

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

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Barriers to Healthcare: The case of Students at Ashanti School for the Deaf, Jamasi.

By

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(PG 9912413)

A Thesis submitted to the Department of Community Health,

College of Health Sciences

In partial fulfillment of the requirements for the degree of  
Master of Science (Disability, Rehabilitation and Development)

(November 2016)

# KNUST



**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**DEPARTMENT OF COMMUNITY HEALTH  
CENTER FOR DISABILITY AND REHABILITATION STUDIES**



***Topic: Barriers to Healthcare: The case of Students at Ashanti School for The Deaf,  
Jamasi***

**Thesis submitted by:**

**Ebenezer Alfa Senayah**

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**In partial fulfillment of the requirement for the Master of Science in Disability  
Rehabilitation and Development**

## DECLARATION

I hereby declare that, this thesis is an original piece of research work which I have undertaken herein under the supervision of Dr Wisdom Kwadwo Mprah a Lecturer at the Centre for disability and rehabilitation studies (CEDRES) of Kwame Nkrumah University of Science and Technology.

I have duly acknowledged all sources of information and am personally responsible for any omission or shortcomings.

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Signature

Date

I declare that I have supervised the student in undertaking the study and I confirm that he has my permission to submit it for assessment

DR. WISDOM KWADWO MPRAH .....

(SUPERVISOR)

Signature

Date

DR. YEETAY ENUAMEH .....

(HEAD OF DEPARTMENT)

Signature

Date

## DEDICATION

I dedicate this work firstly to God, secondly to my Parents and Siblings for their love and support without which it would have been impossible to have finished this work



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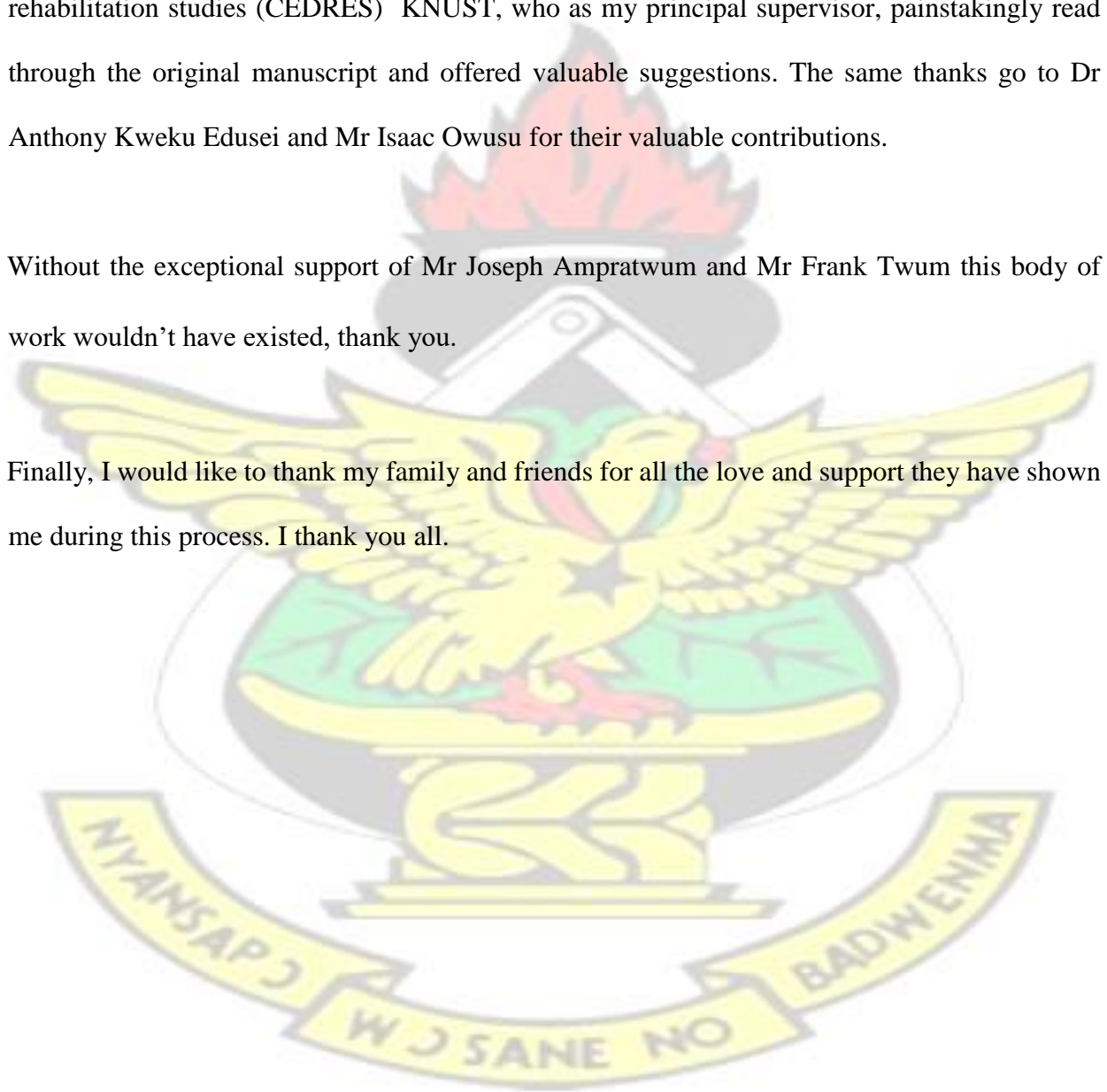


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## ABSTRACT

Persons with Deafness encounter numerous challenges in their quest to access healthcare. These challenges have the potential to limit access to healthcare and more importantly endanger their health. This research aims to bring to the fore the challenges encountered by students with deafness in their attempt to access healthcare. The design is a case study using quantitative methods .A total of 67 students were purposively selected for the study. Closed ended questions were used to access the various challenges associated with healthcare. Need indices were estimated based on choices on a Likert scale. In terms of access priority majority of respondents prioritized friendliness and respect from healthcare professionals. Difficulties with knowing which facility to visit, securing permission to visit a health facility, lack of funds, difficulties with transportation and access to interpreter services within health facilities were major barriers to access to healthcare. Family support was the highest need index for females while that of males was recorded on health worker privacy. The varied nature of the issues at stake requires that all stakeholders should be involved if deaf students are to enjoy greater access to health care. It is recommended that teachers make more time to thoroughly discuss issues of health education with students. Clinicians and non-clinicians as well should be made aware of the need to thoroughly explain health issues to deaf students.

## CHAPTER ONE

### INTRODUCTION

#### **Background to the study**

According to the World Health Organization (WHO) (2012), deafness is a broad term which is used to describe the loss of hearing in one or both ears and can range from complete to partial loss of an individual's perception of sound in one or both ears. The level of deafness can be mild, moderate or severe. Some people are born deaf; some also become deaf through various diseases or accident in their childhood while others become deaf as they age (Nortey, 2009). The WHO (2012) estimates that 5.3% of the world's population suffers from some form of deafness. This translates to roughly 360 million persons. The prevalence of disabling deafness in children is greatest in low income countries such as those in South Asia, Asia Pacific and Sub-Saharan Africa (WHO, 2012). In Sierra Leone, for example, approximately four children out of every 1000 are deaf, and many of them do not have speech. Currently, there is no reliable data on the prevalence of deafness among children in Ghana. However, the overall prevalence of deafness is believed to be one per 1000 persons (Ghana National Association for the Deaf, 2016).

Sickness and disease can be a very discomfoting experience for most patients, care givers and their families because it can disrupt academic work, economic activities and social life. Sickness and diseases can thus affect the output of a country's human resource adversely due to its debilitating effects. Prompt and effective treatment of patients who access health care is therefore necessary to mitigate the burden of illness on individuals and to ensure that the population of a country is healthy (Shuler, 2013). Misdiagnoses, unnecessary assumptions, mistreatment and poor assessments could result in inadvertent harm to



patients, and subsequently, reduced satisfaction and treatment adherence (Glickman and Gulati, 2003).

Deaf patients encounter serious problems when, for example, queuing and filling out medical forms due to communication barriers (Thew et al. 2012). The difficulty in communication between deaf patients and health care professionals may lead to inaccurate and insufficient information across both sides. Problems often arise because health care professionals and other staff often neglect or are unaware of the communication needs of persons with deafness (National Council on Disability 2009). Issues relating to communication are central to persons with deafness and they require support services in order to access health care. However, they receive inadequate attention in the health care system. Persons with deafness who visit health facilities may therefore feel less comfortable and would have more difficulties accessing health care than those who are hearing, especially in the absence of support services and technologies (Thew et al. 2012).

According to O'hearn (2006), most of the information that hospital staff communicate to deaf patients may not be understood, even among highly educated persons with deafness and this has been cited as the primary cause for dissatisfaction with medical care. Also, ignorance about deafness on the part of health professional about deafness has created barriers for persons with deafness, O'hearn (2006), further notes that, for example, out of ignorance, some health professionals have doubted the hearing status of some post-lingual deaf patients. DeVinney and Murphy (2002) have detailed the experiences of a post-lingual woman with deafness that had clear, intelligible speech and was admitted to a hospital for depression. Hospital staff presumed she could hear, despite the patient insisting many times that she could not. Her anger finally was attributed to her illness.



The Ghana National Association of the Deaf (GNAD) has also raised concerns about the difficulty students with deafness encounter when accessing health care because of communication barrier with health professionals (GNAD, 2016). Most health professionals are not familiar with sign language and usually have no education or knowledge about deafness (Allen et al, 2002). Further to this, health care providers who recognize deaf patients' preference for sign language fail to use qualified interpreter services regularly due to the extra cost involved (Gilchrist 2000; O'hearn, 2006).

The length of time that patients spend in receiving medical services and the administrative procedures that patients have to go through greatly influence their patronage of health care (Atinga, 2012). If patients experience unnecessary delays and challenges at the point of service delivery it may likely result in stress and dissatisfaction (Atinga, Abekah-Nkrumah, and Domfeh, 2011). The dissatisfaction however becomes more profound especially when we consider persons who are disabled, for example, deaf patients. Nortey (2009) stated that patients with deafness are severely disadvantaged in accessing health care because deafness is not visible.

