UNIVERSITY OF GHANA

DETERMINANTS OF ACCESS AND UTILIZATION OF HEALTHCARE IN THE BOLE DISTRICT OF THE NORTHERN REGION OF GHANA

BY

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DECLARATION

I do hereby declare that this thesis is my own research and all other works cited have been duly referenced and acknowledged. Neither part nor the whole study has been submitted to the University of Ghana or any other institution for the award of a degree.

…….... ……...

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CERTIFICATION

I hereby certify that this Thesis was supervised in accordance with the procedures laid down by the University of Ghana.

……..... ……...

DR. LILY YARNEY **DATE**

(SUPERVISOR)

DEDICATION

I dedicate this work to the Most High God who is my strength and support in all my endeavours. May His Name be glorified!

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ABBREVIATIONS AND ACRONYMS

BDHD ……..	Bole District Health Directorate
CHAG ……	Christian Health Association of Ghana
CHPS ……..	Community-based Health Planning Services
CPHA ……	Canadian Public Health Association
GDHS ……..	Ghana Demographic and Health Survey
GHS …….	Ghana Health Service
GSS …….	Ghana Statistical Service
JHS ……...	Junior High School
LMIC ……..	Lower and Middle Income Country
MDG ……..	Millennium Development Goals
MMR ……...	Maternal Mortality Rate
NHIA …….	National Health Insurance Authority
NHIS ……. .	National Health Insurance Scheme
OOP ……...	Out-of- pocket payment
OPD ……..	Out Patient Department
SDG ……...	Sustainable Development Goal
SHS ……..	Senior High School
TBS ……	Traditional Bone Setters
UHC ……. .	Universal Healthcare Coverage
UN ……..	United Nations
WHO ……..	World Health Organization

ABSTRACT

Healthcare access is an essential component of human development, but countless people around the world especially in developing countries do not have access to healthcare as they require. Consequently, many international and national organizations are making efforts to improve healthcare access and utilization around the world. This study assessed the determinants of access and utilization of healthcare services by community members in the Bole District of the Northern Region of Ghana using case study design and mixed method approach. The quantitative approach involved selecting three (3) communities in the Bole District purposively where structured questionnaires were administered to 435 purposively selected respondents. The qualitative approach involved indepth interview of three healthcare managers and a focus group discussion held separately for two groups of six (6) men and women. Descriptive statistics, frequencies and Pearson's Chi square test of independence were used to analyze the quantitative data while the qualitative data were transcribed into themes and analyzed. The results revealed the existence of both Orthodox and Alternative Healthcare facilities in the Bole district with 55% of the respondents' preferring Orthodox to Alternative Healthcare while 45% of the respondents prefer Alternative to Orthodox Healthcare, Old age and lower educational level had significant association with preference for Alternative healthcare to Orthodox healthcare system. Determinants that were significantly associated with access and utilization of healthcare included; community members' satisfaction with the healthcare, health insurance status, and distance to health facility as well as personal factors such as education and belief system. The study recommends upgrading the capacity of primary healthcare facilities to reduce the distance and time spent to reach referral facilities. Appropriate copayment measures to sustain the National Health Insurance Scheme in improving access to healthcare, and proper supervision of healthcare staff to ensure they put up good attitude in line with the values of patients.

CHAPTER ONE

BACKGROUND TO STUDY

1.0 Introduction

This chapter provides an introduction to the study. It further presents the background of the study, problem statement, research objectives and questions, definition of key terms and concepts, organization of the study as well as summary and conclusion of the chapter.

1.1 Background of the Study

Healthcare access is an essential component of human development, but countless people around the world especially in developing countries do not have access to healthcare as they require. Consequently, the World Health Organization (WHO) and other actors in healthcare are adopting strategies to promote Universal Health Coverage (UHC) especially in lower- and middle-income countries such as Ghana. UHC seeks to ensure that all people have access to quality healthcare without incurring major financial burden, this is required to maintain and improve health (WHO, 2015; 2016).

Healthy People 2020 enumerates a number of benefits associated with convenient access and use of healthcare services among rural residents some of which include improved physical, social and mental health status, prevention of illnesses, early detection and management of health conditions improved quality of life, treatment of fatal conditions and increased life expectancy. (Ruralhub, 2017). For instance, it is reported that proper access and use of antiretroviral therapy reduces morbidities and mortalities associated with Human Immuno-Deficiency Virus/Acquired Immune Deficiency Syndrome. (HIV/AIDS). (Machtinger & Bangsberg, (2006) cited in Amankwah, (2015).

Inadequate access and use of healthcare services on the contrary is associated with a number of negative health implications that endanger the health status of rural residents, a case in point is a report by the Office of Disease Prevention and Health Promotion(ODPHP), (2017), which indicates that, rural residents of Western Alabama have difficulty in accessing and using healthcare services as a result of unemployment, poor transportation network, lack of internet access and inability to pay health insurance premium which has resulted in the residents' having unmet health needs especially inadequate diabetes management and preventive services.

The Sustainable Development Goal (SDG) goal three (3) with the target of ensuring "healthy lives and promoting wellbeing of all at all ages", reports that on maternal health, globally, only a half of women population in developing countries could obtain the necessary healthcare they required, and although maternal mortality has reduced by about 50% since 1990, the number of mothers who do not survive childbirth in developing countries remains fourteen (14) times higher as compared to those in developed countries (United Nations, 2015).

Rand (2014) perceives healthcare access as the ease with which a person can obtain required health services influenced by factors such as ones socio-cultural, economic and geographic environment as well as health insurance status. Various determinants of healthcare access and utilization of a particular population could be age, gender, rural or urban, religion, educational level, and income level among other demographical factors.

Although unfavourable social and health issues together lower the quality of life of all people, unequal access to healthcare and basic health practices are particularly cited by studies to further heighten the health risks of many populations (CHCUW, 2014; WHO, 2011). Several factors have been associated with access to health, for instance, Abt

Associates (2016) reports that, in a study reviewing the effects of health insurance on the utilization and delivery of reproductive health services and outcomes of newborn health, it was shown that insurance correlated with skilled birth delivery in Brazil, while user fees exemptions also correlated with increased number of deliveries that were conducted at healthcare facilities in Ghana and Burkina Faso (Abt, 2016; Comfort *et al*., 2013; Hatt *et al*., 2013).

In West Africa, access and utilization of healthcare is not much different from other developing countries, Odetola (2015) reports that although there are primary healthcare facilities in most communities and remote areas in Nigeria, patients still have to travel long distances before they can reach secondary and tertiary healthcare facilities. In a similar study on the gap between the condition of health of people living in rural and urban areas in Ghana, the study revealed that most rural people have poorer access to healthcare compared with those in urban areas yet, there were more chances of the health of people in the urban center improving than that of rural dwellers. (Amporfu, 2009; Odetola, 2015).

ACCA (2013), indicated in their report titled; Key health challenges in Ghana that there exist service disparities between the northern and southern parts of the country. They revealed the people in the Northern, Upper East and Upper West regions covers 40% of Ghana's land mass and is made up of 17% of the country's population but have significantly less access to services than the south. For instance, the above named regions have an average of ten (10) hospitals in each region compared with the national average of thirty-four (34) hospitals in each region nationwide.

Also when compared with the people in the south, those in the Northern, Upper East and Upper West regions have limited access to secondary healthcare facilities perhaps resulting from the inequitable distribution of health facilities and number of clinical staffs, as there

are just 90 medical officers serving in the Northern, Upper East and Upper West regions out of the 1880 medical officers serving in the whole country. (ACCA, 2013).

On maternal health, a report on rural women's health in 2013, indicated that issues of access to healthcare affects all women in rural and frontier areas with specific emphasis on limited primary and specialty care with the latter having major effect on the obstetric and gynecological services rendered to women (Bennett *et al*., 2013). Ghana ranks 32nd worldwide in maternal mortality rating with 350 annual number of women death per 100,000 live births behind her neighbouring countries Burkina Faso and Togo who recorded 300 annual number of women death per 100,000 live births each and were in the 38th and 39th positions respectively (CIA World Factbook, 2014).

ACCA, (2013) reports that majority of maternal mortalities reported in the year 2010 were caused by complications including bleeding (24%), abortion (11%), obstructive labour, eclampsia and infections that could have been treated with skilled care, hence improving access to healthcare services such as antenatal care and ensuring the presence of skilled nurse, midwife or physician during child birth are important in reducing maternal mortality.

In line with the quest to improve access to healthcare, the government of Ghana in 2003 established the National Health Insurance Authority [NHIA] under the National Health Insurance Act 2003, Act 650, as a corporate body with the objective to attain universal health insurance coverage and to ensure equity in healthcare coverage, access to healthcare services by the poor and protection of the poor and the vulnerable against financial risk. (National Health Insurance Scheme [NHIS], 2016).

Even though the NHIS has achieved significant gains, it is still having a lot of challenges that militate against its smooth operation with little information on the extent to which the National Health Insurance Scheme reduces the financial burden of people when accessing

healthcare in the Bole district in particular and the Northern region as a whole. Moreover, little information exists on the factors that can improve or hinder access to healthcare by people particularly in the Bole District (Awonodomo, 2013; Bole District Health Directorate, 2016; Mueller *et al.*, 2009).

Policy makers and stakeholders as well as organizations with interest in healthcare access of people need to respond to this phenomenon of poor access to healthcare in one way or another in order to avert the consequences of inadequate access to health in the Bole District of the Northern region of Ghana.

1.2 Problem Statement

Despite several interventions aimed at improving healthcare access for all people such as the Millennium Development Goals (MDGs) and recently, the Sustainable Development Goals (SDGs), African Peer Review Mechanism (APRM) and health financing policies such as the National Health Insurance Scheme (NHIS) as well as various Non-Governmental Organizations' (NGOs) contributions to healthcare, access to healthcare remains a subject of major challenge to many people and organizations (NHIS, 2016; UN, 2015).

For instance, out of the global population of 2.4 billion in 2013, 400 million individuals could not access important healthcare services they required according to a joint World Health Organization (WHO) and World Bank report in 2015 (Population Reference Bureau, 2016).

The Ghana Demographic and Housing Survey (2014) reports that in Ghana, 86 percent of men with high blood pressure are not aware, and only 6 percent of men with hypertension have access to and are using medications to control their blood pressure, whereas 63 percent of women with hypertension are aware of their condition and 17 percent of this number are

using medications to control their blood pressure. (Ghana Statistical Service (GSS), Ghana Health Service (GHS) & ICF International, 2015).

Ghana could not achieve the MDG 5, which sought to reduce her Maternal Mortality Rate (MMR) by 75% between 1990 and 2015 since the country recorded 319 MMR in 2015 as against 145 MMR target (WHO, 2016; World Bank, 2016). The inability of the country to meet this goal on maternal mortality rate which refers to the demise of an expectant woman during term or within 42 days after she has delivered due to any condition and at any location with the exception of accidental and incidental causes. The high MMR was attributed to poor access of women to healthcare services such as antenatal services and good nutrition (BDHD, 2015; ACCA, 2013).

The Bole District in particular remains plagued with inadequate access to healthcare, for instance, two (2) institutional maternal mortalities were recorded in the year 2015 in the Bole District compared to the national target of fifty four (54) per 10000 in 2015 (GHS, 2017). This implies, the Bole District alone contributed a magnitude of 4% to the number of institutional maternal mortalities recorded in 2015 nationwide. Hence, contributing to the relatively high maternal mortalities recorded in the entire country according to the Bole District Health Directorate (BDHD) performance review for the year 2015. These maternal deaths can be attributed to poor access to healthcare of women in the district (Bole District Health Directorate , 2016).

With the influx of illegal gold miners popularly called “galamsey operators” into the district as a result of the discovery of gold in the Bole district since the year 2012. Health risk of people living in the district has further increased which calls for more and better healthcare facilities to cater for the people living in the district (Ameh, 2017). Whilst those actively involved in illegal mining business frequently suffer from deep wounds and lacerations

resulting from blasting of rocks for gold, the rest of the population stand the risk of having opportunistic conditions and illnesses that can result from the use of water from water bodies polluted by chemicals from the "galamsey" activities (Naatogmah, 2017).

Client's attendance to the Out-Patient Department [OPD] in the Bole District reduced from 131,356 in 2014 to 122, 433 in 2015 representing seven (7%) decline in client's OPD attendance. There was also a similar decline in the proportion of insured patients from 93.2% in 2014 to 92.3% in 2015. This decline in the rate of clients insured was attributed to inability to pay the NHIS premium or even renew the validity of the card by the rural poor as a result of abject poverty in some very deprived localities in the Bole District (Bole District Health Directorate , 2016).

The Bole District in addition, lacks adequate human resource as there are limited number of health professionals such as midwives, doctors and nurses as well as technical officers for disease control and surveillance, this serves as a challenge to effective access to healthcare in the district.

With the exception of a study on surveillance that the Bole District Health Directorate supported some students to undertake in the year 2015 (Bole District Health Directorate , 2016). Various attempts aimed at finding information on determining factors on access and utilization of healthcare in the Bole District proved futile indicating there are very little research if any conducted on access and utilization of healthcare in the Bole district. This study therefore assessed the various health systems and facilities available in the Bole district such as Orthodox and Alternative Healthcare including Herbal and Traditional Medicine, the preference of community members for these health facilities and the determining factors that influence healthcare access and utilization by community members in the Bole district.

1.3 Objectives of the Study

The general objective of the study was to find out the determinants of access and utilization of healthcare services in the Bole District of the Northern Region of Ghana.

Specific objectives

The study had the following objectives:

1. To examine whether adequate healthcare facilities are available in the Bole district.
2. To ascertain the community members' preferred choice of healthcare when sick in the Bole District.
3. To identify the factors that affect accessibility and utilization of healthcare services among community members in the Bole District.
4. To find out from community members' perspective measures that can improve their access and utilization of Orthodox Healthcare in the Bole district.

1.4 Research Questions

In order to achieve the above objectives, the following questions were posed:

1. Are the available healthcare facilities in the Bole District adequate?
2. What are the community members' preferred choices of health care when ill or sick in the Bole District?
3. What factors influence the accessibility and utilization of health care services in the Bole District?
4. What measures can improve access and utilization of healthcare in the Bole district from the community members' perspective?

1.5 Organization of the Study

This thesis is organized into five (5) chapters, the first chapter presents the introduction to the study, and it is made up of the background information, the problem statement, and the purpose of the study as well as the specific objectives of the study. Also included are the research questions, the organization of the study and the summary and conclusion of the chapter.

The second chapter of the study is made up of review of empirical literature on healthcare access, including topics such as; the concept of access to healthcare, types of healthcare systems and facilities, the determining factors of access to healthcare as well as the challenges and barriers that confront clients seeking healthcare. In addition to this, the theoretical frameworks used for the study as well as conceptual framework developed are also presented in this chapter.

The third chapter gives a vivid description of the methodology used to conduct the study, it begins with an introduction, then the research design, study area and the study population, it also explains the sampling techniques and sample size determination, the data collection methods and instruments and the ethical consideration, Finally, the research process and data analysis of quantitative and qualitative data is also explained.

The fourth chapter provides the results and discussion of the study findings. The fifth chapter present the summary of the study findings, the conclusion, and recommendations of the study, as well as policy implications and suggestions for further research.

