UNIVERSITY FOR DEVELOPMENT STUDIES

CONTRIBUTIONS AND CHALLENGES OF COMMUNITY-BASED HEALTH PLANNING AND SERVICES (CHPS) IN PROMOTING HEALTH SERVICE DELIVERY IN THE SISSALA EAST MUNICIPALITY

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THE REQUIREMENTS FOR THE AWARD OF MASTER OF PUBLIC HEALTH



DECLARATION

Student

I hereby declare that this thesis is the result of my own original work and no part of it has
been presented for another degree in this university or elsewhere.
Student's Signature: Date:
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Supervisor
I hereby declare that the preparations and presentation of the thesis was supervised in
accordance with the guidelines on supervision of thesis laid down by the University for
Development Studies
Supervisor's Signature: Date:
Dr. Ziblim Shamsu-Deen



ABSTRACT

Since the declaration of Alma Ata in 1978, health delivery systems have improved especially in the rural areas in Ghana and the Sissala East Municipality in particular. With the implementation of the Community-based Health Planning and Services (CHPS) concept most rural areas are now accessing modern health care, this they do bring some challenges. The study therefore sought to examine the contributions and challenges of CHPS in the Sissala East Municipality. In conducting the study, descriptive cross sectional was adopted as the study design. Mix methods were also used and the main tools for the study were survey questionnaire and key informant interview guide. A multistage sampling technique was used to arrive at study subjects. An SPSS software was also used to perform univariate, bivariate and logistic regression analysis. The study revealed that, with the contributions of CHPS, 44%, 59.3%, 70.3% and 61.2% were satisfied with the general contribution of CHPS health service provision, antenatal care, postnatal and referral services, respectively. In a logistics regression analysis, service fees charged, 24hour service availability, health worker attitude and medicine availability were significant predictors of general satisfaction of households on CHPS service delivery. In conclusion, the study found most respondents to be satisfied or very satisfied with the general contribution of CHPS in health service delivery, and lack of essential medicines regarded by majority as a challenge for households in accessing CHPS services. It is recommended that Ghana Health Service could consider regular stocking of CHPS facilities with essential medicines to help meet the needs and demands of communities.



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May God Almighty bless you all!



DEDICATION

I dedicate this work to my wife and children.



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LIST OF ABBREVIATIONS

AFRO African Region from Alma-Ata to Ouagadougou

ANC Antenatal Care

CBAs Community Base Agents

CBDSV Community Based Disease Surveillance Volunteers

CHAPs Community Health Action Plans

CHFPP Community Health and Family Planning Programme

CHMC Community Health Management Committee

CHO Community Health Officers

CHPS Community-Based Health Planning and Services

CI Confidence Interval

DCPP Disease Control Priorities Project

DHIMS District Health Information Management System

EBF Exclusive Breastfeeding

EPI Expanded Programme of Immunization

ER Eastern Region

FGDs Focus Group Discussions

FP Family Planning

FSHS Free Senior High School Programme

GAR Greater Accra Region

GHDR Ghana Human Development Report

GHS Ghana Health Service

GNA Ghana News Agency



GSS Ghana Statistical Service

HC Health Centres

HEP Health extension program

HEP Health Extension Programme

HEWs Health extension workers

HMIS Health Management Information System

IDIs In-Depth Interviews

JICA Japan International Corporation Agency

MCH/FP Mother/Child Health and Family Planning

MHA Municipal Health Administration

MOH Ministry of Health

MSS Midwives Service Scheme

NDPC National Development Planning Commission

NHIS National Health Insurance Scheme

OPD Out-Patient Department

OR Odds Ratio

PHC Primary Health Care

PNC Postnatal Care

SHS Senior High School

SMHA Sissala East Municipal Health Administration

TBAs Traditional Birth Attendants

Tech Technical Training School

UHC Universal Health Coverage



Voc. Vocational Training School

WHO World Health Organization

WHR World Health Report

WIFA Women in fertility Age



CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter is made up of the introduction of the study which further comprises the background to the study, problem statement, justification, research questions, objectives, conceptual framework, the significance of the study including how the work has been organized.

1.1 Background of the Study

The disparities in the wellbeing of individuals, especially between advanced and the low/middle income economies and also even within same countries, are socially, financially, and politically unsatisfactory. This worrying situation is of a concern to all nations and the need to take pragmatic actions. The wellbeing of every population is a central necessity, and its accomplishment to the highest degree is significant, the social objective whose refixation requires the activities of numerous sectors, more importantly, the health, social and economic sectors (WHO, 1978).



The provision of quality health services to any population requires effective and innovative approach (RHSOE, 2006). One approach of health service provision that has been effective but faced with many challenges in its implementation in many areas and countries of the world is Primary Health Care (PHC). World Health Organization (WHO) describes primary health care as a community centred method to health care, which is practiced based on the pressing health needs and preferences of the people both individuals and their families. The PHC approach works with determinants of health in a

comprehensive manner. Its main focus is on the relationships among the component of health, physical, mental, and social wellbeing of a person. The concept of PHC is growing continuously globally. According to the World Health Report (WHR), many countries are now implementing the PHC concept. The concept of social justice, and the right to improved health services for all people, involving the people and avoidance of discrimination explains the PHC strategy. In primary health care, services are brought close to communities and households to help improve their health status (WHR, 2008). The main focus is prevention and empowering the people in order to improve their health. That will help achieve the goal of the Alma-Ata declaration, 1978 at a conference jointly held by the United Nations International Children Educational Fund (UNICEF) and WHO. Consequently, all WHO member states are to develop appropriate and cost-effective strategies as well as policies to implement primary health care concept (WHO, 1978).

The implementation of CHPS which is a nationwide service provision approach gives the opportunity to the implementers of health policies to plan with communities and subsequently develop culturally acceptable ways to deliver health services to these beneficiary communities. Its primary emphasis is communities in underprivileged areas of the country. It also takes the various health packages close to the communities (Ministry of Health, 2016). CHPS as a strategy, policy and process of essential health care is to improve health service delivery which will in turn improve the wellbeing of the people. The implementation of CHPS in Ghana has gained some grounds and has attracted the attention of many stakeholders in health and efforts are being made to scale up CHPS to most communities. In all the regions of Ghana the contribution of CHPS on



health service delivery is significant. In the annual report of the Ghana Health Service (GHS) in 2016, CHPS contribution to the various service indicators was very significant which help to improve on the performance of the service. For instance, of all the Out Patient Department OPD cases, CHPS contributed 8.5%, Penta 3 immunization coverage 38.9%, and total Family Planning Acceptors was over 25% (Ghana Health Service, 2016). CHPS has brought health services closer to communities and households in the country. It is to help empower the population to take control over their health through the organization of health promotion and education activities right at the communities with emphasis on community participation. The contributions of CHPS to the various components of health service delivery may not be equal, nevertheless, the contribution of CHPS to the overall performance of Ghana health service continue to improve year by year.

The implementation of CHPS in Ghana was based on an experimental trial of the Community Health and Family Planning Programme (CHFPP) in Kassena-Nankana East District, Upper East Region, which is known as the "Navrongo Experiment" and which was further replicated at Nkwanta District, Volta Region. The current design of CHPS is based on findings from the "Navrongo Experiment" and the Nkwanta District pilot project. CHPS zones are service delivery points where households, community leaders, health staff, health volunteers, and social groups are mostly involved in making decisions on their health needs. This approach recognizes that households and communities are the producers of their health (Ghana Health Service, 2005). Since Ghana adopted the CHPS model for health care delivery in 2000, it has gone through different levels of transformation regarding the healthcare delivery. CHPS operates basically at the



communities and this is intended to help improve health service delivery (Ministry of Health, 2012). Globally countries have different strategies and policies for primary health care. This is to help them achieve Universal Health Coverage (UHC) in their countries.

In Africa, most countries have put in place some strategies and policies in relation to Primary Health Care and its implementation. PHC which has become the main pillar on which health programmes are operated is fast increasing across the African regions. Different countries refer to the Primary Health Care concept by different names but the goal remains the same. For example, in Ethiopia it is referred to as Health Extension Programme (HEP) whilst in Nigeria, one of their strategies is the Midwives Service Scheme (MSS). In Ghana, CHPS is the main driver of Primary Health Care (WHO/AFRO, 2018).

Implementation of PHC in Ghana through the CHPS system has improved health services most especially accessibility to these services. Many communities now have the privilege of just walking to the CHPS compound to access health services. The number of CHPS zones has been increasing on a yearly basis since its implementation across the nation. It has also brought improvement in coverages of health service indicators, most especially immunization-related coverages (GNA, 2020).



In the Upper West Region (UWR), Sissala East Municipality has been implementing CHPS since 2007. The implementation has brought enormous benefits to the inhabitants of the Municipality. From just two CHPS in 2007, the Municipality has seen an extraordinary increase on year-by-year basis. This is largely because of the desire for CHPS by communities looking at the benefits other communities are enjoying. The Sissala East Municipality had forty-four (44) functional CHPS zones at the end of 2018.

Twenty-six (26) of the CHPS have compounds built by the Municipal Assembly, Japan International Cooperation Agency (JICA), Ministry of Health and some communities themselves. Many communities now initiate their ways of getting CHPS compounds constructed and follow up to Ghana Health Service for the provision of services and this could have led to the increased in the current number of CHPS in the Sissala East Municipality. The Municipality has all of its population living within the catchment area of Functional CHPS zones. As a result, the municipality has one of the highest numbers of CHPS zones in the UWR (SMHD, 2019). The contribution of CHPS to health service delivery in the Sissala East is significant. From the 2018 annual report of Sissala East Municipality, CHPS contributed 50.1% of Antenatal Care (ANC) coverage, skilled delivery 25%, Postnatal Care (PNC) 19.9%, Family Planning (FP) 60.9, 65.9% of Bacillus Calmette-Guérin vaccine (BCG), and 87.1% of Penta3 as well as 21035 OPD cases (SMHD, 2017). In spite of the great contribution of CHPS to health service delivery, the same report highlighted a range of challenges confronting CHPS in the municipality. These include inadequate basic and essential equipment for some CHPS compounds, some CHPS compounds are not connected to national Grid, weak motorbikes for some CHPS compounds while others do not even have, no portable water at most CHPS zones, no toilet and urinal pits for clients at some CHPS zones, deplorable state of some facilities, bad road network making movement very difficult and staff attrition. (SMHD, 2017).



Generally, notwithstanding the several benefits of CHPS, its implementation is bedeviled with several other challenges in terms of logistics, human resource, financial, conflicts between health staff and communities. Others include misconception of the CHPS

concept by communities, high demand for CHPS by communities, conflicts between twin communities, political interferences, National Health Insurance Scheme (NHIS) not paying regularly (SMHD, 2017). The quality of services provided the health system may be the immediate outcome of the investment made the health system, such as the trained staff, medical equipment, medical consumable and financing. It is expected that when more inputs are put into the system it should lead to an improvement in service delivery and also increase access to services for the users. However, it is possible to put in more resources and get a corresponding decrease in output. It is the responsibility of the health system to provide health services that meet the minimum standard in terms of quality and also ensure that these services are available to the population (RHSOE, 2006).

1.2 Statement of the Problem

The main objective of the Ghana CHPS initiative is to ensure increase in access to health services by the people living rural areas. It is however said not to be meeting expectations due to an array of identifiable challenges (MOH, 2012). A study revealed that the success and sustainability the CHPS initiative is threaten by challenges. Some of these challenges are insufficient funding, improper management of the facilities, inadequate supervision, inadequate compounds, poor roads, few health workforce, frequent staff attrition, cultural beliefs, and weak referral system (Assan et al., 2019).

Japan International Corporation Agency (JICA) reports on the implementation of CHPS programme in the Upper West Region revealed that the pace at which the CHPS initiative is being the Scaled Up is slow. The above phenomenon could be caused by weak administrative capacity at the Districts, few numbers of Community Health Officers



(CHOs), no refresher training for CHOs in the health service, and weak participation in CHPS by community members. (JICA, 2014).

The Sissala East Municipality has seen tremendous improvements in access to health care in the past 5 years largely due to the number CHPS zones the Municipality has established (SMHD, 2019) Despite the contributions of CHPS it is said to be bedeviled with an array of challenges including human, infrastructure and logistics, thereby short-changing beneficiaries of the needed services (SMHD, 2019). Despite the increased in access to health care, which could have been because the scaling up of CHPS programme within the Municipality, there is little or no information available on the community perspective of the contributions of CHPS to health service delivery in the Sissala East Municipality. It is also unclear the magnitude to which challenges including human resources, health infrastructure and other logistics affect the implementation of CHPS in the Sissala East Municipality. There is the need therefore to assess the contributions and challenges of CHPS in health service delivery in the Sissala East Municipality.

1.3 Research questions

- 1. What are the contributions of CHPS zones to health service delivery in Sissala East Municipality?
- 2. What are the challenges of CHPS in health service delivery in Sissala East Municipality?
- 3. How are CHPS zones geographically distributed within the Sissala East Municipality?



1.4 Objectives of the Study

1.4.1 Main Objective

To Assess the Contributions and Challenges of CHPS in Health Service Delivery in the Sissala East Municipality.

1.4.2 Specific objectives

- To investigate the contributions of CHPS in health service delivery in Sissala East Municipality.
- To explore the challenges of CHPS in health service delivery in Sissala East Municipality.
- To assess the geographical distribution in terms of equity of the CHPS zones in the Sissala East Municipality.

1.5 Conceptual Framework of CHPS contributions and challenges to health service delivery

Figure 1.5.1 presents the interrelationships among challenges, contributions, and location of CHPS compounds as well as the community satisfaction of the CHPS services. The construct is the researcher's own representation of the relationships.



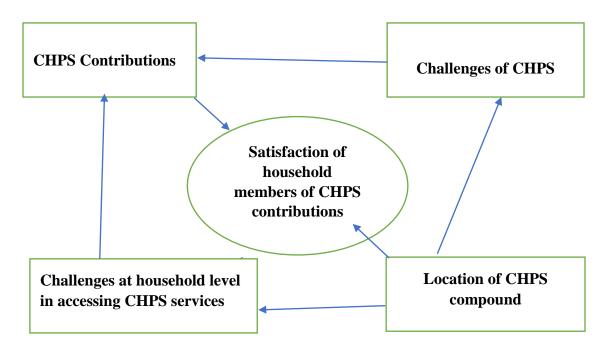


Figure 1.5.1 Conceptual Framework of CHPS contributions and challenges to health service delivery.

Source: Author's Construct, September, 2020.

1.6 Significance of the Study

This study shall also contribute knowledge on contributions and challenges of CHPS in the Sissala East Municipality. Understanding the contributions and challenges of CHPS in health service delivery is crucial in health policy analysis, planning and design of client-centered health interventions and health resource allocation by the health system. Based on the findings, recommendations will be made to guide future planning and implementation of strategies to promote health service delivery at the CHPS level in the Municipality, which may also be useful to the region and Ghana as whole.

The findings of this study could as well also serve as a significant resource to the Ghana Health Service, the Sissala East Municipal Assembly, International Non-governmental Organizations and other organizations that work in health within the Municipality, as it



could be used as a guide to develop more effective strategies to improve service delivery through CHPS.

1.7 Study strengths and limitations

This study has some of strengths. For instance, this was the first study to evaluate the contributions and challenges as well as geographical location of CHPS in Sissala East Municipality. Well trained data collectors were deployed to the field to conduct all the interviews. The data collection tools were also pre-tested to enhance the quality of responses. Moreover, the key informants' interviews were able to allow the collection of detailed information of the study subject to complement the quantitative part of the responses.

However, the study was not without some limitations. First, the cross-sectional design used in answering the study objectives was just a snap shot of exposures and outcome variables. Therefore, the possibility of temporal effects of exposures on outcome variables may not be completely ruled out. Also, by the fact the study design was cross-sectional the findings of the study do not represent causality. Additionally, data were collected during the Corona Virus Disease 2019 (COVID-19) period and it may have affected the quality of response by the participants as they may have hastened to answer interview questions to avoid the possible transmission of the virus. To minimize the effect of this phenomenon, data collectors followed the recommended health protocols assure participants of their safety.

1.8 Chapter Organization

This study was organized into six main chapters. First chapter is made up of introduction of the study, the problem statement, the research questions and objectives, significance of



the study, and how the chapters were organized. Chapter two was devoted for literature review of relevant information. Chapter three dealt with study area and study methodology. Chapter four presents analyzed data. Data collected from the field is presented and analyzed under the chapter. Chapter five contained discussions on analyzed data, study findings. The last chapter contained conclusion of the study and some recommendations.

.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section examines current views/thinking surrounding Primary Health Care (PHC) concept and how it relates to the CHPS system in Ghana. It also reviews the contributions of CHPS to improved health service delivery in Ghana, the challenges facing the CHPS system in service delivery across, and challenges that households face in accessing CHPS services in Ghana and within the Sissala East Municipality in particular. Information included in this review is sourced primarily from published and unpublished books, journal articles, websites, policy documents, guidelines, handbooks, periodic reports of various Government of Ghana agencies and from service protocols amongst others.