It is important to note that when health care providers demonstrate sensitivity to communication through minimal sign language skills, or show a willingness to use pen and paper, they are often highly appreciated by persons with deafness. The services of an interpreter can also not be overlooked (O'hearn, 2006).

Inclusion is a right per the Ghana Disability Act 715. Persons with deafness should therefore be given access to health care in the desired and appropriate formats. For example, the inclusion of sign language in the curriculum of health training institutions may improve the proficiency of health professionals in sign language and enhance communication

between persons with deafness and health staff (GNAD, 2014). Glickman and Gulati (2003) recommended a culturally affirmative approach to health care for persons with deafness.

### **1.1 Statement of the problem**

Access to health care for persons with deafness is a major public health issue worldwide. There is high incidence of misdiagnoses, poor assessment and unnecessary transfers, which result in inadvertent harm and reduced patronage of health facilities by persons with deafness (Shuler et al. 2013). Jones, Renger and Firestone (2005) have stated that generally the deaf community is a very vulnerable population that is susceptible to many health conditions due to poverty. Arulogun et al, (2013) mentioned that health facilities are often not accessible because they are not designed for use by persons with deafness. Beyond accessibility, patients who are deaf do not get the opportunity to participate in health care decisions which is their legal right (Arulogun, 2012). The situation is not different in Ghana as studies conducted by Mprah (2011) and Tsibo-Darko (2008) have indicated that persons with deafness have difficulty accessing information on health related issues.

Education and increased access to information have become key government strategies to address issues of access to health care. The main aim of these strategies is to empower individuals, including the disabled to have equal access health care (Agbenyega, 2013). The Ghana National Association of the Deaf, the Ministry of Health and other stakeholders have made efforts to improve upon the health status of the deaf population in Ghana through improved access (Atiga, 2011). The training of health personnel in sign language is one step being implemented to address communication barriers persons with deafness encounter in the health care setting (Agbeyega, 2013). Although some studies have

confirmed that persons with deafness have difficulty accessing health care in Ghana, these studies are not comprehensive to provide understanding of the health care needs of the deaf population, especially young persons with deafness. This study is being conducted to shed more light on the varying challenges encountered by students with deafness in their quest for quality health care.

## **1.2 Research Questions**

1. What barriers do deaf students from Ashanti School for the deaf encounter when accessing health care?
2. What factors influence the patronage of a health facility by students with deafness at Ashanti School for the deaf?
3. What views do students deafness at Ashanti School for the deaf hold on the attitude of health care professionals?

## **1.3 Principal Objective**

To assess the challenges encountered by students with deafness from Ashanti School for the deaf when they access health care.

## **Specific objectives**

1. To assess barriers that exist when deaf students at Ashanti School for the deaf access health care
2. To ascertain the specific factors that influences the patronage of a health facility by students at Ashanti School for the deaf.
3. To determine views that deaf students at Ashanti School for the deaf hold on the attitude of health care professionals.

#### **1.4 Significance of the Study**

In most Ghanaian communities, many individuals have not been socialized to accept human diversity. Many health professionals and hospital staff are raised in these same communities and portray the negative attitudes and cultural beliefs that limit the utilization of health care systems by persons with disability. With a cursory approach, the challenges encountered by students with deafness at Ashanti School for the deaf might not seem to be seen as a major problem which requires massive attention by the hearing and therefore school management and staff are without deafness and haven't experienced these challenges before on a personal level may be silent about them. According to Nortey (2009) this attitude of neglect is reinforced by the fact that deafness is not visible, hence their challenges are difficult to perceive by hearing persons.

The results of this study will have useful implications at the student level, clinic level and at the policy level. At the student level the study will highlight the challenges deaf students encounter in their attempt to access health care. At the clinic level, the study will inform clinicians and health workers about measures that are likely to enhance the use of hospital facilities by the students and persons with deafness in general. The research will serve policy makers by bringing to the fore the varied challenges encountered by deaf students as well as specific perceptions held by students on those challenges. These will likely lead to the formulation of more effective policies that will mitigate the numerous challenges encountered by students with deafness, and also promote health for the society at large.

#### **1.5 Delimitations and Limitations**

Ashanti school for the deaf is the only special school in Ashanti region that focuses exclusively on the deaf. This School was chosen because the researcher believes that it is



an ideal study site where relevant information on the subject could be gathered for this study. It would have been more appropriate to carry out the research on a larger population as this would have enhanced the generalizations of the findings. However, the researcher was confronted with a number of challenges, notable among them being inadequate financial resources, which made it difficult for the researcher to cover a larger population. The study was limited to only the students in Junior High School who were averagely eighteen years of age and could have a better comprehension of the issues due to their experiences, with a specific focus on barriers deaf students face when accessing health facility. Furthermore, some students were not coming forth on certain issues especially in relation to the attitude of health professionals and this may have affected the findings and subsequent discussions on those issues.

### **1.6 Organization of Study**

The study is organized in six chapters. Chapter one starts with an overview of the health needs of persons with deafness. It also outlines the problem statement, research questions and objectives, significance of the study, as well as the delimitations and limitations of the study. Chapter two reviews the scientific literature under specific themes. It also discusses the conceptual framework which serves as a guide towards data collection. The third chapter looks at the methodology and highlighted the study design, study population, sampling techniques and size. It also includes the techniques and tools of data collection, data analysis, as well as the ethical considerations.

Chapter four presents the findings of the study with regard to the specific objectives which are barriers that exist when students with deafness access health facilities, factors that influence their patronage of a health facility, and views that students with deafness



hold on the attitude of health care professionals. Chapter five discusses the results as presented in the previous chapter in tandem with the scientific literature to draw key conclusions. Chapter six describes the conclusion, and recommendations which were based on the findings as well as suggestions for further research.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

In this chapter, literature related to the health needs of persons with deafness was reviewed. Information sources for this review were peer-reviewed articles, books and institutional reports in both print and electronic media. The chapter is divided into the following subsections: An overview of deafness in Ghana, deafness and health care accessibility, English language literacy and health care among persons with deafness, sign language interpretation and health care among persons with deafness, patients' with deafness perceptions of health care and suggestions for change and conceptual framework for the thesis.

#### **2.1. An overview of deafness in Ghana**

Historically, persons with deafness have suffered discrimination and viewed as inferior. From the middle ages, persons with deafness have continuously been patronized and segregated (Lane 2005). Persons with deafness were also thought to lack intelligence. For example, Aristotle, a great philosopher, strongly believed that thought was dependent on speech therefore persons with deafness were thought to be dumb because they could not hear or speak. According to Van Cleve and Crouch (1989) derogatory terms which are used to describe persons with deafness were derivations in Aristotle's era.

By the mid-1800s some of the misconceptions about persons with deafness had been dispelled, but there were still widespread trial and error on the best method to communicate with students with deafness. The policy to use oral language, that is, speech for communication was promoted in the 1870s by Alexander Bell Graham in deaf education.

However, this method of communication proved to be unsuccessful and frustrating for majority of students with deafness, denying them access to a full natural language. In most boarding institutions during the period, children were not allowed to use sign language but they nevertheless did so surreptitiously (Gannon, Butler, Gilbert 1981 and Lane 2005) .

Although there are many ways of being deaf, two main deaf identities can be found: medically deaf and culturally deaf. The medical sees deafness as impairment or a pathology that needs a cure. The cultural perspective, on the other hand, defines deafness in terms of a cultural identity. The cultural perspective considers persons with deafness as a linguistic minority group, with distinct cultural values and norms (McAleer, 2006).

It is worthy to note that the way individuals identify with their deafness depends on several factors: the extent of deafness, literacy level, the type of school attended, parental hearing status, and the presence or absence of speech. For example, most persons who suffer mild or moderate hearing loss may feel like they are in limbo because they do not fit into the world of the signing deaf nor do they fit into the hearing world. These persons may feel frustrated that they cannot clearly hear and may also be afraid of losing the residual hearing leading to total deafness. Animosity sometimes exists between the hard of hearing and persons with deafness. (Harvey 2003).

As stated above, deafness is sometimes considered a cultural phenomenon, implying that persons with deafness have a culture. Generally, deaf culture has its own set of unique rules and behaviors that the hearing population may not comprehend. For example, as a show of courtesy, one has to maintain eye contact when speaking to a persons with deafness. Other rules concerning physical contact, touching, and pointing are different in deaf customs. Persons with deafness do not want to be left out of any information and may

feel offended if they are excluded from a conversation. Environmental sounds that evoke a response, like a knock on the door, should be conveyed to a person with deafness in order not to elicit suspicion.

Meador and Zazove (2005) mentioned that there are abrupt changes in conversation among persons with deafness and also there are long goodbyes associated with deaf culture, institutions and customs are a common and similar feature in most African societies. Additionally, persons with deafness see themselves as one in many cases and feel closer and less suspicious than with their hearing family members because of the closer bond they share (Allen et al. 2002). Most people perceive persons with deafness as having a pathology that needs to be cured. However many persons with deafness do not see the need to seek a cure for their deafness. The fact that many persons with deafness are able to live meaningful and productive lives supports the assertion that deafness is a representative of human diversity and should not always be viewed as pathology (Padden et al, 2009).

There is very little information on deafness in Ghana because few studies have been conducted on the deaf population. Official figures from the GNAD revealed that there were 6,000 registered members as of 2007. This number consists of mainly voluntary registrations with the true figure anticipated to be way higher (GNAD, 2016).

The type of deaf cultural identity practiced in Ghana is quite different from what is found in Western countries (Mprah, 2011). Generally, the binary deaf cultural identities portraying deafness as either a culture phenomenon or impairment does not exist in Ghana. However, there are distinct groups of persons with deafness within Ghana's deaf community. These consist of those without formal education and generally cannot communicate in the GSL and those who can use the GSL. There are also those who reside



in Adamrobe, a community with an unusually large number of persons with deafness supposedly caused by hereditary deafness. Persons with deafness in this community have developed their unique sign language, the Adomrobe Sign Language (Adsl), which is completely different from the GSL.

Persons with deafness in Ghana generally have limited access to formal education. There is only one residential senior high school for the deaf in Ghana. Mainstreams schools are not accessible to persons with deafness because there are few qualified sign language interpreters in Ghana and most teachers in these schools are not fluent in the sign language. Their low educational attainment, coupled with negative societal attitudes, has limited their participation in employment and social activities such as health care (Mprah 2011).