1.6 Definition of Key Terms and Concepts

Access to health: this is defined as the ease with which an individual can access healthcare services based on the three dimensions of access namely; physical accessibility

(availability), financial affordability and acceptability of services rendered to clients as stated in the WHO bulletin authored by Evans, Hsu and Boerma (2013) which states that access to healthcare is made up of three dimensions namely, physical accessibility, financial affordability and acceptability of services rendered to clients.

Alternative Healthcare: This term together with Traditional Medicine and Complementary Healthcare have been interchangeably used in this study to refer to the practice of varied forms of healthcare other than the Orthodox healthcare aimed at improving the health of individuals. It involves the use of herbal medicine, medicinal plants as well as other forms of treatments employed by Traditional Medicine practitioners.

Orthodox Healthcare: The Orthodox Healthcare system also known as Western Medicine or Allopathic Medicine in this study refers to the mainstream healthcare system sometimes referred to as modern medicine handed over to most countries by the colonial regime which is characterized by evidenced based diagnosis and treatment of ailments.

Individual characteristics: This refers to the demographic characteristics of individuals also defined as social determinants of health that influence an individual's access to healthcare such as the individual's demographic details including; age, gender, location of residence and income level, educational level and religion.

Health Institutional factors: this is also defined as health facility based characteristics that affect healthcare access of respondents, example; waiting time at health facilities and health provider attitude towards patients.

National Health Insurance Scheme (NHIS): the NHIS refers to Ghana's state supported health insurance scheme. It seeks to find out whether respondents are enrolled in this scheme or not, and the extent to which the NHIS in particular improve healthcare access such as;

whether it pays for all healthcare services and cost incurred by individuals when seeking for healthcare.

1.7 Summary and Conclusion

In summary this chapter presented the background to the study, the statement of the problem, the general and the specific objectives of the study. It further stated how chapters are organized in the study as well as the operational definitions of some key terms as used in the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews literature on the concept of access to healthcare, dimensions of access to healthcare, availability of healthcare facilities in the Bole district and accessibility to existing healthcare facilities, determining factors of access to healthcare and healthcare interventions aimed at improving access and utilization of healthcare.

2.1 The Concept of Access to Healthcare

Access to health services means accomplishing optimum health outcomes through prompt use of individual healthcare services which requires three stages namely; a client obtaining entrance into the healthcare facility, being able to access the location of the facility where required services can be given as well as the client getting the services of a health staff they can trust and communicate with (HealthPeople.gov, 2016). With respect to an individual's income level, time as well as monetary prices associated with consumption, Olson and Rodgers (1991) defined access as the highest achievable amount of consumption of health care (Melanie et al., 2010).

Access to healthcare services has often been misinterpreted, access as both a noun and a verb refers to the potential to use healthcare and "the act of using or receiving health services" respectively, resulting in conflicting meaning as to whether access implies; "ability to get care, the act of seeking care, the actual delivery of care, and indicators thereof" (Guagliardo, 2004 as cited in King, 2016). Dixon (2006) in his study on "conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups" indicated that existing literature on access to healthcare is not only voluminous but also

complex and diverse. The study further indicated that access has no consistent definition neither has it been used consistently across the field of healthcare (Dixon, 2006).

In the book "Changing the U.S Health System", Andersen and Davidson (2014) writing on improving access to care in America defined access as the "actual use of personal health services and everything that facilitates or impedes their use". It is also the bridge that brings together healthcare services and the populations they serve together. Access goes beyond going to see a healthcare provider to obtaining the right kind of services a client require to promote or maintain his/her health outcome at the right time (Andersen & Davidson, 2014).

After an individual realize the presence of an illness and make a decision to commence treatment of the illness, the next most important issue is the individuals' access to healthcare which is influenced by five dimensions. These five dimensions of healthcare access which influence an individual's health seeking are; availability, accessibility, affordability, adequacy and acceptability (Obrist *et al.,* 2016). Access to healthcare involves several dimensions, Melanie *et al.* (2010) in their study on the subject; Access and choice-competition under the roof of solidarity in German health care: an analysis of health policy reforms since 2004, identified three dimensions of healthcare access which include; availability, reachability and affordability of healthcare services.

The World Health Organization in its bulletin on Universal health coverage and universal access written by Evans *et al.* (2013) claimed access to health care is made up of three dimensions which include; physical accessibility, financial affordability and acceptability of services rendered to clients, the study further explained physical accessibility as whether health services of good quality are available and clients who require these services can easily reach them within appropriate time and have appointment for the services they require. Financial affordability was also defined as whether clients were able to pay for the services

rendered to them without incurring major financial hardship, taking into consideration the income the direct price of healthcare and indirect cost opportunity cost incurred by clients which is influenced by household income of clients and broader health financing systems. Finally, acceptability referred to the willingness of people to seek health care services, where clients perceive services rendered to them at health facilities as ineffective or are unable to access health services due to cultural or values factors bothering on gender, age or ethnicity, acceptability is said to be low (Evans *et al.,* 2013).

In a study "on the interaction of key elements that determined the use of health services", a framework for explaining access was developed by the authors with much emphasis on the link between the needs of patients and the ability of health systems to meet those needs. They therefore sorted access into more precise dimensions that can be measured; the study defined availability as the interaction between patient need and physical availability of health service, Accessibility defined the link between clients' location and location of supply of health service. Accommodation refers to how health services are organized to meet specific needs of clients. Affordability captures the interaction between the fees of services, and the value perception of clients. Acceptability also explains the difference between services expectations of clients as compared to the actual care delivered (Penchansky & Thomas, 1981 as cited in King, 2016).

Jacobs *et al.* (2011) in a study aimed at "addressing access barriers to health services: an analytical framework for selecting appropriate interventions in low-income Asian countries" the authors also identified four main dimensions of access to healthcare which comprise of; geographical access, availability, affordability and acceptability. The study further looked at measures aimed at solving the challenges to accessing healthcare pose by these dimensions using an analytical framework.

2.2 Availability of Health Facilities

The presence of primary healthcare facilities and the ability to readily access them is a major issue of concern in sub-Saharan Africa. In a study to analyze health facilities availability and access in the capital of Gabon, Libreville. Which employed geographic tools consisting of quantitative measures drawn from maps showing attraction and buffer zones of patients, the results revealed that there were gaps in healthcare access that has the potential of causing unequal access to healthcare which implied that there was the need for revision of the grid of primary healthcare facilities. And also recommended an approach of analyzing geographical and physical needs of healthcare when planning the construction of healthcare facilities in the city. (Makita-Ikouaya *et al.*, 2010).

Khadka and Amin, (2015), in their study titled "Health Facility Assessment of Availability of Different Modern Family Planning Methods in Four Districts of Nepal" using a varied methods comprising general assessment of healthcare facilities assessment, in-depth interviews and administering of structured questionnaires revealed that; the availability of consumables, supplies and well-functioning infrastructure providing family planning services were different among the different healthcare facilities and the districts. The study also showed that while short-term methods were available in all primary healthcare facilities, long acting reversible contraception services were available in few health post and primary healthcare facilities, with lack of competent health professional to provide service being a major constraint to service availability. The authors therefore recommended strengthen the capacity of the health facilities close to communities with enough human resource and adequate supplies and equipments through proper supply chain processes.

While assessing the availability of essential drugs in government health facilities in the Sekondi-Takoradi Metropolis, using a descriptive cross-sectional design, it was found that,

Arthemeter Lumefantrine used for treating malaria was the most available drug in the metropolis while cost of essential medications were two times high as compared with the international reference price as stated in the publication of Management Science for Health. The study recommended that pricing policies on essential medicines be adhered to in order to make essential medications more affordable. (Osei-Assibey, 2016).

Despite the believe that availability of healthcare facility may improve healthcare access as in the literature above, in a related study conducted to ascertain whether an individuals' experience with regard to primary healthcare services and utilization of these services changes with the availability of resources, the findings indicated that, limited or average availability of health resources corresponded with higher client evaluations of care rendered to them and utilization of services, it was also revealed that, there were no cases of greater availability of resources being associated with positive ratings of use of services or care rendered to them. Thereby implying the addition of resources may pose the risk of diminishing returns rather than improving patients' experience and use of services (Lamarche *et al.*, 2011).

Walker, (2017), in a study to assess the awareness level of users about the healthcare services rendered by health institutions discovered many users do not have adequate knowledge or were unaware of the services provided by the health institutions in the study area and further recommended that health institutions should improve the awareness of users about the services they provide.

The Bole District Health Directorate (2016) reports that, there are twenty-two (health facilities located in the Bole district which is made up of the Bole Government Hospital, one (1) clinic and seven Health Centers as well as thirteen functional Community Health-Based Planning Services (CHIPs) compounds. And all these health facilities offer twenty-

four (24) hour services to the communities they serve with the exception of the Bole Reproductive and Child Health (RCH) center as well as the St. Martyrs of Uganda health center which is a Christian Health Association of Ghana (CHAG) facility.

2.3 Preference for Healthcare Systems and Medical Pluralism

Research has shown that in many parts of the world, various forms of healthcare systems are practiced with the aim of treating patients of their ailments, for instance in a study to assess how Orthodox Medicine and Alternative healthcare (Traditional Medicine) could be combined to improve healthcare in Ghana, the authors argued while many societies have improved the integration of both forms of healthcare others are yet to do so. with the aim of finding the relationship between peoples' educational level and use of the various systems of healthcare using a mixed method approach, the results of the study showed that, education had a significant effect on the use of healthcare systems and further enumerated barriers such as legal issues, attitude of people and policies as hindering the integration of Orthodox Medicine and Alternative Healthcare, consequently, placing the Alternative Healthcare services under the National Health Insurance Scheme and conducting further research on the subject were prescribed by the authors as recommendation to improve the integration of both Orthodox and Alternative Healthcare. (Opoku-Mensah & Ahenkan, 2015).

Orthodox medicine also referred to as modern medicine or allopathic medicine is sometimes referred to as biomedicine, Western or scientific medicine and its characterized by evidenced based methods used in diagnosing and treating illness with well-researched chemical components. (WHO, 2001).

Traditional medicine also known as complementary or alternative medicine is defined as the combination or singular application of varied health practices, methods, ideas,

knowledge, beliefs and approaches which may incorporate whole or parts of animals, plants as well as mineral components with or without spiritual connotations for the purposes of preventing, diagnosing or treating an ailment. (WHO, 2002: cited in Gyasi *et al.*, 2010).

The combination of Orthodox and Alternative healthcare has attracted several debates for example Wiese *et al.* (2010), in a review on the relationship between modern healthcare and alternative medicine, indicated that the adoption of the Complementary and Alternative Medicine by the mainstream healthcare has evolved through three (3) distinct stages namely; stage of pluralism, incorporation and finally integration, where pluralism implies the patient playing the role of a consumer by choosing the most appropriate approach. Whereas incorporation involves choosing sections of alternative healthcare to include in the Western medical practice. The integration however refers to a respectful partnership between varied perspectives of healthcare treatment in a mutually beneficial manner.

Assessing the views of people concerning the role Traditional Medicine play in the healthcare delivery system in Ghana using a descriptive cross-sectional survey, the results showed that, most people perceived Traditional Medicine to be very effect in treating various ailments ranging from medical conditions such as malaria and boils and infertility through mental conditions to injuries such as fractured bones, although it is not without challenges such as unstandardized dosages of their medications drugs, the study also revealed that unofficial collaboration existed between the two healthcare systems through referral of patients across the divide, moreover it was indicated that Traditional Medicine is less costly, more accessible and readily available hence appropriate measures should be put in place to improve its safety and quality.(Gyasi *et al.*, 2011).

In a cross-sectional descriptive study aimed at assessing the prevalence and socio-economic factors that influence the use of orthodox and alternative healthcare by people in the Imo

state of Nigeria, the results revealed that, most of the respondents (86.3%) preferred Orthodox Medicine citing the effectiveness of Orthodox Medicine as the main reason for their decision, however 77.5% and 63.7% preferred the use of solely Traditional Medicine and the combination of both Traditional Medicine and Orthodox Medicine respectively. The study further discovered that, age, gender, marital status, level of education, nature of job and size of household and family were found to have significant effect on the preference of individuals for either Orthodox or Traditional Medicine. It was therefore recommended that the awareness of users should be drawn on the potential dangers that might come along with using both treatments concurrently. (Duru, *et al.,* 2016).

The findings of the above study are not different from the assertions of Bamidele *et al.* (2009), as the findings of their study which sought to investigate the knowledge, attitude and use of Alternative healthcare among people in urban areas also employing descriptive cross-sectional method showed upheld that, most of the people interviewed were aware of an alternative form of healthcare which they stated include; herbal preparations or concoctions, herbalist and local bone setters citing radio as their main source of information regarding alternative healthcare. The findings further revealed that the Alternative healthcare was not only cheaper but also more accessible and acceptable hence about 50% of the respondents believed it could cure their ailments without resort to orthodox healthcare.

However, Bamidele *et al.* (2009), did not find any significant relationship between respondents' demographic characteristics such as age, gender, educational status and religious affiliation of the respondent. The authors therefore suggested that since the use of alternative medicine is quite popular among educated people and in the urban areas where there is better access to Orthodox healthcare facilities, measures should be put in place to

control advertisement of Alternative healthcare in the media as the Orthodox Medicine are usually not advertised.

To establish the preference of people between Traditional Bone Setters (TBS) and Orthopaedic fracture care with a prospective observational method using self-administered questionnaire's, it was found out that, most hospital users prefer hospital care in the event they have fracture, however people in the community preferred the services of Traditional Bone Setters as they claim the fear of limb amputation at the Orthopaedic fracture care centers informs their decision. (Nottidge *et al.*, 2011).

With the claim that all the respondents without formal education preferred the use of Alternative Healthcare, the results of a research investigating clients preference for Traditional Medicine in Oyo metropolis in Nigeria opposed the assertions of Bamidele *et al.* (2009) proving an association between decreased education and preference for Traditional Medicine and further revealed accessibility, good taste and awareness of the potency of Traditional medicine as the main determinants of preference for alternative healthcare. The study again showed high preference for alternative healthcare among the males and married respondents. It was therefore concluded that the high prevalence of the use of Traditional Medicine among the less educated people requires increased education on the correct way to use medicinal plants by all stakeholders in health. (Omonona *et al.*, 2012).

2.4 Determining factors of access to healthcare

Studies have shown that varied factors influence the ability of people at different places to reach health facilities and utilize the services they provide, for instance in a cross-sectional study assessing determinants of aged persons' access to healthcare in Uganda, the study

revealed that; aged persons with walking difficulties had poor chance of accessing healthcare while aged people who earned wages had better access to healthcare and concluded that in Uganda, need for healthcare factors such as existence of suffering non-communicable disease(NCDs), seriousness of ones' illness and mobility difficulties as well as supportive environment such as favourable socio-economic status of an individual are the major determinants of healthcare for the aged persons. Wandera *et al,* (2015).

In another study examining the level to which unmet requirements and challenges to healthcare access by homeless persons within a system of universal health insurance, using a random sampling technique, the results indicated that; 17% of the respondents reported inadequate access to required healthcare and this phenomenon was more common among respondents who were homeless as compared to the entire population of Toronto therefore factors such as how young an individual is, whether they had been a victim of an assault or well they were suffering some form of mental illness as some of the factors determining either adequate or inadequate access to healthcare of an individual. the study recommended that persons without homes remain confronted with challenges in accessing healthcare therefore research into measures to improve non-cost related challenges in accessing healthcare by people without homes are to be encouraged. (Hwang, *et al.*, 2010).