2.1 Background of Primary Health Care

Definition: PHC can be described an essential health care system, that makes health services universally accessible to individuals. It encourages community participation and the provision of services at the cost that community members can afford. The approach that is different from the traditional health system, which prioritizes the equal distribution of health services. The PHC concept has some objectives and essential elements in order for it to achieve the health for all policy (Maria, 2016).

PHC will work perfectly for any nation when it takes into consideration the economic situations, sociocultural beliefs, and political dynamics of the country and the geographical distribution of its communities. The implementation of PHC policies and

strategies could address the health problems communities face through its promotive, preventive, curative and rehabilitative services (Marafa, 2007).

PHC has similarly been alluded to as the most fringe level of the medical care framework that is the level to be reached first by the public when looking for medical services. These include health institutions such as clinics, health centers, dispensaries, polyclinics, general practitioners, among others. The government, through the Ghana Poverty Reduction Strategy II, has improved on delivering health services by making healthcare services accessible to all Ghanaians for the past years and has also made it a priority issue for the government. The goal of the health sector is to promote healthy society that is also productive with the ability to contribute to socio-economic development and wealth making for the people in the country. To achieve this health sector goal, the policy directions of the health sector are constantly focused on the following; bridging the gap in getting access to quality healthcare and nutritional services, guaranteeing economic-related plans that ensure the protection of the poor people, and reinforcing the effectiveness in wellbeing administration conveyance (NDPC, 2012).

It is aim of the National Health Care system to improve fairness and increase access to health care for the general population. The national health systems were built towards improving physical, socio-cultural and budgetary admittance to health care (GHDR, 2007).

Dating back to 1978, the nation Ghana became a party to the Alma Ata Declaration and in this way began executing the PHC concept as a health strategy. PHC model since its implementation has yielded some results in preventing childhood diseases for example polio, measles, tuberculosis among others. In any case, independent of the endeavors set



up by the government by method of arrangements, framework among others, the nation is still faced with pregnancy and delivery-related deaths, infant mortalities and, children less five years deaths (Karbo, 2015). Countries that strive to invest in the health care of their citizens must note that strengthening PHC care system is very critical and requires much attention (PAI, 2017).

The PHC approach continues to stress on the first level of health care. Its activities should start with the community, as was defined at its conception. PHC work with proven scientific methods and socially desirable procedures to solve health challenges. This approach to health care makes health services accessible to individuals as well as families at a low cost. The PHC forms a core component of the health sector and social and economic development of the communities. PHC serves as a linkage between the health system and the communities. The PHC ensures continuity of care where clients are referred to higher facilities. It is the first point of call in the national health structure (WHO, 1978a).

The value of PHC of ensuring that all people get adequate health needs is a system that will actually put the people at its center of operation. This means the provision of improved ways of living, meeting the expectation of societies, and their values are features of a functioning health sector (WHO, 2018).

2.1.1 Alma Ata Declaration on PHC

The international conference on the PHC held in September 1978 made some recommendations. First, the provision of health is a human right matter worldwide. Second, the health status of people is not the same everywhere especially when it comes to the developed and developing countries, because of differences in political, social, and



economic situations. Third, the people have a duty and right to participate in the development and implementation of heath programs. Forth, various governments have the sole responsibility for the health of their people by way of providing them with essential health services. Fifth, all governments should develop policies and strategies to implement and sustain PHC. Sixth, countries should collaborate to ensure the full realization of PHC for all people. Finally, for the world to be able to give an acceptable degree of health care to its people by the year 2000, there is the need to invest the world's resources judiciously (WHO, 1978b). These declarations are to guide nations across the world in their implementation of primary health care. Also, during this conference, it was stressed that in implementing PHC, nations should take into consideration the current economic, sociocultural, and political features of the country. Countries are also admonished to use relevant research findings to solve health problems. The PHC process should include at least education, prevention, and control of health problems and occurrences through the use of local resources to help reduce cost. The strategy should also include an appropriate plan that allows the full participation of communities with integrated, and functional referral systems, making it a comprehensive health care system. A robust referral system requires the full involvement of all key stakeholders, for example, nurses, health volunteers, midwives, and traditional healers. These key players need to work together in order to provide the health needs of the communities (WHO, 1978b).

2.1.2 Principles of PHC

After the Alma-Ata declaration in 1978, the WHO adopted the PHC as a strategy for effective health service delivery. This approach is also considered as a viewpoint for the

provision of quality health service. According to the WHO, PHC comes with five principles (Calnan and Rodger, 2002).

Accessibility: This is where quality health services are made available to all, irrespective of one's geographical location. Accessibility basically operates on the principle that health facilities and health professionals would be distributed in rural, remote and urban communities.

Community Participation: This concept is where the beneficiaries are given the opportunity to contribute to decision making concerning their health, that is they take part in identifying their health needs and assessing the advantages of alternative strategies to addressing these needs. This is what brings about community ownership.

Health Promotion: This is a concept that empowers individuals to have some level of control regarding their health. These individuals may gain knowledge through health promotion and education activities on specific health indicators such as reproductive and child health services, immunization prevention, nutrition, sanitation, and control of endemics.

Relevant Technology: the application of emerging ideas and knowledge in the area of disease detection and prevention is very necessary in the implementation of primary health care. This principle recognizes how important it is to be able to adjust to "new and evolving realities", thereby placing much emphasis on developing and testing new and

> innovative health care models and also spread research results that are related to health care. Continuous capacity building and professional development workshops to ensure



that appropriate health care is given to individuals by professional health care providers at the appropriate time.

Inter-sectorial Cooperation: the health sector cannot do it all and therefore the need for collaboration among all sectors. There is a link between health and economic, health and social policy as well as health and Agric sector.

2.1.3 Key Elements of PHC

The elements of PHC include educating the public to recognize and be able to prevent and control existing local health problems. The PHC also promotes the supply of food and adequate nutrition. Furthermore, it encourages the provision of basic sanitation, adequate supply of clean and safe drinking water. Other elements of the PHC include reproductive services, child and newborn health services, vaccination of children, prevention, and control of local diseases, treatment of minor injuries, and the provision of important drugs (Maria, 2016).

2.1.4 PHC Strategy

The idea of the PHC approach involves certain basic fundamentals that are in line with the overall process of development but places much importance on the field of health. It states that health has a direct relationship with the provision and distribution of resources such as doctors, nurses, medicines, education, water and food supply. Thereby implying that, PHC is concerned with equity ensuring that both health and social resources are evenly distributed particularly to those who need them the most. It also states that health is an important component in the development process, which means that factors that affect health maybe a combination of sociocultural, economic, physiological as well as



environmental. Furthermore, to be able to achieve good health requires active involvement of individuals, families and communities by adopting healthy behaviors and also ensuring a healthy environment. The PHC strategy includes the values expressed in its concept where there is the need for transformation in the health care organizations, intersectoral action for health and individual and collective responsibility for health (World Health Organization, 2018).

2.1.5 Components of PHC

The main components of PCH contained in the 1978 Alma-Ata declaration by WHO are basically eight in number. These components explain the stance of the WHO and its member states on PHC (WHO, 1978).

Public Education: The process where the general population is sensitized on the existing health problems, outlining possible causes, how to prevent their spread, and where to get help when confronted with the condition. Public education should be considered first when implementing PHC.

Proper Nutrition: Nutrition plays a significant role in the wellbeing of every population. It is also another component of health care. Inadequate nutrition can cause health complications, and therefore, efforts are made by the WHO to prevent any form of malnutrition, hunger, diseases, and disorders.

Sanitation and Clean Water: The component of water, sanitation and hygienic practices requires the provision of water which is safe for domestic use and putting in place proper waste management strategies, which can improve the health of a population and prevent



the emergence of diseases. Many pathogens thrive well in dirty environments and can be transmitted through drinking water thereby causing diseases.

Maternal and Child Health: This is another essential component of PHC that looks at the provision of basic health needs of mothers, pregnant women and children. The health of mother and children is vey to every nation because they are the future of every country. The health needs of these vulnerable groups can achieve through many health interventions and packages such as family planning services, nutrition counselling services, immunization among others.

Immunization: The administration of vaccines globally has brought about gains in the prevention and control of vaccine-preventable disease outcomes.

Immunization is one of the measures put in place to wipe out infectious diseases, which may lead to improvements in the health of people worldwide.

Disease Control: The diseases can be prevented and controlled by using appropriate and timely health interventions. Diseases-causing agents vary based from one location to the other. So, for the prevention of diseases, suitable measures are developed based on these location characteristics.

Accessible Treatment: The appropriate identification of a disease and its timely treatment will curtail the impact of it and may lead to a long-life span of an individual.

Drug Provision: ensuring the availability of important and lifesaving drugs for those who may need them at certain points in life such as antibiotics to those with infections, mental health drugs. primary health care workers can help prevent the spread diseases. Healthy population and communities have long life spans and are very productive. Treatment of a



disease is also a preventive measure of the disease and hence the need for timely provision of the require drugs.

2.1.6 Scope of PHC

PHC offers first hand and continuous health services for households and should be their first point of contact in the health service structure. However, in most developing countries, public health facilities usually provide health care using trained health staff with the support community volunteers. Primary Health Care performs some unique and important functions which include; the first point of contact for health care by many individuals, this is because the service points are often located in the communities, again, the services provided can cater for a broad range of basic health conditions, There is a follow up component in the primary health care system, where patients are followed over time by the same health care providers, in addition, the health service is linked with a higher level of the health care system that can provide particular health services when the need arises and finally these services are extended to cater for the marginalized and underserved individuals that might not otherwise seek or receive health care (DCPP, 2007).

2.2 Concept of CHPS

2.2.1 Definitions

A CHPS Zone is an earmarked location in a specific geographical area, which has a population of five thousand (5000) or seven hundred fifty (750) households in areas with high population densities. A CHPS zone could be established for particular electoral area or more than one electoral area. Also, a town or part of a town can form a CHPS zone.

The number of communities can be also be grouped to form a CHPS zone as well. At the final stage of the CHPS process health staff such as CHOs and Community Health Volunteers (CHVs) man these CHPS zones (Ministry of Health, 2016).

A CHPS Compound is a standard structure that has space for service delivery and accommodation for health staff (Ministry of Health, 2016).

A CHO is a certified health staff with community health nursing background and who has also been oriented and posted to a CHPS zone to work (Ministry of Health, 2016).

Community Health Volunteers (CHVs) are selected community members who support health staff to carry out health activities in their respective CHPS zones but are not paid for services they render. These volunteers are usually trained in basic health strategies. (Ministry of Health, 2016).

Community Health Management Committees (CHMC) are the community level management committees who act as the policy making bodies, also serve as a linkage between Ghana health service and the community. Members of these committees are volunteers from the communities who are willing to serve their communities. They are responsible for mobilizing the community members for service delivery and also ensure the welfare of CHOs at the CHPS zones (Ministry of Health, 2016).

CHPS was formerly defined as mobilizing the leaders of communities, involve community members in the decision-making processes and providing the needed resources in a defined place called the CHPS zone and the posting of trained frontline health staff. The health staff are supported by the community health and their health management committees to execute their duties. The CHPS zones are community own



facilities (Ghana health service, 2005). The CHPS initiative can be also referred to as a sector-wide health structure of change and development with the primary aim of making PHC accessible to every community in Ghana. To achieve this aim, the initiative has made it possible for District/Municipal Health Management Teams (M/DHMTs) in the country to modify and come out with new strategies but should be mindful of the core mandate of CHPS as PHC tool (Karbo, 2015). The current definitions from the 2016 CHPS policy document serves as a guide for all the implementers of CHPS at their respective locations across the nation.

The introduction of the CHPS initiative was timely and also very appropriate way of delivering health care to communities in deprived areas especially for a country like Ghana with about 70% of its population dwelling in rural communities. These rural areas lack access to quality health care. The concept deals sending health care from subdistricts (health centers) to communities. The initiative also targets remote areas with high risk and are in need of these basic health services. To deliver low cost and quality health services to households, individuals and communities there is the need to engage members of the various communities for planning on how to go about the delivery process (Ghana Health Service, 2005).

Positive results from the experiment by Navrongo Health Research Centre (NHRC) demonstrated that children deaths and the general mortality could be reduced in the poor rural communities with the creation of an outreach point and through community mobilization. These findings, which were first communicated as preliminary findings in 1998 pushed the Government to introduce the national program to implement primary



health care. The Navrongo research health model was then renamed as CHPS. CHPS is

introduced into a community only when the planning and community dialogue process is completed. Proper community entry forms a good foundation for CHPS to thrive. One important principle for the introduction of CHPS is to ensure that the traditional authorities of the community understand and embrace the CHPS concept. Knowledge on the concept and possible benefits of CHPS will ensure the commitment and support from the community. Community participation, sense of ownership and mobilization of local resources will help in the successful implementation of CHPS (Nyonator et al., 2005). Ghana health service adopted the PHC model for delivering health services because it has the potential of reaching everyone including those in the deprived communities (Nyonator et al., 2005).

In the implementation of CHPS, the DHMT plays an important by ensuring that Community Health Nurses (CHNs) are adequately prepare through in-service training to enhance their skills in handling communities. The DHMTs then post these staff to CHPS where they reside and provide both preventive and curative services. These reoriented CHNs, now Community Health Officers provide services to community residents during home visits and also at the facility. Services such as vaccination of children, family planning, emergency delivery, antenatal and postnatal care, treatment of minor ailments and health education are provided by these CHOs. Community volunteers assist the CHOs in the provision of services through community mobilization, the maintenance of community registers, child welfare clinics and other essential activities when there is the need (Nyonator et al., 2005).



2.2.2 Rationale for CHPS

As a national health policy, the CHPS programme ensures the deployment of primary health care services to community through a well-structured subdistrict System (Binka et al., 1995). It is the goal of CHPS to transform the dynamics of health care delivery from a system where service providers wait on patients to come to the facilities for health care to the outreach workers who actively go out to the patients in the communities and at the comfort of the patient, which is known as services at their doorsteps. The core strategy of CHPS entails sending trained CHOs to communities for them to provide basic preventive, clinical, and health promotion services at the homes or at the CHPS zones (Binka et al., 1995).

The CHPS strategy can facilitate universal health coverage (UHC) when scaled up. The goal for the expansion is to send primary health services to all rural households (Asuming et al., 2020). The implementation of CHPS in Ghana has gained international recognition because of how pragmatic the PHC strategies are, in achieving universal health coverage (UHC) (Assan et al., 2018). The CHPS concept relies more on support from the community structures to provide services. For instance, a study revealed that community members have a role to play when it comes to the provision of skilled delivery at the CHPS zones particularly CHVs, traditional birth attendants (TBAs) and mother in-laws can help to identify these vulnerable groups, and to provide education on skilled delivery services. These people can also refer or accompany the clients to the facilities for delivery and care. Stakeholders such as the political authorities, traditional leaders, and community members also play a key role in providing resources including byelaws to promote the skilled delivery (Sakeah et al., 2014).



As evidenced in an expert panel report, stronger Community Based Primary Health Care (CBPHC) programs such as the current CHPS initiative can enhance community engagement and enablement by the implementation of well tested methods which will be important in achieving universal coverage of health services by the year 2030. The aim to end preventable childhood and maternal deaths by 2030, which will eventually achieve the health for all is the goal of Alma-Ata declaration. (Black et al., 2017). Black et al. (2017) also indicated further that stronger CBPHC programs create entry points and collaborations to increase coverages for family planning services as well as for accelerating progress in the detection and treatment of HIV/AIDS, tuberculosis, malaria, hypertension, and other chronic diseases.

It is quite evident that the primary producers of health care are not health care providers but individual households, where mothers or caregivers usually take important decisions in seeking health care for children when these children are sick. However, the ability for individual households to make such decisions depends largely on how they are well informed, the communities intend provide setting on which families operate; in addition, increased household patronage of health care necessitates the need to make available the necessary health education and the right information to household members in an acceptable way.

In 1997, the Ministry of Health (MOH) introduced Health Sector Reforms (HSR) to basically to address challenges regarding access. The HSRs brought about the increased in both geographical and financial access to basic and quality health care as well as ensuring efficiency in the services provided. Subsequently in 1998, Community based



Health Planning and Services initiative was also introduced by MOH purposely to

increase geographical access, fair distribution, quality and efficiency of basic and primary health care (Nyonator et al., 2002).

The CHPS initiative was however initiated as a national health strategy to deal with the issue of disparities in access to health services especially primary health care and thereby redistribute these health services equitably in order promote good of health outcomes.

The Vision of GHS is to ensure that all Ghanaians receive health care that is close to them using the CHPS Initiative. The CHPS concept puts health sector in a better position to achieve the objectives of the new reforms. In the HSR a typical District Health System is made up of three levels for the provision of health services, they include the Community level, the Sub-District (Health Centre) Level and District Hospital level (referral centre) for all facilities in the district. The goal of CHPS is to improve the health status of people whether they live in urban or rural areas across the country, by facilitating actions that empower households and communities (GHS, 2005).

There are three important objectives that will achieve the goal of the CHPS and these are; to improve access to services, provide efficient and responsive care to client needs, and to develop effective collaborations among relevant agencies (GHS, 2005).