## **2.2. Deafness and health care accessibility**

Access to health care generally refers to one's ability to receive the needed treatment. Access to health care is an important determinant of equity in health care delivery (Atagubaa & Goudge, 2012). Facilitating access concerns helping people to command appropriate health care resources in order to preserve or improve their health.

Access is a complex concept and at least four aspects require evaluation. If services are available and there is adequate supply of these services, and opportunity to obtain the services exists, then a population may 'have access' to services (Guliford, 2002). The extent to which a population 'gain access' also depends on financial, organizational and social or cultural barriers that limit the utilization of the services. Owusu-Mensah (2010) also observed that geographical, financial and transportation factors influence access to health care. Agbenyega, (2003) states that religious and cultural norms are the two main variables that influence perceptions about disability in Ghana, also many societies in Ghana



perceive disability as the result of a curse, witchcraft, magic or sorcery. In some instances, it is viewed as a punishment for previous sins committed by persons with disabilities or close relatives (Agbenyega, 2003; Slikker, 2009; Kassah, 2008). In some cultures, children born with disabilities are hidden and may even be killed (Agbenyega, 2003; Bleek & Asante-Darko, 1986). The stigma associated with disability make the condition undesirable and prevents many families from accessing healthcare.

Quayson (2007) identified three factors responsible for the general negative perception of disability among Ghanaians. The first has to do with physical wholeness and attractiveness. The second view associates disability with lower economic status and this is reinforced by sights of numerous persons with disabilities begging for alms on the streets. The third notion associates disability with a metaphysical order, and this notion usually portrays persons with disabilities as beings linked to divine favor so that acts of kindness to persons with disabilities is reciprocated by divine fortunes. Thus a vicious cycle sets in, in which disabled persons representing a marginalized group receive alms from other members of the society, who in turn expect some divine favors, reinforcing some of the aforementioned negative perceptions. These ways of conceptualizing disability have restricted the participation of disabled persons in their access to healthcare, social, cultural, economic and political activities in general.

Geographical access involves the spatial interactions of people and health facilities.

Financial access refers to the ability of people to demand and pay for health services when the need arises. Transportation access refers to the extent to which people can get to health facilities. Thus, access measured in terms of utilization is dependent on the affordability, physical accessibility and acceptability of services, and not merely adequacy of supply.

Services available must also be relevant and effective if the population is to 'gain access to satisfactory health outcomes. Finally, the availability of services should be complemented by the absence of barriers that may act to limit access (Hudson, 2002).

Four significant factors of accessibility put persons with deafness at significant disadvantage: knowledge, transportation, financing and communication barriers (O'Hearn, 2006). Restrictions in communication can lead to exclusion of deaf patients from health services or lead deaf persons to delay in seeking health care. Lack of knowledge on health related issues often makes persons with deafness less assertive in seeking specific services because they usually are lost as to where to go to access that specialized service while the lack of funds may make it difficult for persons with deafness to seek for more expensive specialized health care from a specialist even if they are able to locate the specialized services. Difficulties with transportation often emanate from lack of labels on public transport systems and legal jurisdictions that bar persons with deafness from driving (Tamasker et al, 2000).

### **2.3. English language literacy and health care among Persons with deafness**

Miscommunication connotes unintended failure to communicate clearly or effectively. In a tripartite communication between a person with deafness, an interpreter and a hearing person, each party is a potential source of miscommunication. A major source of miscommunication is that, the word order for the local sign language does not follow the word order of the spoken. A phrase written in English, for example, may be diametrically opposed to the local sign language in meaning. A good example of this was demonstrated by Meador and Zazove, (2005). According to the authors, a written communication that

“one may need surgery” was misconstrued by the person with deafness as needing surgery in the month of May. Misunderstandings can also occur on the side of the health provider, which can lead to medication errors, missed appointments, and misunderstood diagnoses. Meador and Zazove (2005) reported a deaf parent pouring oral antibiotic syrup into her child’s ear canal, a wrong route of drug administration to cure an ear infection.

Health-related terminologies, with which an English speaker would be familiar, for example, orthopedics, arthritis, asphyxia, nausea and fracture, might make less sense for one whose first language is the native sign language. One should not therefore assume that a deaf patient understands medical terms. Thus, health professionals and staff at the various health departments need to check for thorough understanding when seeking or giving information to a deaf patient.. Asking a patient to repeat medication instructions would serve as a check to ensure he/she understands the correct usage.

Moreover, very often deaf patients do not want to appear daft and will nod “yes” to issues they do not fully comprehend. Additionally, most patients with deafness feel stigmatized and might feign they are hearing, further adding to the marked possible miscommunication, errors, and poor care (Bat-Chava, Martin, and Kosciw 2005; Meador and Zazove 2005; Tamaskar et al. 2000). There is therefore the need for hearing people, especially healthcare providers to be absolutely sure of responses by utilizing open ended questions that do not yield a “yes” or “no” answer (Wood, 2002).

Persons with deafness learn through careful observation and practice. Picture images and models aids usually help a lot in a patients’ understanding of concepts. Demonstrating the correct use of medical equipment or correct medication administration to deaf patients yields better results than explaining without pictures (Steinberg et al., 2005).



In addition to communication barriers, it is common for deaf patients to have limited medical vocabulary with which to communicate with health care providers. Bat-Chava et al (2005), reporting on HIV/AIDS care and prevention among persons with deafness, found three barriers to persons with deafness's understanding of the disease: low education level, limited English proficiency, and limited communication with medical providers. Steinberg et al (2002) posited that even well-educated person with deafness may have difficulty understanding written English.

Berry and Stewart (2006), in an article advising nurse practitioners on communicating with deaf patients, stated that most nurse practitioners are unaware that persons with deafness struggle with English, an observation that is true for most health care providers.

Harmer (1999) explained that medical terminologies cause problems for deaf patients because most have limited health care knowledge and also doctors tend to use complex vocabulary and phrases in their explanations and rarely using visual information. Written materials given to hospital patients require, on average, an 11th grade reading level, and letters from doctors to patients are often written at a 16th grade level. However, it is generally acknowledged that the average deaf high school graduate reads at a 4th or 5th grade level. Many persons with deafness have limited access to health related information since it is provided through written or sound communication, such as the television, radio, computers, newspapers and health professionals (Jones, 2007).

In addition to difficulties with English, the average person with deafness has fewer opportunities for health education than most hearing people. This leads to less initiative to seek answers, less assertiveness, limitations on the types of medical care sought and reduced quality of services received (Harmer, 1999). McEwan and Anton-Culver (2007)

reported that deaf patients were less likely than other non-English-speaking patients to try to re-explain when providers failed to understand them.

#### **2.4. Sign language interpretation and health care among Persons with deafness**

Persons with deafness use various modes of communication, including lip reading, sign language and also written and the spoken languages (Scheier, 2009).

Lip reading is the skill of perceiving speech by visually interpreting the movements of the lips, face and tongue (Woodhouse et al, 2009). Some persons with deafness master lip reading as an extra skill and prefer lip reading to using an interpreter. However, the best lip reader can only read about 30-45% of English on the speaker's lips (Lieu et al., 2007).

This is because many sounds in the English vocabulary sound the same. For example, "B" and "P" are identical on the lips. Also, context and the accompanying gestures usually complement lip reading and help the lip-reader to understand what is being said. Familiarity with the speaker and subject at hand likewise play an important role in the success of lip reading (Iezzoni et al. 2004).

An individual with a moustache or a person using a foreign accent can make lip reading virtually impossible; it is also impossible to lip read when, for example, a health personnel have surgical mask on. Proper lighting, face-to-face communication and securing the person's attention before starting a conversation are all important for lip reading (Hochman 2000; Wood 2002). Lip-reading requires constant focus and this can lead to physical and mental exhaustion in a prolonged conversation. Lip reading is equally difficult in a conversation where multiple people are speaking (Harvey, 2003). All the above factors make guesswork an important aspect in lip reading.



The World Federation of the Deaf [WDF] (2016) defines sign language as a visual language which utilizes facial, manual and body movements as a means of communicating. The sign language is thus visual, spatial and relies heavily on body postures such as facial expression to transmit information. There is no one universal sign language as; different countries have their unique sign languages. Indeed, even within a specific country, there might be more than one sign language. The situation in Ghana is a typical example.

However, some sign languages share the same language family. For example, the American Sign Language (ASL), the Irish Sign Language (ISL) and the French Sign Language (FSL) belong to the same family (WFD, 2016).

Lieu et al (2007) asserted that signing is not a word-for-word version of the spoken or written words; rather it is a series of pictures that express meaning. Sign language is a rich and complicated language because it involves a lot of pictures that need to be contextualized in order to derive the correct meaning. It has rules concerning the hand shape, palm direction, placement of the hand on the body or within the signing space, movement and non-manuals (facial expressions), a sign order and a strict grammar (Padden and Humphries, 1988).

The importance of facial expressions in signing cannot be underestimated. For example, perception of the pain that an individual is experiencing can easily be recognized through facial expression and movement. Naturally, persons with deafness are more sensitive to facial expressions than hearing persons (Allen et al., 2002). Persons with deafness who use the sign language as a native language, that is, persons who learned sign language before a spoken language, are more familiar to the subtleties of facial expression, as well as the hand

shape, movement, and location that convey meaning in local parlance (Boudreault and Mayberry, 2006).

Most sign languages do not follow written formats; however, persons with deafness must learn the spoken language, for example, English, in order to master the sign language. This is a serious challenge for most persons with deafness, especially those with congenital deafness (Allen et al., 2002). Acquiring a spoken language without the ability to hear is very difficult and requires more time and dedication for a person with deafness. English presents such a huge challenge for persons with deafness that the average deaf high school graduate has reading skills comparable to a fourth grader (Bat-Chava, Martin, and Kosciw 2005)..

Users of sign language tend to use little or no spoken language and in order to communicate with hearing people, they use professional interpreters. Sign language interpreters are primarily responsible for facilitating communication between persons with deafness and hearing non-users of the sign language. Professional sign language interpreters serve to bridge the gap between the persons with deafness and the hearing world. Best practices demand that deaf patients should be asked for their preferred communication when seeking for health care.