To assess the relationship between availability of healthcare facilities and the level to which clients' rate favourable healthcare encounter and use services, it was found out that, clients' assessment of their healthcare experience and how they are able to use healthcare services were greater at areas where there was inadequate or normal availability of healthcare resources. The study further added that in no scenario were higher use of healthcare services associated with higher availability of healthcare resources and therefore mere addition of healthcare resources or higher availability of healthcare resources instead of enhancing

healthcare experience of clients may rather have diminishing effect on healthcare access and use. (Lamarche *et al.*, 2011).

Meanwhile, in a systematic review to examine the relationship between clients' distance or travel time to health facilities and their health outcomes, which reviewed 108 studies on the topic, the results was inconclusive as 77% of the studies showed a negative relationship between farther distance and clients health outcomes, whereas six (6) of the studies showed a reverse situation of positive relationship between distance and health outcome of users'. 19% of the studies however found no relationship between the two variables. (Kelly *et al.*, 2017).

In a study to investigate the determining factors of healthcare access among the aged using a descriptive cross – sectional survey, the findings showed that, statistically significant relationship existed between marital status, education and the activities of community health workers, the study further found that, satisfaction with the healthcare provided, availability of drug and equipments were also significantly related to healthcare accessibility. Consequently, the author suggested addressing factors that affect healthcare access of the aged as a measure for improving healthcare accessibility of the aged. (Wairiuko, 2014).

Moreover, it has been shown that low income level is a significant cause of delay in accessing and using healthcare thereby deteriorating the health condition of the individuals affected through occurrences such as difficulty in obtaining needed drugs, seeing a medical doctor and other important needs such as having good housing environment, food and utilities. (JHCECHD, 2017).

Studies on access to healthcare in relation to health expenses incurred by clients while using healthcare, shows that factors such as multiple episodes of sickness by a patient, a chronic

illness or long stay in hospital admission as well as whether patient is staying in an urban or rural area and their health insurance status result in catastrophic out-of-pocket payment which places undue financial burden on families (Swadhin *et al.*, 2010; Ye, *et al.*, 2012).

2.5 Healthcare interventions aimed at improving Healthcare Access

Many health interventions have been introduced in the past with the aim of improving healthcare access which is often impeded in a section of the population as a result of their inability to pay for services rendered to them. Some of these interventions dates back to the colonial era when the state was mainly concerned with financing the health of expatriates and the few government officials, in those era, the government seemed not to be interested in a comprehensive health financing for the entire population (Agyepong, 2013).

However fast forward into independence, the new government concerned about improving healthcare access for the entire population introduce a health financing system thus 'free health care for all' in which taxes were used to finance public health care while private health care was also paid through user fees (Escobar & Shaw, 2011). Maintaining this method of payment however became increasingly a difficult burden for the state to bear leading to a search for a more sustainable method for financing healthcare (Agyepong, 2013 as cited in Abuosi, 2014).

In the 1970s, the tax-based health financing system which was based on tax could no more be supported by the tax revenue generated in the country, this was attributed to factors such as irresponsible behavior of some health personnel who misappropriated consumables for their own use and for their relations. By the 1972, out-of-pocket payments was practiced at public health facilities although they were usually low charges. But the health sector like all the other sectors was affected by the downward trend in the economy, hence inadequate

supply of essential drugs, consumables and medical equipments lead to poor quality of care in health facilities (Bour, 2010 as cited in Boamah, 2015).

In the 1980s, clients had to make significant payments before they could access healthcare, Singleton (2006) reports that payment of user fees practiced at facilities and the aim was to recovering about 20% of non-salary operational cost from patients and right from the beginning, this policy was thought to be very burdensome especially to the poor (Singleton, 2006 as cited in Abuosi, 2014). A lot of patients therefore did not turn up to seek for healthcare when they are ill until their condition was either worsened or they were unbearable. Others who got admitted and treated manage to abscond before discharge as a result of inability to pay for their huge medical bills (Atim & Sock, 2000 as cited in Abuosi, 2014).

The many challenges confronting the cash and carry system lead to calls for the cash and carry system to be abolished (Agbeve, 1997; Gissele & Ahiadeke, 2014). At last, the need for a risk pooling method of financing healthcare became necessary leading to the establishment of NHIS. The National Health Insurance Act 2003, Act 650, was passed to establish the National Health Insurance Authority as a corporate body with the object to attain universal health insurance coverage and to ensure equity in health care coverage, access to healthcare services by the poor and protection of the poor and vulnerable against financial risk (NHIS, 2016). The object for the establishment of the authority was to ensure achievement of the universal health insurance coverage with respect to; people living in the country, those who are not living in the country but are visiting the country and provision of access to healthcare for people who are enrolled on the scheme (NHIS, 2016).

At the inception of the scheme, and in order to achieve the objectives of the authority, the following duties were laid out as a guide to the authority, they include; implementing,

operating and managing the NHIS, consulting the minister to determine contributions that should be made to by members of the scheme, registering members of the scheme and registering other private health insurance schemes as well as issuing health insurance cards to members of the scheme (NHIS, 2016). The NHIS in 2016 reported that about 95% of the health conditions that confronts Ghanaians are covered by the scheme. These services covered by the schemes encompasses areas such as Out-Patient Department services such as; consultations, reviews and laboratory investigations as well as x-rays, ultrasound, out-patient daily surgical operations and physiotherapy and prescribed medications on the NHIS medicines list.

Moreover, the In-patient Departments services provided by the scheme include; in addition to the OPD services accommodation, feeding where applicable, cancer treatments and processing for blood and blood product. Apart from these basic services provided; other specialist care such as oral health, eye care services and maternal healthcare services including antenatal, deliveries, be it normal or caesarean and postnatal care services. Are also supported by the scheme. Also all emergency services such as pediatric emergencies, road traffic accidents and industrial or workplace accidents are covered by the scheme (NHIS, 2016).

Notwithstanding the several benefits of the NHIS, a number of challenges confront its operation, In a study 'challenges in provider payment under the Ghana NHIS: a case study of claims management in two districts', the authors reported that both districts processed claims manually and challenges such as administrative and technical capacity, manpower and working environment all play part in late submission of claims by providers as well as delays in vetting and payment by the schemes, moreover, less than 1% of claims submitted to both district schemes were rejected. They further recommended that; the NHIS requires

a change in the provider payment and claims submission as well as processing systems in order to obtain much simpler processes with minimal delays. As well as improvement in the information technology systems to enhance better service delivery (Sodzi-Tettey *et al.*, 2012).

The effect of the NHIS on healthcare access cannot be overlooked as a joint report by the USAID and GHS (2009) on 'evaluation of the effects of the NHIS in Ghana showed that individuals enrolled in the scheme as compared to the uninsured were twice more likely to seek for care from a modern health facility with percentages of 88% and 43% respectively. While the insured were likely to use self- medication at home and half likely to seek for care from informal or traditional providers. The study further revealed that; on hospitalization, whereas base on the household survey individuals admitted into health facilities over the past year reduced from 2.4% in 2004 to 1.9 in 2007 which may be attributed to enhanced ability of insured clients to seek for early healthcare and use preventive services. The patient exit interviews showed that, there was a little increase in the average number of nights spent at the hospital, but none of the insured had been detained at a hospital because of delayed payment of bills as compared to 12% of those who are non-insured who were detained due to inability to pay hospital bills (Chankova *et al.*, 2009).

Moreover, the joint report indicated that although using the household survey, there were no significant changes in maternal care patterns prior to and after the NHIS implementation, with respect to prenatal visits and women who delivered via caesarean section. However, using the end line results, Women who were enrolled on the scheme were more likely to have health-facility based delivery and to deliver through caesarean section, compared to the uninsured women. This observed difference may be attributed to the high chance of

women likely to undergo caesarean section enrolling on the scheme before delivery (Chankova *et al.*, 2009).

Meanwhile several empirical literatures supports a significant relationship between an individual's health insurance status and their access to healthcare services whereby the insured can access and use healthcare services more as compared with the non-insured persons. (Frimpong, *et al.*, 2014; Sepehri, 2014; Kaluski, *et al.*, 2015; Mohammed, *et al.*, 2015)

2.6 Theoretical Framework

The study used the Andersen and Newman Framework of Health Services Utilization and the Health Belief Model as the underpinning theoretical frameworks to investigate the factors influencing access and utilization of healthcare in the Bole district of the Northern region of Ghana.

The aim of the Andersen and Newman Framework of Health Services Utilization is to find out factors that promote or hinder utilization of healthcare as well as developing a behavioural framework that explains the use of healthcare services. The framework has been through four (4) phases since it was developed in the 1960s, the fourth phase of the framework used for this study was developed in the 1990s.

The Andersen and Newman Framework of Health Services Utilization describes the access and utilization of healthcare services of an individual as a function of three major features. These features or characteristics are; predisposing factors, enabling factors and need factors.

Predisposing factors refers to an individuals' socio-cultural features that were present before the onset of an illness. Examples of these socio-cultural characteristics are demographic features such as age and gender, health beliefs such as an individuals' attitude, knowledge

and values with regard to healthcare systems and social structure of an individual with respect to educational level, social networks and culture. (Andersen, 1995).

Enabling factors has to do with the logistical aspect of accessing healthcare, some of these logistical factors include; family issues such as health insurance and an individual's regular source of income. The availability of healthcare facilities, personnel and waiting time in ones' community as well as the genetic make-up and psychological features of an individual are the other enabling factors.

The need factors which refers to the immediate factor that necessitated the use of a particular healthcare service can be described as either perceived need or evaluated need. Perceived needs are the perception of people about their health state and how they assess the health condition, whether it is necessary to seek for professional care or not. Evaluated needs are the professional judgments about an individuals' health condition and their need for healthcare. (Uom, 2014)

The Health Belief Model was developed in the late 1950s for understanding health behavior and has been widely used to study several health phenomenon such as condom utilization, medical compliance and health screening use (ReCAPP, 2016).

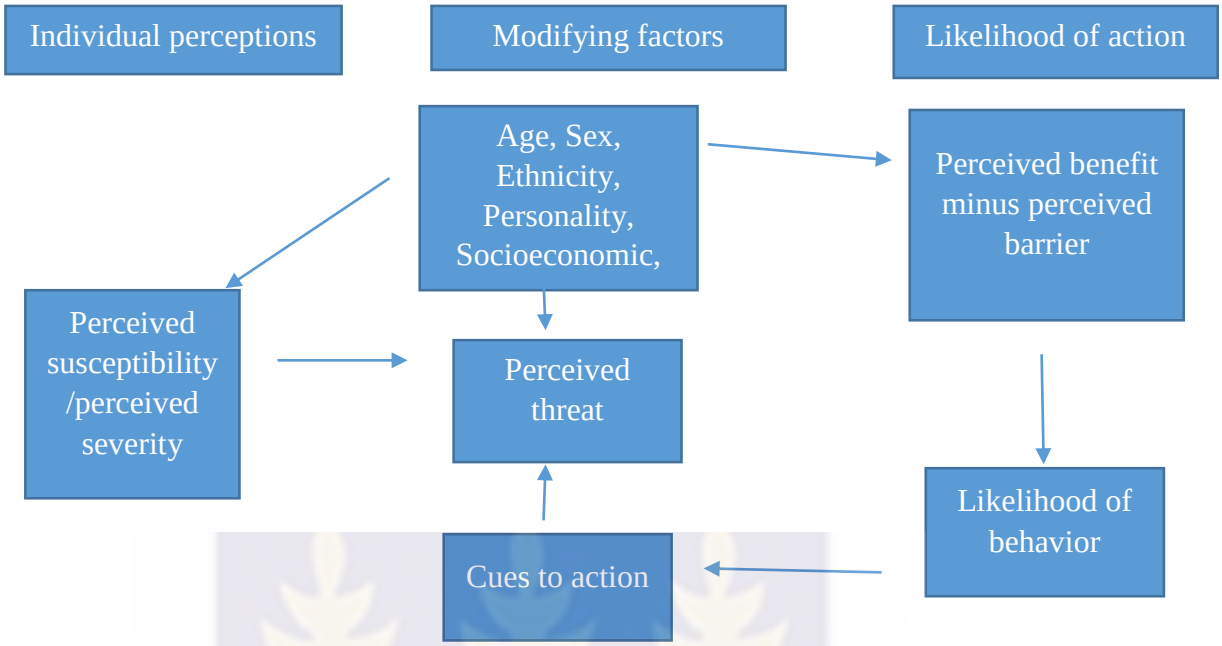

Figure 2.1: The Health Belief Model
Source: (Stretcher & Rosenstock, 1997)

The model is based on six (6) concepts which are; I. perceived susceptibility, II. Perceived severity, III. Perceived benefits, IV. Perceived barriers, V. cues to action, VI. Self-efficacy.

Perceived susceptibility refers to how an individual assesses his or her chances of acquiring a particular illness. Perceived severity also refer to how an individual judges the seriousness of the illness while perceived benefits indicates the conclusion drawn by an individual as to whether the new behavior is better than the behavior they are already practicing. Furthermore, perceived barriers is explained as ones' view as to what will stop him or her from adopting the new behavior while Cues to action is defined as those factors that will star an individual on the way to changing the behavior. Finally, self-efficacy; is defined as an individuals' belief in his or her own ability to do something (Stretcher & Rosenstock, 1997).

2.7 Implications of the Theoretical Frameworks on the study

The Andersen and Newman Framework of Health Services Utilization is related to the issue of access and utilization of healthcare in many ways, for instance, the three main factors stated in the framework such as predisposing factors, enabling factors and need factors bothers most community members and their access and utilization of healthcare.

Predisposing factors such as social structure with its related issues of ones' educational level, nature of job and ethnic groupings as well as social interactions and networks coupled with their health beliefs and demographic characteristics have effect on the general well-being of people, the same set of determinants may however not be applicable to different populations due to varied geographical context among other factors.

The aspect of enabling factors including personal, family and community issues as well as genetic and psychological issues affecting individuals may also determine their ability to access and utilize particular healthcare services they require. Also related to the issue of access and utilization of healthcare is the needs of clients in this study community members whose need factors may be either perceived as in how individuals view their health condition or evaluated as in the case of a clinical judgment by a health professional on ones' condition of health. The Andersen and Newman framework of health services utilization was therefore used as an underpinning theoretical framework to study the major determining factors that affect access and utilization of healthcare services in the Bole district.

The Health Belief Model was used as the theoretical framework for the study as it is related to the study due to the following reasons. First, the decision to seek for healthcare thereby accessing and utilizing healthcare services is usually informed by individuals' perception about how susceptible they are to the health condition and or the severity of the illness should they contract the health condition. For instance, most community members will not

be bothered about accessing and utilizing a health facility for a particular illness if they perceive they cannot be infected by that illness or they perceive the consequences of the illness to be very mild or insignificant.

Second, modifying factors such as one's age, level of education and its corresponding threat posed to an individual as a result of their socioeconomic status and predisposition reinforces one's quest to seek for a particular healthcare service. Many studies for example have shown that people with higher socioeconomic status are more capable of accessing and utilizing healthcare services when necessary than those from less endowed socioeconomic environment. (WHO, 2017; Penchansky & Thomas, 1981; Peters, *et al*., 2007).

