to 289,000 female of reproductive age died during pregnancy and childbirth worldwide; in 2013 (a decline of 45% in 1990). It was observed with great concern the regional inconsistencies in the decreased of maternal death. while the yearly predicted maternal death indicate small increased in Africa (from 199,000 to 204,000) the decreased in the total number of maternal death was intense across Asia (from 315,000 to 139,000) dropped global trends (Zureick-Brown et al., 2013). As a result of these divergent patterns, the largest share of the burden of maternal deaths shifted from Asia to sub-Saharan Africa over this period. More specifically, the reports show that in 1990, around fifty-eight percent of maternal deaths worldwide occurred in Asia (43% of global maternal deaths occurred in Southern Asia) and 36% in sub-Saharan Africa. In contrast, in 2008, 57% of global maternal deaths occurred in sub-Saharan Africa and 39% in Asia (30% in Southern Asia). Thus in 1990, sub-Saharan Africa exhibited the highest MMR among the developing regions, 870 maternal deaths per 100,000 live births (Zureick-Brown et al., 2013). The report shows that most females of reproductive age who died had no access to expertise routine and emergency care. Asia and Northern Africa

country recorded halved of their maternal deaths by 1990, even though the reports also show progress in sub-Saharan Africa, unlike in the developed world where a woman's life time risk of dying during pregnancy and childbirth is 1 in 3700, the risk of maternal death in sub-Saharan Africa remains comparatively very high at 1 in 38. Despite the obvious improvements in reducing maternal mortality at the global level however, it is obvious that more effort is needed in order to meet the stated objectives of MDG 5.

2.3 Maternal Mortality Situation in Ghana

Millennium Development Goals (MDGs) set at the 2000 Millennium Summit, to hasten universal progress in developing countries by adopting reproductive and sexual health as precondition of all goals mainly those related to gender and health. The maternal mortality ratio is an indicator under gender and health.

Maternal Mortality Ratio (MMR) is the number of females of reproductive age who die from any cause associated to or aggravated by pregnancy or its management (excluding unintentional or incidental causes) during pregnancy and childbirth or within forty two days of the end of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births (Hogan et al., 2010). This indicator remains one of the greatest concerns for Ghana as far as achieving the MDG target is concerned.

The records (Ministry of Health 2014) show that Antenatal Care coverage dropped from seventy-two percent in 2012 to sixty-six percent in 2013. Eight (8) out of the 10 regions experienced decline in coverage despite improving midwife/population ratio. Dropout rate between ANC and ANC4+ is exceptionally high. Analysis by the GHS reveals that 17% of all pregnant women register in the 3rd trimester and this influences the coverage of ANC4+. Only 45% of pregnant women make their first ANC visit in 1st trimester. In 2013, the equity indicator for skilled deliveries experienced a marginally wider gap from 1:1:53 in 2012 to 1:1:56. The

national performance for skilled delivery improved slightly. The skilled delivery coverage was 55.3% in 2013, a slight increase from 55.0% in 2012. Seven out of ten regions, however, experienced a decline in the skilled delivery rate but a regional break down reveals that coverage decreased across 7 out of the 10 regions during 2013. Upper East Region recorded the highest coverage with 67.5% in 2013 (*ibid*).

Generally, advancement towards the MDG5 target has been slow and completely off-track (Asamoah et al., 2011). Indeed even though numerous health investigation results indicate a fall from a high of seven hundred and forty (740) per 100,000 live births in 1990 to 451 per 100,000 live births in 2008 (GHS, 2010), the results from the 2010 PHC cast further doubt on the achievement of the MDG target. Report based on 2010 Population and Housing Census (PHC), shows that Ghana's MMR stands at 485 deaths per 100,000 live births.

With less than three years to 2015, this result indicates a reduction of about 60 percent to 70 percent will be required to reach the MDG 5 target of 185 deaths per 100,000 live births (GSS, 2008).

Although, the census did not ask questions on the causes of maternal death, several studies relate it to pregnancy related complications such as severe bleeding (hemorrhage), hypertensive diseases, infections and abortions (Ghana Health Sector Review, 2010). The evidence is that the modest gains achieved so far are not evenly distributed across different geographical settings especially rural localities have been woefully disadvantaged.

The 2010 PHC results also give a startling revelation about the variation of MMR across the age-groups. Though not too surprising, the highest incidence of death occurs between the ages of 12 and 14 as the results indicate 5671 deaths per 100,000 live births, more than ten times higher than the national rate. This age group, however, has the least number of pregnancy-related deaths and live births of 52 and 917 respectively. The data further shows that the risk

of death increases for women aged above 40 years. Female of reproductive age between 45 and 59 are the second highest group more likely to pass on from pregnancy associated complication, across the two localities. Results of maternal death show almost evenly distribution though deaths in urban areas appear slightly lower than rural areas which is common within the aged 12-14 and 50-54 years (GSS, 2013).

At the regional level, the disparities are much wider. The MMR ranges from 355 deaths per 100,000 in the Greater Accra Region to 802 deaths per 100000 in the Upper East Region. Closely following the Upper East Region is the Volta Region which stands at 701 deaths per 100,000 (GSS, 2013).

2.4 Delivery Free Exemption Policy in Ghana

Since 1990 Ghana has been implementing the cost sharing policy in the health sector just like other Africa nations (*ibid*). The adoption of this policy and the consequent charging of user fees for health services was due to stagnating economies and associated budgetary constraints and increasing gaps between supply and demand for basic social services that have been characteristic of African countries since the 1970. The main objectives for the adoption of cost-sharing policies have been to improve both quality and access to health services. Studies focusing on the experience of African countries with the implementation of user fees indicate varying findings on the impact of user fees on the health delivery systems. Access by the poor in particular, has been adversely affected, according to the findings of a number of studies (*ibid*). Policies, such as targeting the poor, have not been effectively implemented to mitigate the impacts of the user fee policy on their access. The main outcomes of this work indicate that a number of limitations of policy adoption, particularly the lack of condition of criteria by which the poor can be identified, make it difficult for health workers to grant exemptions. Further findings show that declining government budget allocations and supplies might have made it imperative for the facility manager to be more concerned about collecting revenue than

attending to financial access of the poor. The study, however, proposes that regardless of the limitations of the targeting plan and its execution, it should continue to be a significant constituent of health policy, bearing in mind the vast disparities in income in the population (Badasu, 2004)

2.5 The Need for Skilled Birth Attendants

Tey and Lai, (2013) estimated that in 2010, roughly 287,000 females of reproductive age died while pregnant or giving birth with neonatal death of 3.1 million worldwide. The highest incident of maternal and perinatal mortality occurs around the time of birth, with the majority of deaths occurring within 24 hours after birth as documented. A major concern has been the fact that majority of deliveries are done without the assistance of skilled care. Authorities agree that access to expertise attendance at birth (Doctors, Nurses and Midwives) is another way to decrease maternal deaths. This access should be available to women in both rural and urban areas. (Say et al., 2014).

Against this background, WHO advocates for every birth to be handled by skilled care. Ensuring quality maternal care services can save the lives of newborn. These services require accredited health professionals – such as a midwife, doctor or nurse who has been educated and trained to expertise in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in females of reproductive age and new-born” (Howson et al., 1996). In addition to the appropriate skills, these health professionals should be motivated and located in the right place at the right time. They need to be supported by appropriate policies, essential supplies including medicines and operating under appropriate regulatory frameworks. Challenges still relate to the shortage of health workforce, education and practice.

2.6 Community- Based Health Planning and Services (CHPS)

New developments in the field of maternal health could be traced to the Alma Atta 1978 declaration intended to improve upon primary health care by ensuring accessible affordable, equitable distribution of health service to all individual households and especially in rural communities (Adegoke and Van Den Broek, 2009). It was based on this concept that the Community Health Planning Services (CHPS) was initiated to improve accessibility of health service to children and pregnant women. The focus of CHPS is to render integrated health service and to give room for the full involvement of communities during construction of health facilities, by providing land and resources for building and their full involvement in decisions and programme of routine activities (Sakeah et al., 2014).

The introduction of free maternal care services and localizing CHPS compounds within rural communities in Ghana are important gap stopping efforts that have been made to remove barriers to accessing skilled maternal care. The CHPS notion is therefore initiated to reorient and reposition primary health care by improving access and quality service to the individual, household and communities. Data shows that by 2012, approximately 68 percent of women gave birth in health facilities and were assisted by skilled personnel during delivery. The approach reduced child mortality by 68%, maternal mortality by 40% and fertility rate by 5.5 within five years of its implementation. However, the achievement in the implementation of the free maternal care policy in the year 2008 has regional disparities with Greater Accra (90%), and the lowest in the Northern Region (37%) (World Health Organization, 2010). One of the major accomplishments of the CHPS concept has been conveying Family Planning programme activities to the doorsteps of rural families. Generally, all pregnancies expose females of reproductive age to some risk, unintended pregnancies expose women of reproductive age to a higher risk of maternal death. A study conducted by Lim et al (2013) indicates that about eighty million in developing countries experience unwanted pregnancy

resulting in thirty million unplanned birth, forty million abortions and ten million miscarriages and in all about 222 million women globally has unmet need for contraceptive (Lim et al., 2013). World Health Organization (2002), reports that in Africa about 53% of Women of reproductive age have an unmet need for contraceptive. As a result, about 291 million pregnant women die out of pregnancy complicated cause in Africa. Thus the CHPS concept therefore renders accessible family planning service to rural people and therefore contributes towards reducing risks associated with unwanted pregnancies and abortion at the community level.

The general absence of satisfactory growth and basic social amenities to support acceptable quality living standard in many rural communities, however makes it difficult for the CHPS programme to attract and retain healthcare professionals in these deprived communities. As a result, despite the efforts by government to push the “village midwife programme”, many communities lack a midwife. However, it is important to state that generally, the CHPS concept promotes and provides essential service such as family planning, antenatal care, health promotion/empowerment, conducting of emergency delivery, immunization, child welfare, community outreach, ANC and treatment of minor illness (GHS 2005). The concept seeks to mobilize community activities to build trust between community health workers and service providers and to facilitate accessibility of services especially to the rural poor.

Among other advantages, the CHPS concept helps in addressing challenges including the culture of seeking concern from elderly family members before accessing health care from health facilities. Community meetings organized through CHPs and empowerment has brought a level of change in community attitudes towards health services generally. In addition, Community Health Officers (CHO) are trained to render services such as immunization, and family planning, treatment of minor illness such as malaria, respiratory infection, ANC, emergency delivery services with the support of community volunteers at the doorstep of the people. However, the challenge has been with

inadequate supportive supervision of CHOs, poor communication system, more focus on clinical care to the neglect of community based intervention services (Nyonator et al., 2007).