However, studies have shown that professional sign language interpreters are hardly used in medical visits, although their use may reduce communication barriers and help achieve effective communication with health professionals (Steinberg et al, 2006). The limited use of sign language interpreters is due to a variety of factors. These include the limited number of available specialized interpreters, cost of using the services of an interpreter, and factors relating to confidentiality, privacy and independence (Richardson, 2014).

Although interpreters are bounded by professional confidentiality rules, there is a degree of mistrust between persons with deafness and sign language interpreters regarding medical visits. Some users do not use interpreters because the deaf community is closed and interpreters are known amongst the community and may know the patient or his family, which may cause embarrassment to the patient and prevent open communication with health care professionals. Some persons with deafness evaluate privacy and confidentiality as paramount amongst all issues and would refuse to use interpreters, even if it means poor communication with their health care providers (Hammer, 1999).

Subsequently, persons with deafness, instead of using qualified sign language interpreters, often visit health care centers without any communication support. Some may opt for written word to communicate with health professionals or use others methods such as lip reading or family members, friends or other members of the staff as interpreters. The use of these individuals as interpreters, especially for deaf children, should be avoided as it is likely to lead to mistakes due to their lack of knowledge of the medical terminology (Shuler et al, 2014). Additionally, because of the personal relationship of these individuals to persons with deafness, questions are raised about their impartiality and credibility as there is a possibility that they may conceal or paraphrase some of the content provided by the physician or patient's information (Barnet, 2002) . For example, a deaf patient who is related to an interpreter might feel uncomfortable requesting for an HIV test. Relatives and loved ones who have emotional attachment with the patient can also deliberately misinterpret communication, be unfamiliar with medical terminologies, or may not be fully fluent in the sign language (Glickman & Gulati, 2003;



Lieu et al., 2007; Wood, 2002). This can influence diagnostic outcomes and medical treatment with serious implications on the health of persons with deafness.

Finally, the use of these people as interpreters may inhibit discussion and reporting of sensitive issues such as domestic violence, substance abuse and sexually transmitted disease.

Inadequate or errors in health care communication can lead to irreversible blunders. Reeves and Kokoruwe (2005) reported that some deaf patients do not understand their diagnosis or medication instructions, took a wrong dose, or woke from surgery to unexpectedly find a leg amputated due to inadequate communication. Due to these negative experiences, persons with deafness are distrustful of the health care systems (Steinberg, 2002).

Studies have found that the struggle and stress associated with communication in a hearing world contribute to the proportionately higher rates of psychotic illness in the deaf population (Harmer 1999). For example, persons with deafness report of increased stress when more than one person speaks at a time at gatherings (Glickman & Gulati, 2003). It has also been revealed that the inability to successfully communicate with one's own kinsmen could lead to low self-esteem among persons with deafness. Consequently, persons with deafness may refuse to or may reluctantly converse with family members who might not show sensitivity to their communication needs.

Allen et al (2002) indicated that 95% of children with deafness are born to hearing parents, while Glickman and Gulati (2003) reported 90%. Thus, the vast majority of children with deafness are born to hearing parents who are unable to communicate with their children. Glickman and Gulati (2003) stated that many parents do not become fluent in the native sign language due to difficulties involved in learning and the fear that they will lose their



child to deaf culture. In cases where hearing parents attempt to learn sign language, they learn at a far slower pace, making sophisticated conversations with their children with deafness very difficult (Snoddon, 2008). Lack of effective communication between children with deafness and hearing parents can result in knowledge and information gap on both sides, and may result in inadequate health information conveyed to the child with deafness.

Additionally, lack of access to incidental knowledge such as what hearing people obtain from listening to conversations, radio, and other sources, leaves a persons with deafness at a disadvantage (Harmer, 1999). It is interesting to note that children with deafness born to parents with deafness who use sign language score higher on standardized tests than their peers born to hearing parents (Singleton and Tittle 2000).

Beyond the family level, persons with deafness encounter communication barriers in the health care setting because most health care providers do not know the sign language at all. Sadler et al (2001) asserted that it is not practical for physicians to learn sign language as the chances of encountering a deaf patient on a regular basis are very minimal. Knowing a few signs, however, shows the deaf patient that an effort is being made to identify with the patients' needs and improve communication. This effort at finding a way to communicate has the potential to lower the anxiety of most patients with deafness (McAleer 2006; O'Hearn 2006). However, a major barrier to health care for persons with deafness is patronizing attitude of hearing hospital staff (Lieu et al., 2007).

## **2.5. Patients' with deafness perception of health care**

Several studies have addressed the experiences of persons with deafness in medical situations. Interpersonal interactions between hearing health care providers and deaf

patients may be difficult if the health care provider does not understand the rules and behaviors of deaf culture. For example, the providers may be perceived as impolite if they do not maintain eye contact when speaking to a person with deafness. Many health care providers also do not understand that many persons with deafness are proud to be deaf and do not wish to be able to hear. Historically, persons with deafness had been viewed negatively and were thought to be inadequate and inferior to hearing persons (Scheier, 2009). This can increase the likelihood for deaf patients not to ask for clarification so that they do not appear stupid.

Steinberg et al. (2006) used focus group discussions in three U.S. cities to research persons with deafness' health care experiences. Participants in the focus groups said that they communicated best when "medically experienced certified interpreters" were provided, but that these were "infrequently available." Themes that emerged from the focus groups included deaf patients' skewed understanding of the health care provider's instructions and their sense of fear in medical settings. The latter included both a fear of the consequences of miscommunication and a fear of letting health care providers know that the communication was inadequate. Likewise, participants were fearful of changing doctors, as a new doctor might be reluctant to pay interpreters. Participants also reported a sense of mistrust, and a feeling that some providers disliked working with persons with deafness.

The authors of the study concluded that persons with deafness who use ASL have much in common with members of other linguistic minority groups: limited access to English communication, infrequent contact with healthcare providers who know their language and culture, and the frequent necessity of using family and friends as interpreters (DeVinney and Murphy, 2002).

In another study, Steinberg et al. (2002) interviewed 45 women with deafness on their perceptions of access to health care. These women exhibited a lack of knowledge of health issues, and reported negative health care experiences and insensitive behaviors on the part of providers. They tended to avoid health services because of previous negative experiences. The authors recommended the development of special resource materials, improved prevention strategies targeted specifically to persons with deafness, and the development of self-advocacy skills among the deaf population. The women in these studies also expressed frustration at the difficulty of scheduling interpreting services, and the subsequent delays this caused.

Group interviews in Boston amongst persons with deafness found providers' conflicting assumptions about deafness to be a major source of distress in medical encounters (Iezzoni, 2004). Physicians often questioned deaf patients about the cause of their deafness despite the fact that it was unrelated to the health problem that had brought them to the office.

Participants felt that some medical doctors did not respect their "intelligence, motivation, and desire to understand and participate in their health care" (p. 356). They reported that doctors often did not understand that providing communication access was the responsibility of the health care provider. Doctors were also unaware of the need to have an interpreter with experience and knowledge in medical settings. Another issue in the disagreement with providers involved time. Deaf patients typically expressed the need for more time than their clinicians could or would provide.

## **2.6. Suggestions for change**

The availability of modern and new technology that was not available years ago may play a very important role to improve health care access for persons with deafness. One of the most promising technological advancements is telemedicine, which allows a patient to



access an interpreter and physician by webcam, providing deaf-friendly health care in areas far from most facilities (Thomas, Cromwell, and Miller 2006). Pagers or vibrating devices given to patients in emergency rooms or waiting areas can inform them when it is their turn (Lieu et al., 2007). Also, if possible, intravenous lines should not be inserted into hands so the person with deafness can continue to sign (McAleer, 2006). Modifications such as access to modern communication device, a qualified interpreter, and increased privacy should be offered to deaf patients (DeVinney and Murphy 2002).

A deaf-friendly stop-smoking (Df-SS) website is an example of another technology being used to improve health education for the person with deafness. This website provided smoking cessation information in ASL using webcams to create real-time video chat rooms for support groups that communicated in sign language and included an ask the expert feature to answer questions. Persons with deafness are included as experts and moderators. A program like this overcomes language and literacy barriers by providing information in sign language. Geographic barriers were overcome because it is an online program, while cultural were issues addressed by including instructors for persons with deafness (Jones, 2010).

The Deaf Heart Health Intervention (DHHI) is a program that does not use technology but is specifically designed to provide health information to persons with deafness. Classes were highly interactive and were taught entirely in sign language by a trained deaf lay Heart Health teacher. A study of the program showed that the DHHI was effective in increasing deaf adults' self-efficacy (confidence) to engage in health behaviors to improve their risk factors for heart disease (Jones, 2007).



## 2.7. Conceptual frame work

The study was designed and conducted within the conceptual framework illustrated in Figure 1 below. The variables developed under this framework were used to generate the result of this study.