Also, the Health Belief Model suggest that the likelihood of an individual taking an action is determined by an individuals perceived benefit as against their perceived barrier which then leads to the likelihood of the behaviour occurring or not. Similarly, the likelihood of a community member to seek for healthcare by accessing and utilizing particular healthcare service the individual require is associated with how the individual perceive the health benefit and improvement he or she will obtain by using that particular health treatment service compared with the constraints be it financial or distance an individual must overcome in order to access and utilize the healthcare services needed by the individual.

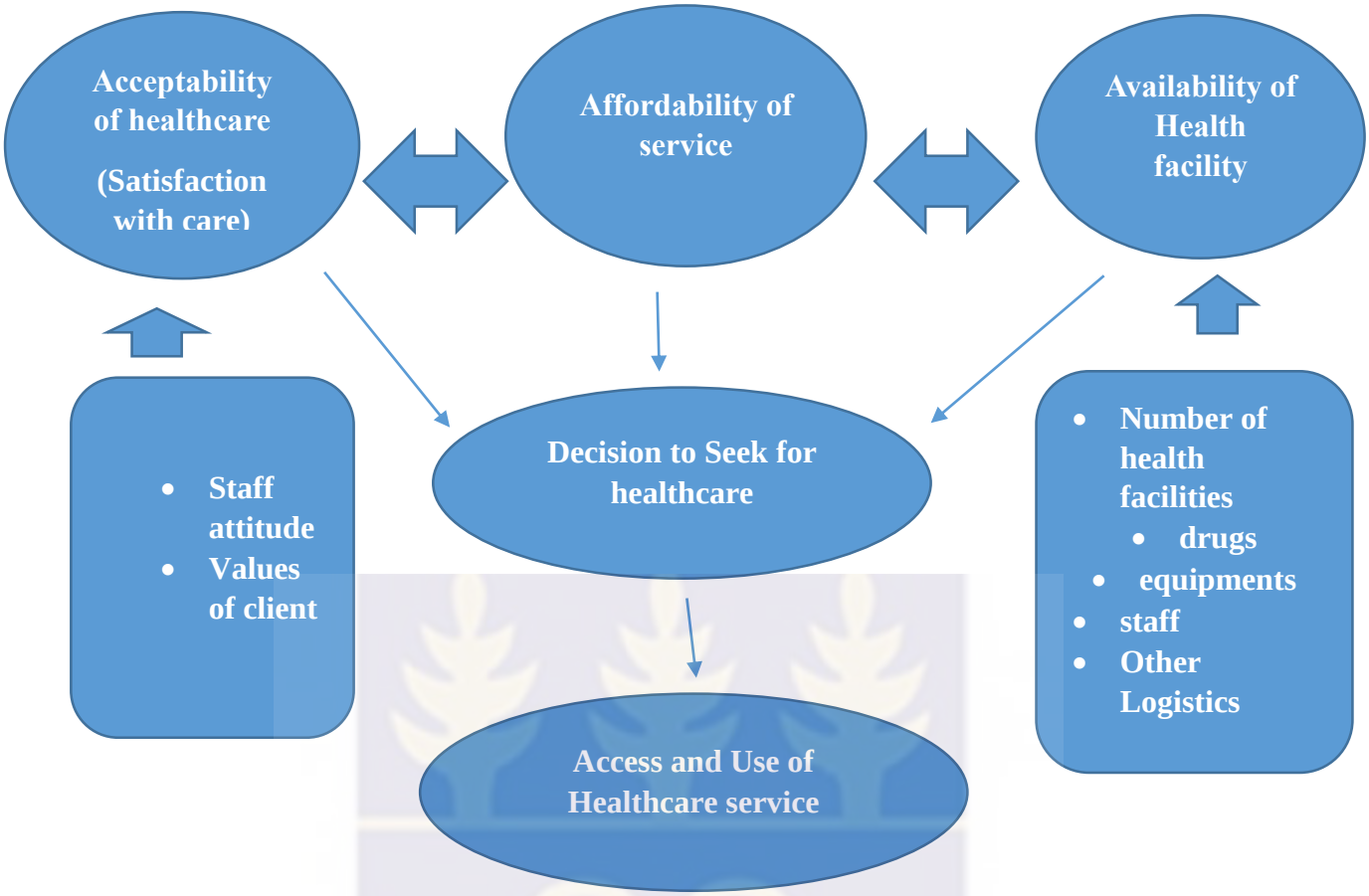

Figure 2.2: Conceptual framework of Healthcare Access and Utilization
Source: Author

Various conceptual frameworks of access to healthcare involves several issues such as how healthcare services provided are approachable, acceptable and affordable to clients as well as the availability, accommodation and appropriateness of the healthcare services provided (Levesque, Harris, & Russell, 2013). Some studies on access to healthcare identifies different dimensions including financial and physical accessibility, availability and organizational factors as important determinants of a clients' ability to access healthcare service (Penchansky & Thomas, 1981; Peters, *et al.*, 2007; Salkever, 1976).

In developing the conceptual framework of determining factors of access to healthcare in the Bole district, issues such as clients satisfaction of the care, which falls under the acceptability dimension of healthcare access, the cost of healthcare services an individual

will incur while accessing and using healthcare, which is concerned with the affordability dimension of healthcare access and the presence of essential logistics and drugs which has to do with availability dimension of healthcare access were considered based on the findings of the study.

The satisfaction of care used in the conceptual framework refers to the level of acceptance a user of a healthcare facility rates the service provided him or her. Some of the factors that affect the acceptance of the care rendered to a user by a health facility as indicated by the respondents include issues emanating from staff-patient relationships such as politeness of communication, promptness of attention given to clients and adherence to privacy and confidentiality of the user, some of which are also enshrined in the Patients Charter of the Ghana Health Service (GHS). (Ghana Health Service, 2017). As revealed by Wairiuko (2011), patients' satisfaction with care has been found to have significant relationship with access and utilization of healthcare hence its inclusion in developing this conceptual framework.

Moreover, the cost of healthcare service an individual would incur while seeking for healthcare have been found to have effect on why some people are able to access and utilize healthcare while others are unable, for instance Holmes (2017) revealed that high cost of healthcare can serve as a deterrent for poor people from accessing and using healthcare services.

In addition, healthcare service availability with adequate and stable or erratic supply of logistics and drugs have effect on community members' ability to access and utilization. Availability of health facilities in the district also involves the different forms of healthcare systems, the numbers of health facilities and the location of these facilities in the district relative to clients' household. Some of the examples of the healthcare systems are orthodox

medicine, which comprises facilities including public and private health facilities that employ modern conventional medical procedures in treating their patients. Other examples of the health systems include homeopathy, chiropractic, herbal medicine and the traditional medicine which sometimes support their healing process with spiritual incantations.

2.8 Conclusion

This chapter reviewed literature on the concept of healthcare access and utilization, availability of healthcare facilities and the determining factors of access and utilization of healthcare facilities. Theories on healthcare access and utilization were reviewed and finally, a conceptual framework for this study was presented.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methods used in conducting the study and the rationale for using them. It describes the research design, the study area and population, sampling technique and sample size, data collection methods and instruments, ethical considerations, the research process as well as the qualitative and quantitative data analysis methods.

3.1 Research Design

The study used the case study design in investigating the determining factors influencing healthcare access and utilization in the Bole District of the Northern region of Ghana. This research design was used because it allows the collection of detailed information by employing various data collection methods over a period of time and involves in-depth analysis of the factors influencing access and utilization of healthcare. (Creswell, 2014).

3.2 The Study Area

The study was conducted in the Bole district, the district lies in the western corridor of the Northern region, it shares boundary to the north with the Sawla-Tuna Kalba district, to the south with the Tain, Kintampo North and Kintampo South districts, to the west with West Gonja and Central Gonja districts and the La Cote D'Ivoire to the east. It is among the twenty-six (26) administrative districts in the Northern region. The district capital Bole, is about 240km from Tamale, the regional capital. The district extends from Bamboi towards the southern part of the district to Bodi towards the northern end of the district, covering a land area of 10,500sq km, for the purposes of healthcare services delivery, the district is sub-divided into six areas namely; Bamboi, Bole, Mandari, Mankuma, Jama and Tinga. This

division is however neither for administrative nor traditional purposes (Bole District Health Directorate , 2016).

Key: Bole District is the area bounded by the deep purple line

Figure 3.1: Map of Bole District
Source: Google Maps

The Population of the Bole District in the year 2016 per the 2010 population census projections is 71,059 as it has an annual growth rate of 2.8%. The district's population is spread over 167 communities. The main tribal groupings living in the district are the Gonjas, Brifor, Vaglas, Dagaabas, Mos and Lobis. With the Gonjas as the landlords. Most of these communities are located along the Bamboi-Wa and the Bole-Chache road that leads to the La Cote D'Ivoire. (GSS, 2015).

The main economic activities engaged by the people in the district is subsistence farming of food crops, few commercial farming, cashew nut plantation, trading and hunting. In recent times, due to a discovery of surface mining of gold in two communities namely Kui in Tinga

sub-district and Cloth in Bole sub-district, many people from diverse background particularly galamsey operators are attracted to the district. (GSS, 2015).

Most of the road networks in the district are third class roads with the Bamboi – Wa road and the Bole – Tamale being the only first class roads. The telecommunication networks available in the Bole district are; Vodafone, Mobile Telecommunication Network Ltd (MTN), TIGO and Airtel. They are however mostly unstable and unreliable in many areas of the district. There are also two radio stations namely Unique FM and the local Yagbon FM which entertain, educate and inform the people in the district. (BDHD, 2016).

Most children of school going age in the district attend school but many of their counterparts in the interior areas of the district are mostly deprived of education as a result of unavailability of schools in these areas causing widening illiteracy gap in the district. In all two SHSs, thirty-three (33) JHSs, and fifty-seven (57) primary schools are in the district. There are also fifty-seven (57) pre-schools and one (1) vocational/technical institution. Pipe borne water supply is only available to the people in the district capital, with the remaining parts of the district depending on mechanized boreholes, hand-dug wells or dams. Waste management is done by the district assembly although there are lots of indiscriminate dumping on unauthorized sites in most parts of the district. There is poor drainage system resulting in flooding whenever there is heavy rainfall. (GSS, 2015).

There are twenty-two health facilities in the district, made up of one (1) district hospital, seven (7) health centers, one (1) clinic and thirteen (13) functional Community-based Health Planning Services (CHPS) compounds, with the exception of one CHPS center which is operated from Maluwe the nearest town to Wakawaka where it is based, the remaining twelve (12) all have compounds. And apart from the Bole RCH the St. Martyrs of Uganda health center which is a CHAG institution, all the other health centers offer 24 hours

services. The main referral point for healthcare in the district is the Bole Hospital which also serves beyond the borders of the country into the neighboring La Cote D'Ivoire. With the Wa Regional Hospital as the main referral facility for patients from the Bole Hospital. Access to healthcare in remote settlements and rural areas is supplemented by outreach services (Bole District Health Directorate , 2016).

3.3 The Study Population

The study population was made up of all people above eighteen (18) years of age living in the Bole district. The adult population was selected since they are more likely to have had experience with regard to access and use of healthcare services in the district hence their views and suggestions on ways of improving healthcare access in the district were obtained. In addition, three healthcare managers were interviewed for in-depth understanding of some of the health issues in the Bole District.

3.4 Sampling Technique and Sampling Size

Purposive sampling technique was used to select the communities where the study took place namely Bole, Bamboi and Jama communities. These communities were purposively sampled to ensure that community members living in both the district capital and very remote areas of the district are fairly involved in the study. For instance, the Bamboi and Jama communities were purposively chosen due to the distal nature of their geographic location to the district capital, as well as their location in the southern part of the Bole district as against the Bole town which is located in the northern part of the district.

Respondents were purposively selected who were mainly adult community members at various places such as markets, schools, streets and health facilities. In all four hundred and

one (401) responses were successfully obtained out of the four hundred and thirty-five (435) questionnaires which were issued to respondents representing a response rate of 92%.

In addition, three health professionals in management position in the district were interviewed using indepth interview guide for their views on factors impeding access to healthcare in the district and measures required to improve upon them and also help better understand health issues in the Bole District.

3.5 Determination of Sample Size

Sample size decision was informed by Yamane (1967) simplified version formula for proportion. At 95% confidence interval and P = 0.05, the formula is given as:

$$n = \frac{N}{1 + Ne^2}$$

Where: n = sample size; N = population size (adult population) and e = level of precision (5%).

Given N (adult population) of the Bole district of 39,281, and e = level of precision of 5%. Projected population of Bole district per 2010 population and housing census is 71059, with an adult population of 55.28% (GSS, 2015).

The estimated sample size is as follows:

$$n = \frac{39281}{1 + 39281(0.05)^2} = 396$$

Therefore, the estimated sample size for Bole District was 435 after adding 10% of the calculated sample size to cater for non-response.

3.6 Data Collection Methods and Instruments

The study employed the mixed method approach which allow the use of both qualitative and quantitative methods in data collection, the quantitative part involved data collection from four hundred and thirty-five (435) community members.

The questionnaire was divided into four parts, the first part asked questions on the demographic characteristics of the respondents, the second part assessed the availability of health facilities in the district, and the third part also assessed the accessibility and utilization of health facilities in the Bole district. The fourth part of the structured questionnaire examined the community members' challenges in healthcare access and utilization and measures required to improve healthcare from the community members' perspective, respectively. (See Appendix I).

The qualitative part also comprised of in-depth interviews of selected management members of health facilities in the Bole district to elicit their views on healthcare access among people living in the Bole district, the challenges people face in accessing and using healthcare services in the Bole District and measures that can help improve healthcare access in the Bole District. (See Appendix II).

A Focus Group Discussion (FGD) was held for men and women separately at Jama a sub-district community in the Bole district located about five kilometers (5km) from the Bui Hydro-Electric Power station. The focus group discussion helped to establish in detail the challenges in accessing healthcare as well as the improvement measures for healthcare accessibility and utilization in the Bole district from the community members' perspectives. (See Appendix III).

Among the instruments which were used during the data collection processes are, a computer laptop for audio recording and data analysis, pens and A4 sheets for transcribing, mobile phones for communication purposes.

3.7 Validity and Reliability

The questionnaire used for the collection of data for the study as well as the in-depth interview guide, and the focus group discussion guide were pre-tested in a nearby district, the Sawla Tuna Kalba district to check the validity and reliability of the data collection tools. The data collection was carried out in three parts, the first part dealt with the issuing of questionnaires to the community members, one research assistant was trained and assisted in the collection of data from respondents who could not read or write. The second part involved a focus group discussion of two different groups in the Jama community in the Bole district, and the third part was concerned with in-depth interview of three (3) healthcare managers in the Bole District for their views on healthcare access and use in the Bole District.

3.8 Ethical Considerations

Research ethics is concerned with codes of conduct on right and wrong behavior when dealing with human participants in a study. Its three main objectives are, to protect human participants, to ensure the study is conducted in a manner that is in the interest of individuals and the whole society and lastly, examining of particular research activities and issues, example informed consent and confidentiality of participants information. (Walton, 2016; Resnik, 2016).

Before the community entry for data collection, an introductory letter was obtained from the department of Public Administration and Health Services Management of the University

of Ghana Business School indicating the purpose of the study to the Bole District Health Directorate and the leaders of the communities where the studies were carried out.

Respondents were required to give their consent to partake in the study by thump print or signing a consent form after the purpose of the study had been explained to them before they answered the questions. Respondents were assured that their anonymity will be guaranteed while interviews were conducted in a manner that ensured the privacy and confidentiality of respondents.