As part of building the capacity of CHOs, midwifery training is provided to enable them supervise and conduct emergency delivery in the community setting. The CHO also works in partnership with community leaders. In Bangladesh for example, community based interventions were proposed by which midwives were recruited to conduct home delivery at designated villages, to also distinguish and manage obstetric complications within their capacity and escort patients necessitating referral to the higher level. This strategy drastically reduced maternal mortality from 1.4 to 3.8 per 100 live-births (Fauyeau et al. 1991). In another development in order to mitigate maternal mortality provision is made to increase access to skill delivery with partnership with Traditional Birth Attendants and the deployment of midwives to provide skilled delivery at the door steps of rural communities with built-in special incentive packages (Nyonator et al., 2007).

Another important challenge to reducing maternal mortality and improving the general health of the nation is related to poor documentation which could help promote the evaluation of interventions. Most developing nations do not have the capacity to collect data and data collected vary with different criteria from country to country making comparisons difficult (Graham et al., 2008). Accuracy of documentation in most parts of Africa is questionable. Maternal deaths are under reported because rural communities have no such mechanism put in place to capture such information (Graham et al., 2008).

Another difficulty is the absence of clear consensus regarding the best practice for technical, intervention and commitment to examine the scale of the problem and the importance of the social context (Nour, 2008). Development Partners and governments in some cases do not have the same concepts and understanding of the situation. Political commitment to the issue varies while international commitment seem to focus largely on progress of MDG per se without due consideration for contextual issues (Alwan, 2011).

The reduction of maternal mortality is also influenced by gender issues and the level of women educational status. Higher educational status influences increased antenatal attendance and delivery at the health institution which significantly reduce maternal mortality. The UN General Assembly recognizes gender equal opportunity and female empowerment as both central to achieving sustainable development by means of combating poverty and disease. Globally females are more disadvantaged than men in relation to reproductive and sexual health. It is in this sense that improved access to health service through programmes like CHPS expansion in Ghana would contribute towards addressing the health of women (Baatiema et al., 2013).

2.7 Social factors and maternal death

The consequence of pregnancy has been found to be largely predisposed by household behaviour and decision making process. Women in Africa are downgraded because of poverty as most of them are unwaged with high illiteracy rate, and are subjected to gender based violence. As a result, women are denied involvement in decision making concerning their own health. This has implications for maternal death (Wall et al. 1998). Unsafe traditional practices and beliefs such as female genital mutilation, the inserting of herbs during pregnancy and labour in most African countries result in uterine rupture with the disproportional use of health facility for services such as family planning, ANC, delivery service because of the harmful cultural and religious beliefs contributing adversely to maternal health (Ghebrehiwot, 2004).

Poverty within households with inadequate apportionment of resources also influences maternal death (Jamison et al., 2006). Most pregnant women in rural settings cannot afford cost of health service. Even with the free ANC and deliveries in the public health facilities in some African countries. Some families cannot afford the transportation and feeding cost of pregnant women in health facilities. Certain African governments steadily fail to reimburse public health

facilities. The situation results in some public facilities rendering low quality service resulting in increase in maternal death (Lule et al., 2005).

2.8 The Health Referral System

The referral system operates at three levels; primary secondary and tertiary levels.(Adegoke and Van Den Broek, 2009). The entry point of every referral system is the primary health care (PHC) where majority of the essential and basic health care services are rendered. Secondary level hospitals provide mostly curative services for in and out patients. This level normally accepts referrals from rural areas where PHC services are leading. The tertiary hospitals provide specialized services therefore expect referrals from secondary and primary levels that require specialist attendance. The referral system provides continuum of care that links the primary level to the secondary and to the tertiary health facilities. The challenge however, is where inadequate knowledge and skill on disease conditions that need immediate referrals create situations of poor referrals within the system (Hongoro et al., 1998). In addition, PHC facilities lack adequate resources in terms of personnel, drugs and equipment at some rural areas. Clients therefore seek services at referral facilities without going through the low level facility as a first point of call (Parakoyi et al., 2001). Study in Tanzania reported that high risk pregnant women decline referral recommendation because of discriminating attitude of health workers.

Clients prefer to seek the services of TBAs instead of going to modern health facilities (Jahn and De Brouwere, 2000).

Emergencies are erratic events that need urgent intervention to prevent a condition from deteriorating. Safe and effective emergency care depend on well-equipped health systems, personnel (Cole-Ceesay et al., 2010) and reliable transport system. After rendering services at the lower levels of health care to stabilize the situation, the client is then to be transported to the higher facility for continuum of care.

However, poorly resourced health facilities with inadequate drugs and logistic, create difficulties in managing or effective referrals. Indeed, in Africa, the health system is poorly financed resulting in limited or lack of essential drugs, inadequate equipment, as well as logistics. This contributes significantly in increasing maternal deaths. In Africa most health facilities are under resourced in terms of health professionals. Even the few that are there largely lack technical competence and therefore not in the best position to identify complicated cases and refer appropriately leading to delay at the lower health facilities which contributes to maternal mortality. Negative attitude of health workers with insufficient treatment guidelines and protocols also hinder the rendering of quality health care that result in poor maternal health outcome (Howson et al., 1996)(Howson and Law 1996).

Poor accountability of some system managers also lead to inadequate resources to effectively manage health facilities which result in poor quality of input and serve which de-motivate other health professionals. Inadequate financing and sustainability of the health sector generally leads to many health facilities being under equipped and underutilized since service that can be carried out by those professionals are referred to other facilities resulting in inequality of health and undue delay which result in high maternal mortality (Jamison et al., 2006).

2.9 Antenatal Care Services

ANC services facilitate the reduction of risk during pregnancy and delivery. Areas where ANC services are absent, women walk longer distances to access services. The situation reduces frequency of attendance that might lead to failure to identify and correct certain risks that pregnant women may encounter that leads to loss of life increasing maternal death. ANC is a special care that mothers receive during the period of pregnancy and shortly after childbirth this is very essential for the survival of both mother and the unborn baby.

Indeed, one way of achieving improvement of health of female of reproductive age is providing maternal health service immediately after conception. The achievement of maternal health at

the antenatal level is a vital approach, of empowering women with health seeking behaviour during pregnancy. Services rendered at ANC sessions include; counselling, screening, treatment of minor illness, weighing, vital signs, testing urine for protein in hypertension in pregnancy. The above services promote the health of mother and her unborn baby. Regular ANC attendance will facilitate the identification of early signs of risk in pregnancy. The recommended four visits before delivery are essential for the detection of early risk and averting them before onset of labour. In Ghana ANC coverage is about 87% with about 60% of the women attending four visits (GSS, 2013).

Another socio-economic factor implicated in the utilization of ANC services is financial accessibility. More affluent mothers have more chances of attending a first and subsequent ANC visit than the underprivileged mothers and also have the tendency of choosing to deliver at a health facility than those who are poor (Ortiz et al., 2012). Other social factors that promote the use of ANC are the educational level of women. The more a woman is educated the better she uses ANC and prefer to deliver at a health facility than the uneducated woman (Aseweh Abor et al., 2011).

The age of women also influences the choice of ANC and delivery at health facilities (Chandhiok et al., 2006). The study further established that pregnant women who live in urban areas appreciate the importance of ANC and institutional delivery in health facilities than their rural counterparts. However, with the CHPS concept, CHOs provide ANC services by screening and identification of those at risk with conditions such as anaemia, pregnancy with hypertension, and diabetes for referrals to higher facilities. CHOs also render health promotion education and empowering pregnant women on lifestyle adjustments that promote safe pregnancy and delivery. CHOs provide care in communities by improving health equity, removing non-financial barriers to primary health care that contributes to reducing the potential risk that women face during pregnancy or delivery.

2.10 The role of Unskilled Birth Attendants (TBAs)

An unskilled Birth Attendant (TBA) is a traditional sovereign non-formally trained and community-based provider of care during pregnancy, childbirth and postnatal period (World Health Organization, 2004). TBAs continue to play an important role in providing antenatal care and assistance in developing countries. The services of TBAs are easily accessed in community settings, their services cost less as a result most women in developing countries patronize them because of the cost (Costello et al., 2004). Due to other challenges and cultural barriers such as poor access, high cost, negative attitude of health workers and practices, some pregnant women depend largely on TBAs. TBAs have been an integral part of health systems in Ghana since the initial training during 1980 to provide delivery service in rural areas to mitigate drastically inadequate midwife and other health professionals (Hounton et al., 2013).

However, in 1997 a study suggested that care provided by TBAs has been found not to reduce maternal mortality (Sibley and Sipe, 2004). Against this background, WHO came out with a new policy that refuses to recognize TBAs delivery (World Health Organization, 2004). Elsewhere, it has been found that the integration and collaboration with TBAs with formal health systems suggested the approach has increased skilled birth attendance (Shaikh et al., 2014). It was also proposed that about one hundred and thirty to one hundred and eighty million pregnant women will deliver with unskilled attendance in Africa and Asia since some of the TBAs continue to provide services at the rural areas of developing countries.

The introduction of the CHPS concept in Ghana in rural areas has repositioned and reoriented primary health care services in rural communities. This has fortified the collaboration between TBAs and CHO in such communities, since CHO directly supervise TBAs who are within their catchment areas. In order to reduce maternal mortality, TBAs are encouraged to refer and

accompany their clients (pregnant women) to health facilities for skilled delivery (Sakeah et al., 2014). Despite the policy course, not all TBAs refer their clients immediately but only do so after observing complications such as abnormal presentation, prolonged obstructed labour and excessive bleeding (Yousuf et al., 2010). Against this background, Ghana health service is posting trained midwife and some CHO who are also trained as midwives to rural communities to provide skilled delivery. This is in connection with the safe motherhood initiative of improving skilled birth attendance by training more midwives that will reduce maternal mortality. By this approach, the roles and responsibilities of TBAs has been redefined to sending all pregnant women in labour for skilled delivery.