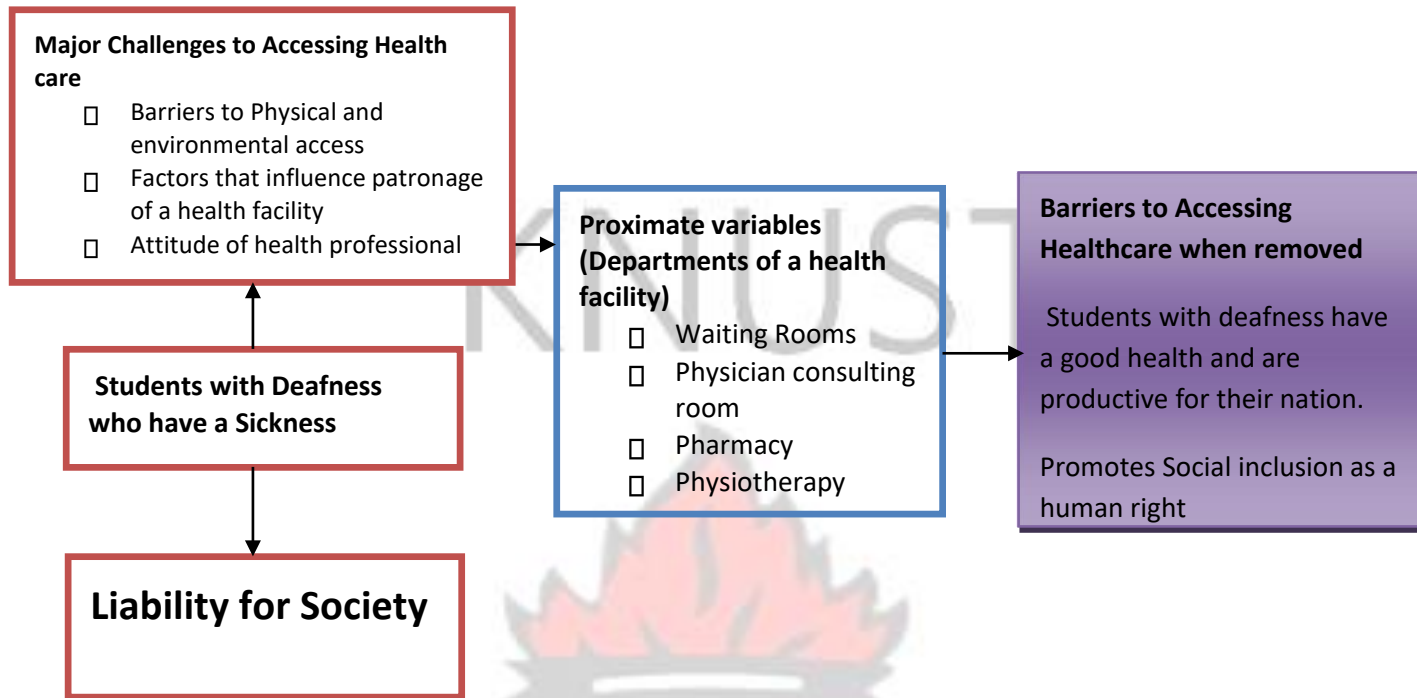


Figure 1: Authors developed, 2014

The above conceptual framework is divided into different sections depicting various departments of the hospital that could serve as barriers to persons with deafness when accessing health care. Physical barriers such as proper labeling of consulting rooms in combination with social variables such as attitudes of health professionals may influence persons with deafness' effective use or otherwise of a facility to access health care.

## 2.8. Conclusion

The literature review reveals the different experiences of persons with deafness in their quest to access health care. These experiences reveal the different disadvantages they encounter in a accessing health systems that are mainly designed for hearing persons.

## CHAPTER THREE

## **RESEARCH METHODOLOGY**

### **3.0 Introduction**

This chapter presents a narrative of the research methodology. It specifically looks at the study area, research design, population, sample and sampling technique, methods of data collection, procedure for data collection, data analysis and presentation, reliability and validity and ethical considerations.

### **3.1 Research design**

The design is a case study targeting students at Ashanti School for the Deaf. Case studies involve empirical investigation of a particular phenomenon within its real context using multiple sources of evidences (Robson, 2002). Ashanti School for the deaf is the only academic institution for persons with deafness in Ashanti region with deaf students from various parts of the region who have varied experiences to share from across the region and therefore was considered a single case to conduct an in-depth investigation into varied scope of challenges students face in accessing health care across the region. Students' opinions were sought because they were more vulnerable and were likely to face more challenges when accessing healthcare, also most students are more forthcoming with their opinions in an academic environment such as school. Student's views were assessed through questionnaire. Considering the purposes of case studies and the intent of this research, which is to assess challenges students face in accessing health care, a case study design is deemed appropriate. This study adopted a quantitative approach.

### **3.5 Population sample and sampling**

The population for the study constituted all 106 Junior High School students at the Ashanti

School for the deaf. Out of this population, a sample of 67 students in the Junior High School was purposively selected for the study and this was made up of 44 males and 23 females. With this technique, the researcher chose the sample based on who is able to provide the relevant information for the study. The junior high school students were chosen because they could better comprehend the issues explained in the questionnaire by their teachers and therefore gave better answers to the questionnaire items.

### **3.4 Procedure for data collection**

The researcher obtained a letter of introduction explaining the purpose of the research to the authorities at Ashanti School for the deaf. Upon receiving the permission, the researcher visited the School to collect the data from the students. The questionnaire was administered to student independently by teachers in the school with the researcher assisting with clarifying issues where necessary. The teacher who administered the questionnaire is fluent in the sign language and the students were able to follow the guidelines and rules issued. The questionnaire had four sections: socio-demographic characteristics of respondents, barriers in accessing health care, factors that influence the patronage of a health facility and views on the attitude of health care professionals.

The data collection took 15 days and each interview session lasted for forty minutes.

### **3.5 Data analysis**

The data generated from the questionnaire were entered into the Statistical Package for Social Sciences (SPSS, version 16) and the findings were presented using the descriptive statistic such as frequencies and percentages. Need index was calculated as the difference between the proportion of all respondents who indicated that an issue was “very important” to them and the proportion of respondents who believed that they were “very satisfied”



with services they were receiving on the issue (Finlyson, 2006). For example, if K is the sample proportion identifying an issue as “very important” and the proportion of all survey respondents who said they were “very satisfied” with the given service issue is M, then the need index (N) = K-M.

The scores are expressed as a percentage with 100 being the highest possible need index

### **Inclusion Criteria**

Only students who could clearly relate to the issues stated in the questionnaire because of their personal experiences were selected.

### **Exclusion Criteria**

None of the primary school students at the Ashanti School for the deaf were included in the research

### **3.6 Validity and reliability**

A pilot study was conducted with 14 deaf students from Bechem School for the deaf. The pilot study was to ensure research objectives were consistent with individual questions on the questionnaire. Further to this, the pilot study allowed for a review of questions that respondents found disconcerting, thus ensuring utmost validity of the questionnaire. A Cronbach’s Alpha was calculated and the value for the factors identified from the questionnaire was .975 which is higher than the 0.70 that is generally accepted in social science research. The internal consistency of items in the test instrument was thus highly reliable, which means that the coefficient level was high for the instrument to be used (see Table 1. below). Therefore the instruments can be said to be relevant and reliable in measuring what they are supposed to measure.

**Table 1: Cronbach's alpha for validity and reliability**

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha	
	Based on Standardized Items	N of Items
.975	.957	31

**3.7 Ethical consideration**

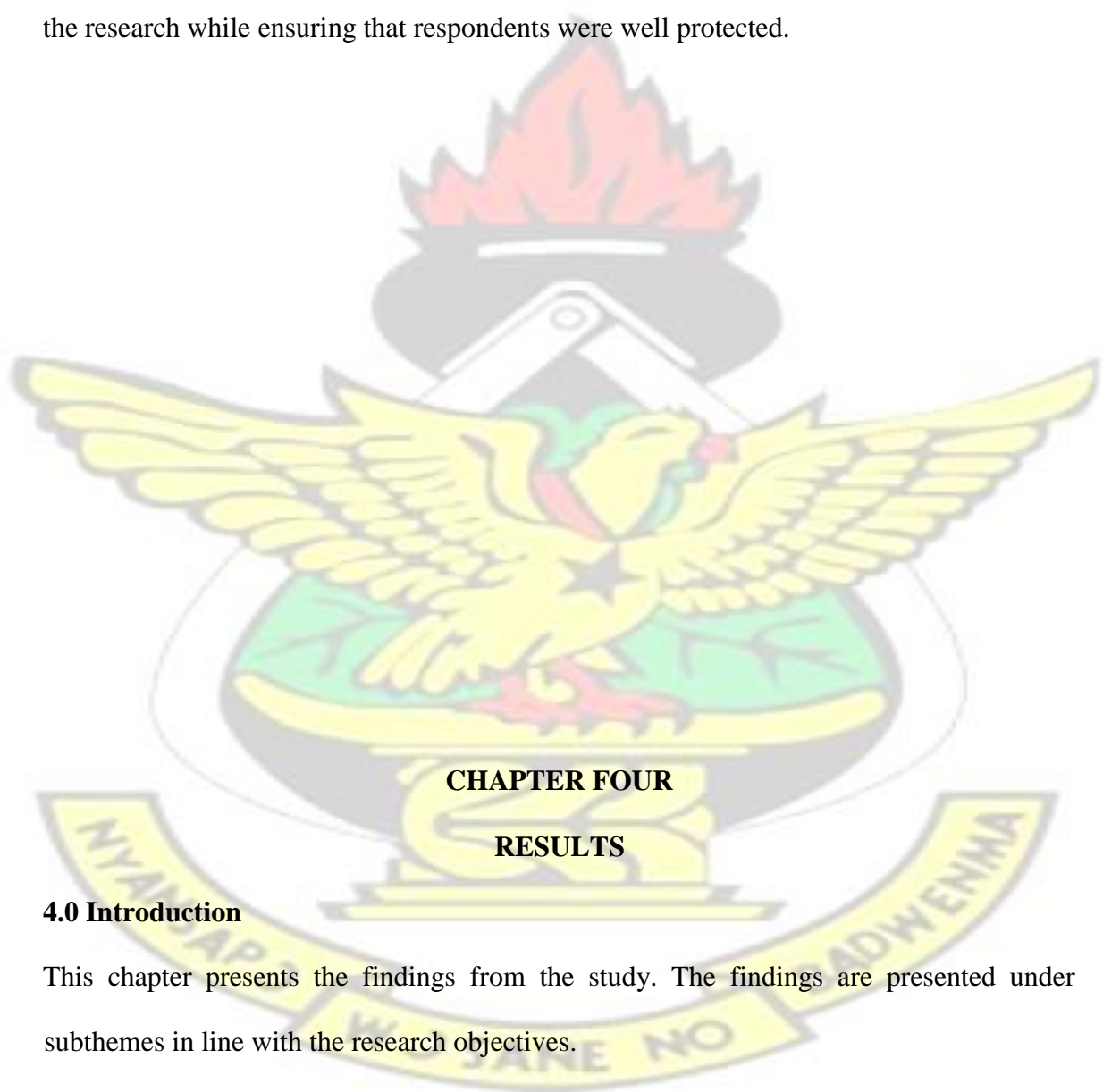
The researcher ensured that the students who participated in the study did so voluntarily without any form of coercion. To guarantee their confidentiality, the researcher did not ask questions that bothered on personal identification. The rights of respondents and other parties involved at every stage of this study were treated with utmost care.

The following considerations were made to promote and protect the rights and interests of respondents at different stages of the study. As a procedure to gain access to the school, an introductory letter from the Department of Community Health, Kwame Nkrumah University of Science and Technology was presented to the authorities of the school. Parents of the students were also informed through Parents Teachers Association meeting. The researcher told the respondents of their right to participate voluntarily or withdraw from the study at any stage if they deemed it appropriate to do so. Anonymity and privacy of respondents were guaranteed by asking them not to write their names on the questionnaire. The purpose of the study, the risks and benefits of the study were explained

to the respondents and this culminated in the signing of an informed consent form by each respondent.