Moreover, Writings and intellectual properties of other people cited have been appropriately referenced. Using APA sixth edition referencing style, the University of Ghana Research Commons programme for checking plagiarism (turnitin) was also employed to verify the intellectual integrity of the study.

3.9 Data Analysis

The quantitative data were analyzed using Statistical Package for Social Sciences (SPSS) version 21, descriptive statistics such as percentages and frequencies were used to analyze the demographic characteristics of respondents as well as the availability of healthcare facilities in the Bole district. To establish whether the observed variation in preference for Alternative and Orthodox Healthcare among different age groups and educational levels were statistically significant a Chi Square test of independence was used to test the findings at the 0.05 level of significance.

To determine the factors that affect access and utilization of healthcare services by respondents in the Bole District, the Chi square test of independence was used to test and identify factors that had statistically significant relationship with respondents' access and utilization of healthcare services using 0.05 level of significance.

The qualitative data involved a focus group discussion and in-depth interviews which were recorded with an electronic recorder and transcribed. Interviews and discussions held in the local language were translated and transcribed in English language. Themes were then developed from the responses of the in-depth interviews and the focus group discussions based on the main objectives of the study and used as the basis for analysis.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter presents the results and discussion of the findings of the study. It covers the demographic characteristics of respondents, the availability of health facilities and the healthcare services provided, community members' preferred choice of healthcare when ill or sick, factors that affect the accessibility and utilization of healthcare services among community members as well as the challenges and measures for improving access and utilization of healthcare services from community members' perspective in the Bole District.

4.1 Demographic Characteristics of Respondents

The ages of the respondents ranged from 18years to 90years. Majority (65.1%) of respondents were between the ages of 18years and 29years. A few (3%) of respondents were between the ages of 50 and 59 years while a handful (2.2%) were above 60years. Lastly, the most occurring and mean ages were 19 years and 28 years, respectively. This shows that most of the respondents were teenagers and adolescents.

With respect to gender, a greater number (58.4%) of the respondents were males whiles less than half (41.6%) of the respondents were females. The males were many because of willingness and assertiveness of the men to speak to the researcher than the women.

In terms of their educational level, a few (9.2%) of the respondents had no formal education while some (35.4%) of respondents had tertiary education. Also a handful (11%) of the respondents had primary education.

With respect to employment status, most (56.9%) of the respondents were employed. The respondents were engaged in teaching, trading, farming and other public services. Some (32.4%) of respondents had no employment in the past three months and a handful (10.7%) of the respondents indicated that they were students.

In terms of marital status, the study showed that more than half (58.1%) of respondents were single. Some (37.7%) of respondents were married whiles a few (4.2%) of respondents were either divorced or widowed.

With respect to the religious affiliation of respondents, almost half (49.9%) of the respondents were Muslims followed by Christians and the Traditionalist with 46.4%, 3.7% of respondents respectively. However, none of the respondents indicated any other religion apart from the three (3) religions outlined above.

In terms of household size, most (16%) of the respondents had five (5) individuals constituting household sizes. On the other hand, some (14.7% and 10.7%) of the respondents had one (1) and three (3) household sizes respectively, also the most occurring household size was five (5) while the mean household size was six (6).

With respect to their income levels, most (58.4%) of the respondents earned less than Ghc500 per month while some (22.2%) of respondents earned between Ghc500 and Ghc1000 per month. A handful (19.5%) of the respondents earned above Ghc1000 per month.

Lastly, majority (52.4%) of the respondents covered less than one kilometer distance before they can have access to a health facility. Some (31.7%) of respondents covered between one (1) and five (5) kilometers before reaching a health facility whiles a few (16%) of the

respondents covered more than five (5) kilometers to reach the nearest health facility. See Table 4.1 for details of the demographic characteristics of respondents.

Table 4.1: Demographic Characteristics of Respondents

VARIABLE	CATEGORY	FREQUENCY	PERCENTAGE (%)
Age (years)	18-29	261	65.1%
	30-39	88	21.9%
	40-49	31	7.8%
	50-59	12	3%
	60 and above	9	2.2%
Total		401	100%
Gender	Male	234	58.4%
	Female	167	41.6%
Total		401	100%
Educational level	No education	37	9.2%
	Primary	44	11%
	Secondary	178	44.4%
	Tertiary	142	35.4%
Total		401	100%
Employment status	Employed	271	67.6%
	Unemployed	130	32.4%
Total		401	100%
Marital status	Single	233	58.1%
	Married	151	37.7%
	Divorced/widowed	17	4.2%
Total		401	100%
Religion	Christianity	186	46.4%
	Islamic	200	49.9%
	Traditional	15	3.7%
Total		401	100%
Income level	Less than 500Ghs	234	58.3%
	500-1000Ghs	89	22.2%
	More than 1000Ghs	78	19.5%
Total		401	100%
Distance to nearest health facility	Less than 1km	210	52.4%
	1-5km	127	31.7%
	Above 5km	64	16%
Total		401	100%

Source: Field Data, 2017.

4.2 Healthcare Facilities in the Bole District

Healthcare facility availability varied across the various locations in the district, also the services provided by these health facilities were different among the various types of health facilities in the Bole district. The services provided by the different health facilities in the Bole district include;

1. Ante-Natal care and Family planning services.
2. Delivery services such as normal labour and Complicated/advanced delivery services including caesarean section.
3. Immunization of children as well as preventive and curative child health care.
4. Adolescent health services.
5. HIV counselling and testing, HIV/AIDS care and support services including antiretroviral treatment (ARV) therapy and prevention of mother-to-child transmission of HIV (PMTCT).
6. Diagnosis, treatment and management of chronic medical conditions such as tuberculosis, malaria and hypertension.
7. Surgical operations including basic surgical operations such as incision of minor lacerations and comprehensive surgical operations such as laparotomy and other related services such as blood transfusion.

Details of the Orthodox healthcare facilities available in the Bole District, the facility type and their number, number of communities they serve and their catchment population is presented in table 4.2a.

Table 4.2a: Orthodox Health Institutions and their locations in the Bole District

Health Institutions, Number of Communities Served & the Catchment Populations							
Hospital/Health Centers				**CHPS Zones**			
No.	Facility	#of communities	Catchment Population	No	Facility	#of com'ties	Catchment Popn.
1	Dist. Hosp.	170+	71,059+	1	B/Nkwanta	6	2,687
2	Bamboi HC	25	14,678	2	Carpenter	6	2,070
Hospital/Health Centers				**CHPS Zones**			
3	Bole HC	44	21,151	3	Chache	6	1,656
4	Jama HC	23	9,924	4	Chibrinyoa	9	2,186
5	Mandari HC	27	6,610	5	Dakurpe	8	4,854
6	Mankuma HC	22	6,610	6	Gbenfu	7	2,849
7	Tinga HC	29	12,688	7	Kakiase	9	3,172
8	St. Martyrs HC*			8	K/Kwesi	5	1,807
9	BOSEC Clinic			9	Maluwe	4	3,131
				10	Sakpa	5	346
				11	Seripe	8	2,773
				12	Sonyon	4	2,681
				13	Wakawaka	4	1,962
	Total	170	71,661		Total	81	32,174

Source: Adapted from the BDHD 2015 Annual Performance Review

The table 4.2b depicts the various healthcare services provided by health facilities in the Bole district, the authority owing or managing the facility, the operational status as well as the present nature of their infrastructure, also included are the location and the various health services provided by the facilities, See Table 4.2b for details.

Table 4.2b: Healthcare Services Available at Facilities in the Bole district

Health facility type		Availability of health facilities in the Bole District					
		Administrative information				Production of health service	
		Number(s) of facility	Ownership/ managing authority	Location	Operational status	Services offered	State of Infrastructure
Orthodox Healthcare Facilities	Hospital	1	Government	Bole	Operational	1-14	Good
	Public Health centers	7	Government	Bamboi, Bole, Jama, Mandari, Mankuma, Tinga, BOSEC	Operational	1,2,3,5,6,7,13	2Good 3Satisfactory 2Poor
	Mission Health centers	1	CHAG	Bole	Operational	2,3,5,6,13	Satisfactory
	CHIPs	13	Government	Banda Nkwanta, Carpenter, Charche, Chibrinyoa, Dakurpe, Gbenfu, Kakiase, Kwame Kwesi, Maluwe, Sakpa, Seripe, Sonyon, Wakawaka	Operational	1,2,3,5,6,7,8	Satisfactory
Alternative Healthcare facilities	Traditional Medicine	Several indigenous practitioners*	Private	In almost every community of the district	Operational	11,12	Mixed
	Herbal Clinic	1*	Private	Bole	Operational	11	Satisfactory
	Homeopathy	1*	Private	Bole	Closed	11	Satisfactory

Source: Bole District Health Directorate, (2015); Field data, (2017).

[NB: Interpretation of services provided; **1**-family planning, **2**-antenatal care, **3**-delivery services, **4**-advanced delivery services, **5**-child health immunization, **6**-child health preventative and curative care, **7**-adolescent health services, **8**-HIV counselling and testing, HIV/AIDS care and support services, **9**-antiretroviral treatment (ARV) therapy, /preventing mother-to-child transmission of HIV (PMTCT), **10**-tuberculosis diagnosis/treatment, -malaria diagnosis/treatment, **11**-chronic disease treatment/management, **12**-basic surgery, **13**-Comprehensive surgery, and **14**- blood transfusion services]

The Bole district has witnessed gradual increase in the number of various categories of staffs over the years with the exception of Medical doctors, Medical assistants and Laboratory technicians who had no significant increase in their numbers. Professional categories such as midwives, general nurses and auxiliary nurses had their numbers increased from 12, 16 and 21 to 17, 20 and 87 respectively. On the contrary, the number of Community Health Nurses in the Bole district reduced from 44 to 13 over the five-year period between 2011 and 2015 which is as a result of retirement and furtherance of their education to become midwives without corresponding replacement. (See Figure 4.2).

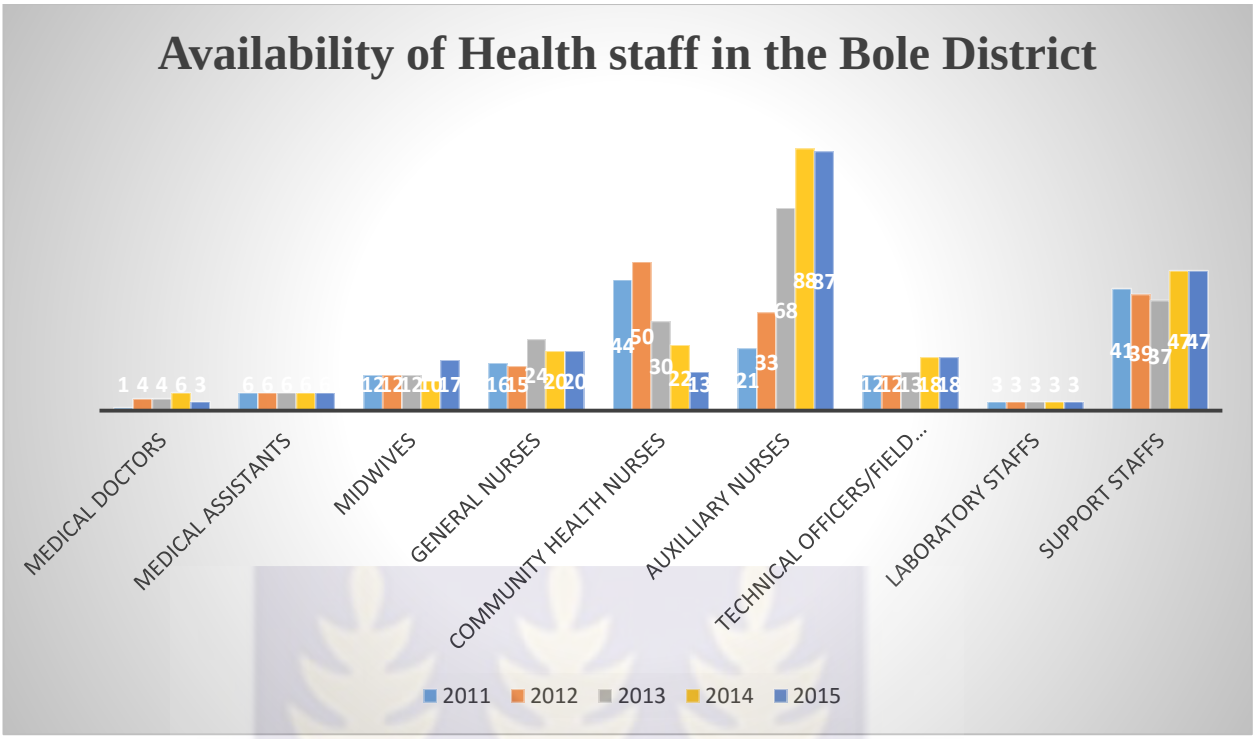

Figure 4.1: Healthcare Staff Strength in the Bole District
Source: Field Data (2017); BDHD, (2015).

4.3 Preference for Orthodox and Alternative Healthcare systems

The findings of the study showed that 55.4% of the respondents preferred Orthodox Healthcare to Alternative Healthcare, as against 44.6% respondents who indicated they prefer Alternative Healthcare to Orthodox Healthcare.

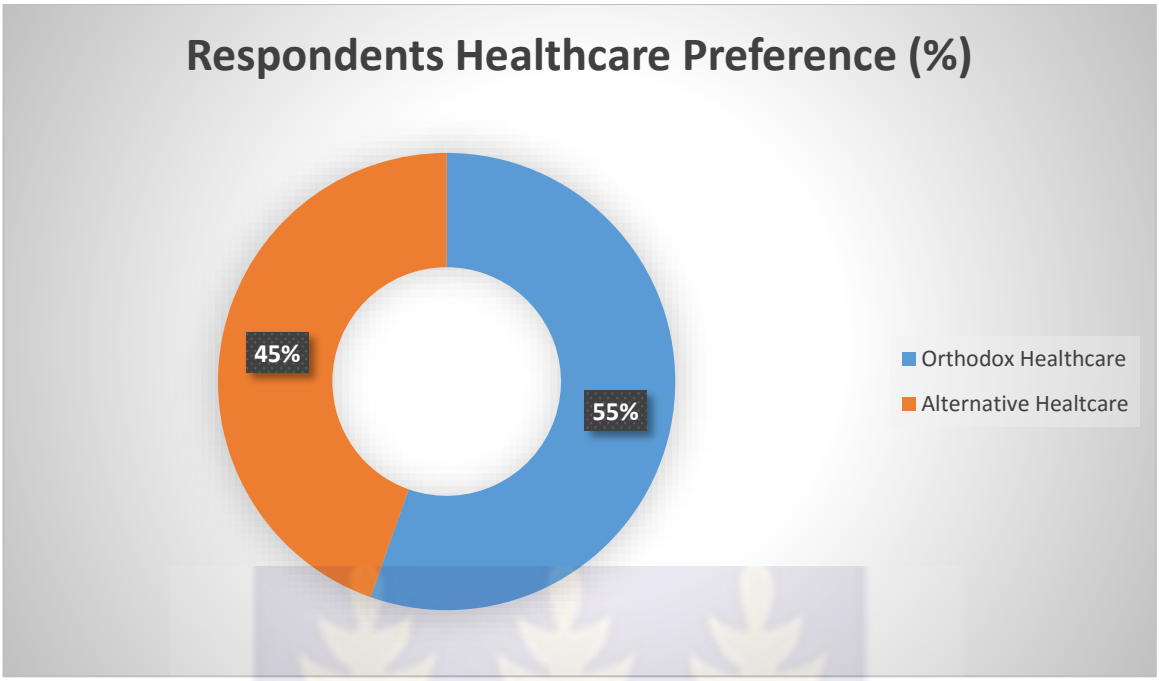

Figure 4.2: Community Members' Preference for Healthcare in Percentage
Source: Field data, (2017).