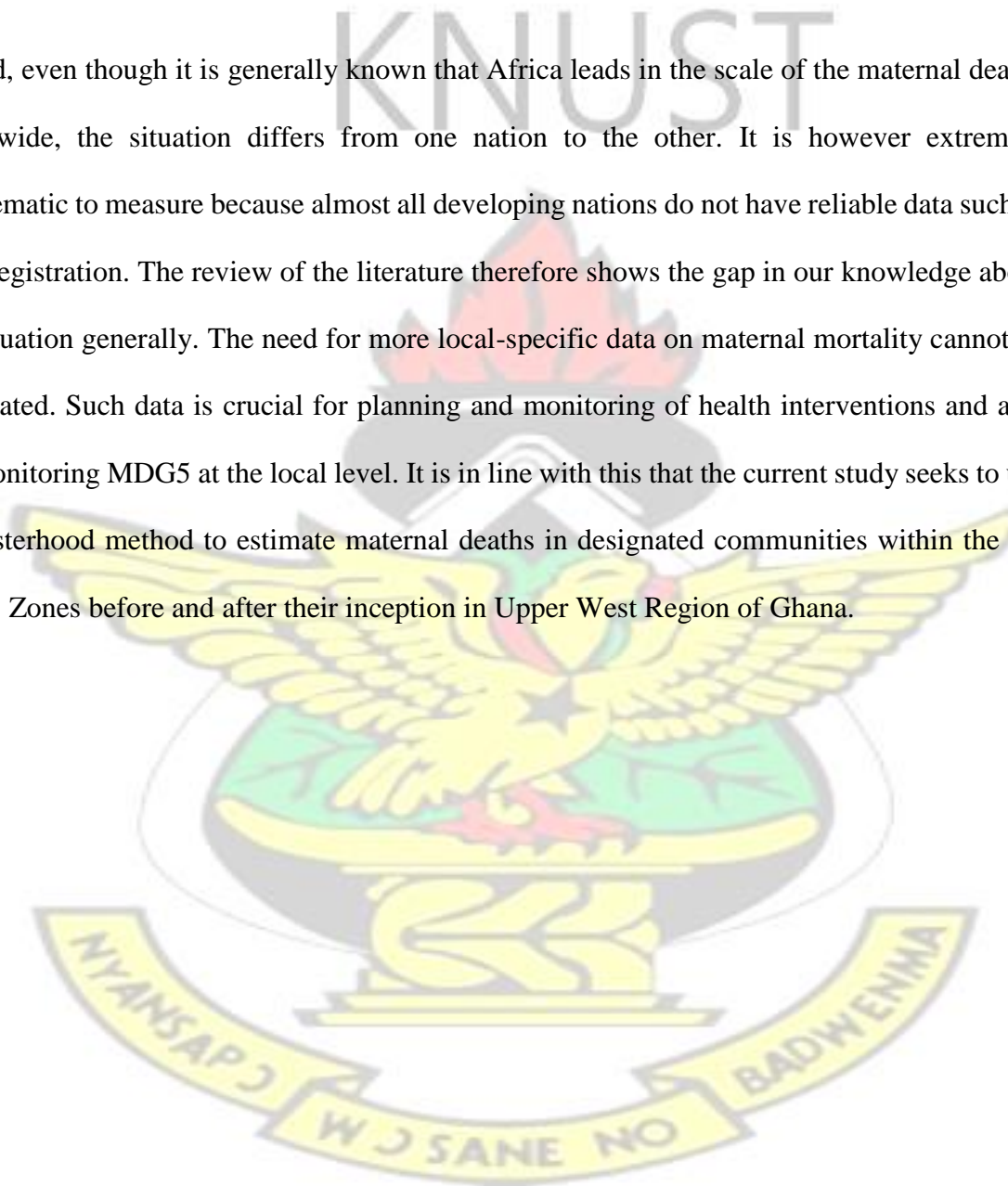
Some CHPS compounds have also introduced the emergency transport system (ETS). Community members contribute to renting of transport for TBAs and pregnant women to be conveyed to higher health facilities for skilled care. Likewise, incentive packages from CHO midwife could be a motivating factor for TBAs referring their client to health facility by respecting and encouraging them to work in collaboration (Hounton et al., 2013).

2.11 Challenges in the estimation of maternal mortality

Inadequate data on death due to pregnancies and childbearing is challenging in developing nations. According to (WHO and Unicef, 1996), maternal death could be defined as death of a female of reproductive age while pregnant or within forty two days of termination of pregnancy, irrespective of the duration of pregnancy. Approximating maternal death goes with some difficulties especially in Africa. This is especially so where some women are not readily able to confirm pregnancy until after 3 to 4 months and also recording of maternal deaths is difficult to confirm (World Health Organization, 2010). The situation is most challenging where the differentiation between direct and indirect causes of maternal death from a layman's view is difficult to ascertain. But data on causes of maternal death is essential for policy makers to be able to take the right decision in addressing the prevailing issues. Among the causes one

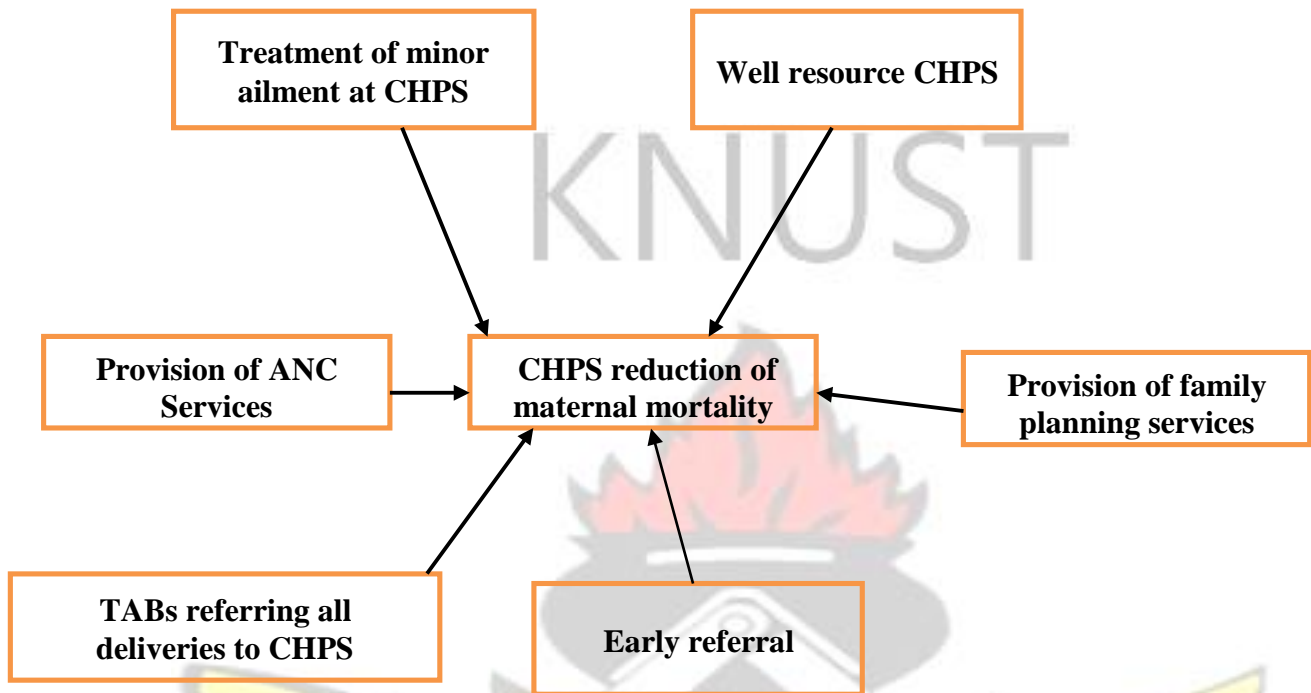
need appropriate documentations on the leading cause of death to develop appropriate interventions to improve the situation. According to Say et al. (2014), globally about 73% of maternal deaths are due to direct maternal death while 27% are due to indirect causes. Hemorrhage was leading among the direct causes (Say et al., 2014).

Indeed, even though it is generally known that Africa leads in the scale of the maternal deaths worldwide, the situation differs from one nation to the other. It is however extremely problematic to measure because almost all developing nations do not have reliable data such as vital registration. The review of the literature therefore shows the gap in our knowledge about the situation generally. The need for more local-specific data on maternal mortality cannot be overstated. Such data is crucial for planning and monitoring of health interventions and also for monitoring MDG5 at the local level. It is in line with this that the current study seeks to use the sisterhood method to estimate maternal deaths in designated communities within the ten CHPS Zones before and after their inception in Upper West Region of Ghana.



2.12 Conceptual Framework

To Access CHPS Contribution in the Reduction of Material Mortality in Wa Municipality



The conceptual framework illustrates various variables and their contributions to the reduction of maternal deaths. CHPS treat minor ailments like malaria, hyperemesis etc. that reduce disease burden of the communities and contribute in decreasing maternal deaths. During ANC services at the CHPS Zones, all clients are screened routinely by taking their vital signs to identify abnormalities and refer appropriately to reduce risk among pregnant mothers (Howson Harrison and Law 1996). Family planning services target at reducing teenage pregnancies and delaying the births by mothers therefore contributes towards healthy maternal outcome (Bhuiya and Streatfield 1991). TBAs collaborate with CHO by accompanying all delivery cases to health facilities for skilled delivery. A well-resourced

CHPS compound would render quality care resulting in optimal maternal outcome. The conceptual framework is illustrating these variables roles. How these activities are rendered by Staff at the various CHPS zones contributes immensely in the reduction of maternal deaths.

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CHAPTER THREE

3.0 METHODOLOGY

3.1 Study Population

The study was conducted in Wa Municipality of Upper West Region of Ghana (northern Ghana). According to 2010 population census, the total number of people in Upper West Region is about 702,110. Wa Municipality has an estimated population of 107,074. However, the projected population for 2015 is about 117,769 with 127 communities. The major ethnic groups in the Municipality are Waalas and Dagaarbas and other ethnic groups in the minority include the Sisasla, Nadomer. Notwithstanding modern trends, the customary notion of control by a strong patriarchal system still predominates. Despite the diversity of ethnic groups in the region, the people of Upper West basically share some similar social and cultural practices such as funeral rites, marriages, customs and taboos. Compound-house family structure in which close kin of the extended family live within the same compound headed by an elderly male still

predominates. Polygyny is predominant with 40 percent of all married women in 2003 and about 38 percent in 2008 reporting that they have at least one cowife (GSS, 2009).

3.2 Study Type and Design

This study employs a descriptive cross-sectional approach (Bowling 2002). In line with this, a household survey was conducted with women within the reproductive age (15-45 years) as the target group to find out how the services of CHPS contributes towards the reduction of maternal mortality.

The predictor variables include antenatal care, family planning, referral systems, TBAS delivery and recourse to facilities. The inclusion criteria for this study was therefore women of reproductive age 15 – 45 years residing in the district with/without children and willing to participate in the study. The exclusion criteria were women not within 15 to 45-year age group; women within the reproductive age group who do not reside in the district.

3.3 Study Unit

Women were selected and interviewed at the household level. Traditional birth attendants and CHO/Enroll midwives conducting skilled delivery at CHPS facilities were also interviewed.

3:4 Data Collection Tools and Methods

The data was collected using household structured questionnaire from July 14 to September 3, 2015. The questionnaire was designed to elicit data on various aspects of services provided by the CHPS compound. Specifically, the questionnaire was used to collect information from all women aged 15-45 in selected households. The questionnaire solicited information on women and their children on the following topics: The questionnaire was categorized into four section the social and demographic characteristics of respondents, how maternal health service such as ANC, FP, activities at CHPS contribute in the reduction of maternal death, how TBAS activities

such as home delivery referrals can influence the reduction of maternal death at CHPS zones, and whether the staffing, equipment at CHPS facility is within standard to promote effective delivery. Pretesting of questionnaire was done at Gbegru CHPS to ascertain the consistency of the questionnaire. This offered fieldworkers the opportunity to practice interviewing techniques and the questionnaire was further revised based on the pretest. Some of the insertions were: here did you deliver your baby? With TBAs or at your own home without TBA assistance, why client prefer ANC service at CHPS, record of TBAs delivery were not kept at CHPS zone or by nurse, delivery were not conducted at CHPS facility that are without midwife and CHO who are not midwives refer all delivery to the hospital or their mother sub-district for delivery.