### **3.8 Conclusion**

This chapter highlighted the various methods used in collecting the data for the study. The systematic methodology adopted for the study allowed for the collection of useful data for the research while ensuring that respondents were well protected.



## **CHAPTER FOUR**

### **RESULTS**

#### **4.0 Introduction**

This chapter presents the findings from the study. The findings are presented under subthemes in line with the research objectives.

#### **4.1 Demographic characteristics of respondents**

**Table 4.1 Demographic characteristics of respondents**

<u>Demographics</u>	Males		Females		Total	
	(n=44)	%	(n=23)	%	(n=67)	%
<u>Ethnicity</u>						
Akan	24	54.55	15	65.21	39	58.21
Ewe	7	15.91	1	4.35	8	11.94
Ga-Adangbe	3	6.82	3	13.04	6	8.96
Guan	9	20.45	4	17.4	13	19.40
Mole-Dagbane	1	2.27	0	0.0	1	1.49
<u>Religion</u>						
Christians	39	88.6	21	95.45	60	90.90
Moslems	4	9.09	0	0	4	6.06
Traditional	1	2.27	1	4.55	2	3.03
Other	-	-	-	-	-	-
<u>Junior High School</u>						
<u>Level (JHS)</u>						
JHS 1	7	15.9	3	13.04	10	14.93
JHS 2	13	29.55	6	26.1	19	28.36
JHS 3	24	54.55	14	60.86	38	56.71
Other	-	-	-	-	-	-
<u>Age of onset of deafness</u>						
12-17yrs	10	22.73	8	34.8	18	26.87
18-22yrs	31	70.45	12	52.17	43	64.18
Unknown Age of onset	3	6.82	3	13.04	6	8.95

From table 4.1 above, it can be deduced that there were more male respondents than females in the study. The table further shows that majority of respondents (58.21%) belonged to the Akan ethnic group while the ethnic group with the least representation was the mole –



Dagbani (1.49%). Christianity was the dominant religion among the respondents, with 90.9% identifying themselves as Christians. In terms of educational attainment, 56.7% of the respondents were in Junior High School (JHS) 3, 28.36% in JHS 2 and 14.93% in JHS 1. The majority of respondents (64.18%) acquired their deafness between the ages of 18 and 22, while 26.87% acquired it between the ages of 12 and 17; 8.97% did not know when they acquired their deafness.

#### 4.2 General access to health care

**Table 4.2 Access to health care**

Access to health	Male(n=44)	%	Female (n=22)	%	Total (n=66)	%
Very easy	23	52.27	6	27.27	29	43.9
Difficult	9	20.45	7	31.82	16	24.24
Very Difficult	7	15.91	7	31.82	14	21.21
Don't know	5	11.36	2	9.10	7	10.6

Table 4.2 above shows that approximately 43.9% of the respondents found it is “easy” to access health care in a health facility. However, 24.24% and 21.21% of the respondents found it “difficult” and “very difficult” respectively to access health care. More males (52.27%) found access to health care “very easy” compared to females (27.27%).

#### 4.3 Decision making among participants

**Table 4.3 Decision making among participants**

Decision to Access	Male	%	Female	%	Total	%
Parent	34	75.56	17	77.27	51	76.12
Teachers	2	4.44	1	4.55	3	4.48
Myself	8	17.78	3	13.64	11	16.4

Don't know	1	2.22	1	4.55	2	3.00
<b>Access priority</b>						
Affordable(cheap)	10	23.26	3	13.04	13	19.70
Friendly , Respect and trust	19	44.17	15	65.22	34	51.51
simple procedures	10	23.26	2	8.70	12	18.18
accessible language	3	6.98	3	13.04	6	9.09
Nearness	1	2.33	0	0	1	1.52

On decision making to attend a health facility when ill, majority of the respondents (76.12%) felt “very comfortable” with their parents making decisions on whether or not to attend a health facility when they were ill. However, it was interesting to note that only approximately 5% of students wanted their teachers to make the decision for them even though they lived with their teachers most of the time in the boarding school (See Table

4. 3). This preference for parents to make decisions on attending a health facility was shared by the vast majority of males and females.

Friendliness and respect for the deaf from health professionals were the major incentives for a respondent to visit a particular health facility to access health care. Slightly more than half (51.51%) of the respondents ascribed to the aforementioned reasons as incentive for attending a health facility with females having a higher percentage (65.22%) compared to males (44.17%). Less than 2% of the respondents felt that the proximity of the health facility was an issue when it comes to accessing a facility. A higher proportion of females (13.04%) considered accessible language a priority compared to males (6.98%).

#### **4.4 General barriers affecting students on access to health care**

**Table 4.4 General barriers influencing students on access to health care**

<b>Knowing where to go</b>	Male	%	Female	%	Total	%
Not difficult	16	36.36	12	52.17	28	41.79
Difficult	11	25.00	1	4.35	12	17.91
very difficult	11	25.00	7	30.43	18	26.87
No Response	6	13.64	3	13.04	9	13.43
<b>Getting permission to go</b>						
Not difficult	26	59.09	4	17.39	30	44.78
Difficult	8	18.18	11	47.82	19	28.36
very difficult	7	15.90	8	34.78	15	22.39
No Response	3	6.82	0	0	3	4.48
<b>Getting money to go</b>						
Not difficult	12	27.27	5	21.74	17	25.37
Difficult	9	20.45	7	30.43	16	23.88
very difficult	16	36.36	10	43.48	26	38.81
No Response	7	15.90	1	4.35	8	11.94
<b>Needing assistance</b>						
Not difficult	18	40.91	10	43.47	28	41.79
Difficult	17	38.63	7	30.43	24	35.82
very difficult	7	15.90	2	8.70	9	13.43
No Response	2	4.55	4	17.39	6	8.96
<b>Transportation</b>						
Not difficult	15	34.09	9	39.13	24	35.82
Difficult	15	34.09	10	43.47	25	37.31
very difficult	10	22.72	3	13.04	13	19.40
No Response	4	9.09	1	4.34	5	8.77

<b>Getting an Interpreter</b>						
Not difficult	17	38.64	8	34.78	25	37.31
Difficult	10	22.72	3	13.04	13	19.40
very difficult	15	34.09	9	39.13	24	35.82
No Response	2	4.55	3	13.04	5	7.46

Table 4.4 summarizes responses on the general barriers that affect access to health care among the students. The responses from the respondents indicated that the difficulty of the deaf students to get an interpreter when accessing health care in a facility was an important barrier as close to two-fifth (35.82%) of the respondents found it very difficult in getting an interpreter in a health facility. Approximately 56.71% of respondents faced transportation challenges in their quest to access health care. A higher proportion of males (22.72%) found transportation to health facilities very difficult compared to 13.04% of females. Nearly half of all respondents had challenges when they needed assistance with locating where particular services are rendered within health facilities.

Generally, it was also very difficult for the students to know where to go to access health when they were ill. Results from the study showed that approximately 30% of respondents found it difficult in knowing where to go to access health care. However it was noticed that relatively females (30.43%) had more difficulty knowing where to go than males (25%). Furthermore, over two-fifth of the respondents, representing 42% of admitted that money was an issue when it came to accessing health care. A higher percentage of females (73.91%) had difficulty with getting money to access health care compared to males (56.81%).



#### 4.5 Need indices by gender

Table showing need indices of respondents by gender

Importance and Satisfaction Statements	Females	Males	Pvalue*
Access to Health Education	30.4	29.6	0.535
Access to Interpretation Services	28.3	13.6	0.465
Accessible Messages	15.2	23.9	0.450
Treatment	17.4	31.8	0.121
Parent Privacy	8.7	12.5	0.113
Health Worker Privacy	15.2	51.1	0.154
Family Support	34.8	22.7	0.279
Peer Support	8.7	6.8	0.568
Teacher Support	-4.3	3.4	0.465
Parent Care	-2.2	11.4	0.223
Understanding Posters	17.39	1.1	0.179
Health Communication	32.6	37.5	0.598
Doctor Privacy	15.2	25.0	0.550
Nurse Privacy	17.4	7.95	0.311
Doctor Communication	17.4	23.9	0.414
Nurse Communication	28.3	26.1	0.479
Medical Explanations	8.7	19.3	0.172

P-value\* deduced by Fisher Exact Test based on need/no need between females and males

Table 4.5 above presents need indices generated from the *Likert* scale. The highest need for females was family support while that of males was recorded on their privacy. Besides teacher support and parent care for females, all other issues had positive need indices.

#### 4.6 Attitude of health workers towards deaf students

**Table showing attitude of health personnel towards deaf students**

<b>Attitude</b>	<b>Male</b>	<b>%</b>	<b>Female</b>	<b>%</b>	<b>Total</b>	<b>%</b>
Patronizing	20	45.45	8	34.78	28	41.79
Indifferent	5	11.36	3	13.04	8	11.94
Accommodating	15	34.09	10	43.48	25	37.31
Pleasant	4	9.09	2	8.7	6	8.96

Table 4.6 above represents students' perception of attitude of health workers towards students of Ashanti School for the Deaf. Majority of students felt health workers had a patronizing attitude towards them and less than 10% felt health workers were pleasant towards them.

#### 4.6 Conclusion

Nearly half of respondents had some level of difficulty accessing health care while the vast majority of respondents preferred a parent in making a decision as to whether to attend a particular health facility or not. Friendliness and respect from the staff of health facilities was important for deaf students. Difficulties obtaining permission, lack of funds, needing assistance, transportation to and from health facilities as well as getting the services of an interpreter were prominent challenges. Generally, respondents had positive need indices on the various importance and satisfaction statements.

## **CHAPTER FIVE**

### **DISCUSSION**

#### **5.0 Introduction**

The discussion covers the areas of demographic characteristics of respondents, barriers to accessing health care experienced students with deafness, factors that influence patronage of specific health facilities as well as views held deaf students on the attitude of health care practitioners. The discussion focuses on the implications of the findings as well as the possible reasons behind those implications.