Community members' preference for healthcare services provided by either Orthodox or Alternative Healthcare facilities differed among the different age groups and educational levels. The study results showed a statistically significant relationship between community members' preference for either Orthodox or Alternative Healthcare and their age group at the 0.05% precision level in the Bole District (p-value = 0.013). There was also statistically significant relationship between respondents' educational level and their preference for healthcare with a p-value of 0.000 at the 0.05 level of precision (p-value = 0.000). As depicted in table 4.3.

Table 4.3: The Relationship between Age and Education Level with Preference for Orthodox and Alternative Healthcare

Variable	**Orthodox Medicine**		**Alternative Medicine**		**χ2**	**df**	**p value**
Age(years)	Freq.	%	Freq.	%	12.679	4	0.013
18-29	135	33.7%	121	30.2%			
30-39	61	15.2%	30	7.5%			
40-49	20	5.0%	13	3.2%			
50-59	5	1.2%	10	2.5%			
60+	1	0.2%	5	1.2%			
Total	222	55.4%	179	44.6%			
Total	Freq. = 401 % = 100%						
Education	**Freq.**	**%**	**Freq.**	**%**	**χ2=42.808**	**3**	**0.00**
No. Edu.	11	2.7%	26	6.5%			
Primary	27	6.7%	17	4.2%			
Secondary	71	17.7%	96	23.9%			
Tertiary	113	28.2%	40	9.8%			
Total	222	55.4%	179	44.6%			
Total	Freq. = 401 % = 100%						

Source: Field Data, 2017.

4.4 Determining Factors of Access and Utilization of Healthcare services

Out of the 401 responses obtained for the study, 276 respondents representing 68.8% indicated they access and use healthcare services while 125 respondents representing 31.2% stated they do not access and use healthcare services in the Bole District.

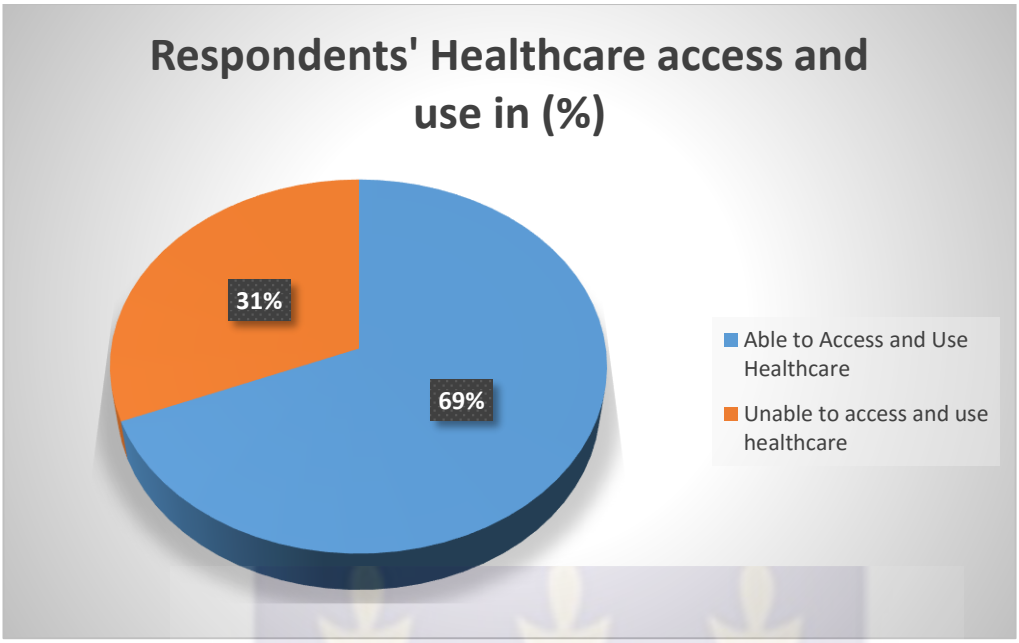

Figure 4.4.1: Respondents Access and Use of Healthcare
Source: Field Data, 2017.

The results of the Chi square test of independence showed that, health insurance status (p-value = 0.000), distance to health facility (p-value = 0.008) and satisfaction with the healthcare (p-value = 0.000), as well as personal factors such as belief system and level of education (p-value = 0.000), affect access and utilization of healthcare as all the variables had p-values less than 0.05. ($p<0.05$), when tested at the 0.05% level of significance indicating statistically significant relationship exist between the determinants and healthcare access and utilization. (See table 4.4).

Table 4.4: Relationship between Various Determining Factors and Healthcare Access and Utilization

Variables affecting access to Healthcare	χ2	df	p value	C.I		%Response	
				L.B	U. B	Freq.	%
Health insurance status	28.370	1	0.000	0.000	0.000	62	15.36 %
Distance to facility	9.749	2	0.008	0.007	0.011	88	21.96 %
Satisfaction with care	36.309	4	0.000	0.000	0.000	162	40.36 %
Personal factors (E.g.: Educational level and belief system)	20.069	3	0.000	0.00	0.00	89	22.32 %

Source: Data from Fieldwork

4.5 Factors Influencing Access to Healthcare from Community Members' Perspective

The respondents were further asked the challenges they encounter when accessing or using healthcare services, the pragmatic measures that in their view can improve healthcare access and utilization in the Bole district. Using open ended questions, the various findings were summarized and categorized into the following themes, the six (6) major challenges stated include; high cost of services, drugs and transportation to referral facilities, poor staff attitude such as poor communication, favoritism and poor emergency response and inadequate human resource mostly in the remote rural areas especially shortage of midwives.

Other factors mentioned as impeding access to healthcare include poor sanitation and environment of health facilities, long distance to facilities and inadequate supply of drugs, consumables and other logistics such as x-ray machines which often breakdown for long periods.

The suggestions given by the community members with regard to what they think can improve their access and utilization of healthcare were grouped into seven (7) improvement measures which include the following; subsidizing of the cost of healthcare, positive attitudinal change of staffs, proper supervision and in service training of staffs on good communication skills as well as recruitment of adequate human resource and fair distribution of staff.

Establishment of new health facilities and upgrading healthcare facilities especially health centers into polyclinics so as to reduce the time and distance community members have to cover before reaching facilities they are often referred to such as the Bole District Hospital, adequate supply of drugs, consumables and important healthcare logistics such as x-ray machines, respect for patients' privacy and confidentiality as well as human dignity and public education of community members on health issues especially services of the National Health Insurance Scheme (NHIS) with regard to medications and services covered by the scheme include measures suggested by the respondents.

4.6 Focus Group Discussion (FGD) and the Indepth Interviews Findings

The qualitative findings obtained through the Focus Group Discussions and the Indepth interviews are in line with the findings of the quantitative data. For instance, on the issue of healthcare facilities available in the Bole District, Participants of the FGD revealed that the two main healthcare systems available in their community are the Orthodox Healthcare systems comprising of the hospital, health centers, Community-based Health Planning Services (CHPS) compounds and licensed 'over the counter' drug stores. The only hospital in the district is located in Bole, the district capital and serves as the referral point for several health centers and CHPS in the district. As well as the Alternative Healthcare system made

up of herbal medicine practioners and Faith based hearers including the Pastors, Mallams and the traditional Medicine healers who basically depend on prayers to heal their clients.

On community members' preference for Healthcare in the Bole District, the FGD participants indicated that most of the community members prefer Orthodox Healthcare to Alternative Healthcare, one participant opined that;

> *"We often attend the health center when ill although we sometimes first buy drugs from the 'over the counter' drugstore before visiting the health center when we perceive the illness to be a mild one"* - A Community member of Jama, a remote area in the Bole District.

Other discussants argued that they usually try herbal drugs when they are having some conditions they believe the herbal medicine is highly efficacious and is acceptable per their culture and tradition, examples of such conditions they gave as boils of all forms, simple and compound fractures which are not open.

Some of the determining factors that affect community members access and utilization of healthcare as mentioned by the FGD participants include; their satisfaction of the care provided, whereas good staff attitude encourages community members to seek for care when necessary, they indicated poor staff attitude discourage their quest to seek for healthcare even when they need to seek for healthcare. For example, one woman indicated;

> *"Some health workers use harsh words (intemperate language) on patients and their relations which makes accessing healthcare uncomfortable"*. - FGD Participant at Jama

Other factors are health insurance status, whether insured or not, they revealed that community members with valid health insurance cards are able to access healthcare more than those who are non-insured. Distance to health facilities was also mentioned as one of

the determinants of access and utilization of healthcare in the Bole district. This view was reiterated by a participant of the FGD and a community member who revealed;

> *"I have to spend more time and money to travel all the way to Bole before I can see a doctor and also do x-ray"* - FGD Participant at Jama

Moreover, the participants indicated that personal factors such as their educational level, marital status and belief system affects their access and utilization of healthcare. Whereas those who are literates can express themselves well to the healthcare providers, those who are unable to express themselves in the language understood by the healthcare provider often realize the interpreters are unable to express their views and complaints exactly as they wish it should be done.

The in-depth interviews also threw more light on healthcare provision as well as access and utilization of healthcare in the Bole District of the Northern region of Ghana. For instance, on the issue of availability of drug, consumables and other logistics in health facilities, one of the healthcare managers in the Bole district had this to say;

> *"Right now we are short of consumables and drugs but because we are owing our suppliers, they do not want to give us more supplies, NHIS too is not paying our claims, hence we need to agree with the patients to pay something to support us run the health facility"*- Healthcare Manager in the Bole District.

4.7 Discussion of Study Findings

This section discusses the findings of the study in relation to the research objectives of the study. Moreover, the findings were compared with existing literature on determinants of access to healthcare to ascertain whether the findings confirm or contradict previous studies.

4.7.1 Healthcare facility availability in the Bole District

Many studies on access and utilization of healthcare among rural residents show that while most rural dwellers can access and use primary health services, they usually have inadequate access and utilization of secondary healthcare facilities and the services they provide (Odetola, 2015; Bennett *et al*., 2013; Khadka & Amin, 2015). The findings of this study approves this assertion and further reveal that although community members in the Bole District can easily access and use primary healthcare facilities such as the CHPS compounds and some health centers, most community members in the district have to travel long distances before they can access and utilize the services of a secondary healthcare facility such as a policlinic and a hospital which can only be located at Bole, Sawla or Wenchi the nearby district capitals for referral services.

There are seven (7) government owned health centers and one CHAG health center as well as thirteen (13) Community-based Health Planning Services (CHPS) centers which provide primary healthcare services such as; ante-natal care services, diagnosis and treatment of minor health conditions such as simple malaria as well as conduct of normal birth deliveries. (BDHD, 2016). This information further supports the finding that primary healthcare services are more accessible and can be used conveniently by community members as compared to secondary or tertiary healthcare services in the Bole District.

Although some respondents acknowledged using one form of herbal medicine or the other when they are ill, there were no health facility solely dedicated for herbal medical practice such as herbal clinic or hospital, with the exception of some few retail herbal shops where over the counter herbal products are sold. This implies that majority of respondents who use herbal products in the district either obtain them from herbal clinics or hospitals outside the Bole district or they resort to unlicensed herbal products from the local Traditional Medicine

practitioners. However, with the inadequate standardization and professional bodies monitoring the activities of Alternative healthcare practioners especially in rural areas (Opoku-Mensah & Ahenkan, 2015), it is quite difficult to know the exact number of Alternative Healthcare facilities operating in the Bole District even though a lot of the respondents acknowledged their awareness of the existence of the Alternative Healthcare services provided by the locals in the Bole District.

The study also revealed that the Bole district has seen gradual increase in the number of various categories of staffs over the years with the exception of Medical doctors, Medical assistants and Laboratory technicians which had no significant increase in their numbers. Professional categories such as midwives, general nurses and auxiliary nurses had their numbers increased from 12, 16 and 21 to 17, 20 and 87 respectively. On the contrary, the number of Community Health Nurses in the Bole district reduced from 44 to 13 over the five-year period between 2011 and 2015 which is as a result of retirement and furtherance of the education of community health nurses to become midwives without corresponding replacement.

4.7.2 Preference for Orthodox and Alternative Healthcare Systems

Two hundred and twenty-one (221) respondents representing fifty-five percent (55%) of community members revealed that they prefer Orthodox Healthcare system to Alternative Healthcare system whilst the remaining one hundred and eighty respondents representing forty-five percent (45%) of the respondents preferred Alternative Healthcare to Orthodox healthcare.

Besides, there were statistically significant relationship between background features of community members such as educational level (p-value =0.013) and their age groups (p-

value = 0.000), with their preference for either Orthodox or Alternative healthcare systems at the 0.05 significance level as both variables had p-values less than 0.05.

With respect to education, the study showed an individual's educational level had a positive correspondence with their preference for orthodox healthcare as more community members without any formal education preferred Alternative to Orthodox healthcare whereas more people with tertiary education preferred Orthodox to Alternative healthcare. The issue of educated people preferring Orthodox to Alternative healthcare services has been emphasized by previous studies (Duru *et al*.; Opoku-Mensah & Ahenkan, 2015), for instance, Duru *et al*. (2016) stated categorically that there was a significant relationship between educational level of individuals and their preference for orthodox healthcare.

In agreement with Duru *et al*. (2016), the age of individuals had a significant relationship with the community member's preference for the two healthcare systems, this is however contrary with the findings of Bamidele et al. (2009) who found no significant relationship between age of individuals and their preference for the two healthcare systems.

The findings of the study therefore reiterate the earlier assertions of some studies that a statistically significant relationship exist between age and educational level of community members and their preference for either orthodox or alternative healthcare. Thus while preference for Alternative healthcare appreciates with increasing age it depreciates with increasing educational level. (Duru, *et al.*; Opoku-Mensah & Ahenkan, 2015; Nottidge, *et al*, 2011; Omonona, *et al*.).

4.7.3 Determining Factors of Healthcare Access and Utilization

The results of the study show that out of the four hundred and one (401) responses obtained 68.8% access and use healthcare services whilst 31.2% indicated they did not access and

use healthcare services in the past six months in the Bole district. The predictor variables such as the educational level, marital status, income level which constitutes personal factors of an individual, as well as the respondents' health insurance status, satisfaction with the healthcare or acceptance of the healthcare provided at health facilities and distance to health facilities had varied influences on healthcare access and utilization among respondents.

The results of the Chi square analysis showed that a statistically significant relationship exist between health insurance status (p-value =0.000) and their access and utilization of healthcare at the 0.05 significance level. The qualitative results obtained from the Focus Group Discussion interviews also supports this finding as the participants of the FGDs revealed although there are challenges affecting the operations of the National Health Insurance Scheme yet notwithstanding these challenges, being enrolled on the scheme improves their access and utilization of healthcare.

Proportionally, seventy-three percent (73%) of the insured respondents indicated they accessed and used healthcare services whilst only thirty-five percent (35%) of respondents without any health insurance cover accessed and used healthcare services. this finding agrees with the findings of several previous studies which suggest that enrolling on health insurance scheme has positive effect on an individuals' healthcare access and utilization. (Kaluski, et al., 2015; Mohammed, et al., 2015 & Frimpong, et al., 2014; Sepefri, 2014).