In addition, service providers including Traditional Birth Attendants as well as Enroll/CHO midwives at CHPS facilities were also interviewed. All questionnaires were designed in the local language and later translated to English. Six Research Assistants were recruited and trained to administer the questionnaires using the interview approach. This is especially necessary given that some of the respondents could not read and write. Research Assistants also helped in translating the questionnaire into the two major local languages (Waale and Dagaare) and back to English.

3.5 Sampling

The sample size was calculated based on the number of women in the fertile age (WIFA, 15-45 years) in the study area. The formula for sample size for the study is determined by $n = \frac{z^2 p (1-p)}{d^2}$ where n is the number of respondent interviewed. A tolerable margin of error of 10% was used $d^2=0.023$, $p=80\%$, $z=1.96$. The population estimate for WIFA in Wa Municipality is 28,265 in 2015 (Municipal Annual Health Report 2014) but according to the population census (2010) total population of WIFA in the Wa Municipality was 35,678. Following this, $P = (28,265 \div 35,678) \times 100$. This gives a sample size of 524 households.

By this method, a total of 524 respondents were randomly selected within communities covered by CHPS zone for interviews. Upon entering each house, the lottery method was used in randomly selecting one household for interviews wherever they were more than one.

3.6 Pre-Testing

Questions developed were tested in a pilot survey at Geberu CHPS Zone which is also a community in Wa Municipality. In this sense, this community shares similar features with the research community generally. The pre-test offers the research assistants the opportunity to practice interviewing techniques and also facilitated the revision of the questions where necessary. This is to ensure data quality.

3.7 Data management and analysis

During the period of data collections, efforts were made on a daily basis by the supervisor to ensure validity. Questionnaires were grouped by CHPS zones with each zone specifically given specific numbering so as to facilitate data processing. Primary data was collected from the 524 respondents and was analysed to represent their actual opinions on the field, the data is analyzed using STATA and the information presented into tables and graphs.

3.8 Ethical Consideration

Ethical clearance was sorted from the ethical committee of Kwame Nkrumah University of Science and Technology. On the field, the concern-form was explained to respective potential respondents who were made to consent before the interviews.

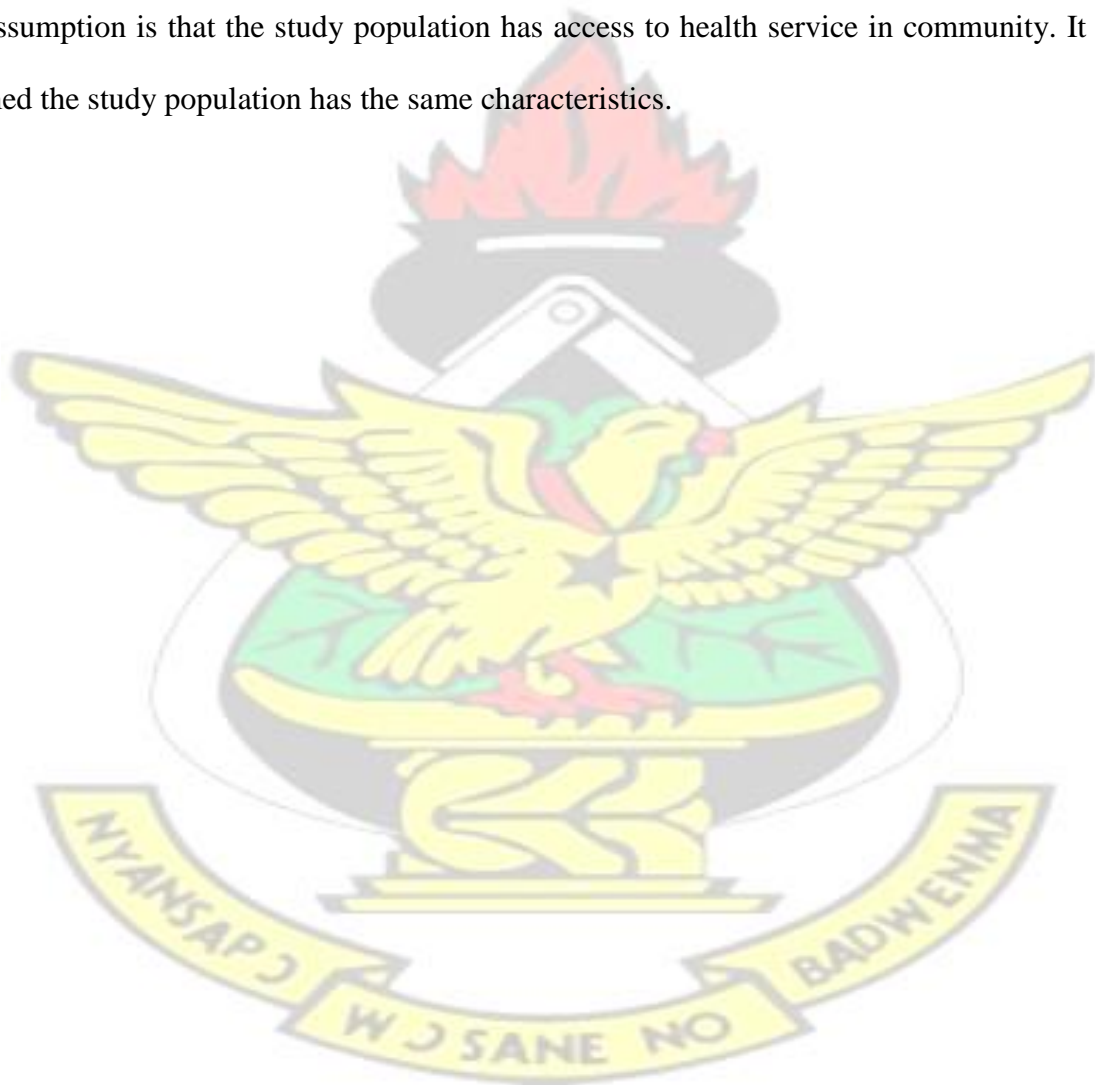
3.9 Limitation of the Study

This study is focused on CHPS initiatives in the reduction of maternal mortality and cannot be generalized outside this context. The uniqueness of the study design and implementation of CHPS concept in Ghana might vary from one country to the other. On the other hand, policy

and programme implementers in developing countries can adopt the strategies to assess similar programme in their respective community. Recall bias could have been a limitation since some participants might not have remembered past event about FP, delivery and ANC and sister death. Another limitation of the survey was the absence of base line data to evaluate before and after the implementation of CHPS activities. Poor record keeping and documentation system were a limitation since I could not access KNDO on TBAS delivery at the health facilities

3.10 Assumptions

The assumption is that the study population has access to health service in community. It is also assumed the study population has the same characteristics.



CHAPTER FOUR

4.0 RESULTS

4.1 Background Characteristics of Respondents

The socio-demographic information of respondents including age, level of education, religion and marital status was collected from respondents.

Table 1 below shows the demographic characteristics of respondents. Majority of the respondents were between the ages of 20 to 39 representing 85%. A little over fifty-five percent (55%) of the respondents have never went to school, 14 percent attained primary school education whilst only 4 percent attained tertiary education. (76%) of the respondents were predominantly Muslims, while only 0.57% are said to be Traditional believers. A high proportion of the respondents were married it formed (94%) while only 5% were either single or divorced. The data additionally revealed that majority of women in the sample (about 60%) were self-employed with their occupations being trading, seamstresses, farmers and teaching respectively. Interestingly, about a third (38%) of respondents did not earn any income.

Table 1 Demographic characteristics of respondents

Variables	Frequency(n=524)	Percentage (%)
Age		
15-19	35	6.69
20-23	116	22.18

24-29	171	32.50
30-33	101	19.31
34-39	55	10.52
40-44	21	4.02
45-49	16	3.06
50-54	7	1.06
55+	2	0.38
Education level		
Primary	75	14.31
JHS	107	20.42
SHS	31	5.92
Tertiary level	20	3.82
Not educated	291	55.34
Religion		
Christianity	120	22.90
Muslim	401	76.34
Traditionalist & others	3	0.39
Marital status		
Married	492	94.07
Single & Divorced	32	5.03
Occupation		
Housewife	200	38.17
Trader	131	25.00
Seamstress	81	15.46
Farmer	38	7.25
Teacher	12	2.29
Others	62	11.64

Source: Field Survey, 2015

As presented in table 4, a total number of 524 households were interviewed, given a total number of 1287 live sisters. Out of the total number of sisters, 108 had pass on. Thirteen (13) of the total deaths were pregnancy related. Twelve (12) of the sisters whose deaths were related to pregnancy occurred before the inception of the CHPS. Only one maternal death (1) occurred after the commencements of the CHPS programme. On further interrogation, 12 of the reported sisters' death (maternal death) occurred before the inception of CHPS, with MMR of 139 deaths per 100,000 live births. Only one (1) of the reported deaths occurred after the inception of CHPS representing MMR of 12 deaths per 100,000 live births.

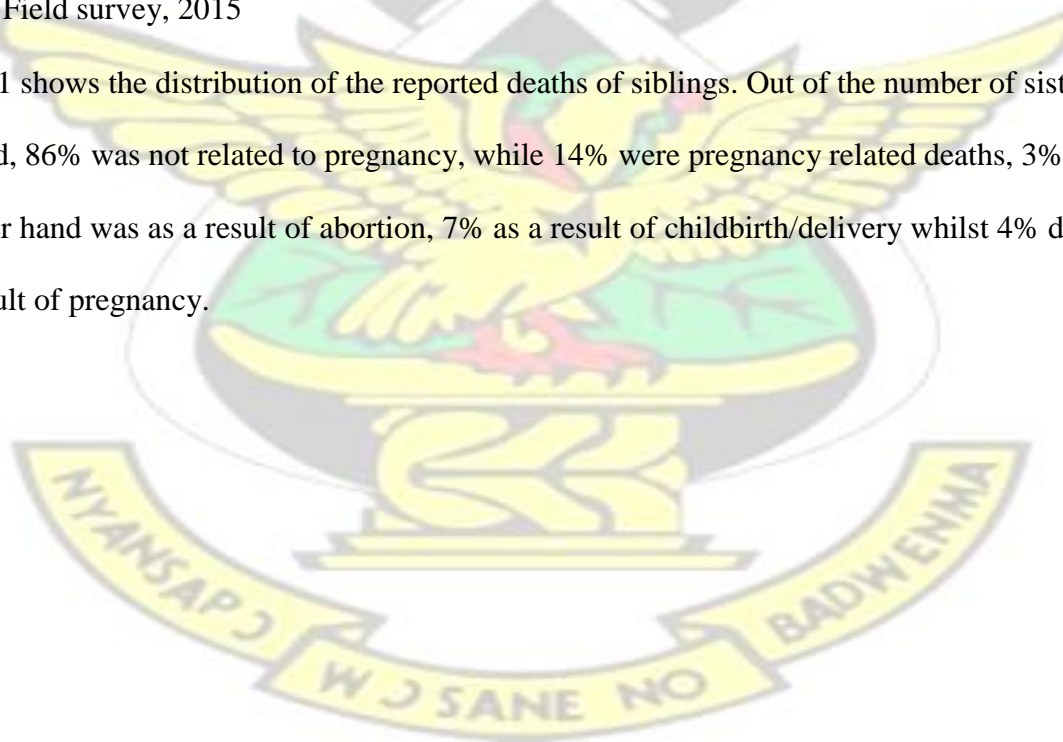
Table 2 Total number of sisters in the households

Variable	Frequency(n=524)	Percentage (%)
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Number of sisters		
Number of sister alive(Min, Max)	1287	
Number of death sisters(Min, Max)	108	
Weeks sister died after delivery		
One to two weeks	6	46.2
Three to four weeks	2	15.4
Five to six weeks	2	15.4
She was not sending the baby out	1	7.7
I cannot remember	2	15.4
Maternal mortality rate		
WIFA of 10 Study CHPS	8640	
MMR before CHPS inception	12	139 death per 100,000 live birth
MMR after CHPS inception	1	12 death per 100,000 live birth
When Sister Died		
Before CHPS commencement	12	85.7
After CHPS commencement	1	7.14
	13	100

Source: Field survey, 2015

Figure 1 shows the distribution of the reported deaths of siblings. Out of the number of sisters that died, 86% was not related to pregnancy, while 14% were pregnancy related deaths, 3% on the other hand was as a result of abortion, 7% as a result of childbirth/delivery whilst 4% died as a result of pregnancy.