The implementation of CHPS requires a good relationship between health sector and communities as the process needs sufficient planning and negotiations with all stakeholders more especially the traditional authority, politicians, Community Based Organizations (CBOs) and all community members for effective community mobilization and participation. CHPS is a system of delivering services where by the health system provides additional in-service trainings on the CHPS concept and how to mobilize



communities for heath service training to the staff to equip them for-community work. The concept put more emphasis on providing public health services such as immunizations, family planning, infant feeding practices, counselling services etc. However, CHPS are to also treat minor ailments, conduct emergency deliveries and make prompt referrals of the cases they cannot handle. CHPS represents a process of change that bridges the gap between research results and health sector reforms (Binka et al., 2005).

2.2.3 The Components of CHPS

The components of the CHPS initiative as identified by Nyonator et al. (2005) are presented in Figure 2.2.3. The initiative involves a process of evidence-based structural and contextual changes for the extension to the communities the new the sectoral approach to health. To be able to accept the change from the original facility centered to an integrated community- based health service approach the following should be adhered to; a research arm that will continue provide evidence to guide the process, an arm like the Ministry of Heath that formulates policies, provide resources, and develop ways for communicating the process and priorities for operational change, and finally also an arm which have informal mechanisms for spreading the innovation and change within Districts. The figure clearly shows how to achieve the desired change in health services delivery through organizational change, which requires continuous research and the diffusion of innovations to enrich the process towards planned organizational change.



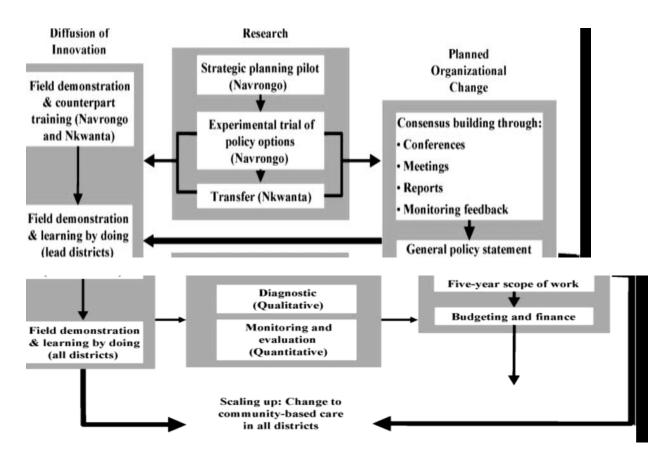
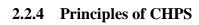


Figure 2.2.3. The Components of the CHPS

Source: (Nyonator et al., 2005; Karbo, 2015)



The principles that guide the implementation of CHPS include; community participation and ownership, empowerment, the consideration of gender and vulnerable groups, volunteers to assist health staff, focusing on the community health needs, shifting of tasks among community members and also among the health staff to achieve universal access, mobilization of community resources including human resources and health services

delivered using appropriate approaches. In all it is the CHO that leads (Ministry of Health, 2016).

2.2.5 Organizational structure for rural health

Municipalities and Districts are the most important units when it comes to the implementation of PHC and the management of it for service delivery. The Districts/Municipalities in the organizational structure of the Ghana Health service are further organized into a three-tiered structure; the District/Municipality level (level C) at the top, the Sub-District level (level B) and the Community level (level A). The systems work hand in hand to ensure the provision of comprehensive services (Ministry of Health, 2016).

2.2.5.1 District Health Management Team (DHMT)

The M/DHMT is the decision-making body, programme development Coordinator for the CHPS. The team serves as the central part of the health management, taking directives from the Regional level. The DHMT also gives directives for the provision of community level health care through the Sub district system and their CHPS zones. Some of the specific roles played by the DHMT are to develop, organize, implement, and monitor community level health care programmes.(Ghana health service, 2005).

2.2.5.2 Sub-District Health Team (SDHT)

Every political district is usually zoned into some number of sub-districts depending on its size the geographical distribution of the its communities. A sub-District may have a a population ranging between twenty thousand (20,000) and thirty thousand (30,000). Sub-districts in the health sector are administrative classification which does not necessarily



correspond to area councils in the local government classification. However, it is possible for the health system put two or three area councils together to form a sub-district.

The team also plays a supervisory role over the CHOs and the CHVs and serves as a link to the District levels. Furthermore, they plan and budget programmes for their zones. The SDHTs receive and distribute essential medicines including family planning devices from the District medical stores (Ghana health service, 2005)

2.2.5.3 The community level

Several communities fall within a sub-district, in rural areas a community can be the same as a village or could be a group of small communities which makes it difficult to define a community using only the population. However, for the purpose of health service delivery, in defining a community, the geographical boundaries and population must be taken into consideration. A community can have a population of 100 or less but are so far away from each other such that it would be so difficult to group them with another community. On the other hand, a town with a 1000 or more population may not be that easy for one CHPS zone to deliver services to the entire population even though the people are in the same geographical location.



It is good that CHPS zones are established leveraging on with existing local government structures. Some District Assemblies use population of 1500 or less for the establishment of CHPS meanwhile the recommended population of a CHPS Zone should be in a range of three thousand (3000) to four thousand five hundred (4500) people and may cover one or electoral areas in the district. A CHPS zone should have at least two trained CHOs who will be providing services to households within the communities. The CHOs are to conduct to home visits to houses within the catchment area of the CHPS zone. They are

to also mandated to conduct all outreaches within the zone. As part the home vising strategy CHOs are to draw a plan in consultation with communities and also using community register as guide. The tracing defaulters and people with special conditions like pregnant women and children at risk will increase coverages. The CHO in a CHPS zone is a member of the SDHT, advocating for the health of the communities (Ghana Health Service, 2005).

2.2.6 Stages in the implementation of CHPS

Implementing CHPS requires new and locally modified ways for ensuring that CHPS zones are accountable to the communities they serve, provision of quality services, and administrative control. The activities of CHPS are integrated into the traditional institutions and all other social groupings in the community structure. These mechanisms can be organized into six stages (GHS, 2009).

Preliminary planning: at this stage in the implementation of CHPS a clear understanding of the concept by all stakeholders. The CHPS zone operates from a specific geographical area where all CHPS services are rendered to the population. At the Start of the CHPS process involves identifying boundaries of the zone and where the compound will be located, assessing the human resources require and their various skills, assessing of equipment needs, the training requirements, and scheduling the start of service provision. It is important to involve the District Assembly at this stage and solicit for their full commitment (GHS, 2009).

Community entry process: Community entry is where the leadership of the health system introduces the CHPS program to the community or communities involve. This is done through the opinion leaders of the communities and subsequently the all the



community members during durbars or any traditional gathering. During community entry it is important to explain the CHPS concept including the roles of the community and the roles of the health service (GHS, 2009).

Building of CHPS compounds: a CHPS zone needs a standard structure to house the logistics for easy the provision of services. The compound should have a room or rooms for the community health officer and possibly the other cadre of health staff. The community should be involved to create a sense of ownership, the land for the construction of the compound should large enough for future expansion and possibly total upgrading (GHS, 2009).

Procuring essential equipment: before the of the CHPS all the basic equipment for the operation of a CHPS zone should be procured. The community also in the provision of equipment and other logistics (GHS, 2009).

Posting community health staff to CHPS zones: another important phase of the CHPS implementation is the posting of health staff most especially the CHOs to the CHPS zone. The CHOs or health staff goes to before launching to carry out activities such as community population registration. The launching of the CHPS can take place at a durbar to celebrate the start of provision of care and official reporting. CHPS services involve the provision of treatment services, conduction of home visits, provision family planning services, and carryout health education among others (GHS, 2009).

Engagement of volunteers: the health system has been working with community health volunteers for years in almost every community and usually when a CHPS a zone is established in a particular the existing CHVs are encourage to continue to work with the CHPS staff, also in some cases district health-management teams can decide based on



their local needs engage volunteer or health aides with the support community health management committees. Usually volunteers are trained on how to mobilize the community for health programs with particular emphasis on promoting family planning and reproductive health among men (GHS, 2009).

2.2.7 CHPS policy

In 2016 a new CHPS policy was developed to bring update the concept of CHS implementation. The policy gives clear directives on the how CHPS should be implemented across the country and also gives highlights on duty package of CHPS, human resource requirements among others (Ministry of Health, 2016).

2.2.8 Policy directives

The current National CHPS Policy document has the following directives shall to guide the full implementation of CHPS across the nation. These directives are to solve any policy challenges encountered over the years.

2.2.8.1 Duties of CHOs and package of services at CHPS

Maternal and reproductive services this involves the provision relevant information women in reproductive age and also those who are that pregnant. Services such as FP, ANC PNC are very essential in the provision of maternal services. Pregnant women should be encouraged to seek appropriate services including the Prevention of Mother to Child Transmission (PMTCT) which is the reason why delivering at health facilities under the supervision of skilled staff is important, child health services including; EPI services, nutrition counselling services, growth monitoring and promotion sessions, and the provision of Community Integrated Management of Childhood Illnesses (CIMCI), etc. The treatment of minor ailments in conformity with national protocols for the



community level for example malaria control, first aid for cuts, burns and domestic accidents, and referrals, health education, sanitation and counselling on healthy practices and good nutrition and tracing of defaulters and the visiting of patients who have been discharged (Ministry of Health, 2016).

Information and Surveillance: CHOs are to keep up to date records of health events and report as such using standard formats. This information should include vital health reports on the CHPS zones and to do notifications promptly of any strange happenings. The occurrence of any abnormal increase in the of known patterns of diseases such as diarrheal disease cases, yellow fever and jaundice should be reported immediately to the subdistrict and the district authorities.

Emergency deliveries by CHOs. CHOs can conduct in head Vagina deliveries and refer all other delivery cases to a facility that have the capacity. The District Director of Health Services in consultation with the DHMT could add midwifery services to the services of a CHPS zone based on need and then post a qualified midwife to stay at the CHPS zone and practice. Furthermore, other health interventions both governmental and Non-governmental project services to be implemented at the communities should be carried out using the CHPS strategy (Ministry of Health, 2016).

2.2.8.2 Human resources for CHPS

CHNs are qualified nurses recognized by the Nurses and Midwives Council to practice. When a CHN goes through the official CHO training successfully he or she becomes a recognized CHO. There are however refresher trainings these CHOs are they continue their practice. The policy has further stated that, there should be an established CHN upgrading scheme for the purpose of providing career path CHNs holding certificates and



diplomas. This will ensure any CHN acquiring a professional nursing grade or a degree qualification to migrate onto the new profession grade categories for their promotions. To prevent any doubt, a CHN acquired a professional qualification and licensed to practice in a nursing profession above a CHN can move from the CHN category directly to the new grade. The professional may however continue to work at the CHPS zone when there is the need. An example is a midwife who was as a CHO working at a CHPS and combing the roles (Ministry of Health, 2016).

A CHPS zone may have up to three (3) CHOs with the appropriate staff mix using their current backgrounds who may serve at the CHPS zone playing specified roles and the years of serving at the CHPS is dependent on whether the CHPS zone is a deprive one or not. After three years the CHO is qualified for an internal transfer. Additionally, a scheme for conditions of Service should be developed and instituted to make the CHO job attractive. The duration at the facility and type of deprivation of the CHPS zone should be considered in the incentive package. The incentive scheme will recognize the efforts staff who voluntarily want to serve in very deprived areas.

On health volunteers the directive states that CHVs will continue to be a central part of CHPS in health service delivery. Each of CHPS communities should have at least two volunteers who are selected by the community leaders and further trained by their staff. The volunteers should be the recognized by all stakeholders. Also, an appropriate incentive scheme should be developed and instituted to reward the Volunteers depending on performance (Ministry of Health, 2016).



2.2.8.3 Equipment and infrastructure for CHPS

A CHPS compound can be descried as a standard structure that have an accommodation for CHOs and rooms for health service delivery. For the purpose of uniformity, efficient and cost effective in the construction of a compound, its maintenance and management it all parts of the country, all the CHPS compounds will have a standard design across board. Also, for uniformity in terminology, the compound a will place for residence and health post will be referred to as a CHPS Compound. The hospitals, health centres and CHPS compounds sites should be determined by every district as part of their District Health Strategic Development Plan and should be covered by proper land documents. CHPS compounds are expected not to gradually transit into Health Centres or any higher facility other than the CHPS zone established. In a situation where a temporary structure is provided by community to serve as a CHPS compound, it should be changed in due course with the standard compound on an approved site (Ministry of Health, 2016).

A CHPS zone which have maternity services approved for a particular a separate maternity facility within the CHPS compound should be built based on the standard design. A CHPS compound should be equipped and furnished in accordance to the standard design. CHPS compounds which are located in deprived areas without electricity or source of water should be given boreholes and solar power as part of the standard requirements. All the CHPS compounds which were under construction before the 2016 CHPS policy should be completed their original designs or modified if possible, to the new design except that the cost due to modifications should not exceed 15% of the suggested cost of construction using the new prototype. All the CHPS compounds which



are yet to be constructed should use the approved prototype for construction (Ministry of Health, 2016).

The demarcation of a CHPS zone and the compound location should be established by the District Assembly in consultation with the District Director of Health Services and should be part of the District Strategic Health Plan. In instance where a CHPS has more than one community, the land for the construction of CHPS Compounds should be provided by the host community for free with appropriate documentation sealed at the land title registry. The government on receipt should the right to vest the land in a third party for the sole purpose of achieving the objective of establishing a CHPS Compound (Ministry of Health, 2016).

CHPS compounds that are constructed by a private individuals or organizations in contributing to the health of the communities, ownership of the compound should be transferred to the Ghana Health Service with documentation. For urban areas and areas surrounding hospitals and health centres, the CHPS strategy can be applied, except that the services will be provided from an existing facility. The CHOs can be accommodated in other facilities that exists around if possible (Ministry of Health, 2016).

2.2.8.4 Financing of CHPS

The government of Ghana is the main of the financier of the CHPS program as well as in responsible for scaling up. Government should budget for the scaling up of CHPS operations. Additionally, funds can be mobilized from other sources like National Health Insurance Fund, Development partners, and philanthropists. All CHPS services are by covered the NHIS (Ministry of Health, 2016).



2.2.8.5 Monitoring, Supervision and evaluation

The District Director of Health Services (DDHS) is the technical lead person in the district and reporting to the District Chief Executive (DCE) and the district assembly will have an overall responsibility of guiding the activities of CHPS zones. The sub district should directly supervise CHOs at the CHPS zones and when there is no government health centre, the Director will assign an appropriate officer to be responsible. The Medical officers in the various District Hospitals should be assigned to a number of sub-districts for mentoring and technical supervision. The doctors have responsibility to also visit the CHPS zones in their assigned sub-district at least once every quarter. The DCE in collaboration with the director of Health Services should commission annual reviews to monitor the progress of CHPS implementation in the district and make the report available to be discussed by the District Assembly. The report and recommendations of the district assembly should be made available to the Director General of the Health Service and also the Minister of Health (Ministry of Health, 2016).

2.2.9 Roles and responsibility of key institutions

2.2.9.1 Community Health Management Committees

The roles and responsibilities of these committees are in the area of policy, resource mobilization and the general coordination of CHPS activities at the community level. They usually form a liaison between the health system and the community. Specifically, these committees settle conflicts between the Community Health Volunteers and heath staff, organize communal labour activities to support the programme, advocate for the of community health, and family planning services, manage the funds of CHPS and other resources. (GHS, 2009).



2.2.9.2 Community Health Volunteers

Health volunteer assist health staff to implement activities such as child welfare clinics, malaria control measures and prevention activities by the distribution and usage of insectisized treated mosquito nets (ITNs), the provision family planning services, conduct home visits among others. Volunteers are usually directly involved in health services delivery playing a supportive role (GHS, 2009).

2.2.9.3 The District Health Management Team (DHMT)

The DDHS the duty for the management, provision of guidance and technical assistance, the planning and budgeting for the CHPS program at the district with support of the other DHMT members. The team also serve as liaison and organize meetings between district health management team and SDHT and provision of essential medical supplies to SDHT, and also Supervises SDHT activities (GHS, 2009).

2.2.9.4 The Sub District Health Team

The SDHT is responsible for holding management meetings with community health management committees and community health officers, data collecting on community health officers and volunteer programs. Also the supply and monitoring of usage of drugs and family planning materials by community health officers and volunteers and reporting as such.(GHS, 2009).

2.2.9.5 Community Health Officers

They shall conduct both community and compound level education on disease prevention, the provision of family planning services and counselling, conduction services both at the outreach and static points in order to achieved high coverages, register and pregnant women and provide ANC services. Also, they are to post-natal



care., supervise and monitor communities on sanitation, the provision of education nutrition, treatment minor cases like diarrhea, malaria, acute respiratory diseases, wound and skin diseases all in their mild form and providing referrals for severe conditions (GHS, 2009).