With the varied debates on the effect distance to healthcare facilities have on access and utilization of healthcare services, the findings of previous studies on the influence of distance on access and utilization of healthcare are largely divided with some literature supporting the assertion that increase in distance to health facilities decrease access and utilization of healthcare services and vice versa (Kelly, et al., 2017; Wairiuko, 2014), Other studies such as Lamarche et al, (2011) stated categorically that increasing availability of

healthcare facilities does not necessarily improve access and utilization of healthcare but may rather cause diminishing returns to healthcare accessibility and utilization.

This study supports the view that the higher an individuals' distance to a healthcare facility the lesser the individual can access and use the healthcare services it provides as suggested by Kelly, et al., (2017) and Wairiuko, (2014), as the findings showed a statistically significant relationship between distance to health facility (p-value=0.008) and healthcare access and utilization at the 0.05 precision level using Chi square analysis. This view is in line with several complains by community members such as;

> *"I have to spend more time and money to travel all the way to Bole before I can see a doctor and also do x-ray" - FGD Participant at Jama.*

Satisfaction with care provided for an individual had a significant relationship with access and utilization of healthcare (p-value = 0.000) at the 0.05 significance level. This was further supported by the results of open ended questions on determinants of respondents' healthcare access and utilization as 162 respondents representing 40.26% indicated their satisfaction with the healthcare provided for them determines whether they would access and utilize services of a healthcare facility. This assertion was earlier established by Wairiuko, (2014) who stated that users' level of satisfaction with the service provided at a healthcare facility has a significant relationship with the user's access and utilization of the healthcare services. Personal characteristics of individuals such as one's educational level and belief system also had significant relationship with respondents' healthcare access and utilization of healthcare in the Bole District. For instance, increasing educational level was found to have a significant relationship with access and utilization of healthcare (p-value = 0.000) at the 0.05 precision level using Chi square test of independence. 89 respondents representing 22.36% of the respondents indicated personal factors such as ones' educational level and belief system have significant influence on their access and utilization of healthcare.

Various studies such as WHO, (2017) supports this finding as the organization enumerate educational level among factors influencing access to healthcare. The significant relationship (with a p-value of 0.000 at 0.05 precision level) between educational level and healthcare access and utilization is also reiterated by the findings of other studies such as Wairiuko, (2014).

4.7.4 Community Members' Perspectives on Challenges and Improvement Measures for Healthcare Access and Utilization

The views of community members on the challenges posed by financial constraints due to high cost of services, drugs and transportation to healthcare facilities have been earlier on upheld by findings of studies conducted by JHCECHD, (2017) and Wandera *et al*., (2015) who posited that people with low socio-economic status usually do not have adequate access to healthcare services. this position was further reiterated in a study by an international healthcare organization, the WHO, (2017), which indicated income level and socioeconomic status of an individual as a major determinants of healthcare access.

Wairiuko, (2011) in a study assessing the determinants of healthcare accessibility also revealed a significant relationship between users' satisfaction with the healthcare service delivered to them, which is premised on issues bothering the way and manner in which the patients are attended to by health staff. In line with the above literature, the respondents raised complaints such as; poor staff attitude with regard to poor communication, favoritism for some clients and poor emergency response as some of the issues affecting their access and utilization of healthcare services. For instance, a respondent complained:

> "*They [health staff] are very slow in attending to patients, their emergency responds is also poor and they don't seem to have respect for human beings*"- *a community member at Bole.*

Consequently, a senior health manager in the district who preferred to remain anonymous when asked about staff-patient relationships in the Bole district admitted that occasionally there arise issues of disagreements between health staff and patients, their relatives or care takers but in such cases the unit head of the facility usually settles the dispute and its only when the issue is beyond the immediate unit head that it is brought to the attention of the senior managers. She further added that there are suggestion boxes in some facilities to solicit the views and grievances of healthcare users so as to improve healthcare delivery in the district.

Inadequate human resource has been reported to be an affront to effective delivery, access and utilization of healthcare services. The findings of this study and existing empirical literature on healthcare access such as Uneke, *et al*., (2017), and the Bole District Health Directorate Annual Performance Review, 2016 reiterated this issue. However, in the Bole District there was particular emphasis on shortage of staff in the remote areas especially midwives by community members. In response to that, a healthcare manager in the district revealed frantic efforts have been made to request for more health staff to be posted to the Bole district.

Based on physical observation of some of the healthcare facilities in the district, it was found that some of them were not in good shape, this assertion was further emboldened by the views of some community members who indicated the deplorable nature of some of the healthcare facilities in the Bole District coupled with poor sanitation, erratic supply of consumables such as roll plaster, syringe and needles and intravenous giving sets as well as inadequate supply of essential logistics such as diagnostic equipments and laboratory services impede the access and utilization of healthcare in the Bole District.

Meanwhile, another senior healthcare manager, on the issue of the deplorable nature of some healthcare facilities stated the health management team of the district is aware of the poor nature of some of the health facilities but added that by their nature renovating healthcare facilities are "capital intensive" thus very costly hence it usually require national or donor funds to successfully renovate, refurbish or upgrade existing healthcare facilities, even so, she added efforts within their strength are always put in place to improve the physical state of some of the facilities.

4.7.5 Implications of the Study Findings on the Conceptual Framework

The study revealed that the main determinants of community members' access and utilization of healthcare services in the Bole district are; satisfaction with the healthcare, health insurance status, distance to health facility as well as personal factors including educational level and belief system as illustrated in figure 4.7.5.

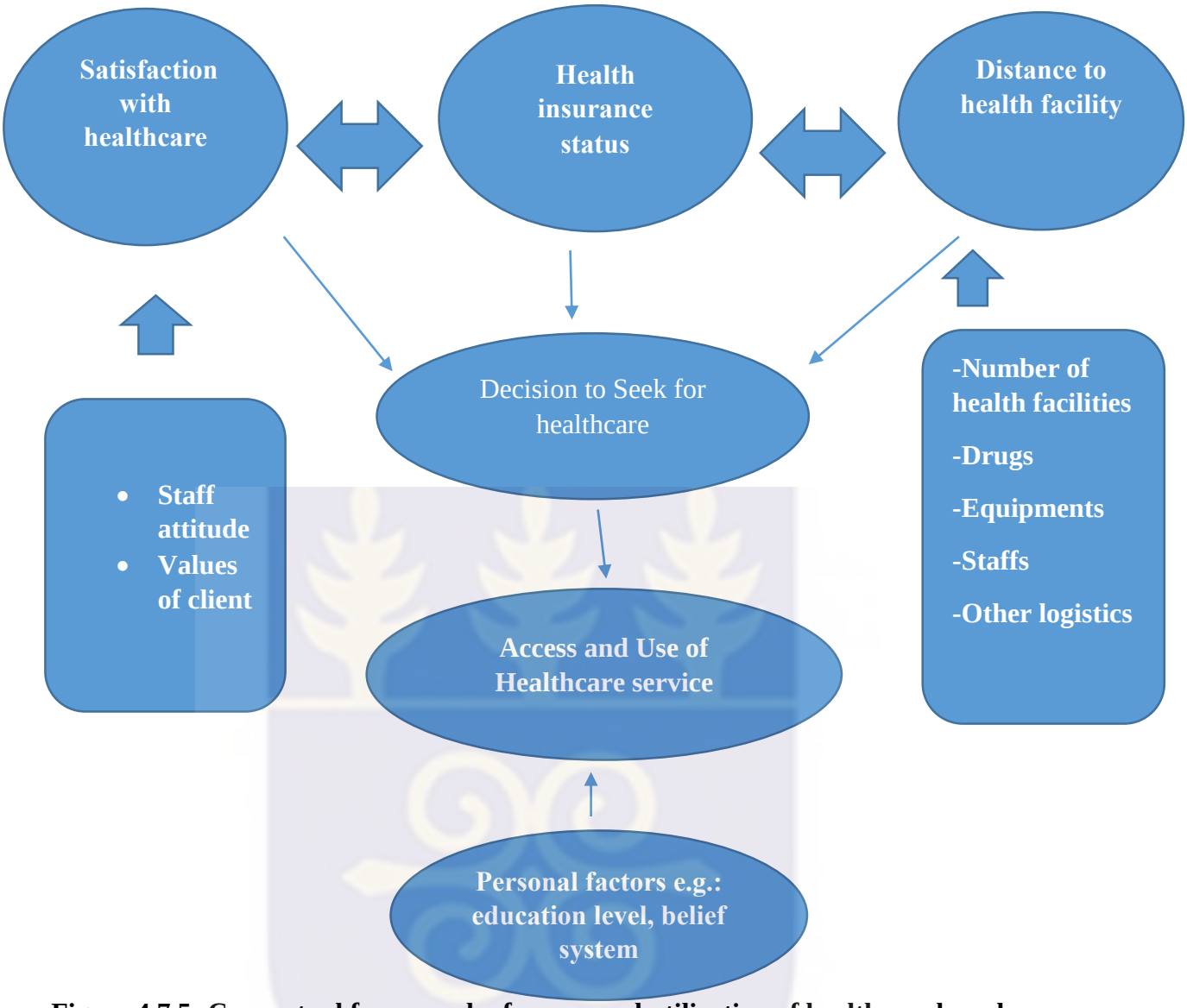

Figure 4.7.5: Conceptual framework of access and utilization of healthcare based on study findings

Source: Author

The definition of healthcare access and utilization in the study was based on the dimensions of physical accessibility, financial affordability and acceptability of the services healthcare facilities provide for their clients. From the study, the most significant determining factor influencing a community members' accessibility and utilization of healthcare services in the Bole District was the patients' satisfaction with the care provided by a health facility, whether it meets their healthcare needs and individual or cultural values, as well as staff

attitude including such issues as punctuality, promptness of health staff and staff-patient communication.

Another determinant influencing community members' accessibility and utilization of services of healthcare facilities is the distance covered by individuals before reaching a health facility, from the results of the study, 88 community members representing 21.96% of the respondents described the main determinant of their access and utilization of healthcare as the distance to healthcare facilities. There was also a statistically significant relationship between distance to healthcare facilities and respondents' healthcare access and utilization of healthcare (p-value =0.000) at the 0.05 level of precision to support this claim. Among the factors that are closely associated with distance and availability of health services from the study findings are issues such as erratic supply of drugs to healthcare facilities, lack of medical equipments and logistics used for diagnosis and treatment as well as the number of health staff present at healthcare facilities.

In addition to the above, the health insurance status of an individual regardless of their income level had significant relationship with whether the individual would access and utilize healthcare services or not. Many of the respondents thus 15.36% stated that the major determinant of their access and utilization of healthcare services is health insurance status.

Finally, apart from community members' satisfaction with care, their distance to healthcare facilities and their health insurance status, on which the conceptual framework was based, about 22.32% of the respondents indicated that personal factors peculiar to an individual such as, belief system and educational level influences their access and utilization of healthcare. Moreover, belief system of an individual for instance education level had a statistically significant relationship with access and utilization of healthcare (p-value = 0.00)

at the 0.05 level of significance. Therefore, personal factors were added to the conceptual framework as another determinant of access and utilization of healthcare.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

5.0 Introduction

This chapter presents summary of the findings of the study with emphasis on the specific objectives of the study. Based on the results of the study, recommendations to help improve access and utilization of healthcare services in the Bole district are also suggested and conclusions finally drawn. In addition, the limitations of the study and suggestions for research are also presented.

5.1 Summary of study findings

Access to healthcare remains a major component of the well-being of every population, however the factors that are associated with and influences access and utilization of healthcare differs among various populations. In studying the determinants of access and utilization of healthcare services in the Bole district of the Northern region of Ghana, a structured questionnaire, interview guide and focus group discussion were used to obtain data from the respondents. In selecting samples for the study, three communities namely Bamboi, Jama and Bole Township were purposively selected to represent the remote areas and the district capital respectively. A total of four hundred and thirty-five (435) respondents were then purposively sampled from various selected communities.

The availability of health facilities in the Bole District was assessed using direct observation and secondary data from the Bole District Health Directorate Annual Performance Reviews and the Ghana Statistical Service (GSS) data on the Bole District. While community members' preference for either Orthodox or Alternative Healthcare systems was analyzed

using Chi square test of independence, also the determinants of healthcare access and utilization were analyzed using frequencies, cross-tabulations Chi square test of independence.

5.2 Findings of the Study

The study had the following findings:

- Community members living in remote areas of the Bole District have to travel long distance before they can access and use secondary healthcare services mostly in the only Government Hospital in the district due to unavailability of polyclinics in the Bole District.
- Frequent unavailability of medications at most Orthodox health facilities in the Bole district due to erratic supply of medications resulting in frequent shortage of medications discourage most community members from accessing and utilizing healthcare services.
- Most of the well-educated community members preferred Orthodox Healthcare to Alternative Healthcare services and vice versa. Whiles most of the aged community members preferred Alternative Healthcare to Orthodox Healthcare system.
- Community members' satisfaction with the healthcare provided for them is associated with the attitude of health staff with regard to promptness, punctuality to work and their manners, as well as the individual and cultural values of clients, poor staff attitude therefore discourage community members from seeking for healthcare service thereby impeding their healthcare access and utilization.
- The health insured community members were more likely to access and utilize Orthodox Healthcare facilities as compared to those who were not enrolled with any form of health insurance scheme.

- Personal factors and characteristics of individuals such as community members' belief system and educational level have statistically significant relationship with individuals' access and utilization of healthcare services in the Bole District.

5.3 Recommendations of the study

- The capacity of some of the primary healthcare facilities in the Bole District particularly CHPS compounds and health centers should be upgraded into polyclinics to reduce the travelling time and distance of community members in remote areas before they can access the services of a hospital.
- To ensure community members who prefer Alternative Healthcare to Orthodox Healthcare are not left out of the mainstream healthcare system, the Ghana Health Service should integrate the services of qualified Herbal Medical Officers in some health facilities in the Bole District.
- Appropriate measures on co-payment should be formulated by the stakeholders of healthcare namely community members, healthcare providers and NHIS officials in the Bole District and the agreed measures should be well communicated to the entire community to ensure smooth cooperation between health providers and community members in the Bole District.
- To eliminate the incessant frustration of community members associated with the erratic shortage of medications in most of the health facilities in the Bole District, the healthcare managers should promptly communicate the medications available in the health facilities to their community members through the mass media channels.
- To solve the problem of poor attitude and mannerism of some health staff which discourage some community members from accessing healthcare, strong

supervisory measures should be put in place to monitor the attitude of health staff at work.

5.4 Conclusions

Access and utilization of healthcare services remains an essential part of human development hence there is the need to find ways and means of improving it among various populations. This study which examined the determinants of healthcare access and utilization in the Bole District revealed that despite the existence of health facilities in many parts of the district, some community members still have to travel long distances to Bole, the district capital before they can access secondary healthcare services, erratic supply of medications to the healthcare facilities in the district often lead to frequent unavailability of medications thereby discouraging many individuals from accessing and utilizing health facilities in the Bole District. The study revealed that the major determinants of access and utilization of healthcare facilities in the Bole District are; satisfaction with the care provided for them, distance to health facilities and health insurance status as well as personal factors of an individual mainly their level of educational and belief system.