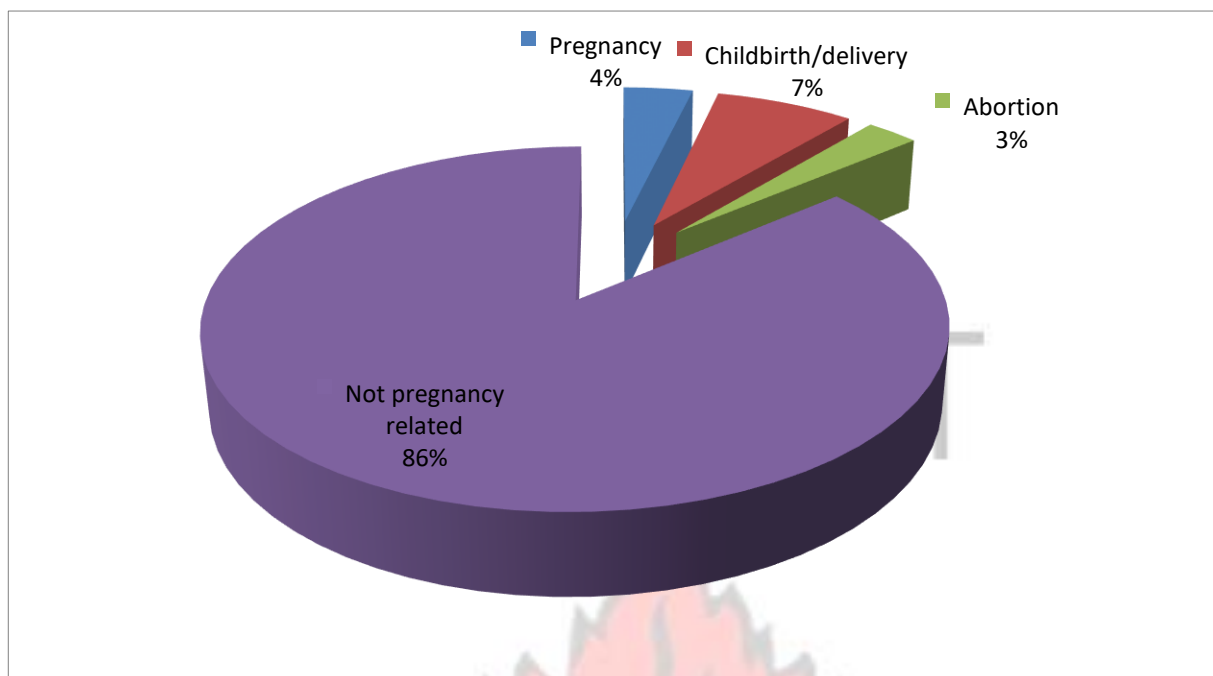


Figure 1 Reported Deaths of female siblings of respondents

From table 5, among the 524 women who responded to the questionnaire, 59.35% are currently using contraceptives method. Majority of the women representing 43% received their contraceptive methods from the community facility CHPS, while 3.8% got their contraceptive from the hospital and 12.8% got their contraceptive at health center. Meanwhile, a significant proportion of the women representing 87.8% will always prefer to receive their contraceptive at a CHPS zone, with 3.3% and 8.5% prefer Hospital and subdistrict respectively. A substantial proportion (83.4%) of them from the table below consults their husband before using a contraceptive method.

Table 3 Family planning in use in the CHPS Zone communities

Are you on family planning	Frequency	Percentage
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Yes	311	59.35
No	213	40.46
Preferred place to access FP		
CHPS Zone	455	87.84
Hospital	17	3.28
Health centre	44	8.49
Where did you receive FP services		
Hospital	20	3.82
Health centre	67	12.77
CHPS Zone	226	43.13
Private sector	1	0.03
Others	213	40.65
How long have you been on FP		
1 year	129	24.61
2 years	54	10.31
3 years	42	8.02
4 years	27	5.15
Others	272	51.91
Have you ever lost any pregnancy		
Yes	126	24.09
No	398	75.72
If yes number of pregnancy		
1	93	73.81
2	18	14.29
3	8	6.35
4	2	1.59
Others		
<u>Need the concern of husband</u>		
Yes	437	83.39
No	87	16.60
Level of husband education		
Primary	44	8.58
JHS	86	16.76
SHS	68	13.26
Tertiary	65	12.67
Not educated	247	48

Source: Field Survey, 2015

According to Table 6, 32% of the respondents indicated they had ever delivered with traditional birth attendants. The rest representing 68% had never had any deliveries with

TBAs. Among those who had ever delivered with TBAs, about 77% delivered before the inception of CHPS whilst only 24% indicated delivery with TBAs after the inception of CHPS. When respondents were asked about home delivery, about 25% said they have experienced delivery at home before. Among those who had experienced delivery at home, only 29% experienced home delivery after the inception of CHPS. Almost all the respondents (98%) preferred delivery at CHPS zones, compared to delivery at home or with TBAs.

Table 4 Antenatal Care

Variable	Frequency(n=524)	Percentage (%)
Ever delivered with TBAS		
Yes	166	31.67
No	358	68.32
If yes,		
Before CHPS inception	127	76.51
After CHPS inception	39	24.49
Ever delivered at your home		
Yes	133	25.38
No	391	74.61
If yes		
Before CHPS inception	95	71.43
After CHPS inception	38	28.57
preferred place of delivery		
With TBAS	5	0.95
At Home	4	0.76
With CHPS	515	98.28

Source: Field Survey, 2015

Table 7 reveals that, among the respondents who reported with first time pregnancy, 51% of them visited ANC before CHPS inception whilst 48% of them visited ANC after the inception

of CHPS. 48% of respondents with second time pregnancy on the other hand attended ANC before CHPS inception, whilst 52% attended ANC after CHPS inception.

Among those who were pregnant for the third time, 35% sought ANC services before CHPS commencement, with 64% attending ANC service at CHPS after its inception.

Table 5 Antenatal Care

	Frequency (n=524)	Percentage (%)
First pregnancy		
Hospital	162	30.91
Health centre	144	27.48
CHPS Zone	187	35.68
Did not attend ANC	31	5.91
Before CHPS inception	271	51.64
After CHPS inception	253	48.17
Second pregnancy		
Hospital	113	25.38
Health centre	89	16.98
CHPS Zone	170	32.44
Did not attend ANC	132	25.19
Before CHPS inception	190	48.22
After CHPS inception	203	51.52
Third pregnancy		
Hospital	65	12.41
Health centre	59	11.26
CHPS Zone	144	27.48
Did not attend ANC	256	48.85
Before CHPS inception	102	35.56
After CHPS inception	183	63.99
Fourth pregnancy		
Hospital	36	6.87
Health centre	27	5.15
CHPS Zone	100	19.08
Did not attend ANC	361	68.89
Before CHPS inception		
After CHPS inception		

Source: Field Survey, 2015

With reference to table 8 when participants were asked to rate the conduct Staff of CHPS s, 77% said they were good, 17% said they were moderate whilst only 5% said their services were

bad. Among the 524 respondents involved in the study, 80% were referred when they came for ANC services. Additionally, from the same table 8% of the 524 respondents were referred from hospital, 72% were on the other hand referred from CHPS whilst 19% had been referral from health center. When respondents (524) were asked to choose the facility that will meet their ANC service's needs, 87% chose CHPS, 10% health center and 3% chose hospital. The same number of respondents (524) were asked to justify their choice of CHPS facility for service, 74% chose CHPS because of proximity, 22% on the other hand said because it is mandatory and 3% also reported they chose CHPS facility for services because of low cost.

Table 6 Antenatal Care

How will you rate ANC service at CHPS	Frequency(n=524)	Percentage (%)
Good	405	77.29
Moderate	91	17.37
Bad	28	5.34
Ever been referred at ANC service Yes	424	80.91
No	100	19.08
Which facility where you referred Hospital	37	8.33
Health centre	85	19.14
CHPS Zone	322	72
Not referred	80	
Among the three facilities where will you prefer for ANC		
Hospital	18	3.48
Health centre	51	9.9
CHPS	455	87.23
Why is CHPS service your preference		
Because of its closeness	368	73.75
Because it is cheap	19	3.81
Because it is mandatory	111	22.24
Others	26	

Source: Field Survey, 2015

From table 9, among the 524 respondents involved in the study, 62% said their CHPS zone was not conducting delivery. Respondents involved in the study (524) were additionally requested to identify staff needed to improve skill delivery. About 92.86% said midwife service was needed, whilst 3.09% and 3.47% of them proposed that, an Enroll and CHO nurse service were needed respectively at their facility to improve delivery service. Only 0.39% thought that nutrition officer is needed to improve upon delivery service at the CHPS Zone.

Furthermore, when respondents were asked to rate the usefulness of midwife service where 49% said the midwives are very important, 50% on the other hand said it is important, whilst only 1 respondent rated the services of midwives as not important.

Table 7 Antenatal Care

Do the CHPS provide delivery service?	Frequency(n=524)	Percentage (%)
Yes	186	35.5
No	326	62.2
Others	12	2.3
Which other staff when added will you prefer to improve upon delivery at CHPS		
Midwife	481	92.86
CHN	16	3.09
Nutritional officer	5	0.39
Enrol nurse	22	3.47
How will you rate midwife service in reduction of maternal death		
Very Important	258	49.13
Important	262	50.1
Not important	4	0.77

Table 10 gives frequency/percentage distribution on which health facility respondents respectively delivered their current babies. The Table depicts that among the 524 respondents involved in the study, 12% said they delivered their current babies at the Health centers, 64%

chose hospital as the place they delivered their current baby, 7% said they delivered theirs at CHPS Zone, whilst 16% of the 524 respondents additionally reported that they delivered their current babies with TBAs. The study further asked the preference delivery facility of respondents. 88% of the respondents chose CHPS Zone as the preferred delivery facility, 6.9% on the other hand chose hospital whilst 4.6% chose health center with the remaining 2% choosing TBAS as the delivery facility they prefer.