2.2.9.5 The District Chief Executive and the District Assembly

The DCE who is the head of government machinery at the district level is responsible for the health of the people. The district chief executive and the district assembly through the social services subcommittee can link up with the district health management team in the selection and prioritization of communities for the implementation of the CHPS programme. The provision of funds and other materials to support operating the CHPS process particularly for the construction of compounds and motivation and encouraging heath staff, the members of parliament in the district, as well as NGOS can advocate for the CHPS process and provide material support for its implementation, empowering district assembly, area council and unit committee members to provide active organizational and material support to the development of CHPS program in their communities, receiving quarterly report on implementation of the CHPS for necessary action.(GHS, 2009).

2.2.10 Community ownership and participation

Community involvement enhances community acceptance and participation in the activities of CHPS. Through is the community would own the CHPS and embrace the importance of its existence. In community entry the leadership of health service in collaboration with the district assembly sends the planning process and activities from the district level to the community, and through the appropriate identification of the people



who matter in the community the CHPS concept is introduced. The newly posted CHOS

need to get acquainted with the socio-cultural and behavioral patterns of community members in relation to family planning issues. Hence, they should be able to speak the local language and if they cannot speak it should be learnt. The nurses will render health services by engaging with the leadership of the community such as chiefs, queen mothers, Members of Parliament and local opinion leaders appropriately. The program should follow proper and appropriate community entry procedures for each community to make the work of the health staff easy. This may need the development of a community leadership and participation programme through dialogue with the leaders and residents. Community durbars are traditional gatherings which may involve drumming, dancing, speechmaking and public debate and could be used to lunch CHPS (Williams et al., 2005: Irene, 2017). If community members are well involved in the CHPS implementation process it make them to appreciate this new approach to health care and to view CHPS as a form of health insurance since the deferment of payment provides time for patients to seek emergency funded support from extended families at the appropriate time. Thus, it is the immediate cost of health insurance card that can constrain the health seeking behavior of a person, CHPS uses an informal mutual trust system which harness available resources of traditional health insurance for modern health care (Agyepong and Marfo, 1999). Community ownership in the CHPS program through community mobilization has an important implication on the roles of various levels of the GHS service delivery structure.

Community engagement in the selection of CHMCs and assigning their roles can lead to lasting teamwork and organizational arrangements, community perceptions, and

leadership that means much more to sustaining CHPS than just the standing facility. Ownership is instilled by the volunteerism and community ownership of the program (Pence et al., 2000).

Furthermore, the process of working closely management community health committees and fostering volunteerism to generates ownership instilled by the volunteerism process, and community ownership of the program turns the authority structure of health and other public sector bureaucracies on end, community cohesion and grass roots political clout become the focus of worker accountability and supervision supervisors are expected to provide support, the district authorities are expected to make the initiative work by removing barriers and providing resources (Pence et al ,2000).

2.2.11 Implementation challenges

The roll out of CHPS in the initial stage faced policy and some systemic challenges, which have highlighted in many reviews pointed to the fact that there has been a lack of a clear policy direction of CHPS especially its definition causing an unending conceptual argument. Also, the non-availability of effective leaders, technical directive, lack of preparation and budgetary allocation for activities CHPS of at the national, regional and district levels are some of the challenges. The planning process of CHPS implementation at the community level was also not done adequately (Ministry of Health, 2016). At the various implementing Districts and Municipalities both health staff and local government officers acknowledge that there is the confusion in CHPS policy directives. Although district assemblies were initially willing to do scaling up the CHPS initiative, there was still no clear description of the roles and responsibilities of the key players. Still on the challenges, it was also difficult whether or not CHPS could be implemented in urban



areas given its original definition as a strategy for reaching deprived rural communities (Ministry of Health, 2016). The term 'functional CHPS zone' particularly created some difficulties when it was first introduced into the health system. The functional CHPS zone definition made the inclusion of CHPS an optional requirement in the CHPS process. During these time CHPS zones were described as either partially completed or fully completed which depends on how many of the sixteen steps have been accomplished. In the old description of a CHPS zone it was by the difficult to make up exactly the meaning of functional (Awoonor-Williams et al., 2013, Baatiema et al., 2013). When an assessment was conducted in two different regions (Western and Central Regions) on the progress of CHPS implementation, it came out that seventy seven percent (77%) of CHPS compounds were in a poor condition and needed urgent renovation. Information also revealed that, some districts commission CHPS compounds which were yet to commerce full operations. Most compounds (about 60%) were also partially equipped and had no accommodation services for health staff. CHOs also complained of lack of impress to run the day to day activities at the CHPS zone (GHS, 2014). The delivery of services was however, in a constant flow amidst the ambiguity of the definitions of the standard packages to be delivered at a CHPS zone (GHS, 2005, GHS, 2010 and GHS, 2013). The 2016 policy document added new services onto the already existing ones making communities to expect an increasing variety and higher clinical services to be delivered using the CHPS strategy. Now many health interventions use CHPS strategy as a platform to reach the target communities and populations. Around this same time there was also the for CHOs to add head in vagina deliveries to the services they provide. In addition, the week communication strategies and less community engagement limited



community members understanding between community-based health service and other forms of services (Clement, 2011). Another implementation challenge has to do with communities expecting a CHPS to provide higher clinical services. The population reached through CHPS services nationally was about 5% at the time making it look like investing in CHPS was not good enough. This raised the question of whether nation was optimally implementing the strategy or whether the CHPS strategy had value for money (GHS, 2012). The low coverage of CHPS nationwide could be because of the methods and indicators in measuring CHPS performance. CHOs have of reporting on the work they this is however a challenge because of work load. That is the of filling many forms for various indicators and some specific activities which gives them more work to do (Ministry of Health, 2016). Furthermore, the initial idea of a CHPS zone to a CHN led to an over training of CHNs with the ratio being about 1:11 at a certain point and needed a review. Now with new policy a CHPS zone can have at least two CHOs. This review also presented various logistical challenges in terms of accommodation and amenities. The training program for CHNS was initially designed without any consideration for career progression, and it became a problem leading to high attrition of CHNs. There was also no policy direction on how long a CHN should work in a deprived community or incentives in place to reward those serving in deprived areas coupled with lack of career demotivating these nurses. The way volunteers should be selected for the smooth running of the program and their training are all captured in the new policy document. It was revealed in a report that about 55% of CHPS zones have no volunteers working with CHOs and the CHPS zone that had volunteers some were not active (MoH, 2014). Volunteers are to compliment the efforts of staff in the provision services patients



without any salary. The low availability of these volunteers could be attributed to several

factors key among them may many and sometimes conflicting programs drawing on their skills. There was no policy on how to reward and motivate volunteers which led to fatigue. Many other programs especially NGOs have introduced volunteers to cash reward and created a challenge for the volunteer system in Ghana health service in several communities making volunteers expecting cash reward for services the render. In some sub-districts volunteers sometimes hired community members who perform volunteer roles (Awoonor-Williams et al., 2013). There are proposals from the Ministry of Health to retool existing volunteers and regularize the payment system by providing some monetary payment. The weak and sometimes non existing Community Health Management Committees was another challenge that was in all regions. Though they were formed in most CHPS zones, members were inactive or not trained in about 65% of the CHPS zones (GHS, 2014). Community entry mobilization to support the CHPS programme were not done as expected. There were issues of inappropriate siting of CHPS compounds and in some instances, lands allocated for CHPS were either in sacred groves, insanitary environments and not sensitive to the cultural situation and taboos (Ministry of Health, 2016). There were also issues of no security, no water and electricity. Financing CHPS was also not clear. Different development partners have funds for supporting the development and scale up of CHPS but there is no coordination and harmonization of the various funds. The NHIA does not reimburse CHPS services directly making it for them to access their internally generated funds. CHPS zones provide services and the NHIA reimburse their mother sub districts (Ministry of Health, 2016).



2.3 Contribution of CHPS

The mandate of CHPS is to provide essential primary healthcare for the people residing in smaller communities and rural areas. Several studies reported that the CHPS concept of health care provision has contributed in diverse ways to the health status of the people living in their catchment areas. Findings from a study in the Upper West region showed that through their mandate of primary healthcare provision, CHPS have contributed directly to improvement in community health particularly access to family planning services, and other forms of services (Woods et al., 2019). The study further reported that the CHPS concept has also indirectly strengthened the social, human, and economic capital which has led to some improvement in the social cohesion, awareness of health care needs, and willingness to take actions at the community level (Woods et al., 2019). Also, according to the 2016 annual report of the Ghana health service the region recorded some improvement in some of the service delivery indicators despite some challenges. Provision of services at the door steps of the people through the CHPS initiative has been a priority for the region. The operational CHPS zones increased in number from 202 in 2015 to 227 in 2016 with a corresponding increase in the number of compounds from 194 in 2015, to 209 in 2016. The population covered in percentage terms by CHPS services, increased from 51% in 2015 to 54% in 2016. In response to the GHS policy directive to improve geographic access by aligning CHPS zones to electoral areas the region as at the close of 2016 has demarcated 256 zones - a short fall of 42 zones in matching the 298 electoral areas in the region (GHS, 2016). Over 80% of the population in the Sissala East Municipality is being served by CHPS. The success of CHPS implementation continuous to have a positive impact on health service delivery in the municipality. From the Sissala



east annual report, CHPS contributed 49.8% of ANC services, 22.9% of skilled delivery, 22.9% of Post-natal care services, 56.6% of family planning services; 62.4% of BCG, and 85.7% of children vaccinated with penta 3 for the year (SMHD, 2019). Attesting to these findings in the Sissala East Municipality another study revealed that CHPS compounds are highly patronized in the study area. Hence, they are achieving the main purpose for which the CHPS initiative was designed and implemented (Wiru et al., 2017).

Also, increasing in access to community-based health care was reported to have improved contraceptive use among women of reproductive age (Asuming et al., 2020). Supporting these findings further, another study reported that Community-based services enhanced attitudinal change towards more acceptable family planning in a traditional sub-Saharan African setting and improved survival of children (Dalaba et al., 2016).

A similar rural health care intervention that used community health promotion officers in the Uganda comparable to the CHPS concept in Ghana reported changes in health knowledge, increased utilization of preventive and treatment approaches, as well as increased maternal, newborn, and child health service coverage that led to a reduced under-five mortality rate by 27 percent, infant mortality rate by 33 percent, and neonatal mortality rate by 27 percent (Nyqvist et al., 2019).

According to another study findings, CHPS contributed significantly particularly in bridging geographical access to health among rural populations (Assan et al., 2018). A systematic review done by Ntoimo et al. (2019) found that effective delivery of primary health care which is imbedded in the CHPS concept of care significantly improved maternal, new-born and child health in sub-Saharan Africa.



Community-based service delivery through a resident female community health worker increased health service utilization in rural, hard-to-reach areas in Nigeria (Uzondu et al., 2015). An example is reported where a community recorded over 500% increased rate of health facility visits; with monthly antenatal care coverage increased from a range of 0.9% -5.8% to 11.9% - 21.3% respectively, in the preceding year; and also, more than doubled facility-based deliveries following deployment of female community health officer at two separate communities. This same study found evidence of sustainability of these changes over the 2 subsequent years (Uzondu et al., 2015).

Furthermore, where CHPS compounds are set up near health facilities, there is improved access to care, demonstrating the facilitatory role of CHPS in stimulating access to better care at birth (Johnson et al., 2015). Moreover, Johnson et al. (2015) revealed that uptake of skilled care at birth has increased in communities where CHPS has become functional compared to communities where CHPS has not become functional but access to health facilities remain limited. Indicating that uptake of skilled birth care was 25.0% prior to CHPS becoming functional but increased to 30.1% after CHPS became functional.

In Ethiopia, the health extension program (HEP) comparable to the CHPS concept in Ghana enabled Ethiopians to achieve significant improvements in maternal and child health, communicable diseases, hygiene and sanitation, knowledge and health care seeking behaviour (Assefa et al., 2019).

On the contrary, Navrongo community nurses and volunteers had no measurable impact on neonatal survival among respondents according to a study. Although neonatal mortality gradually declined in the study area, this progress is related to factors other than community-based primary health care exposure (Brooks and Johnston, 2012).



A related study in Bunkurugu revealed that the CHPS strategy has improved physical access to designated CHPS services in the district (Abdul-Rahaman, 2018).

Additionally, the CHPS programme is fulfilling the initial intent of providing accessible health care to the people in the selected communities and by so doing the author can conclude that although the CHPS programme is bedeviled with some challenges, it has significantly impacted positively on the health of the people in the district. It is recommended that civil society organizations should support efforts by government in providing healthcare to those at the grassroot (Jeedah, 2018).

The study findings revealed that, CHPS zones offer a viable option for increased access to PHC for the rural poor in the Nadowli District, hence considered efficient and effective in PHC delivery(GUMAH, 2010).

The contributions of CHPS to the general delivery of health services in Ghana continues to record improvement on yearly basis. In 2016, CHPS impacted 8.5% to the total OPD cases compared with 8.1% in the year 2015. In the Upper East region 16% of OPD cases came from CHPS, also in the same region CHPS equally contributed 38.9% to Penta 3 immunization coverage in 2016 compared to 36% in 2015. In the Eastern Region CHPS the contribution was as much 59.7% to their Penta 3 coverage. On FP acceptors there was over 25% from CHPS where 47.9 % which was highest, was recorded in the Eastern region and least of 9.7% was also recorded in the Greater Accra region (Ghana Health Service, 2016).

Furthermore, a study revealed 77% of women who said they either very satisfied or satisfied with quality of care for childbirth at the CHPS. Reasons for women's



satisfaction included the availability of midwives to provide childbirth services and to have follow-up homes visits (Dalinjong et al., 2018a).

2.4 Challenges Affecting CHPS Implementation

A number of studies reported varying forms of challenges affecting CHPS implementation in an effort to increase access to health care among the rural poor. For example, poor roads and lack of transport, inadequate staffing and absence of electricity in most CHPS facilities were identified by Woods et al. (2019) in Lawra Municipality and Wa West District of the Upper West Region. Also, the full functioning of the CHPS initiative is limited by factors such as health governance and leadership, provision of services of quality, financial risk protection strategies targeting public health, information and care continuity, and the right mix of trained health professionals of even distribution across communities (Assan et al., 2018).

Furthermore, one more study identified that CHOs in the early phases of CHPS implementation were unprepared to deliver essential health services, such as addressing maternal and neonatal complications (Awoonor-Williams et al., 2013). In addition, the initial training program for CHOs did not provide them with the necessary skills in how to engage with the community (Awoonor-Williams et al., 2013). Awoonor-Williams et al. (2013) noted also that complicated Health Management Information System (HMIS) that overburdened staff to the detriment of service delivery and lack of feedback on the collected data resulted in little use of the information to improve service delivery. They further reported lack of leadership and political engagement, coupled with the absence of a committed budget for CHPS, that resulted in inadequate resources and a lack of focus on and clarity about the program.



Similar constraints that related to productivity and efficiency of health extension workers (HEWs); working and living conditions of HEWs; capacity of health posts; and, social determinants of health were identified with a community based intervention program in Ethiopia (Assefa et al., 2019).

In addition, a study revealed that communication gap between the health providers and the people in communities within which CHPS are located led to much higher expectations of the kind of services they should receive compared to the deliverables (Kushitor et al., 2019). Sakeah et al. (2014) also reported from their study that inadequate transportation, infrequent supply of drugs, attitude of nurses as challenges, hindering women accessing maternity services in rural areas. Consistent neglect of the construction of roads and the widespread poverty in the rural areas where CHPS are mostly situated led to lack of vehicular transport and this makes the provision of alternative transport services for health care problematic. This has further resulted in pregnant women using risky means of transport such as bicycle/tricycle/motorbikes (Atuoye et al., 2015b). Other dimensions of challenges affecting CHPS include financial accessibility and certain sociocultural norms and beliefs regarding gender roles that lower the utilization of services delivered through the strategy. (Abdul-Rahaman, 2018). Challenges of CHPS outlined in the 2019 annual report of the Sissala East Municipality; inadequate basic and essential equipment for some CHPS compounds, Some CHPS compounds are not connected to national Grid ,weak motorbikes for some CHPS compounds and others do not even have, no portable water at most CHPS zones, no toilet and urinal pits for clients at some CHPS zones ,Some facilities in deplorable state ,Hard to reach communities (SMHD, 2019).



In spite of the great successes chalked, CHPS implementation in the region still have a

number of challenges. These include frequent changing of CHO leading lack of continuity in some important community level activities such as Community Health Action Plans (CHAPs). Inability of the region to market its strengths and showcase its success stories in CHPS, Delay and inconsistencies associated with CHPS data thus affecting our performance on DHIMS, Weak Home visit performance due to absence of reporting systems, Slow rate of alignment of functional zones to electoral areas (Current rate is 87% of Electoral areas), inadequate monitoring and technical support to CHOs, inadequate medical equipment, weak or no transport for CHPS activities, inadequate space of the compound and poor provision of basic amenities such as toilet facilities for clients, water, electricity (any form) in CHPS compounds (GHS, 2016). Lack of transport can undo the good work of CHPS on maternal and child health. Also, the continuous neglect of road construction and development couple with poor economic fortunes of the Sissala East Municipality makes provision of alternative transport services for health care a problem. The use of bicycles, tricycles, and motorbikes to access obstetric health care services especially during emergencies, has made people to sometimes turn to rely on traditional medicines and traditional birth attendants for maternal health care services. (Atuoye et al., 2015a). Other findings also saw that shortage of medicines (41.5%), lack of money to pay for services (28.7%) and absenteeism of Community Health Officers (CHOs) (12.3%) were major barriers to the use of the facilities (Wiru et al., 2017).