#### **Key Findings**

Majority of respondents perceived access to health care as difficult with more males perceiving access to health care to be very easy compared to females. Majority of respondents were most comfortable with their parents making the decision on which health care facility to attend. Friendliness and respect from health professionals were the major incentives for a respondent to visit a particular health facility. In terms of the general barriers confronting deaf students' access to health care, the lack of interpreter services within health care facilities was an important barrier. More than half of respondents had difficulties with getting money or permission to visit health facilities. Majority of respondents encountered difficulties with transportation in their quest to access health care. Health worker privacy was the highest need index for males while family support was the highest need index for females. Patronizing and accommodating attitudes were the most frequent behavior from health workers towards deaf students.

## **Discussions**

### **5.1 Demographic characteristics**

The findings of the study indicating that majority of respondents acquired deafness between the ages of 18 and 22 years suggest many of the respondents are likely to have spoken language and can speak to health professionals. This may be an advantage in terms of communication as these respondents are likely to encounter fewer barriers in accessing health care as compared to respondents with congenital deafness.

### **5.2 Access to health care and associated barriers**

Access to health care for deaf persons may be dependent on proximity to a health facility, affordability and presence or absence of facilitators within a specific health facility OwusuMensah (2010). Another dimension of accessibility to health care has to do with the particular services rendered by a facility such as specialist services and the knowledge of these services by persons with deafness (O'Hearn, 2006). For example, persons with deafness might be able to reach a facility providing specific services but if their health care need at that particular moment demands the attention of a specialist who is unavailable in that facility, they are unlikely to receive that service. For persons with deafness, factors that contribute to ease of accessibility include proper signage and labels of hospital units, presence of sign language interpreters, ability to read text and lip, ability to pay for the service, and getting the necessary support from health workers and other people such as their relatives (Hudson, 2002 ). Thus the study finding that majority of the respondents had easy access to health care suggest the availability of some of the above factors. However, this finding contradicts many previous studies. Harmer (1999) reported deaf patients encounter significant barriers in their quest for health care. Bat-Chava et al (2005) reported deaf patients encounter significant barriers within health facilities due to their limited



medical vocabulary. A possible reason for this supposed ease of access could be that this group perceived getting treatment as the epitome of accessibility and subsequently ignored all the other barriers encountered. This is indeed confirmed by the fact that majority of respondents admitted to difficulties with securing permission to visit health institutions, lack of funds to access health care, difficulties with transportation and getting an interpreter within health care facilities.

Difficulties with securing permission from school could be a reflection of doubt from school authorities as to whether students indeed require certain health services or treatments. This could be due to a lack of grasp of their health needs by school authorities. The lack of funds for deaf students suggests these students would not be able to access health care even if they were sure of where to access specific health services. Difficulties with getting an interpreter suggest most students would have to resort to writing and hope that is reciprocated by health care professionals. Considering the limited time health care professionals spend per patient, this is highly unlikely, thus denying deaf students the opportunity for effective communication with health professionals.

On the other hand, respondents who found access to health care “difficult” and “very difficult” likely encountered significant barriers in the form of lack of signage, sign language interpreters, lack of financial resources, difficulty to read written English, or negative attitude from health care professionals. This is actually supported by the positive need indices on access to interpretation, understanding posters and health communication. Reeves and Kokoruwe (2005) reported that deaf patients experience heightened anxiety when they visit a health facility and likely choose health facilities that have facilitators and health personnel showing positive attitudes. Allen et al (2002) posited that the inability to

read health care information is likely to lead to dissatisfaction, and subsequently the perception of inaccessibility. A lack of opportunities for health education on the part of deaf students could be responsible for some of the difficulties associated with accessing health care. The relatively larger positive indices recorded on access to health education for both females and males lend credence to this assertion. Being limited on health education could lead to less initiative to seek answers, less assertiveness, limitations on the types of medical care sought and reduced quality of services received as stated by Harmer (1999).

### **5.3 Decision making among respondents**

Decision making on whether to attend a particular health facility is dependent on a number of competing factors. First, prior encounter and experience with a particular institution plays a crucial role in whether a person chooses to attend that facility or if he or she would use the facility in future (Guliford, 2002). Deaf students are likely to revisit facilities with adequate facilitators that would mitigate their loss of hearing such as the provision of sign language interpreters. Most importantly, they are likely to revisit institutions that appreciate deaf culture as posited by Scheier (2009).

Majority of students being dependent on their parents in terms of decision to attend a particular health facility despite staying with their teachers most of the time is probably due to the fact that students trusted their parents on such decisions. This argument assumes greater validity if the parent/parents of the student are deaf as well. Parents usually bear the cost of health care and with majority of students admitting to difficulties with funding for health care, it is natural that parents are consulted on which facility to attend.

Friendliness and being respected are the most important incentives for deaf students to choose a particular health facility. This finding is expected and consistent with that of Mprah (2011) who reported a lack of sensitivity on the part of health care professionals often made deaf patients uncomfortable when visiting sexual and reproductive health clinics. Being friendly and respectful towards a deaf patient is an indication of interest in the patient's wellbeing, and health staffs who exhibit these attributes are likely to be more responsive to the needs of the deaf patients. They are also likely to address communication barriers, sometimes by improvising in the form of writing. Although this could lead to misinformation as posited by Meador and Zazove (2005), such little efforts are appreciated by deaf persons. It is worthy to note that friendliness and respect are general attributes that every patient, irrespective of disability status, expects from a health care provider, although the expectation may be higher among persons with disabilities than their counterparts without disabilities.

The finding that students felt health workers' attitude was patronizing is consistent with the findings of Lieu et al (2007). This patronizing attitude has the potential to make students uncooperative and dissatisfied with the services they received. As stated earlier, being respected is one cardinal attribute that determines the choice of health facility for the deaf persons. Thus a patronizing attitude is likely to reduce their patronage, subsequently limiting their overall access to health care. As documented by Wood (2002), a patronizing attitude could force students to give outright answers to queries by health professionals in an attempt to appear smart despite a lack of grasp of the issue at hand.

Affordability and the use of simple procedures were equally proffered as reasons for the choice of a health facility by a significant number of reasons. Since disabled persons



including persons with deafness are generally poor as posited by Quayson (2007), affordability is of paramount interest to them. Majority of respondents admitting money is an issue in accessing health care support this assertion.

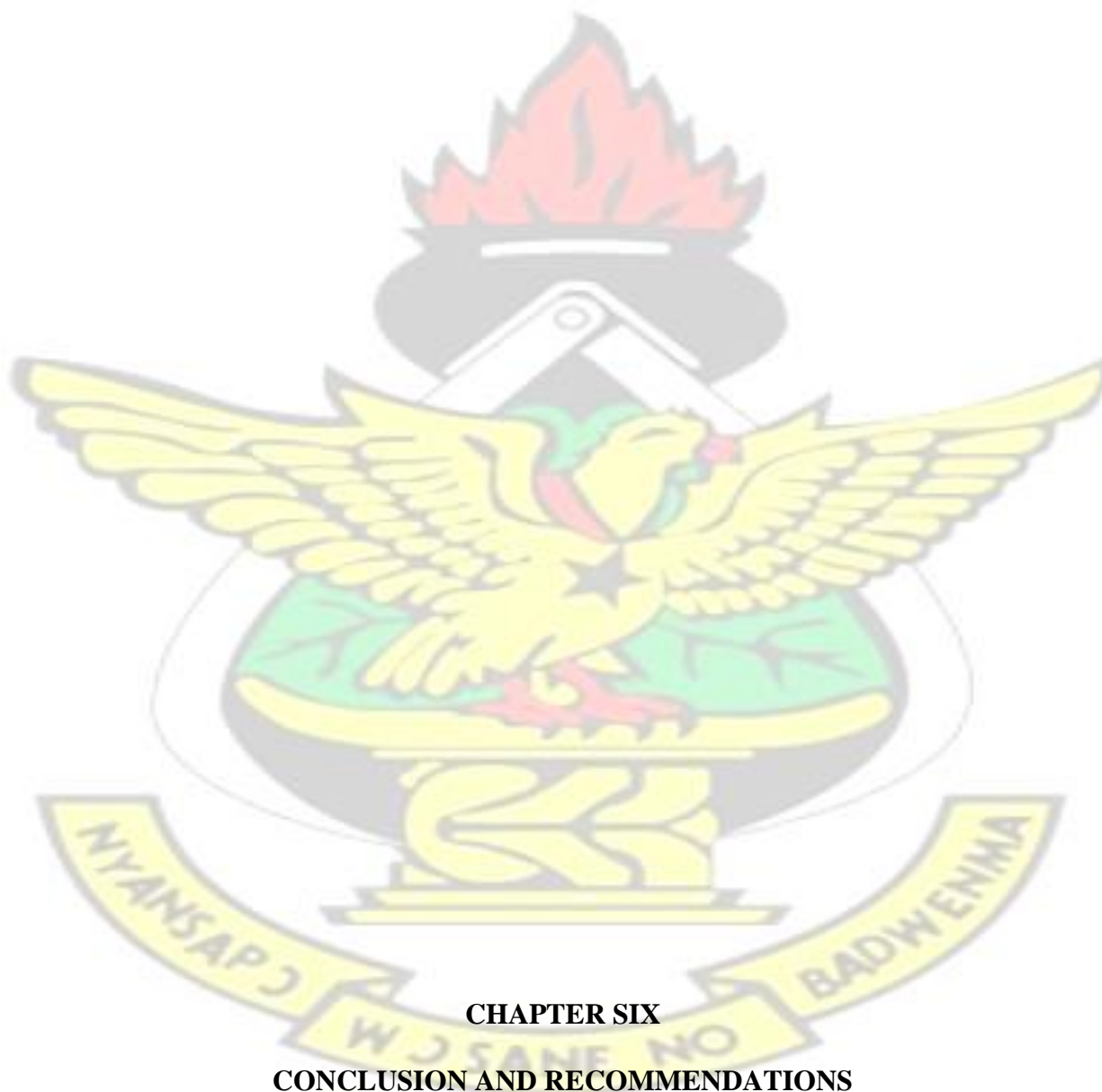
Another important issue influencing decision making of the students in their choice of health facility is access to transport. Since most vehicles in Ghana do not have indicators to show their destinations, persons with deafness often find it difficult knowing which vehicles are bound for their intended destinations. Young persons with deafness such as students would therefore find it difficult using the transport system. The issue of transport may also be tied to affordability, in this sense getting money for both transport and for health care would be difficult for many persons with deafness. Majority of respondents admitting money is an issue in accessing health care is an indication of the dire economic situation of deaf students and persons with disabilities in general.