Respondents were additionally asked to indicate whether their community chief sanctions those who deliver at home or with TBAs, 60% said yes indicating that the community chief sanctions those who deliver at home or with TBAs, whilst 40% on the other hand said no as an answer indicating that the community chief does not sanction those who deliver at home or with TBAs and whether the sanction has influence with respect to seeking skill delivery 57% said yes it has whilst 43% said no indicating that the sanction has no influence with seeking skill delivery.

The views of respondents involved in the study on whether the by-law can influence the reduction of maternal death were solicited and as a result 61% said yes indicating that bylaws has influence on the reduction of maternal death whilst the remaining 39% said no meaning the use of by-laws do not have influence on the reduction of maternal death.

Table 8 Antenatal Care

Where do you deliver your baby	Frequency(n=524)	Percentage (%)
CHPS	34	7.05
Health centre	58	12.13
Hospital?	331	64.77
TBAS	78	15.85
If all these facilities provide delivery which of them will you chose? Hospital	36	6.87

Health centre	24	4.58
CHPS	455	86.8
TBAS	9	1.75

Chief/elders sanction TBAS/home delivery?		
Yes	316	60.30
No	208	39.69

Has the sanction influenced you to deliver at health facility ?		
Yes	300	57.25
No	224	42.74

Do you think this sanction can reduce death due to delivery at home ? Yes		
	319	60.88
No	205	39.12

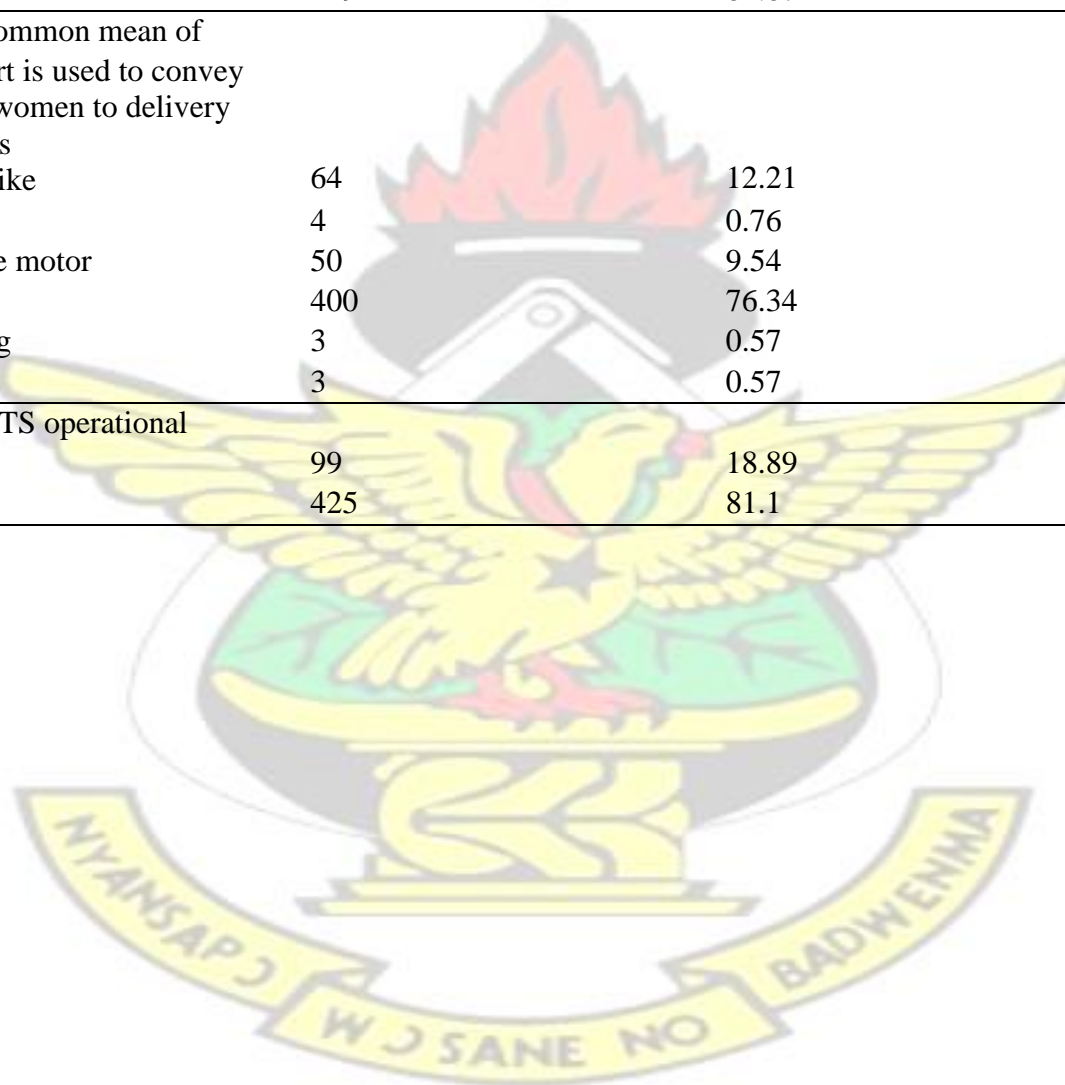
From Table 11, respondents involved in the study were additionally asked of the form of sanction. About 55% of the respondents involved in the study said Cash payment was the form punishment given when sanctioned, whilst the rest were not within the community where by-laws are implemented. When the same respondents were interviewed on community emergency transport system, 82% of the respondent said the transport system was not operational in their community whilst the remaining 18% said their communities have emergency transport system.

Further views on what means of transport respondents would use in terms of emergency and referral were solicited and as a result 76% said they would use vehicle when it comes to emergency and referral, 9.5% on the other hand chose tricycle as the means they would use in terms of delivery and emergency, 1% representing four (4) respondents said they would walk when there is emergency or referral whilst only 0.7% reported they would use bicycle to transport women in labour to higher facility for delivery.

Table 9 Antenatal Care

	Frequency(n=524)	Percentage (%)
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In what form is this sanction		
Cash payment	290	55.34
Punishment	7	1.33
<hr/>		
Divorce women	1	0.2
Others	226	43.13
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Emergency transport system		
Do you have emergency transport system in the communities		
Yes	95	18.13
No	429	81.87
<hr/>		
What common mean of transport is used to convey labour women to delivery facilities		
Motorbike	64	12.21
Bicycle	4	0.76
Tricycle motor	50	9.54
Vehicle	400	76.34
Walking	3	0.57
Others	3	0.57
<hr/>		
Is the ETS operational		
Yes	99	18.89
No	425	81.1
<hr/>		



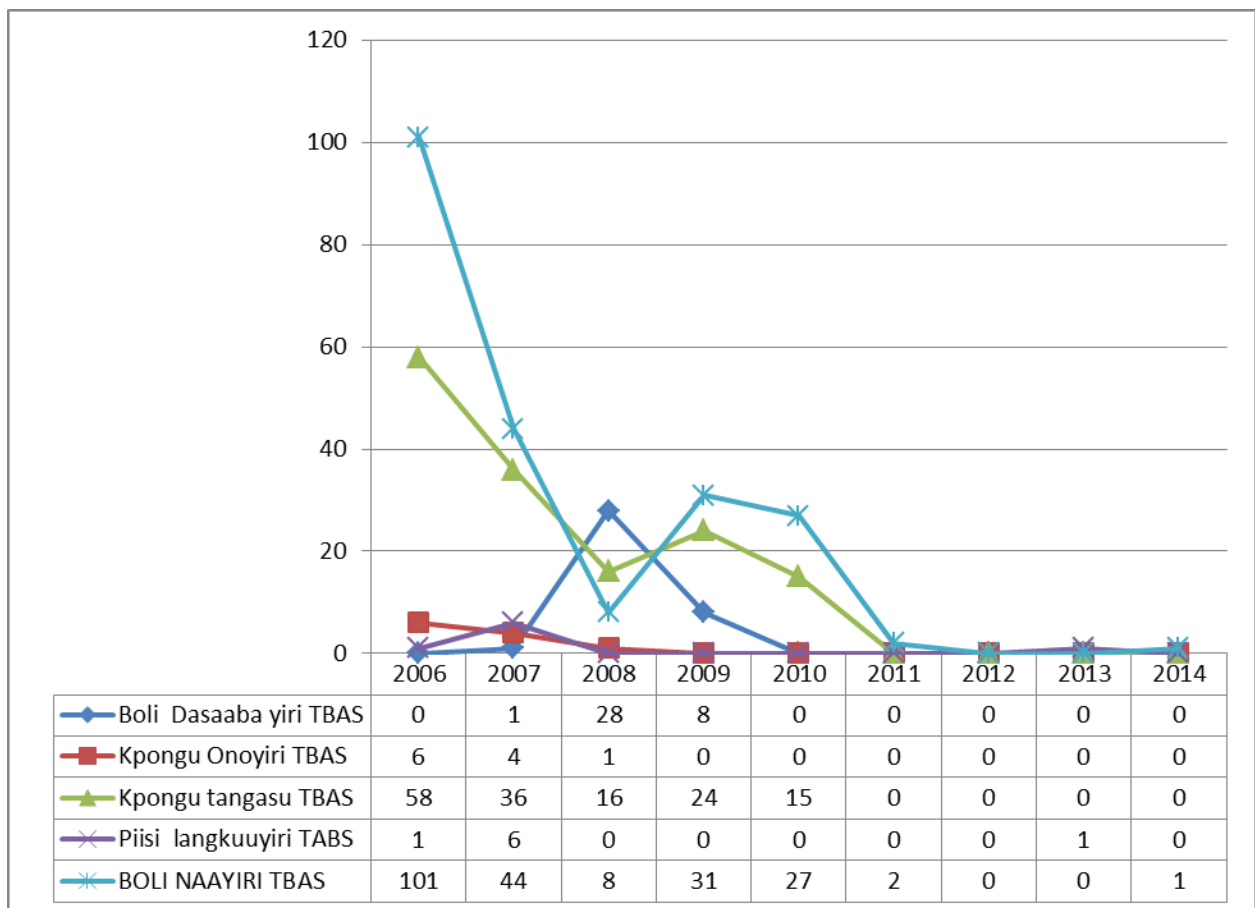


Figure 2 Number of TBAS delivery recorded per year

The study also assessed TBA delivery at their various houses and when records were being cross checked six (6) TBA out of thirteen (13) had records that captured their delivery with days and years. Some of the records had fallen outside the period of this assessment and could not be captured.