A survey results also showed that only two (14%) out of fourteen facilities had clean water, and five (36%) had electricity, emergency transport for referrals was available in only one (7%) facility and basic drugs, medical supplies, equipment and infrastructure

especially physical space were inadequate. That is the rooms used for delivery purposes in some facilities were small and are also even used for many purposes. Confirming this Eighty-nine percent of women reported lack of privacy during childbirth claim (Dalinjong et al., 2018a). "There is a referral system to link the various levels of care but it is currently not working well, resulting in secondary and tertiary hospitals also using significant proportions of their resources for primary care services (Agongo et al., 2017). Still on challenges a study by Irene (2017) also further outlined the following; lack of logistics, poor accommodation for health staff, lack of electricity and difficult in maintaining the cold chain to be affecting the CHPS strategy (Irene, 2017). Adding to this was another study findings which revealed that community members do not participate fully in the decision – making of the CHPS programme where some were even of the view that they are completely neglected in the process (Jeedah, 2018). The challenges of CHPS are multifaceted in nature and can become complicated as revealed in this study, "negative attitude, high attrition, inadequacy and unavailability of health professionals at post when needed were challenges associated with the health professionals. Late referrals, lack of proper community entry and engagement, non-availability of essential logistics, distance of CHPS compounds from communities, and inadequate funding were challenges associated with the health system. Lack of community ownership of the CHPS programme, lack of security at CHPS compounds, and late reporting of cases by the community members were also realized as challenges emanating from the community members" (Kweku et al., 2020). Finally, low health insurance coverage, poor community participation and misunderstanding of the CHPS concept were also some challenges of CHPS similar to other study findings stated before. (Gumah, 2010).



2.5 Geographical Location of CHPS

The municipality has made tremendous efforts in the implementation of the CHPS concept. Out of 52 demarcated CHPS zones, 46 are operational for the period under review(SMHD, 2019). The GHS policy directive to improve geographic access by aligning CHPS zones to electoral areas also saw the region increase in the number of demarcated zones to 256 - a short fall in matching the 298 electoral areas in the region (GHS, 2016).

The mal-distribution and problems associated with geographical and financial access coupled with staff attrition of highly qualified staff mean that new ways of working are required to deal with the basic ailments that plague the poor. In response to this the CHPS initiative views that working with households and communities to ensure the availability of appropriate community-based services, and addressing all barriers to access at the local level are some of the most important areas that require new and innovative approaches (Karbo, 2015). With a total of 308 functional Community-Based Health Planning and Services (CPHS) zones out of 361 demarcated for construction in Upper West Region, 62 percent of the population of has been covered. The CHPS concept which serves as a vehicle to deliver Primary Health Care (PHC) is vigorously being implemented by the Regional Health Management Team and the 62 percent according to health authorities is an improvement over that of previous year (GNA, 2020).



CHAPTER THREE

STUDY AREA AND RESEARCH METHODOLOGY

3.0 Introduction

The chapter is divided into two main sections basically, Section A deals covers the geography of the study area and section B deals with methodology employed to conduct the study.

3.1 Background of Study Site

3.1.1 Location and background

Sissala East is a Municipality in the Upper West Region. It was carved from the former Sissala District in 2005 for easy governance. The District got elevated to the status of a municipality in 2018. Eastward the Municipality is bounded by the Upper East Region (UER) specifically the Paga Chiana and Builsa Districts, South by Wa East, West Mamprusi Municipality and Nadowli Municipality, to the West by Sissala West District. The Northern boundary is shared with Republic of Burkina Faso. The Municipality lies between Longitudes 1.300 W and Latitude 10.000 N. The total land size of the Municipality is 4,744 sq. km, which represents 26% of the total landmass of the region (SMHD, 2019).



Tumu is the capital of the Sissala East Municipality. The municipality has 62 communities with a population of 68,578. Majority of the people are Sissalas. Some other minority tribes also living in the municipality include Grunsis, Dagaabas and Akans. The municipality has a low population density of about 12/ km2. Most roads in the Municipality are in a deplorable state and need urgent attention. About 68% of the population are subsistent farmers with few farmers now going into commercial maize

production. The rearing of animals, mostly livestock and, poultry are on a small scale. Cotton, which was the only cash crop grown by some farmers, is now produced in low quantities. Despite the rearing of the livestock and poultry, the people do not consume much of these, but rather transport them to the south to sell for money to enable them to buy other needs. The municipality has only one rainy season beginning averagely, March to September in most years. This pattern is, however, changing gradually in recent times due to the changing climatic conditions (SMHD, 2019).

Figure 3.1: Map of Sissala East Municipality

DISTRICT MAP OF SISSALA EAST BURKINA FASO SISSALA WEST labugubelle Bichemboi DAFFIAMA BUSSIE Duu East WA EAST MAMPRUGU MOAGDURI LEGEND District Capital Road Network District Boundary

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3.1.2 Vegetation and climate

The Sissala East Municipality is within the Guinea Savannah vegetation zone. Based on this, inhabitants of the Municipality are prone to the outbreak of Epidemic Meningococcal Disease (commonly known as Cerebro-Spinal Meningitis) during the dry season starting mostly from middle of November to April of the ensuing year. The vegetation consists of grasses with scattered fire-resistant trees such as the Shea nut, the Baobab, and Dawadawa trees. Acacia is also a common tree of this vegetation belt. The heterogeneous collections of these trees meet domestic requirements for firewood and charcoal, construction of houses, cattle kraals, and fencing of gardens. The shorter shrubs and grasses provide fodder for livestock. This circumstance has brought about the entry of Fulani herdsmen in large numbers popularly knowns as (trans-humans) from neighboring Burkina Faso into the Municipality especially, during the dry season. Their activities, coupled with the rampant illegal logging of rosewood, have to be appropriately controlled and managed if the environment is to be protected and food security assured. The shea nut tree, which is a seasonal crop, is an economic asset in the Municipality. Women harvest these shea nuts through handpicking and also do shea butter extraction in small scales for both domestic and commercial use. The industry can be developed to serve as major source of livelihood for these women in the Municipality. The Municipality has a forest reserve with a total area of about 267sqkm, which supports mammalian wildlife. This is however threatened by the rampant bush fires and the illegal lodging of trees.

The climate of the Sissala East Municipality is tropical continental as experienced in the northern regions of Ghana. In a typical year, temperatures are usually high, with a

minimum temperature of 23°C at night and a maximum of 42°C during the day. These high temperatures favor plant growth. The mean monthly temperature across the Municipality ranges between 21°C and 32°C. The highest monthly maximum temperature rises to 40°C before the rainy season in May, with the lowest minimum temperature falling to about 12°C in December when the Harmattan winds from the Sahara dry up the vegetation. The municipality has one crop farming season due to the one rainy season (May to September/October) experienced annually. The one farming season affects the economic fortunes of the people, which causes the youth to migrate to the south in search of greener pastures. Thus, the need to have adequate irrigation facilities to promote and enhance agricultural activities in the dry season. In line with this, effective implementation of the current government's policy of 'one village, one dam' will engage the youth during the dry season. As a result, this may improve the incomes of households directly involved in irrigation farming. Besides, it is imperative to identify and provide alternative sources of livelihood to the people to complement their occupations and improve their income-generating capacity. The Municipality, due to its position, has an advantage for trade and other cross border activities. The position of the Municipality has an advantage for international trade and even internal economic activities. This locational advantage is part of the potentials for the development of the local economy. However, the Municipality, by its location, also faces the threat of illegal immigrants from neighboring countries. Prominent among them is the insecurity posed by the invasion of Fulani herdsmen into the Municipality, especially the Kunchogu submunicipality, which has become a norm every year. Consequently, this has implications



on health service delivery as well as indicators in the Kunchogu sub-municipality and the Municipality as a whole (SMHD, 2019).

3.1.3 Socio-cultural

The Municipality has 62 communities which were divided into 4 Zonal Councils and one urban council. The languages spoken are: Sissali, Grunni, Dagaari and Mossi. However, Hausa, Akan, and English are widely spoken particularly within the capital.

Islam, Christianity and traditional African religion are the religions that are popularly practiced in the Municipality. However, the effects of some religious beliefs have negative implications on the health of the people, since some of these beliefs have seriously undermined the acceptance of some health messages and interventions. The cultural practices among the Sissalas is dynamic. The Sissalas celebrate the "Paari Gbiele" festival once every year while the Kassenas celebrate the "Farkuuru" festival every year. The municipality has several tourism potentials, which include: the slave market at Kassana, Pieng mysterious rocks, Nmanduonu mysterious River, Wuru, Kwapun, and Banu bone setters, the Santijan Historical site, and the White man's grave at Tumu (SMHD, 2019).

3.1.4 Socio-economic activities

Agriculture (both crops and livestock rearing) is the primary occupation of the inhabitants in the Municipality. A small number of people, especially women are involved in trading. These people visit several markets within and outside the Municipality to buy and sell maize, yam rice and some of the food crops that are produced in large quantities in the Municipality. The major markets in the Municipality Tumu, and Bugubelle including



other satellite markets such as Nabugubelle, Nabulo, Bawiesibelle across other parts of the Municipality (SMHD, 2019).

3.1.5 Education

The Sissala East Municipality has low literacy rate but this is higher in males than females. However, the continuous expansion of government's school feeding programme coupled with the Free Senior High School Programme (FSHS), many basic schools in the Municipality are likely to improve upon the literacy rate in the near future. Data from the 2010 population & Housing census indicates that more than half of the population (58.4%) 11 years and older are not literate. This invariably affects health seeking behaviours of the people to a large extent and also poses a challenge on how to craft health promotion and educational messages to target all these people. It calls for the adoption of different approaches to these health education & promotional messages (SMHD, 2019).

3.1.6 Communication

There is one local radio station (RADFORD FM) in the municipality and more than two FM stations in the regional capital, Wa that be tuned to in the Municipality. These radio stations help the rural people to be informed, sensitize, and other times entertained.

The national TV network covers the Municipality. However, only GTV transmission gets to the Municipality. There are few internet facilities where people visit for internet services in addition to the use of mobile phones and other portable devices as WiFi.

The various health facilities in the Municipality were networked on GHS/MOH regional T.P. radio programme. This gave the health staff at lower facilities to interact with the



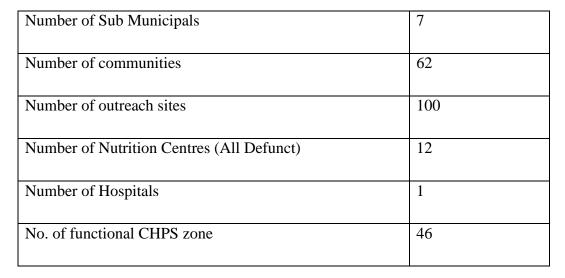
Municipal hospital and the Municipal Health Administration, especially on the referral of patients. This network system broke down in 2005 and all efforts to have it repaired proved futile (SMHD, 2019).

3.1.7 Health infrastructure

The Municipality has one hospital, Eight (8) Health Centres (HC), forty-six (46) functional CHPS zones (34 with compounds), one Mother and Child Health and Family Planning (MCH/FP) Clinic, one private hospital, one Maternity Home, and 12 Nutrition Centres that not more functioning.

The Municipality has three Ghanaian trained doctors, one returning from further studies. The doctor patient ratio is 1:22,859 compared to 1:33, 514 population per a Doctor the same period for the previous year. This is however an improvement over the previous year because of the return of the third doctor who was in school. The ratio could be more in reality as the municipal hospital is also a referral center for people from the Sissala West District and Burkina Faso (SMHD, 2019).

Table 3.1.7A: Number of health facilities in the Sissala East Municipality





Modern Private Hospital	1
Private Maternity Home	1

Source: Sissala East MHA (2019).

Table 3.1.7B: Projected population by facilities – 2019, Sissala East

SUB		0-11	12-23	0-23	6-59	24-59	0-59		
-		mths	mths	mths	mths	mths	mths	WIFA	Total
MU N	Facility	4%	4%	8%	18%	12%	20%	23.7%	
	Kulfuo H/C	49	49	99	223	148	247	293	1237
	Mwanduonu								2646
On	CHPS	106	106	212	476	318	529	627	
KULFUO	Tarsaw CHPS	55	55	111	249	166	277	328	1385
K	Challu CHPS	119	119	237	533	356	593	702	2963
	Sub-Total	329	329	658	1482	988	1646	1951	8231
	Nabulo H/C	87	87	174	392	261	435	516	2176
	Bawiesibelle CHPS	67	67	134	301	200	334	396	1670
	Santijan CHPS	38	38	76	170	113	189	224	945
	Duu- East								
	CHPS	31	31	63	141	94	157	186	786
10	Guosi CHPS	55	55	110	246	164	274	324	1369
NABULO	Fachoboi CHPS	43	43	85	192	128	214	253	1068
N A	Komo CHPS	33	33	67	150	100	167	198	834
	Sub-Total	354	354	708	1593	1062	1770	2097	8848
	Tumu H/C	291	291	581	1308	872	1454	1723	7268
	Chinchang CHPS	36	36	72	162	108	180	214	902
	Kasana CHPS	41	41	81	183	122	203	241	1017
	Kong CHPS	196	196	392	881	587	979	1160	4894
MU	Dimajan CHPS	36	36	73	164	109	182	216	910
TUMU	Taffiasi CHPS	54	54	108	244	162	271	321	1353
	Sub-Total	654	654	1308	2942	1961	3269	3874	16344
	Sakai H/C	208	208	415	934	623	1038	1230	5190
	Sakalu CHPS	68	68	135	304	203	338	400	1689
	Pieng CHPS	77	77	153	345	230	384	455	1918
ζΑΙ	Lilixi CHPS	80	80	160	361	241	401	475	2006
SAKAI	Sentie CHPS	31	31	62	141	94	156	185	781
	ı						1		



	Bandei CHPS	64	64	127	287	191	318	377	1592
	Sub-Total	527	527	1054	2372	1581	2635	3123	13176
[4]	Welembelle H/C	235	235	469	1056	704	1174	1391	5868
ELLE	Bugubelle CHPS	174	174	347	781	521	868	1028	4339
WELEMBELLE	Bichemboi CHPS	43	43	87	195	130	217	257	1086
WEJ	Jijen CHPS	43	43	86	194	129	216	255	1078
	Sub-Total	495	495	990	2227	1485	2474	2932	12371
JU	Kunchogu H/C	31	31	62	140	93	155	184	776
100	Wuru CHPS	51	51	102	229	153	255	302	1273
KUNCHOGU	Banu CHPS	50	50	101	227	151	252	299	1261
KU	Pina CHPS	46	46	93	208	139	232	274	1158
	Sub-Total	179	179	357	804	536	894	1059	4468
CE	Nabugubelle H/C	75	75	149	336	224	373	442	1867
BEL.	Yigantu CHPS	24	24	49	110	73	122	145	611
NABUGUBELLE	Bujan CHPS	54	54	108	244	162	271	321	1354
	Dolibizon CHPS	52	52	105	235	157	262	310	1308
	Sub-Total	206	206	411	925	617	1028	1218	5140
Munio	Municipal Total		2743	5486	1234 4	8229	1371 6	16253	68578

Source: Sissala East MHA (2019).

Other health providers in the Municipality:

Table 3.1.7C: Other health service providers in Sissala East Municipality

14	

Other Health Providers	2017	2018	2019
Trained TBAs	95	95	95
CBDSV	92	92	92
Chemical sellers	9	15	15
Traditional Herbal units	2	2	7
CBAs	172	172	172

Source: Sissala East MHA (2019).

3.1 Study Design

Cross-sectional study design was adopted to achieve the set aims of the study. This study design best suits the purpose of the study. The study was to be conducted within a short period.

3.2 Study Type

The study basically comprised of mixed methods that is qualitative and quantitative methods. A questionnaire was designed in line with the study objectives and research questions and using the literature on the issues under investigation (CHPS), which helped to capture a lot of information including characteristics of the respondents and to locate the various CHPS zones selected for the study. Also, key informant interviews were conducted for CHPs zone heads, sub-municipality heads and Community Health Management Chairpersons of the CHPS zones. The qualitative data collected was used to address the challenges and contribution of CHPS zones. Quantitative data collected was gotten from the structured questionnaire designed for data collection. Responses were sought from two hundred and sixty-three (263) respondents for descriptive and inferential statistics.

3.3 Study Population

The population comprised CHPS zone in charges, sub municipal in charges, chairman/representatives of CHMCs and household members. These groups constituting the study population are those who manage and utilize the CHPS services in the Sissala East Municipality. The responses that were obtained from these groups enabled an assessment of the contributions of CHPS to heath service delivery to the Municipality. Consequently, the information obtained may inform policy direction on the way forward

with regards to the CHPS initiative in the area of implementation and considerations for a possible review of the programme where the data strongly suggests so.