5.5 Limitations of the study

The study is limited with respect to its design. The case study design used for the study has the limitation of not allowing generalization of study outcomes beyond the study population. Notwithstanding these limitations the findings of the study can help formulate and implement pragmatic measures and policies that would improve access and utilization of healthcare services in communities.

5.6 Suggestions for future research

The study assessed the determining factors of access and utilization of healthcare services in the Bole District, all issues regarding healthcare access and utilization could not be exhausted by the study. Further studies could examine the magnitude of financial burden incurred by community members when accessing healthcare in the Bole District using different methods and approaches.

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APPENDICES

Appendix I: Questionnaire

UNIVERSITY OF GHANA

DEPARTMENT OF PUBLIC ADMINISTRATION AND HEALTH SERVICES MANAGEMENT

My name is Abile Moses, a second year graduate student of University of Ghana pursuing MPhil in Health Services Management, I am undertaking a research on the topic ***"The Determining Factors of Access to Healthcare in the Bole District of the Northern Region of Ghana".*** I wish to assure you that this is an academic study and all information obtained shall strictly be used for academic purposes. You are also assured of absolute anonymity and confidentiality. There is no right or wrong answer.

DECLARATION BY RESPONDENT

I certify that the purpose of the study has been explained to me and all my questions have been answered to my satisfaction and I reserve the right to discontinue participation in the study at any time I am willing to do so. I therefore voluntarily agree to answer the questions of the study.

……

Signature/Thump print

……

Date

DECLARATION BY THE RESEARCHER

I certify that the purpose and nature of this research has been explained to the above respondent, and any questions raised by the respondent has been satisfactorily answered.

……..

Signature of the person who obtained the consent

……...

Date: …….

No.

Please tick the most appropriate answer or provide your responds in the space provided

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. How old are you? ……..
2. Gender: 1. Male [ ] 2. Female [ ]
3. Education Level: 1. No Education [ ] 2. Primary [ ] 3. Secondary [ ] 4. Vocational [ ] 5. Technical [ ] 6. Tertiary [ ]
4. Occupation: 1. Teacher [ ] 2. Trader [ ] 3. Farmer [ ] 4. No occupation [ ] 5. Other (specify) …….
5. Marital Status: 1. Single [ ] 2. Married [ ] 3. Divorced/separated [ ] 4. Widowed [ ]
6. Religion: 1. Christian [ ] 2. Islam [ ] 3. Traditional [ ] 4. Other specify……
7. Household Size: ……
8. In all, how much do you earn as your income per month? 1. Less than 500 GH₵ [ ]

2. 500 - 1000GH₵ [ ] 3. More than 1000 GH₵ [ ]

9. Distance to nearest Health Facility; 1.Less than 1km [] 2. 1-5km [] 3. Above 5km []

SECTION B: AVAILABILITY OF HEALTH CARE FACILITIES

10. Which of the following healthcare systems (are you aware of their existence) are available in the Bole District? 1. Orthodox Medicine [ ] 2. Herbal Medicine [ ] 3. Homeopathy [ ] 4. Faith-based Healers [ ] 5. Chiropractic [ ] 6. Acupuncture [ ]
11. Among the healthcare systems which one is your first point of call when you are ill or sick? 1. Orthodox Medicine [ ] 2. Alternative Healthcare
12. If Orthodox Medicine, Which type of health care facility is your first point of contact when ill or sick?
    1. Government Hospital [ ] 2. Private Hospital [ ] 3. Mission Hospital [ ] 4. Quasi [ ] 5. Other specify …….
13. What reason (s) informed your choice of the type of health facility in the question above? 1. Affordability [ ] 2. Proximity [ ] 3. Quality of care [ ] 4. Strong provider-patient relationship [ ] 5. Conformity with religious or cultural beliefs [ ] 6. Less pressure at facility [ ] 7. Readily availability of health workers [ ]

SECTION C: ACCESSIBILITY AND UTILIZATION OF HEALTH CARE SERVICES

14. Have you ever experienced any form of illness or injury in the last six (6) months?
    1. Yes [ ] 2. No [ ]
15. What type of illness or injury was it? 1. Injury [ ] 2. Medical Condition [ ] 3. Surgical Condition [ ] 4. Psychiatric Condition [ ] 5. Others specify ……

16. Have you visited a health facility in the last six (6) months? 1. Yes [ ] 2. No [ ]
17. Are you an active member of a health insurance scheme? 1. Yes [ ] 2. No [ ]
18. If yes, what type of Health Insurance do you have? 1. NHIS [ ] 2. . Private Health Insurance [ ] 3. Specify ……
19. If No, how do you finance your health care? 1. Delay the treatment till I get money [ ] 2. Pay from personal earnings/income [ ] 3. Sell assets to finance my health care [ ] 4. Borrow from Friend or relatives [ ] 5. Do nothing [ ]
20. If you are not an active member of any health insurance scheme, why? 1. Have not heard of NHIS [ ] 2. Unable to afford premium [ ] 3. NHIS do not cover my health need [ ] 4. Do not know where to register [ ] 5. Poor attitude of staff [ ] 6. Poor health care [ ] 7. Expired health insurance card [ ]
21. Do you have free access to public health facilities with your Health Insurance? 1. Yes, I have free access to healthcare with my health insurance [ ] 2. No, I still pay for some services and or drugs [ ]
22. Has your Health Insurance improved your access to healthcare? 1. Yes [ ] 2. No [ ]
23. How do you get to your nearest health care facility? 1. Car/Vehicle [ ] 2. Walk [ ] 3. Bicycle/Motor [ ]
24. How long does it take you when you access health care in the Bole District? 1. Less than 1hr [ ] 2. 1hr-2hrs [ ] 3. 2hrs-3hrs [ ] 4. 3hrs-4hrs [ ] 5. More than 4hrs [ ]
25. What are some of the challenges you face while accessing health care facilities? 1. High cost of service [ ] 2. Religious Belief [ ] 3. Difficult treatment regimen [ ] 4. Poor attitude of staff [ ] 5. Uninsured [ ] 6. Long distance to health facilities [ ]
26. What is your level of satisfaction with waiting times at health facilities that you attend? 1. Very Satisfied [ ] 2. Satisfied [ ] 3. Neutral [ ] 4. Dissatisfied [ ] 5. Very Dissatisfied [ ]

27. How would you describe the surrounding environment of the health facility that you attend in terms of cleanliness? 1. Very Satisfied [ ] 2. Satisfied [ ] 3. Neutral [ ] 4. Dissatisfied [ ] 5. Very Dissatisfied [ ]
28. The level of skills and knowledge of health care providers providing health care. 1. Very Good [ ] 2. Good [ ] 3. Satisfactory [ ] 4. Poor [ ] 5. Very Poor [ ]
29. How would you rate the attitude of health care providers? 1.Very Good [] 2.Good [] 3. Satisfactory [ ] 4. Poor [ ] 5. Very Poor [ ]
30. Ease of scheduling appointments with health care providers. 1. Very Good [ ] 2. Good [ ] 3. Satisfactory [ ] 4. Poor [ ] 5. Very Poor [ ]
31. Clarity of communication by health care providers. 1. Very Good [ ] 2. Good [ ] 3. Satisfactory [ ] 4. Poor [ ] 5. Very Poor [ ]
32. Adherence to patient privacy and confidentiality. 1. Very Good [ ] 2. Good [ ] 3. Satisfactory [ ] 4. Poor [ ] 5. Very Poor [ ]
33. How would you rate the overall quality of health care delivery in the Bole District? 1. Very Good [ ] 2. Good [ ] 3. Satisfactory [ ] 4. Poor [ ] 5. Very Poor [ ]
34. Are you satisfied with the overall healthcare provided in the Bole District? 1. Yes [] 2. No [ ]
35. Can you access and use healthcare services you need in the Bole District? 1. Yes [ ] 2. No [ ]

SECTION D: CHALLENGES AND RECOMMENDATIONS

36. What are some of the challenge(s) you face when accessing health care in the Bole District?……
……
37. What do you think can be done to improve health care delivery in the Bole District?
……
……

Appendix II: In-Depth Interview Guide

UNIVERSITY OF GHANA

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The purpose of the study for which this questionnaire is being issued is to investigate The Determining Factors of Access to Healthcare in the Bole District in the Northern Region of Ghana, your response to the questions are required as data for the study, you are hereby assured that the study is solely for the purposes of this research and your anonymity and confidentiality are guaranteed, therefore your candid and sincere views are welcomed. You however reserve the right to decline or partake in the study.

Do you consent to partake in this research? Yes [ ] No [ ] if yes sign/thumbprint: ……

Date …… Time …… Questionnaire code…….

Profession: 1. Medical Doctor [ ] 2. Nurse [ ] 3. Pharmacist [ ] 4. Laboratory staff [ ] 5. Pharmacist [ ] 6. Administrator [ ] 7.other specify …….

Date: ……..

1. Gender: 1. Male [ ] 2. Female [ ]
2. What types of health systems are currently available in the Bole District?
3. Which of the health systems do you work under?
4. How many of health facilities are operating currently in the Bole District?

5. In your view how does staff-patient relationship affect healthcare access in the district?

6. In your opinion, how do the health insurance status of clients affects their access to healthcare?

7. What are some of the challenges facing healthcare access by community members in the Bole District in your view?

8. What measures can help to improve healthcare access in the Bole District in your view?

Appendix III: Focus Group Discussion for Community Members (Men and Women) in the Bole District

The purpose of the study for which this questionnaire is being issued is to investigate Determinants of Access to Healthcare in the Bole District of the Northern Region of Ghana, your responses to the questions are required as data for the study, you are hereby assured that the study is solely for the purposes of this research and your anonymity and confidentiality are guaranteed, therefore your candid and sincere views are welcomed. You however reserve the right to decline or partake in the study.

Do you consent to partake in this research? Yes [ ] No [ ] if yes sign/thumbprint: ……

Date …… Time …… Questionnaire code…….

Name of enumeration area/facility: …….. Number of participants: …….

1. How does the following demographic features affect individual's access to healthcare in this district? 1. Age 2. Gender 3. Education level 4. Religion 5. Insurance status 6. Location of residence
2. What is the first point of contact for healthcare of women in the Bole District?

   1. Hospital 2. Clinic 3. Health center 4. CHPS 5. Pharmacy

   6. Licensed chemical shop 7. Herbal practitioner 8. Spiritual healer
3. Why do they prefer these health facilities in point two (2)?
4. What measures can help improve healthcare access in the Bole District?

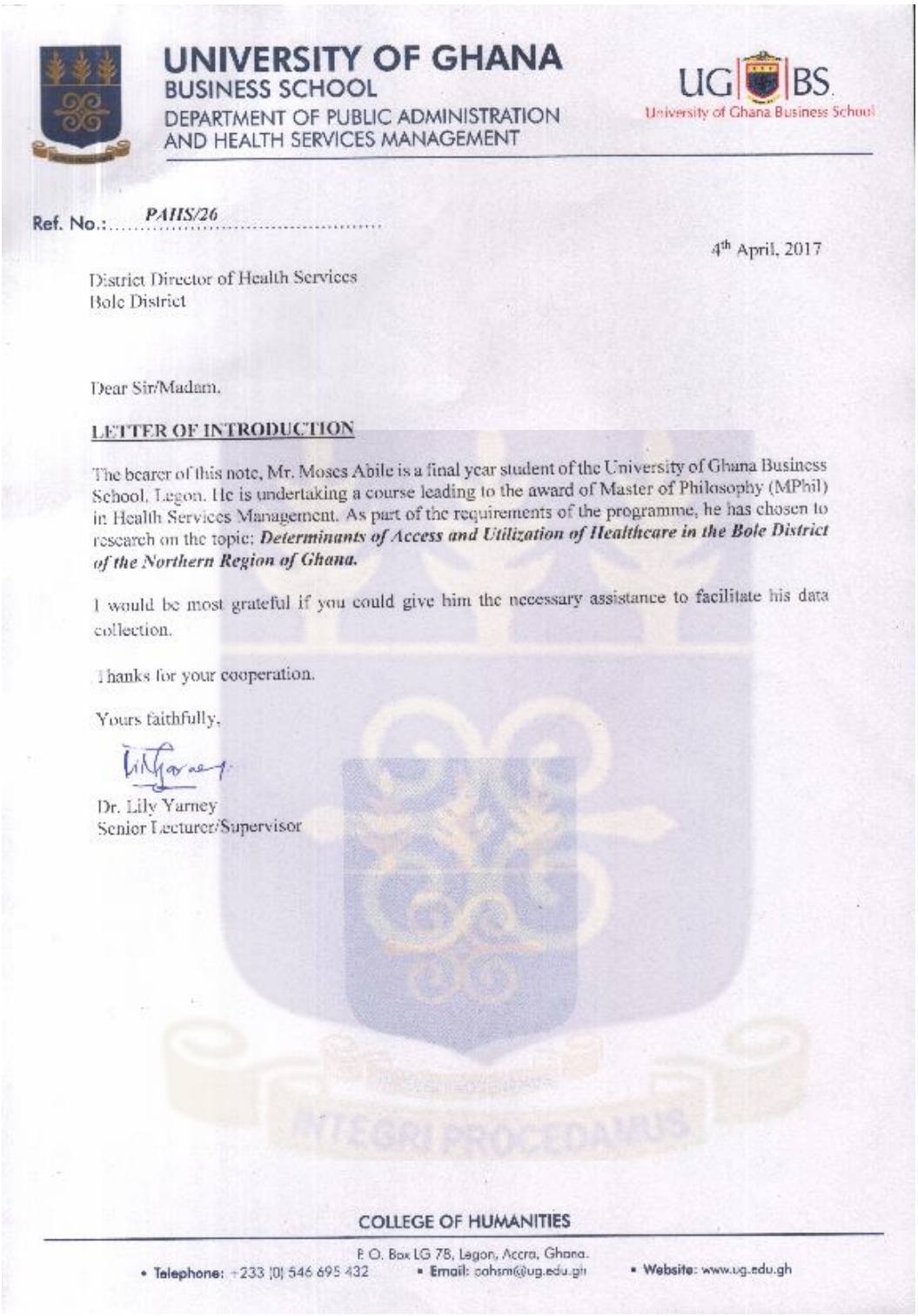
5. How does the following health-facility based factors affect community members' healthcare access in the district? 1. Drugs/medications availability 2. Consumables availability

   3. Staff-patient relationship 4. Waiting time at health facility

6. What are the main challenges of access to healthcare in the Bole District?

7. What measures can help improve healthcare access in the Bole district from the community perspective?

Appendix IV – Introductory Letters



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BUSINESS SCHOOL
DEPARTMENT OF PUBLIC ADMINISTRATION
AND HEALTH SERVICES MANAGEMENT

UGBS
University of Ghana Business School

Ref. No.: PAHS/26

4th April, 2017

District Director of Health Services
Bole District

Dear Sir/Madam,

LETTER OF INTRODUCTION

The bearer of this note, Mr. Moses Abile is a final year student of the University of Ghana Business School, Legon. He is undertaking a course leading to the award of Master of Philosophy (MPhil) in Health Services Management. As part of the requirements of the programme, he has chosen to research on the topic: ***Determinants of Access and Utilization of Healthcare in the Bole District of the Northern Region of Ghana.***

I would be most grateful if you could give him the necessary assistance to facilitate his data collection.

Thanks for your cooperation.

Yours faithfully,

Dr. Lily Yarney
Senior Lecturer/Supervisor

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TO WHOM IT MAY CONCERN

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