Boli Dasaabayiri CHPS commenced in 2007 and the TBA registered delivery of 1, 28 and 8 in 2007, 2008 and 2009 respectively and two years of inception, Boli Dasaabayiri TBA delivery dropped to zero. At the same CHPS Zone with different community, Boli Naayiri TBA was an old lady aged 80+ with high experience registered high number of TBAS delivery up to 101 in 2006 before CHPS inception but delivery continues dropping after the inception up to 2011 where she recorded only two TBA delivery, but recorded only one case in 2014 after the inception of CHPS.

Kpongu CHPS was commenced in 2012 with another experienced TBA at Kpongu Tangasu who was about 56 years. She said that it was God's gift and because of her output a lot of women prefer coming to deliver at her place. She registered high numbers but stopped conducting delivery at her house after the inception of CHPS. She rather sent all her client to the CHPS facilities and even supported the enroll midwife to conduct delivery. At the same CHPS zone with different TBA at Kpongu, Onyiri age 60+ recorded high deliveries, by 2006 her delivery dropped to one in 2008 until the inception of the CHPS in 2012.

Additionally, Pisi CHPS commenced in 2010. The TBA was in her 70s. She also registered high numbers of deliveries but that was not within my study range. She registered 1, 6 and 1 in 2006, 2007, and 2013 respectively. From the data it suggested that with the inception of CHPS there was a systematic reduction in TBA delivery. Dobile CHPS on the other hand commenced in 2010 and had a TBA/herbalist who was in town. According to her the record book was seized by health workers and all attempt to stop her from delivery failed. She recorded 12, 12 and 15 cases in 2013, 2014 and 2015 respectively. According to her that was her only source of income.

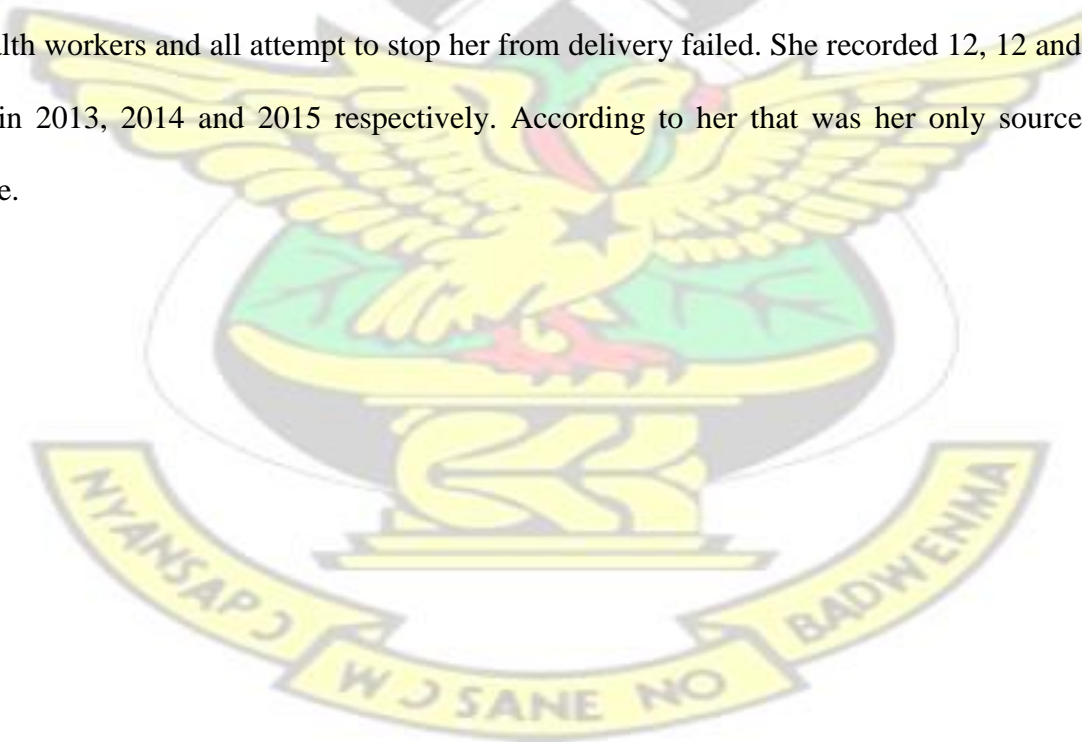


Table 10 Staffing situation and basic equipment's at CHPS zone

Facility	CHO/EN Midwife	CHO	Tape measure	stethoscope	foetuscope	Weighing scale	Delivery bed	Palpation table	depo	HB test kids	Pregnancy test kid	Iron drug	llin	B/P Apparatus
Kperisi	1	1	1	0	1	1	1	1	72	0	0	500	5	1
Bamaahu	1	1	0	0	0	1	0	0	50	0	0	0	15	0
Kpongu	1	1	2	1	1	2	1	1	81	0	0	1850	0	1
Tampali	1	1	1	1	1	3	1	1	33	0	46	1730	3	2
Sing	0	1	2	2	0	1	1	1	16	0	15	100	0	1
Boli	1	1	2	2	1	0	1	1	57	0	40	9	3	2
Piisi	0	1	2	3	2	0	1	1	30	0	15	382	6	2
Dondoli	0	1	2	2	2	3	1	1	124	0	0	300	12	1
Mangu	2	1	1	1	2	2	0	1	204	0	0	2000	0	1
Dobile	4	3	2	2	2	4	1	1	175	10	50	10000	20	2

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Ten (10) CHPS facilities were studied to assess whether the facilities were well equipped to function optimally. Out of the ten (10) facilities only five (5) were having delivery bed. Most of the facilities had only one midwife. Out of the ten (10) CHPS visited, none of them had three B/P apparatus which is within the standard. However, four (4) facilities had two B/P apparatus and the remaining six (6) had only one B/P apparatus. Among the ten (10) facilities nine (9) had one palpation bed. Among the ten facilities that were assessed, three (3) were not having delivery bed (i.e. Sing, Tampalipaani and Bamaahu). Some facilities such as, Dondoli, Piisi and Sing were operating without midwives. The most essential equipment that was lacking was the blood Hb estimation kits. Most of the facilities had enough FP device and ANC routine drugs. All the ten (10) facilities had at least one weighing scale with the exception of Boli and Piisi. Among the ten (10) CHPS Zone five (5) facilities are without any pregnancy test kits.



CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

The aim of the study was to assess the role of CHPS in addressing inadequate accessibility of health services especially in rural areas of Ghana as a means of reducing maternal mortality. This chapter discusses findings of the study with special emphasis on answering the research questions posed.

The study identified that the CHPS concept has been a major contributory factor to the provision of health care services especially among remote communities. Majority of service providers at these service delivery points have been trained and groomed to provide basic health care services.

Using the sisterhood method in assessing maternal death the study found that the overwhelming proportion of reported deaths of respondents' siblings (85%) were not pregnancy related. It was also identified that about 13.76% of the reported deaths were pregnancy related. It was discovered that 12.4% of the deaths were actually maternal deaths. In all, only one of the reported maternal deaths occurred after the inception of CHPS in the communities. The MMR was calculated to be 12 deaths per 100,000 live births. Respondents were convinced that the commencement of CHPS has an influence in the reduction of maternal deaths.

This finding confirms major findings in literature that CHPS zones generally work with stakeholders to bring modern health services that are acceptable, available and accessible to the common person.

5.1 Family Planning

On the issue of Family Planning, findings revealed that 88% of respondents prefer patronizing FP at CHPS zone. According to Bhuiya and Streatfield (1991), since the use of FP will improve

upon parity, reduced abortions, fertility rate, teenage pregnancy and delay in the age of marriage, these will result in improving maternal health. The main component of reducing maternal death is to increase access to family planning service, ANC, and skill delivery. This study discovered that majority of respondents prefer accessing CHPS Zones for FP, ANC and skill delivery. This suggests that CHPS have the potential of addressing maternal mortality in the Wa municipality. It is however, worth noting that 83% of women involved their husbands on the decision of using contraceptives. This as a result points out that, their husbands support is very impressive. This defies the impressions that husbands were an obstacle to women contraceptive usage. From the results it suggests there is a strong collaboration between communities and health staff.

5.2 Reasons for the Popularity of the CHPS Programme

This study found that the overwhelming majority (98%) of respondents chose to seek skill delivery at the CHPS zones. A very small proportion (1%) chose TBA and home delivery. The study observed that community by-law initiation and community transport system facilitate health service provision.

As such, when stakeholders are made to participate or involved in programme planning, implementation, monitoring and evaluation, the programme activities are given the needed boost and resilience (Sakeah *et al* 2014).

5.3 Antenatal Care: How Far Has TBA Delivery Reduced with the Inception of the CHPS

Findings suggest that the presence of the CHPS zone does not necessarily mean that the service is accessible to clients generally. Accessibility goes beyond affordability per se to include other components like perceived quality of care and also traditional beliefs about such care. Findings suggest that TBAs still operate in some communities and compete with CHPS zones. It was

revealed that bye-laws and the pressure from other stakeholders have reduced TBA activities. The study noted that about 98% of respondents prefer delivery at the CHPS zones. The provision of quality care at the CHPS zone is a step towards winning the TBA competition. WHO (1998), observed that health workers' contact with mothers during the first hour post-delivery is of utmost significance. It is during this period that health personnel could identify problems like hemorrhage, poor uterine involution and how the mother copes as the body adapts to the non-pregnant state. Appropriate support is needed at this crucial period. Indeed, most TBAs have that expertise and provide the warmth that is needed by the baby and the mother in the first days of delivery. Unfortunately, most health personnel lack these cultural inclinations of personal touch and support in a culturally sensitive manner. This makes the huge difference between TBAs and the others (Glover, 2016). Glover (2016) argues that health workers are often poorly trained in respecting cultural sensitivities.

The situation inadvertently produces a sense of inferiority-superiority complex between the client and the modern service provider which creates fear in the client. The poor illiterate client is the underdog in this situation and sometimes, the activities of health providers consistently portray power and domination which is usually not the case with TBAs. No doubt, findings show that comparatively, more of the respondents prefer the CHPS zone for FP, ANC and deliveries. This may be related to the accessibility of such service at their communities.

5.4 TBAs Delivery Records Show Significant Reduction

By visiting TBA at their homes to assess their delivery register during the study, records indicated that some of them were recording over 100 deliveries yearly. The implementation of the new health policy (WHO 2004) which integrates TBA service into health system by encouraging TBA to refer and accompany labour case to the health facility for skill delivery. Findings from this study identified that from the year 2010, almost all TBA deliveries in the

communities dropped to zero. This was within two to five years from the inception of CHPS. It is therefore heartwarming that most TBAS have accepted the policy and stakeholder support is achieving the expected outcome in the CHPS zones. As such, respondents were of the view that the CHPS concept has influenced the reduction in maternal mortality.

5.5 Assessing ANC Service at The CHPS Zone: Has The CHPS Zone Met Its Objective of Improving Accessibility to Services?

The study revealed that the CHPS zone is leading in the preferred health service delivery points for ANC services. The trends generally demonstrate an increase in ANC services after the inception of CHPS facilities in research communities.