3.4 Data collection procedure and tools

Well-structured questionnaires were used to obtain data on geographical distribution of CHPS zones, CHPS contributions and challenges of CHPS as well as the challenges at household level which hinder maximum access to health service provided by CHPS. This questionnaire comprised of open and close ended questions which gave the respondents the opportunity to respond to every indicator of interest to the study. Also, an interview guide for key informant interviews for the sub municipals in charges, CHPS zone in charges and CHMC chairman/representative was designed and used for collection of qualitative data. The key informant guides were designed specifically to answer some objectives outlined in the study.

3.5 Sampling Procedure

The study sample was drawn from the study population which constitutes the sample frame. The sample drawn was based on the multistage sampling technique where cluster sampling was adopted to group localities according to geographical distribution. Submunicipals were used as the clusters for this study. In each cluster, one CHPS zone and its respective communities selected through simple random sampling technique. From the seven CHPS zones selected, a total number of 1965 of households was determined. Using proportionate sampling technique, the number of households selected from the study communities are indicated in the brackets. Thus, Jijen (n=30), Bujan (n=30), Challu (n=75), Lilixi (n=38), Bassisan (n=12), Santijan (n=12), and Kassana (66).



Systematic sampling method was adopted in identifying households to be interviewed. In each household, the household mother or any other member who surpasses the age of 20 years was interviewed to solicit responses to address the research objectives.

3.6 Sample Size Determination

A population of interest of normality of the dataset was assumed in this study. Due to the fact that probability sample procedure was key in the processes leading to data collection, the sample calculator for normally distribution data was adopted to determine the sample of the study. The formula used was;

$$= Z^2 \times P(1-P)/E^2$$

Where Z = Critical value set as 1.96

The probability of success (P) = 0.8

The probability of failure (1-P) = 0.2

Margin of Error (E) = $5\% \approx 0.05$

$$\therefore 1.96^2 \times \frac{0.8(1-0.8)}{0.05^2} = 246$$

(Charan & Biswas, 2013)

5% non-response rate was anticipated and an additional 17 households were added to the initial 246 bringing the total sample size to 263.

3.7 Study Variables

The dependent variables considered in this study were CHPS contributions as perceived by household members, and the perceptions of sub municipal and CHPS zones staff as



well as Community Health Management Committee (CHMC) members. For instance, Antenatal care, Postnatal care, Family Planning, immunization, referral services, emergency delivery, exclusive breastfeeding services, nutrition education on food supplements, education on infant and young child feeding, health education on infectious diseases, health education on chronic disease, and education on clinical management of minor illness, and home visits.

The independent variables were challenges of CHPS zones to healthcare service delivery and challenges at household level hindering household members from accessing maximum utilization of healthcare services provided by CHPS. For example, access to health services, fees being charged at CHPS zones, lack of 24-hour service availability, poor health worker attitude, lack of essential medicines at CHPS zones, and national health insurance (NHI) usage related challenges.

3.8 Sources of data

Data were collected from selected CHPS zones and a group of individuals in the Sissala East Municipality on the contribution of CHPS to health service delivery. Additionally, data were collected on challenges and the geographical distribution of CHPS in the Sissala East Municipality. Key informant interview guides and well-structured questionnaire were used for data collection.

3.9 Inclusion Criteria

The municipality consist of 62 communities and 52 CHPS zones with a total population of 68, 578. In this study, all households within the Sissala Municipality were considered. Also, all the CHPS zones, Community Health Management Committees and all the sub municipalities were targeted.



3.10 Exclusion Criteria

The study excluded households where the head of the household was below the age of 20 years. Also, households who had lived in the communities for a period of less than a year were excluded from the study.

3.11 Analysis and Interpretation

The data were cleaned and codes were also assigned for data analyses using SPSS version 24.0. A univariate analysis was performed to obtain simple frequencies for the socio demographic variable CHPS zones contribution and challenges, geographical distribution of CHPS and the challenges that confront households from accessing healthcare services provided the CHPS. A bivariate analysis was carried out using the Yates' Correction for Continuity to assess association between a general indicator satisfaction level of CHPS contribution at household level and challenges by households in their quest for accessing health services provided by CHPS. Furthermore, by using binary logistic regressions model, the odds and confidence intervals for satisfaction of general health service contribution (dependent variable) by CHPS at household level were assessed across some specific health service access related challenges (independent variables) such as fees being charged at CHPS zone, lack of 24-hour service availability, poor health worker attitude, lack of essential medicines at CHPS zone. The satisfaction level of CHPS health service delivery (dependent variable) by households was dichotomized (No satisfaction coded as '0'and satisfaction coded as '1'). Also, the independent variables were dichotomized where a "0" means lack of the problem and a "1" means the presence of the problem. In the adjusted models, the effects of age, education, number of years stayed in community and household size were accounted for because they were considered

potential confounding factors. In all the statistical tests for associations, when a P-value is < 0.05, it was considered statically significant.

In furtherance to the above statistical analysis, open-ended responses on perceptions of sub municipal and CHPS zones staff as well as community health management committee members of CHPS zones were manually analyzed.

3.12 Pre-Testing

Pretesting of the questionnaires were done on the field before the commencement of the data collection. This helped refined the data collection tools.

3.13 Ethical Consideration

The study protocols were certified by the Department of Community Health and Family Medicine, University for Development studies, Tamale. The consent of participants was sought through a consent form of the study in which the rationale of the study was explicitly explained to those who could not read and understand on their own. Each study subject was told of his or her exclusive right to withdraw from participating in the study at any stage in the data collection process. In case a potential respondent was an illiterate, a witness was present during the consent process to confirm that the right information contained in the consent form was properly explained. The consent to participate was without any coercion. Informed consent was documented with a signature or a fingerprint.



CHAPTER FOUR

PRESENTATION OF RESULTS

4.0 Introduction

This section contains the findings of the study from the data analysis which have been presented in tables and charts. The categories of information presented include sociodemographic data of respondents, the contributions, challenges and geographical distribution of CHPS. Also, the relationship between the challenges of CHPS healthcare utilization and the general satisfaction level of healthcare services provided by CHPS are highlighted.

4.1 Socio-Demographic Characteristics of respondents

In a whole, the respondents were young (35.76±12.89 years) with the age category of respondents, 109 (41.4%) making majority of respondents were within the 18-30 years age category, as 90 (34.2%) said to be within 31-43 years category, while a few (8%) in the 57-78 years age category.

The demographic information of respondents presented in table 4.1 below revealed that majority (83.7%) of the two hundred and sixty-three (263) respondents interviewed were females and only a few (16.3%) were males.

In terms of educational level, as much as 65.8% of the 263 respondents were said to have attained no formal education, 24.3% reported to have some basic education, while only 3.0% had tertiary education. On marital status, over 90% of respondents were married, while 12(4.6%) were said to be single and 4.1% making those said to be widows/widowers.



On the ethnic background of respondents, majority (69.2%) were found to be of the Sissala ethnic background, while 71(27.0%) were of Gurisi extraction and other ethnic groups making 10(3.8%).

The study also sought information on the household sizes of respondents and revealed an average household size of 5.77±2.37 members, from which 130(49.4%) of the 263 respondents had 2-5 persons making the households, while a few (3.0%) had between 11 and 15 persons making the household.

Table 4.1. The Demographic Features of Respondents

Variable	Frequency	Percentage (%)
	(n=263)	
Sex		
Male	43	16.3
Female	220	83.7
Age group (years)		
18-30	109	41.4
31-43	90	34.2
44-56	43	16.3
57-78	21	8.0
Education		
No formal education	173	65.8
Basic Education	64	24.3
SHS/Voc/Tec	18	6.8
Tertiary	8	3.0
Marital status		
Married	240	91.3
Single	12	4.6
Widow/ Widower	11	4.1
Ethnicity		
Sissala	182	69.2
Gurisi	71	27.0
Other	10	3.8
Household size		
2-5	130	49.4
6-10	125	47.5
11-15	8	3.0





4.2 Contributions of CHPS in health service delivery

Contributions of CHPS to health service delivery in Sissala East Municipality are shown in Table 4.2 below. For every single component of healthcare service contribution by CHPS, the majority (greater than 50.0%) of the households were satisfied. For example, it was observed that 156(59.3%) of the respondents were satisfied with ANC service contribution by CHPS. Additionally, 187(71.1%) and 196 (74.5%) of the respondents were satisfied with education on exclusive breastfeeding and education on infant and young child feeding, respectively. However, less than half of the household respondents in each case were satisfied in immunization and emergency delivery services thus, 129 (49.0) and 125 (47.5), respectively.

The key informant interviews conducted in this study revealed that all respondents had a clear understanding of the CHPS concepts. The key informants among other things espoused their expectations from their respective CHPS compounds, such as "to treat sick people, take care of pregnant women, and weighing children", "help deliver pregnant women, and giving of drugs", "ANC services, treatment of diseases", "we expect to see improvement in community participation in health service activities and this will enhance improvement in health service".



Also, all key informants in their interviews highlighted the contribution of CHPS in health delivery in different perspectives, as they mentioned treatment of diseases, referral, reduction in maternal deaths, etc. For instances some of them were quoted as saying, "treatment of diseases and home visits", "treatment of people, conducting deliveries, and referring people to higher health facilities", "disease prevention and home visits", "has reduced distances travelled to seek healthcare, save lives of people, provide emergency

delivery and reduce complications", "It has increased facility deliveries", "immunized children in all communities, treatment of minor ailments, referrals, reduced maternal and neonatal deaths, reduced TBA deliveries" among others. A facility in-charge from the technical side brought to the fore what she felt is one key contribution of CHPS, and said, "with the establishment of CHPS and CHPS zones pregnant women are being identified early and referred for early registration, case detection and early referrals and continuous monitoring of clients at the community level.

On the impression of the key informants on the impact of CHPS, all those interviewed noted they were at the least impressed with the contribution of CHOs.

On the effectiveness of the CHPS initiative, some of the key informants especially those of the community health committee had some divergent opinions as some thought it was effective, others felt it was not effective. However, almost all the CHPS facility incharges who were interviewed intimated that the CHPS initiative was effective in contributing to health service delivery. One of them was unambiguous in her position, saying "It is effective but needs improvement". Another expatiated her position to tell the reason behind the effectiveness of CHPS in health service delivery in her area, saying "CHPS initiative has been effective through community mobilization, community participation and the provision of primary health care".



Table 4.2: Contributions of CHPS in health service delivery in Sissala East Municipality

		Frequ	ency (%)		
Variable	Indiffere nt	Not satisfied	Satisfied	Very satisfied	Total
Antenatal care services	10(3.8)	36(13.7)	156(59.3)	61(23.2)	263(100.0)
Postnatal care service	21(8.0)	29(11.0)	185(70.3)	28(10.6)	263(100.0)
Family planning services	43(16.3)	16(6.1)	176(66.9)	28(10.6)	263(100.0)
Immunization	2(0.8)	9(3.4)	129(49.0)	123(46.8)	263(100.0)
Referral services	39(14.8)	53(20.2)	161(61.2)	10(3.8)	263(100.0)
Emergency delivery services	34(12.9)	64(24.3)	125(47.5)	40(15.2)	263(100.0)
Exclusive breastfeeding services	11(4.2)	15(5.7)	187(71.1)	50(19.0)	263(100.0)
Nutrition education on food supplements	56(21.3)	49(18.6)	133(50.6)	25(9.5)	263(100.0)
Education on infant and young child feeding	22(8.4)	31(11.8)	196(74.5)	14(5.3)	263(100.0)
Health education on infectious diseases	18(6.8)	52(19.8)	168(63.9)	25(9.5)	263(100.0)
Health education on chronic disease	34(12.9)	72(27.4)	138(52.5)	19(7.2)	263(100.0)
Education on clinical management of minor illness	1(.4)	33(12.5)	174(66.2)	55(20.9)	263(100.0)
Home visits	7(2.7)	84(31.9)	147(55.9)	25(9.5)	263(100.0)

Source: Field survey.



The level of satisfaction in the general contribution of CHPS in health service delivery among the household members is as shown in figure 4.1 below. It was revealed that 44.0% of the 263 respondents were satisfied with the overall contribution of CHPS in health service delivery, while 25.0 % were said to be very satisfied. Also, 29.0 % said

they were not satisfied with the general contribution of CHPS in health service delivery, with a very few (2.0 %) of the 263 respondents said to be indifferent as shown above (Figure 4.2).

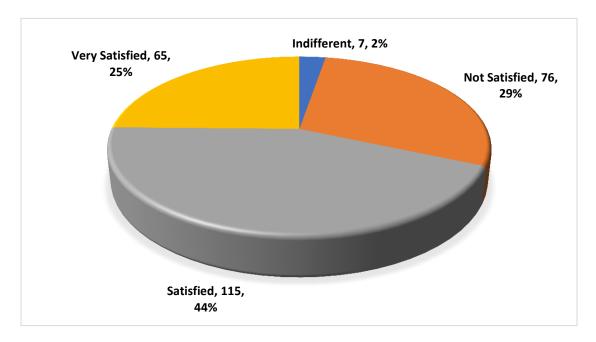


Figure 4.2 General satisfaction of health service provision by CHPS

4.3 Challenges of households in health service utilization by provided by CHPS

The study assessed a number of challenges that may affect the maximum utilization of healthcare services provided by CHPS, as household respondents were required to attest to the existence of some listed challenges. In all the challenges listed, except lack of essential medicines majority of the 263 respondents indicated the non-existence of these challenges, as shown in figure 4.3 below. In terms of accessibility challenges, close to 85% said they saw no accessibility challenges, 81%, 88%, 65% and 56.3% said no to the existence of fee payment, NHIS, health worker attitude and 24-hour service availability challenges, respectively. However, majority (55.9%) pointed to lack of essential



medicines at the CHPS to be a major challenge affecting their utilization of CHPS in health care delivery.

The key informant interviews conducted also sought information on the challenges faced by CHPS in delivering health care services to its fullest for the benefit of people in the CHPS zone and beyond. At the level of the leadership of the Community Health Committee a number of challenges of CHPS were mentioned such as inadequate staff, lack of vehicles (ambulance) and other logistics, and lack of cooperation among community members. Some of the comments made by individual respondents include; "no midwife, no delivery room, lack of medicine, lack of emergency transport, no light for the compound and inadequate staff", "inadequate staff, lack of drugs, poor community attitude toward health meetings", "lack of medicines, inadequate staff, lack of ambulance for referrals", "No permanent structure, lack of equipment, no adequate drugs, few staff, no accommodation for staff, lack of community corporation", "Lack of drugs, few nurses, no emergency transport, misconception of CHPS initiative by community members", among others.

interviewed as key informants mention a number of challenges faced by CHPS such as inadequate staff, poor understanding of the CHPS concept by some staff, inadequate logistics, low community participation, and so on. Some of the in-charges were quoted during the interview as saying, "logistics and human resource constraints are the

challenges", "Ineffective community participation especially during raining season,

On the part of the professionals managing the CHPS facilities, the facility in-charges

inadequate logistics, few CHOs and staff attrition are our problems in this area",

"hmmmm, in my place here our biggest challenge is lack of community emergency



transports, as well as lack of water and inadequate infrastructure", "logistical constraints, lack of human resource, bad road network, lack of infrastructure and lack of water", "under staffing, poor motivation for staff in the rural areas, poor community understanding of the CHPS concept and task shifting", "no light, weak structure that needs renovation, no security man, lack of motivation of staff from health system, lack of cooperation from community members, inadequate essential drugs and few number of staff", among others.

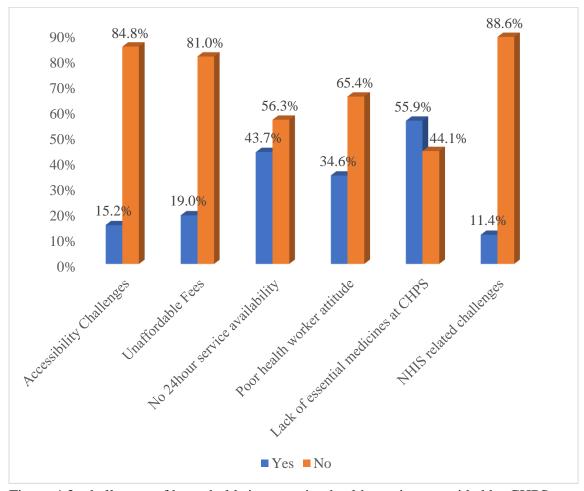


Figure 4.3: challenges of households in accessing health services provided by CHPS



4.4 Relationship between health service utilization challenges at household level and general satisfaction of health service delivery by CHPS

In this study, level of general satisfaction of CHPS health service contribution was used as a proxy to define overall health service contributions of CHPS in respect of ANC, PNC, FP, immunization, referral, emergency, EBF, supplementary food information provision, health information, and clinical management of chronic disease services at CHPS facilities as well as health service provision during home visits.

The relationship between health service utilization challenges at household level and general satisfaction of health service delivery by CHPS are shown below (Table 4.4A). The findings revealed a significant association between lack of 24-hour service availability and no satisfaction in general service delivery of CHPS ($\chi 2 = 10.661$, p = 0.001). Also, Poor health worker attitude was significantly associated with lack of satisfaction in general service delivery of CHPS ($\chi 2 = 33.597$, p < 0.001). Furthermore, there was a significant relationship between lack of essential medicines at CHPS and no satisfaction in general service delivery of CHPS ($\chi 2 = 10.661$, p = 0.001). Moreover, service fees charged was associated with lack of satisfaction general service delivery of CHPS ($\chi 2 = 15.706$, p < 0.001). However, NHI related utilization challenges at CHPS, and access difficulty did not show significant association with general service delivery satisfaction.

Table 4.4A. Relationship between health service utilization challenges and general satisfaction of health service delivered by CHPS

Variable		General CH delivery	PS Service	Chi-Square Continuity Correction (χ²)	P- value
		No	Satisfaction		
		Satisfaction			
	No	7(31.8)	152(68.2)	0.002	0.964
Service access	Yes	12(30.0)	28(70.0)		
challenge					
	No	55(25.8)	158(74.2)	15.706	< 0.001
Fees charged	Yes	28(56.0)	22(44.0)		
Lack of 24-hour	No	34(23.0)	114(77.0)	10.661	0.001
service availability	Yes	49(42.6)	66(57.4)		
Poor health worker	No	33(19.2)	139(80.8)	33.597	< 0.001
attitude	Yes	50(54.9)	41(45.1)		
Lack of essential	No	26(22.4)	90(77.6)	7.296	0.007
medicines	Yes	57(38.8)	90(61.2)		
NIHS related	No	78(33.5)	155(66.5)	2.742	0.098
challenge	Yes	5(16.7)	25(83.3)		

Source: Field survey.

From the results of the chi-square continuity correction test, lack of 24-hour service availability, fees being charged at CHPS zone, poor health worker attitude, and reports of lack of essential medicines showed significant relationship with the low satisfaction of CHPS service contribution in general (dependent variable) (Table 4.4A). The strength of these associations was further tested using binary logistic regressions model as shown below (Table 4.4B). from the analysis, the odds of general satisfaction of services provided by CHPS were lower among households who reported of not having 24-hour service availability (OR = 0.40, CI: 0.24-0.68; p=0.001). This relationship remained significant (OR = 0.51, CI: 0.27-0.95; p=0.033) upon adjustment for the effects of household characteristics (household size, age of respondent, educational status, and number of years respondent stayed in community). Also, the probability of being satisfied with general health service



provision by CHPS in the community was lower among households with reports of service fees being charged compared with those who were not charged fees for health service utilization (OR = 0.27, CI: 0.15-0.52; p<0.001). Moreover, after the adjustment of the household related characteristics, this observation still remained significant (OR = 0.18, CI: 0.09-0.39; p<0.001). Similarly, the odds of general service satisfaction were lower in households who experience poor health worker attitude compared with those who did not report of poor health worker attitude as a challenge (OR = 0.20, CI: 0.11-0.34; p<0.001). This result was still significant after the adjustment of household characteristics (OR = 0.15, CI: 0.09-0.26; p<0.001). In the same vein, households who reported of lack of essential medicines at CHPS facilities compared with those who did not report of lack of essential medicines were less likely to be satisfied with general service delivery by CHPS (OR = 0.46, CI: 0.26-0.79; p=0.005). This relationship was still significant after the adjustment for the covariates (OR = 0.44, CI: 0.24-0.83; p=0.010).

Table 4.4B: Determinants of general satisfaction of CHPS service delivery

Variable		General CHPS Service delivery				
		(No satisfaction = 0;				
		satisfaction=1)				
		Odds ratio	Confidence Interval	P-value		
Service fees charged	Model 1	0.27	0.15-0.52	P<0.001		
(no=0; yes=1)	Model 2	0.18	0.09-0.39	P<0.001		
Lack of 24-hour service	Model 1	0.40	0.24-0.69	0.001		
availability (no=0; yes=1)	Model 2	0.51	0.27-0.95	0.033		
Poor health workerr	Model 1	0.20	0.11-0.34	P<0.001		
attitude (no=0; yes=1)	Model 2	0.17	0.07-0.32	P<0.001		
Lack of medicines	Model 1	0.46	0.26-0.79	0.005		
(no=0; yes=1)	Model 2	0.44	0.24-0.83	0.010		



Model 1: unadjusted; Model 2: adjusted for age, education, years stayed in community and household size. In both models, the categories coded 0 were considered the reference whereas, those coded 1 were compared with the reference. The general satisfaction of CHPS service delivery was dichotomized (no satisfaction as 0, and satisfaction as 1. The contrast function was used to set reference categories for education status it had more than 2 categories. All statistical results were considered significant when p-value <0.05

4.5 Geographical Location of CHPS

The figure below (Figure 4.5) represents respondents' position on whether they were satisfied with the location of the CHPS compound or not. It was revealed that majority (96.6%) of the 263 respondents were satisfied with the location of their respective CHPS compounds, while a few (3.4%) indicated they were not satisfied with the location of their CHPS compounds.

The community health management committee members who were enrolled for the key informant interviews made their views known regarding their satisfaction of the geographical location of the CHPS. Whiles some of them said they were satisfied with the location others said they were not satisfied, either the location was said to be too close to the community others said it was far away. While some were satisfied with the nearness, others felt as it was too close to their homes, and felt there was no privacy when seeking health care. The following are some of the comments made by the respondents with regards their satisfaction on the location of their CHPS compound; "yes am satisfied, it is closer to everyone in the community", "no, it is too close to the community", "yes, because it is easy to access, no cost of transportation", "no, am not satisfied with the location because we have a new site for the compound, the current structure is a temporary one", among others.

The community health management committee members who were interviewed as key informants were again asked to know if members of their communities were satisfied



with the location of their CHPS compound. Almost all the key informants said the people in their communities were satisfied with the location as it is closer to everyone in the community, saving them transportation challenges when they have to seek medical care.

Further, the facility in-charges interviewed as key informants in this study expressed their views on the distribution of CHPS zones in the municipality. Some of them expressed their satisfaction saying almost all communities are covered while others noted they were not satisfied with the distribution saying some communities are not having CHPS compounds. Some of the opinions expressed could be quoted as, "yes, I am satisfied with the distribution of the CHPS zones because almost every community is under a CHPS zone and every electoral area has a CHPS compound and some located in town", "yes, I am satisfied but we still need one more", yes, because all the far ends have CHPS", "no, I am not satisfied with the distribution as some of the places are not closer to water", among others.



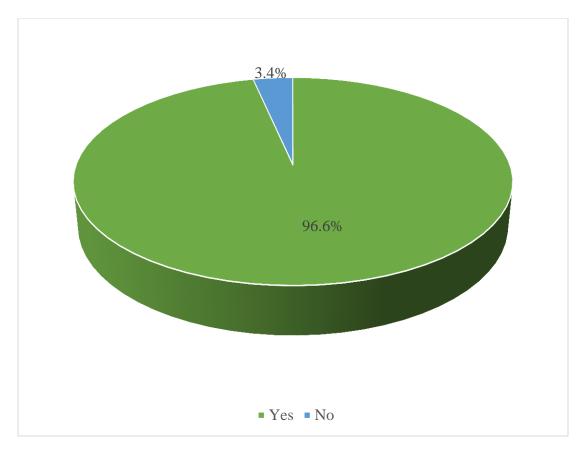


Figure 4.5: Satisfaction of respondents on location of CHPS.



CHAPTER FIVE

DISCUSSION

5.0 Introduction

The present study examined geographical distribution of CHPS compounds as well as the contributions and challenges of CHPS in health service delivery. Also, the suitability of the location of the CHPS compound from the household 's perspective was evaluated including the challenges they face in their quest to access the health services provided by the CHPS.

The findings revealed that the geographical distribution of CHPS in the Sissala Municipality is good. The main health services contributions include; ANC, PNC, emergency deliveries, management minor ailments, exclusive breastfeeding, home visits, referrals immunization, health education on prevention of infectious diseases, health education on chronic disease and infant and young child feeding practices. The study further showed that majority of the respondents were satisfied with the general contribution of CHPS.

Moreover, the main challenges at the CHPS level were; no light in CHPS compound, weak and old compound, lack of motivation, lack of community cooperation, no water at CHPS compound, no midwife, inadequate fuel for service delivery, health staff, poor road network, poor understanding of CHPS concept. predominantly the challenges at the household level were; lack of essential medicines and poor staff attitude.

5.1 Age Distribution

The socio-demographics characteristics of the study participants as presented in Table 4.1 include age, education, marital status, sex, ethnicity, number of years stayed in



community, and household size as they could have some influence on how a participant may perceive and report on the contribution and challenges of CHPS in promoting health service delivery as well as the location of a CHPS compound in his or her community.

Age distribution of respondents in the study was relatively very young, with the highest age group captured from the results being 18-30 years age bracket representing 41.4% of the 263 respondents. This was not surprising as the study was focusing more on the mothers or care givers or their representatives and most of these mothers are in their reproductive which is a young age group.

5.2 Sex Distribution

The results revealed a vast majority (83.7%) of the respondents were females, this could be attributable to the fact that women and for that matter household mothers were preferred to their male counterparts and this was done with argument that it is the mothers or care givers that may use the CHPS services more than the men. This was later confirmed in an individual interview with one of the CHMC chairman (Jijen CHPS zone) who indicated that the questions about the contribution and challenges of CHPS should be directed towards women. It was clear from the study that most women in Municipality visited their CHPS zones and could readily answer the question without. A similar in study found out that majority of the participants in the Bongo District who use the services of the CHPS were women in their reproductive age group (Irene, 2017).

5.3 Marital status of the study respondents

Results of the study found out that most respondents were married representing 91.3%. This percentage of married people was higher compared to the national marital status of



Ghana as at 2010 (42.9%) (GSS, 2012) and the Sissala East Municipality of 52.7 (GSS, 2014) one possible reason for this great variation could be due to differences in age category of the participants in this study. The GSS started with people from age twelve years and above. However, the findings are not out place as findings from other studies support (Johnson et al., 2019) and Ghana Statistical Service (2009).

5.4 Respondents educational background

From the study a vast majority (65.8) of the study subjects did not have any formal education. This is not surprising as the area is one of the Municipalities with high illiteracy rate according the GSS 2010 report. The illiteracy rate of the population was (58.4%) (GSS 2014). Also, the national illiteracy rate according to GSS was high representing more than half of the population (52.6%). Findings from another study estimated three-quarters of the household members (78.3 percent on average) have received no formal education in the upper west region (USAID-METSS 2016).

This may have serious implication on the health seeking behavior and healthy practices of the people. Culture, high illiteracy, poverty, high school dropout and high teenage pregnancies could be responsible for this low education (SMHA 2019).

5.5 Household size

The study found out that on the average the household size of the respondents was 5.77±2.37 members with 3% of households having 11-15 members. This household size is quite higher than that of the national household size of 4.4 but lower than both the upper west region and the Sissala east municipality household size of 6.2 and 6.0. Another study found out that the range of household's size is between 4.7 in Sissala East



and 6.0 for the upper west region (USAID-METSS, 2016). This variation of household

size from the region ad national figures could have resulted from the differences in the populations distribution and also differences in samples of the studies.

5.6 CHPS Contributions to health service delivery

For reproductive and child health services, the study focused on ANC, PNC, and emergency delivery (head in vagina delivery) and the findings showed that the participants were satisfied with these indicators. The findings are in supports of results of a previous study (Abdul-Rahaman, 2018) where in a focus group discussion with women, they said they were satisfied with ANC services provided by CHPS. The high satisfaction of these services in the present study may be attributed wide coverage of these services by CHPS in the upper west region (SMHD, 2017).

Also, exclusive breastfeeding, health education on food supplements and counselling on Infant and Young Child Feeding (IYCF) practices were basically the nutrition indicators that the study focused on. It was revealed that the participants were satisfied with these services. Public health is mostly concerned with the empowerment of the individuals in the population to have control over their health. This is done by carrying out health education and promotion activities using various platforms. Prompt referrals of cases that cannot be managed at the CHPS zone is key principle in the practice of primary health and for that matter for successful operation CHPS (SMHD, 2017). Also, CHPS are to practice continuity of care for patients that have go for further treatment and have returned to the CHPS zone community. Management of minor ailments and emergencies services are to provide at the CHPS.

The findings which revealed satisfaction on health service contributions by CHPS are within the expectations of the Ghana Health Services because the primary objective of



CHPS strategy has do with increase access (SMHD, 2017) and the utilization of health services in remote communities (Aikins et al. 2013, Johnson et al., 2015, MOH, 2010, GHS, 2015, MOH, 2011 and Woods et al., 2019) such as immunizations, emergency service delivery and health education, family planning and antenatal services. Moreover, previous reports showed that CHPS contribute greatly to health services delivery Sissala East Municipality (SMHD, 2019).

5.7 Challenges of CHPS

In this study, lack of essential medicines at the CHPS zone was seen as a leading challenge affecting health care utilization at household level. However, the study further revealed the existence of some other challenges such as; service fee charged, lack of 24hour service availability and poor health worker attitude. In a previous study, the similar problems were enumerated.

Also, at CHPS zones, poor community participation in CHPS activities, no electricity, lack of motivation, as well as weak and unrenovated compounds were reported as health provision challenges. In line with this study, an earlier study in some selected communities in Upper West Region showed similar results and are considered as leading causes inadequate access to health service utilization (Woods et al., 2019).

5.8 Impact of challenges on CHPS service delivery

Base on the chi-square analysis the study showed the existence of some challenges experienced by the households were significantly associated with their satisfaction level of the general services provided by the CHPS. Specifically, the logistic regression analysis revealed, households who experienced service fees charged were found to have a



lesser chance of being satisfied in the services provided by the CHPS when compared with households that did not experience the challenge. Furthermore, lack of 24-hour service availability was also associated with lower chance of being satisfied with the general CHPS services. Additionally, the study also revealed lower odds of satisfaction among participants who experienced poor health worker attitude and lack of essential medicines when they visit the CHPS zones for health services.

These findings support that of Abdul-Rahaman (2018) that challenges affect the utilization of CHPS services. When people anticipate for certain services only to find out that those services are either not available or they are but rendered with an attitude that is not good they become demoralize. Another study (Wiru et al., 2017) revealed association between lack of medicines and low utilization of CHPS services by households heads in kimtampo North. Furthermore, the present findings agree with previous studies that the existence of challenges often affect the utilization of health services (Atuoye et al., 2015, Woods et al., 2019, Rishworth et al., 2016).

The study indicated that the CHPS faces series of challenges such as lack of logistics, poor accommodation for health staff, lack of electricity and difficult in maintaining the cold chain. These findings are supported by previous results (Irene 2017) (Karbo 2015)(Woods et al., 2019). Similarly, essential drugs, medical supplies, equipment and infrastructure were reported in another study. Also they found that physical space was inadequate of which some women were said to complain of lack of privacy during childbirth (Dalinjong et al., 2018b).



5.9 The Geographical distribution of CHPS

The study showed that most of the household respondents were satisfied with the location of the CHPS compounds in their communities. This could be because of the short distances respondents now travelled to get health services (Woods et al., 2019) that is why they were satisfied with the CHPS locations in the study communities. Moreover, in the key informants' interviews, it was revealed that CHPS distribution in the Municipality is good.



CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter presents a summary of the key findings, conclusion and recommendations on the contributions and challenges of CHPS that may be used to improve health service delivery in the Sissala East Municipality and Ghana as whole.

6.1 Conclusion

In conclusion, the study found most respondents to be satisfied or very satisfied with the general contribution of CHPS in health service delivery, and lack of essential medicines regarded by majority as a challenge for households in accessing CHPS services.

A greater majority of households who participated in the study expressed satisfaction on the general contribution CHPS in health service delivery, as well as on some specific some specific indicators such as ANC, PNC, referral services, FP services, exclusive breastfeeding, education on infant and young child feeding practices among others in the study area. However, a number of challenges were reported to be hindering households from benefiting fully from the services provided CHPS zones. Among these challenges were lack of essential medicines, lack of 24-hour availability of services, poor health staff attitude.

Almost all households' respondents were satisfied with the location of the CHPS compounds, and the geographical distribution of CHPS zones with averagely one community to a CHPS zone in the municipality.



6.2 Recommendations

In view of the findings from this study, the following interventions are recommended to be instituted in the Sissala East Municipality or elsewhere to help improved on health service delivery at CHPS zones.

- 1. Regular Community sensitization on the CHPS concept by district health administration in collaboration with subdistrict and CHPS zones staff
- 2. Institute a tenure of office for CHMC members for instance every five years this will make the committee members serious with their responsibilities to help improve CHPS service delivery by CHPS zone in charges.
- 3. Ghana Health Service could consider regular stocking of CHPS facilities with essential medicines to help meet the needs and demands of communities.
- 4. Municipal Health Administration (MHA) could consider staff mix when posting staff to CHPS zones.
- 5. CHPS staff should be encouraged to ensure the provision of 24-hour service provision at the CHPS zones.
- 6. Capacity development of CHPS staff on customer to prevent poor staff attitude at the CHPS zones by Ghana Health Service



REFERENCES

Abdul-Rahaman, Y. (2018). Factors Influencing Utilization of Communiy-Based Health

Planning and Services in BunkpuruguYunyoo Districtin Northern Region of Ghana

двигательными нарушениямиNo Title (Vol. 2, Issue 10636388).