It was revealed that for those who rated ANC services at CHPS to be "Good", participants were unanimous that the service is usually provided by personnel who have become part of the community and therefore have developed culturally sensitive ways of meeting needs of the people. This finding is consistent with the GHS Policy document (2005) that established the CH programmer. In line with this policy, the CHPS concept is credited with bridging the yawning gap often associated with modern health personnel that seem alienated from community members and often showing signs of disrespect for cultural values. Findings suggest varied answers with regard to the reasons why the CHPS service is popular among respondents: "Because of its proximity", "Because it is comparatively low cost" and "because it is mandatory". Indeed, accessibility to the service point is seen here as very crucial for the choice of the CHPS zone (Baker et al., 2007).

Another important reason was "because it is mandatory" due to by-laws passed by some of the communities. This is important because CHPS concept has brought a level of discipline into of managing health systems in Ghana. It is clear that respondents are aware that entering the health system through the primary level and leaving referrals to personnel is not only cost effective

but also gives better results to the patient (Adegoke and Van Den Broke, 2009). As shown by a number of other studies (Cole-Ceesay et al., 2010), the challenge of reliable transport in most health facilities has been identified by this study. Findings reflect that a major challenge for the CHPS zones was transportation. About 72% of respondents were without community emergency transport system and ambulance services are allocated specifically for referrals.

In most cases, the only available means of transporting the sick or women in labour is through the passenger trucks, motor bikes and bicycles. This arrangement is inconvenient and disrupts effective referrals and prevents CHPS zones from taking prompt action to assist women who may need to be referred to higher level health facilities.

Coupled with this, the results showed considerable evidence that there is deficiency in supply of basic equipment and physical amenities for the provision of quality care at all the CHPS zones visited. This is supported by the research conducted by Howson, Harrison and Law (1996), which points out that lack of drugs and supplies or non-functioning equipment in health facilities contribute enormously to poor quality care and high maternal mortality. Even though it is not possible to have enough equipment, drugs and consumable in any real situation, per the standards, efforts should be made at least to ensure that basic and simple equipment are always available in accordance with the Mother-Baby Package (WHO recommendations (1994) at CHPS zones).

5.6 The Role of Society in Sustaining the CHPS Concept

The role of civil society as stakeholders in health provision has been found to be very pronounced in the CHPS zones. Again this is consistent with the National Policy (WHO Health policy 1996) on which CHPS was enforced. Bye-laws have been generated in communities to generally safeguard implementation. Bye-laws however, do not necessarily bring about the

needed change in attitudes and practices (Glover et al., 2016). Despite frowning upon the services of TBAs, findings show that traditions hardly die. Some TBAs especially those that offer additional services as herbalists and healers still play some roles in communities.

Findings suggest that even though some TBAs persist after the introduction of the CHPS programme, there is a systematic reduction on TBA delivery over time. This suggests that the measures put in place to integrate the CHPS zone into community development has found profound acceptance generally (Glover, 2016)



CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 Conclusions

The results of this study present information about the role of the CHPS programme in addressing inadequate accessibility of health services especially in rural areas of Ghana as a means of reducing maternal mortality. Findings show that the CHPS concept has brought a lot of positive difference in the lives of women in contributing towards the reduction of maternal mortality in most study communities. Despite its success, the programme faces a number of challenges including personnel, funds, equipment and vehicles for effective referrals. Sustained

mass education and provision of Family Planning services by the CHPS zone has contributed towards unanimous awareness about contraceptives. The overwhelming majority who chose the CHPS zone for services did so because of easier accessibility, and the fact that personnel at these centers are skilled, comparatively friendly and always available. Management and practices in CHPS zones may vary from zone to zone; however, the quality of services provided remains relatively similar with regards to quality of care. There is dynamic referral system between CHPS zones and other primary health care facilities (clinics) and hospitals. The role of civil society as stakeholders in health provision has been found to be very pronounced in the CHPS zones. Bye-laws have also been generated in communities to safeguard implementation of the CHPS zone programme generally. Positive nurse-client interaction and dissemination of information to mothers have been identified as hallmark in the CHPS programme that has contributed to the provision of quality care.

6.2 Recommendations

Specifically, there is the need to expand infrastructure, equip CHPS zones adequately, and provide transport for effective referrals to bridge the performance gap by providing more inservice training courses on Safe Motherhood for CHO midwives involved in maternal child health services. There is the need to establish more CHPS Zones at deprived communities that would address accessibility and improve on maternal health generally. Stakeholders involvement has demonstrated some support in the implementation of the CHPS programme through the by-laws, if such collaborations could be extended to all health facilities. There is the need to increase the number of CHO midwives assigned to CHPS Zone to improve upon delivery service at the Municipal..

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QUESTIONNAIRE ON CHPS CONTRIBUTION ON REDUCTION OF MATERNAL MORTALITY IN WA MUNICIPALITY. CHPS ZONE

COMMUNITY NAME.....

DATE CHPS COMMENCE OPERATION

1 How old are you?

- A) 15-19 B) 20-23 C) 24-29 D) 30-33
E) 34- 39 G) 45-49 H) 50-54 F) 40-44
I) 55+

2 What sex group are you? 1) Male 2) female

3 What is your educational level?

- A) Primary education B) JHS C) Senior high school
D) Tertiary level E) NOT educated.

4 what religious denomination do you belong?

- A) Christianity B) Muslim C) Traditionalist
D) None of the above

5 What is your marital status?

A) Marriage B) Single C) devoice D) single parent

6) Occupation A) Housewife B) trader C) Seamstress D) Famer E)

Teacher F) OTHER.....

KNUST

SISTERS DEATH

2:1) How many sisters do you have?

A) 1 B) 2 C) 3 D) 4 E) 5 F) 6 G) others

2:2) How many of these sisters have gotten to adolescent age?

A) 1 B) 2 C) 3 D) 4 E) 5 F) 6 G) others

2:3) How many of these sisters died?

A) 1 B) 2 C) 3 D) 4 E) None F) others.....

2:4) If none died proceed to FP? How many of your dead sisters died during

A) Pregnancy B) childbirth /labour C) abortion or mi scourrage D) death not related to pregnancy

2:5) How many weeks was your sister when she died after delivery

A) One to two weeks after delivery B) three to four weeks after delivery C) five to six weeks after delivery D) She was not sending the baby outside E) I can't remember the actual period.

2:6) How old were you when she died? Age.....

A) Before CHPS..... B) After CHPS.....

2:7) How many years is it now when your sister died?

Years.....

Before CHPS.....After CHPS.....

2:8) Did the death of your died sister occurred within Wa Municipal 1) Yes 2) No

FAMILY PLANNING SERVICE

3:1) Are you on any family planning method 1) Yes 2) No

3:2) If yes Which facility did you obtain the family planning service from?

A) Hospital B) Health center C) CHPS zone

3:3) Consider you need FP service which facility will you prefer to go for family planning service A) Hospital B) Health center C) CHPS zone D) private sector

E) other

3:4) How long have you been on family planning service A) 1year B) 2years

C) 3years D) 4years E) others

3:5) Have you ever lost any pregnancy before (abortion/miscarriage)1)Yes. 2) No If YES, how many times.

A) 1 B) 2 C)3 D) 4 E) others.....

3:5) How many deliveries did you have in your life? A) 1 B) 2 C) 3 D) 4

E) others.....

3.6) Do you need the concern of your husband before using any family planning method

1) Yes 2) No

3.7) what is the level of education of your husband A) Primary education B) JHS

C) Senior high school

D) Tertiary level E) NOT educated

3.8) Have you ever delivered with the TBAS 1) Yes 2) No

3.9) If yes before the inception of CHPS 1) before inception of CHPS 2) after CHPS inception

4.0) Have you ever delivered at home (outside) health facility. 1) Yes 2) No

4.1) If yes was it 1) before the inception of CHPS 2) After the inception of CHPS

4.2) If given the opportunity to give birth now, where will you prefer to delivery.

A) With TBAS B) At the home C) At CHPS

ANTENATAL CARE

4:1) How many pregnancies did you have.

A) 1 B) 2 C) 3 D) 4 E) 5 F) 6 G) 7
H)

OTHERS.....

4:2) Where did you attend ANC service during?

I) First pregnancy and before CHP 1 after CHP 2

i) Hospital ii) Health center iii) CHPS iv) Did not attend ANC

II) Second Pregnancy and before CHP1 after CHP 2

i) Hospital ii) Health center iii) CHPS iv) Did not attend ANC

III) Third pregnancy and before CHP 1 after CHP 2

i) Hospital ii) Health center iii) CHPS iv) Did not attend ANC

VI) Forth pregnancy and before CHP 1 after CHP 2

i) Hospital ii) Health centre iii) CHPS iv) Did not attend

ANC

4:3) How will you rate CHPS ANC service?

A) Good B) Moderate C) Bad

4:4) Have you ever been referred at ANC 1) Yes 2) NO if Yes, how many times A) 1

B) 2 C)3 D)4 E) others.....

4.5) AT which health facility where you referred from A) Hospital B) Health center

C) CHPS zone

4.6) which of these condition where you referred A) Anemia B) Hypertension

C) Abnormal lay of fetus D) for operation E) during prolong labour F) diabetic

G) Lab test H) Others

4:7) If given the opportunity now Where will you prefer to go for ANC ?

ii) Hospital ii) Health centre iii) CHPS

4.8) Why do you prefer to attend ANC service at CHPS A) Because it closer B)

Because the services are cheap C) because it is mandatory

D) Others.....

5.1) Do the CHPS facility provide delivery service 1)Yes 2) No

5.2) which of the following staff will you prefer to be incorporated to improve on delivery at

CHPS A) post midwife to the facility B) post community health nurse C) post

nutrition officer D) Enroll nurse

5.3) How will you rate midwife service in the reduction maternal death. A) Very important

B) important C) Not important

5.4) Where do you normally delivery your baby A) CHPS B) health centre C)

Hospital D) TBA

5.5) If all the under listed provide delivery service choice the one you will prefer to go for delivery service A) Hospital B) health centre C) CHPS facility in your community D) TBAS

5.6) Have the chief and elders in your community sanction household for delivery at home/with TB 1) Yes 2) No

5.7) Have this sanction influence you to deliver at the health facility. 1) Yes 2) No

6.8) Do you think this sanction is good to reduced women death during delivery at home
1) Yes 2) No

6.9) In what form is the sanction. A) they pay money B) they are punish to work C) the women is divorce D) others.....

EMERGENCY TRANSPORT SYSTEM

6:1) Do you have emergency transport system in your community 1) Yes 2) No

6:2) If no do individual household has to battle with the transportation of their labour woman 1) Yes 2) No

6.3) what is the most common mean of transport that will be used to convey you when on labour to the health facility for delivery. A) Motorbike B) Bicycle C) Tricycle motor D) Vehicle E) Walk to hospital F) Others.....

6:4) The emergency transport system is it operational.

1) Yes 2) NO

KNUST