PRIMARY HEALTH CARE SYSTEMS (PRIMASYS), (2017).

- Aikins, M., Laar, A., Nonvignon, J., Sackey, S., Ikeda, T., Woode, G., Nang-beifubah, A., & Nyonator, F. (2013). Evaluation of facilitative supervision visits in primary health care service delivery in Northern Ghana.
- Assan, A., Takian, A., Aikins, M., & Akbarisari, A. (2018). Universal health coverage necessitates a system approach: an analysis of Community-based Health Planning and Services (CHPS) initiative in Ghana. *Globalization and Health*, *14*(1), 107. https://doi.org/10.1186/s12992-018-0426-x
- Assefa, Y., Gelaw, Y. A., Hill, P. S., Taye, B. W., & Van Damme, W. (2019).

 Community health extension program of Ethiopia, 2003-2018: Successes and challenges toward universal coverage for primary healthcare services. *Globalization and Health*, *15*(1), 1–11. https://doi.org/10.1186/s12992-019-0470-1
- Asuming, P. O., Bawah, A. A., Kanmiki, E. W., & Phillips, J. F. (2020). Does expanding community-based primary health care coverage also address unmet need for family planning and improve program impact? Findings from a plausibility trial in northern Ghana. *Journal of Global Health Science*, 2(1), 1–18. https://doi.org/10.35500/jghs.2020.2.e18
- Atuoye, K. N., Dixon, J., Rishworth, A., Galaa, S. Z., Boamah, S. A., & Luginaah, I. (2015a). Can she make it? Transportation barriers to accessing maternal and child



- health care services in rural Ghana. *BMC Health Services Research*, 1–10. https://doi.org/10.1186/s12913-015-1005-y
- Atuoye, K. N., Dixon, J., Rishworth, A., Galaa, S. Z., Boamah, S. A., & Luginaah, I. (2015b). Can she make it? Transportation barriers to accessing maternal and child health care services in rural Ghana. *BMC Health Services Research*, *15*(1), 1–10. https://doi.org/10.1186/s12913-015-1005-y
- Awoonor-Williams, J. K., Sory, E. K., Nyonator, F. K., Phillips, J. F., Wang, C., & Schmitt, M. L. (2013). Lessons learned from scaling up a community-based health program in the Upper East Region of northern Ghana. *Global Health Science and Practice*, *I*(1), 117–133. https://doi.org/10.9745/GHSP-D-12-00012
- Brooks, L. L. Z., & Johnston, J. (2012). *Electronic copy available at :*https://ssrn.com/abstract=3182015 Electronic copy available.
- Charan, J., & Biswas, T. (2013). How to calculate sample size for different study designs in medical research? *Indian Journal of Psychological Medicine*, *35*(2), 121. https://doi.org/10.4103/0253-7176.116232
- Clement, T. (2011). IMPACT ASSESSMENT OF THE COMMUNITY-BASED

 HEALTH PLANNING AND SERVICES INITIATIVE IN THE BEREKUM

 MUNICIPALITY [KNUST]. In *The Lancet Neurology* (Vol. 10, Issue 10).

 https://doi.org/10.1016/S1474-4422(11)70221-6
- Dalaba, M. A., Stone, A. E., Krumholz, A. R., Oduro, A. R., Phillips, J. F., & Adongo, P. B. (2016). A qualitative analysis of the effect of a community-based primary health care programme on reproductive preferences and contraceptive use among the Kassena-Nankana of northern Ghana. *BMC Health Services Research*, *16*(1), 1–8.



https://doi.org/10.1186/s12913-016-1325-6

- Dalinjong, P. A., Wang, A. Y., & Homer, C. S. E. (2018a). Are health facilities well equipped to provide basic quality childbirth services under the free maternal health policy? Findings from rural Northern Ghana. *BMC Health Services Research*, *18*(1), 1–9. https://doi.org/10.1186/s12913-018-3787-1
- Dalinjong, P. A., Wang, A. Y., & Homer, C. S. E. (2018b). Are health facilities well equipped to provide basic quality childbirth services under the free maternal health policy? Findings from rural Northern Ghana. *BMC Health Services Research*, *18*(1). https://doi.org/10.1186/s12913-018-3787-1

Ghana health service. (2005). CHPS Policy Document (p. 63).

- GHS. (2009). Tutor 's Guide Tutor 's Guide For CommunityNursing Health Schools Training. 1.
- GHS. (2014). GHANA HEALTH SERVICE ANNUAL REPORT.
- GHS. (2016). Upper West annual report (Issue May).
- GNA. (n.d.). Upper West Region has 62% CHPS coverage. Ghana Business News.

 Retrieved September 2, 2020, from

 https://www.ghanabusinessnews.com/2018/08/10/upper-west-region-has-62-chps-coverage/
- GUMAH, T. A. (2010). Efficiency and Effectiveness of Chps Zones in Primary. UDS.
- Irene, N. (2017). Masters thesis: Assessing the Factors Influencing Utilization of Family Planning Services At the Community-Based Health Planning Services (Chps) in the Bongo District of the Upper East Region of Ghana [UDS]. In *UDSspace*. www.udsspace.uds.edu.gh UNIVERSITY



- Jeedah, M. N. (2018). ASSESSMENT OF COMMUNITY PARTICIPATION IN

 COMMUNITY BASED HEALTH PLANNING AND SERVICES (CHPS) IN

 HEALTH CARE DELIVERY A CASE STUDY OF THE KASSENA NANKANA

 DISTRICT OF GHANA. UDS.
- Johnson, F. A., Frempong-Ainguah, F., Matthews, Z., Harfoot, A. J. P., Nyarko, P.,
 Baschieri, A., Gething, P. W., Falkingham, J., & Atkinson, P. M. (2015). Evaluating the impact of the community-based health planning and services initiative on uptake of skilled birth care in Ghana. *PLoS ONE*, 10(3), 1–18.
 https://doi.org/10.1371/journal.pone.0120556
- Karbo, P. (2015). University for Development Studies Chps Initiative: Challenges and
 Opportunities To Improving Rural Access To Health Service Delivery in the Lawra
 District: Chps Initiative: Challenges and Opportunities [UDS].
 http://hdl.handle.net/123456789/2019
- Kushitor, M. K., Biney, A. A., Wright, K., Phillips, J. F., Awoonor-Williams, J. K., & Bawah, A. A. (2019). A qualitative appraisal of stakeholders' perspectives of a community-based primary health care program in rural Ghana. *BMC Health Services Research*, *19*(1), 1–13. https://doi.org/10.1186/s12913-019-4506-2
- Kweku, M., Amu, H., Awolu, A., Adjuik, M., Ayanore, M. A., Manu, E., Tarkang, E. E.,
 Komesuor, J., Asalu, G. A., Aku, F. Y., Kugbey, N., Anumu, F., Boateng, L. A.,
 Alornyo, J. S., Glover, R., Letsa, T., Bawah, A. A., Kanlisi, N. S., Awoonor-Williams, J. K., ... Gyapong, J. O. (2020). Community-based health planning and services plus programme in Ghana: A qualitative study with stakeholders in two
 Systems Learning Districts on improving the implementation of primary health care.



PLoS ONE, 15(1), 1–24. https://doi.org/10.1371/journal.pone.0226808

- Metcalfe, C. (2001). Biostatistics: A Foundation for Analysis in the Health Sciences. 7th edn. Wayne W. Daniel, Wiley, 1999. No. of. pages: xiv+755+appendices. Price: •28.95. ISBN 0-471-16386-4. *Statistics in Medicine*, 20(2), 324–326. https://doi.org/10.1002/1097-0258(20010130)20:2<324::AID-SIM635>3.0.CO;2-O Ministry of Health. (2016). *National CHPS policy*.
- Ntoimo, L. favour, Okonofua, F. E., Adejumo, O., Imongan, W., Ogu, R., & Anjorin, S. (2019). Assessment of interventions in Primary Health Care for improved maternal, new-born and child health in sub-Saharan Africa: A systematic review. 1–34. https://doi.org/10.21203/rs.2.13111/v1
- Nyqvist, M. B., Guariso, A., Svensson, J., & Yanagizawa-Drott, D. (2019). Reducing child mortality in the last mile: Experimental evidence on community health promoters in Uganda. *American Economic Journal: Applied Economics*, 11(3), 155–192. https://doi.org/10.1257/app.20170201
- Pence et al. (2000). The Impact of the Navrongo Community Health and Family Planning

 Project on Child Mortality, 1993-2000. *Journal of Chemical Information and*Modeling, 53(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004
- Sakeah, E., Mccloskey, L., Bernstein, J., Yeboah-antwi, K., Mills, S., & Doctor, H. V. (2014). Is there any role for community involvement in the community-based health planning and services skilled delivery program in rural Ghana? 1–14.
- SMHD. (2017). Ghana health service: Sissala east annual report.
- SMHD. (2019). SISSALA EAST MUNICIPAL HEALTH DIRECTORATE ANNUAL PERFORMANCE REVIEW REPORT, 2019.



- USAID-METSS. (2016). Feed the Future Indicators for Upper West Region, Ghana 2015. July.
- Uzondu, C. A., Doctor, H. V., Findley, S. E., Afenyadu, G. Y., & Ager, A. (2015).

 Female health workers at the doorstep: A pilot of community-based maternal, newborn, and child health service delivery in Northern Nigeria. *Global Health Science and Practice*, *3*(1), 97–108. https://doi.org/10.9745/GHSP-D-14-00117
- Wiru, K., Kumi-Kyereme, A., Mahama, E. N., Amenga-Etego, S., & Owusu-Agyei, S. (2017). Utilization of community-based health planning and services compounds in the Kintampo North Municipality: A cross-sectional descriptive correlational study. BMC Health Services Research, 17(1), 1–11. https://doi.org/10.1186/s12913-017-2622-4
- Woods, H., Haruna, U., Konkor, I., & Luginaah, I. (2019). The influence of the Community-based Health Planning and Services (CHPS) program on community health sustainability in the Upper West Region of Ghana. *International Journal of Health Planning and Management*, 34(1), e802–e816. https://doi.org/10.1002/hpm.2694



APPENDICES

Appendix 1: Structured questionnaire for household member

Hello my name is Forkor Kasim, an MPH student in the Department Community Health and Family Medicine University for Development Studies Tamale. This study seeks to assess the contributions and challenges of the Community-based Health Planning and Services to health service delivery in Sissala East Municipality.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1.	Name of community						
2.	Age of respor	ndent					
3.	Sex	Male []	Female []				
4.	Marital status						
	Married []	Single []	Divorced []	Widow [Widower []		
5.	Educational E	Background					
	No Education	JHS/N	Middle School [] S	HS/Voc/Tec	[]
	Tertia	ry []					
6.	Number of ye	ears in this con	nmunity				
7.	Ethnicity						
8	How many n	eonle are in thi	is household?				

SECTION B: CONTRIBUTION OF CHPS TO HEALTH CARE DELIVERY

How has the CHPS initiative in your community contributed to the following primary health care services.

9. Antenatal Care services:



1.Very Satisfied []	2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
10. Post Natal Service:	
1.Very Satisfied []	2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
11. Family Planning serv	vices:
1.Very Satisfied []	2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
12. Immunization service	es:
1.Very Satisfied []	2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
13. Referral services:	
1.Very Satisfied []	2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
14. Emergency delivery	services:
1.Very Satisfied []	2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
15. Nutrition education of	on exclusive breastfeeding:
1.Very Satisfied []	2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
16. Nutrition education of	on food supplements:
1.Very Satisfied []	2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
17. Infant and young chi	ld feeding practices:
1.Very Satisfied [] 2.S	atisfied [] 3.Not Satisfied [] 4. Indifferent []
18. Health education and	l promotion on infectious diseases



1.	Very Satisfied [] 2.Satisfied	[] 3.Not Satisfied [] 4. Indifferent []
19	9. Health education and promot	tion on chronic diseases:
1.	Very Satisfied [] 2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
20	O. Clinical management of mine	or illness:
1.	Very Satisfied [] 2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
2	1. Home Visits	
1.	Very Satisfied [] 2.Satisfied [] 3.Not Satisfied [] 4. Indifferent []
22	2. What in your opinion is the in your community?	general contribution of CHPS to health care delivery
1.	Very satisfied [] 2. Satisfied [] 3. Not Satisfied [] 4. Indifferent []
SEC	ΓΙΟΝ C: CHALLENGES OF	CHPS
23	3. Do you have a challenge w	with regards to access to health care provided by the
	CHPS in your community?	
	1.Yes []	2. No []
2	4. Are you charged fees for se	rvice delivery by the CHPS in your community each
	time you access the facility?	
	1.Yes []	2. No []
2:	5. If yes, do you have a challer each time you access the faci	nge with service fees charged at the CHPS compound
	1.Yes []	2.No []

26.	Do you have 24 hours ser	rvices availability at the CHPS compound in your
	community?	
	1.Yes []	2.No[]
27.	27. Do you have a challenge	e with health workers attitude any time you visit the
	CHPS compound for health s	service delivery?
	1.Yes []	2.No[]
28.	Do the CHPS usually report	lack of essential medicines prescribed during any of
	your visits?	
	1Yes []	2.No[]
29.	Have you ever had challenge	es with your health insurance using it to access health
	care service in the CHPS?	
	1.Yes []	2.No[]
30.	Have you encountered any or	ther challenges in the utilization of the CHPS in your
	community?	
	1.Yes []	2.No[]
31.	If yes, please specify	
SE	CTION D: GEOGRAPHICA	L DISTRIBUTION OF CHPS COMPOUNDS
32.	Are you satisfied with the loc	eation of your CHPS compound?
	1.Yes []	2.No[]
	If yes why?	
	If no why?	



Appendix 2: key informant interview guide: sub municipal in charges /representatives and CHPS in charge

Hello my name is Forkor Kasim, an MPH student in the Department Community Health and Family Medicine University for Development Studies Tamale. This study seeks to assess the contributions and challenges of the Community-based Health Planning and Services to health service delivery in Sissala East Municipality

SECTION A: DEMOGRAPHIC CHARACTERISTICS

Ι.	Name of sub-district
2.	Questionnaire Number:
3.	Name of interviewer.
4.	Date of interview
5.	Start (time) End (time)
6.	Name of CHPS zone:
7.	Designation
8.	Age:
9.	Sex:
10.	Qualification

SECTION B: CONTRIBUTION OF CHPS TO HEALTH CARE DELIVERY

- 11. What do you understand by the CHPS initiative?
- 12. What are your expectations of the CHPS initiative?
- 13. Can you share with me the contributions of CHPS in health service delivery?
- 14. Overall, what is your impression about CHPS?



- 15. Has the CHPS initiative achieved what it set out to do? What is/are your reason (s) for this response?
- 16. How effective has the CHPS initiative been?

SECTION C: CHALLENGES OF CHPS

- 17. What are the challenges faced by your CHPS zone?
- 18. How do these challenges affect health service delivery?
- 19. In your view, how can these challenges be addressed?
- 20. Can you mention in your own opinion the people who can address these challenges?

SECTION D: GEOGRAPHICAL DISTRIBUTION OF CHPS COMPOUNDS

- 21. On the average how many communities does a CHPS serve?
- 22. Are you satisfied with the geographical distribution of the CHPS zones in sub municipality? Explain



Appendix 3: Key Informant Interview Guide: CHMC Chairman/Representative

Hello my name is Forkor Kasim, an MPH student in the Department community health and Family Medicine University for development studies Tamale. This study seeks to assess the contributions and challenges of the Community-based Health Planning and Services to health service delivery in Sissala east municipality.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Name of sub-district:
2. Questionnaire Number:
3. Name of interviewer
4. Date of interview
5. Start (time) End (time)
6. Name of CHPS zone:
7. Designation
8. Age:
9. Sex:
10. Level of formal education:
11. Occupation

SECTION B: CONTRIBUTION OF CHPS TO HEALTH CARE DELIVERY

- 12. What do you understand by the CHPS initiative?
- 13. What are your expectations of the CHPS initiative?
- 14. What are the contributions of CHPS in health service delivery?



- 15. Overall, what is your impression about the CHPS initiative?
- 16. Has the CHPS initiative achieved what it set out to do? What is/are your reason (s) for this response?
- 17. How effective the CHPS initiative been?

SECTION C: CHALLENGES OF CHPS

- 18. What are the challenges faced by your CHPS zone?
- 19. How do these challenges affect health service delivery?
- 20. In your view, how can these challenges be addressed?
- 21. Can you mention in your own opinion the people who can address these challenges?

SECTION D: GEOGRAPHICAL DISTRIBUTION OF CHPS COMPOUNDS

- 22. Are you satisfied with the location of your CHPS compound? Explain.
- 23. In your opinion are your community members satisfied with the location of your CHPS compound. Explain.