Having interpretation services within health facilities is preferred for many persons with deafness as the findings indicated. Steinberg et al (2006) asserted sign language interpreters are essential in achieving effective communication between clinicians and persons with deafness. As indicated previously, in the absence of well-trained interpreters, deaf patients have no choice than resort to unorthodox methods such as writing, which may lead to misdiagnoses and misinformation because of the low literacy among persons with deafness. This has serious implications for their health, some of which could be life threatening as deduced by Reeves and Kokoruwe (2005). Although using a sign language interpreter represents a quick way through which persons with deafness could easily communicate with health care practitioners, the use of interpreters may breach privacy of persons with deafness seeking health care (Glickman and Gulati, 2003).



## **5.8 Conclusion**

The discussion of the findings reveals that barriers encountered by deaf students in their quest to access health could have far reaching implications. Overall these barriers have the potential to offset any benefit associated with seeking health care and endanger the health of deaf students.



## **CHAPTER SIX**

### **CONCLUSION AND RECOMMENDATIONS**

## **6.1 Conclusion**

Deaf students of the Ashanti School for the Deaf encountered varied barriers in their attempt to seek health care. These barriers include lack of funds to access health, difficulties with transport, difficulties with knowing where to seek specific services, lack of interpretation services, getting permission from school to seek health care and poor attitude on the part of health workers. Need indices confirmed these barriers and revealed deficits in health education, health worker privacy, access to interpretation services, accessible messages, treatment, parent privacy, health worker privacy, family support, peer support, understanding posters, health communication, doctor privacy, nurse privacy, doctor communication, nurse communication and medical explanations. Students prioritized affordability, respect and friendliness, simpler procedures and familiar medium of communication as incentives to choose a particular health care facility. Attitude of health workers towards deaf students included being pleasant, accommodating, indifferent and patronizing.

It can be deduced that the vast majority of respondents encountered significant barriers in their quest for health care that are not limited to health facilities but home and school circumstances as well.

## **6.2 Recommendations**

The varied nature of the issues at stake requires that all stakeholders should be involved if students are to enjoy greater access to health care, for example the ministry of health and other ministries should ensure that the needs of persons with various forms of disability are catered for by the involvement of experts in disability when major decisions and projects are being undertaken to ensure their full inclusion and participation. It is recommended that

teachers make more time to thoroughly discuss issues of health education with students. The ministry of education can facilitate the process by making available health information material in accessible formats for persons with deafness and the disabled in general. This will not only serve as an eye opener for the students, but raise their level of awareness in terms of what to look out for in their quest for access to quality health care. Teachers should equally employ profiling students' health issues. This will give them a greater grasp of students' health conditions and resolve the perennial issues with seeking permission.

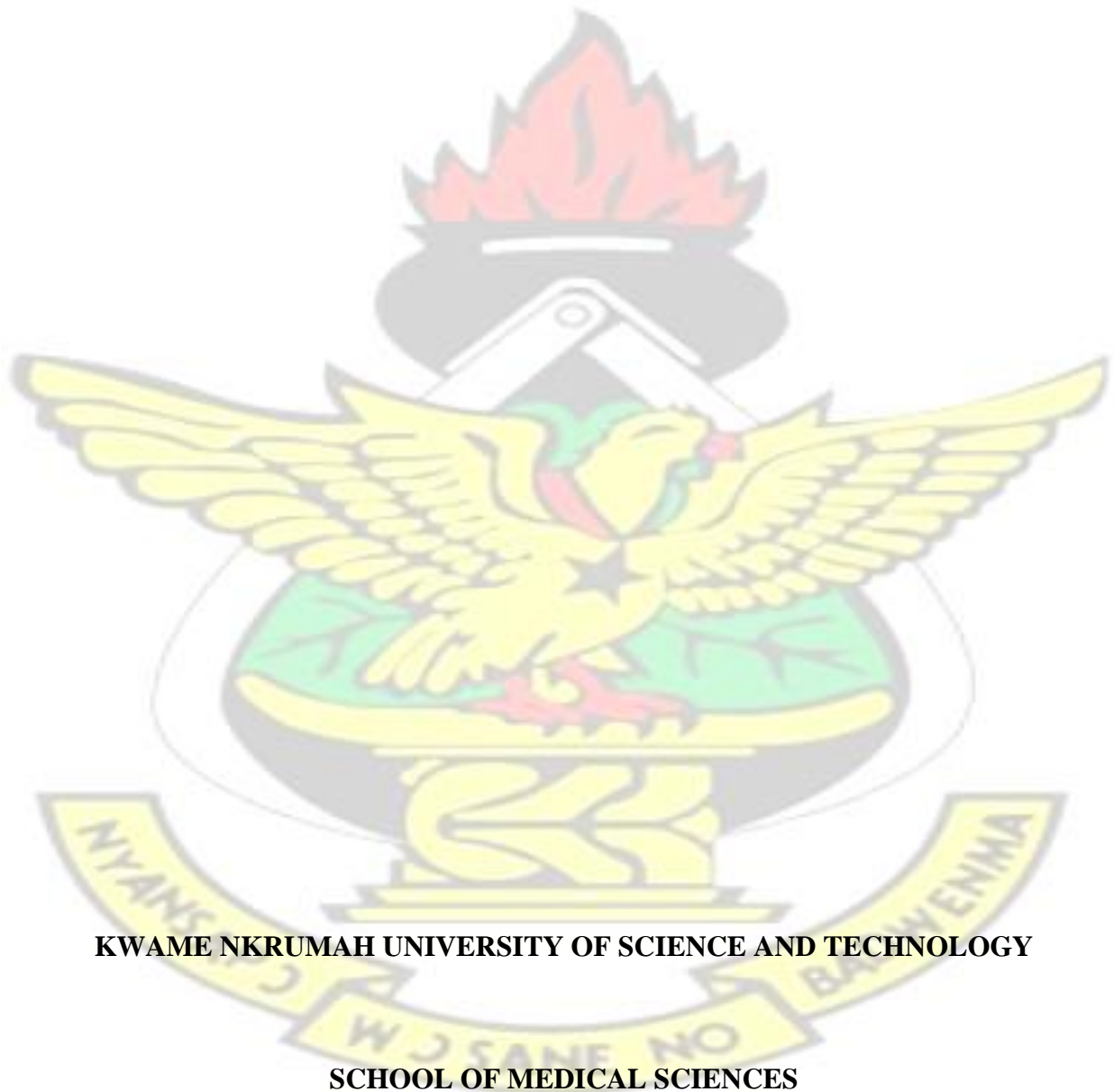
It is also recommended that parents should support and care more for their wards and be made aware that the general health of their wards goes beyond the absence of infirmity. This exercise could be accomplished through the parent teacher association meetings. Health institutions should be implored to make available professional sign language interpreters that could work on a part-time basis. Clinicians and non-clinicians as well should be made aware of the need to thoroughly explain health issues to deaf students and not use communication barrier as a reason to offer terse explanations. Text messages could be a convenient way by which students communicate their health needs and issues to clinicians especially if they are in school.

Health workers should be educated on the need to adopt more a positive attitude towards deaf persons (including students) and be made to appreciate disability as a form of human diversity. This education could be done by DPOs scheduling interactive sessions with the various health facilities as well as using mainstream media.

Future researches involving more schools in different settings would shed more light on the issues captured in this thesis and allow for more valid generalizations. These researches should not only focus on the views of students but take into account the perspectives of

health care professionals. This would ensure balance and guarantee that measures implemented to make health care more accessible are long lasting and effective.

# KNUST



**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF MEDICAL SCIENCES**

**DEPARTMENT OF COMMUNITY HEALTH**



**CENTER FOR DISABILITY, REHABILITATION AND DEVELOPMENT  
STUDIES**

**Introduction**

My name is Ebenezer Alfa Senayah a Student at the School of Medical Sciences, Center for Disability, Rehabilitation and development studies, KNUST. I am conducting a research on the “Health needs assessment of deaf Students at Ashanti school for the deaf” This survey is part of efforts to improve the services offered to deaf students when they visit health facilities to get treatment. Your responses will remain confidential and will not be shared with anyone, except for reporting under statistical tables and graphs.

Read each statement and then choose the answers that apply to your situation.

**Part I**

**Section 1: Socio-demographic Characteristics**

1. I am: (Please choose one of the answers below)

01. Male ☐

02. Female ☐

2. My ethnicity (tribe) is: (Please choose one of the answers below)

01. Akan ☐

02. Ewe ☐

03. Guan ☐

04. Mole-Dagbani ☐

05. Ga-Adangbe ☐

06. Other (Specify \_\_\_\_\_)

3. My age is: (Please write your age in completed years in the box)

4. I am a: (Please choose one of the answers below)

01. Christian ☐

02. Moslem ☐

03. Traditional religion ☐

04. Other (Specify \_\_\_\_\_)

5. My level of education is: (Please choose one of the answers below)

01. JHS 1 ☐

02. JHS 2 ☐

03. JHS 3 ☐

04. Vocational (Specify \_\_\_\_\_)

05. Other (Specify \_\_\_\_\_)

6. Where you born deaf?

01. Yes ☐

02. No ☐

03. Don't know ☐

7. What was your age when you became deaf? Please write your age in years in the box

8. I am going to ask you a question on access to healthcare.

How easy do you find your way around when you visit a hospital facility in times of sickness or when you are ill?

01. Very Easy ☐

02. Difficult ☐

03. Very difficult ☐

04. Don't know ☐

9. Who makes the decision for you to attend a health facility?

01. Parent ☐

02. Teachers ☐

03. Myself ☐

04. Don't know ☐

10. If you want to visit a hospital or health center for treatment, rank by placing 1, 2, 3, 4, 5, 6 and 7 in the boxes by each answer, how important is each of these in your decision-making? 1 is very important and 7 is less important.

01. Affordable (cheap) ☐

02. Friendly, respect, and trust ☐

03. Simple procedures ☐
04. Accessible language ☐
05. Nearness ☐
06. Confidentiality and privacy ☐
07. Other (Specify\_\_\_\_\_)

## Section: 2. General Issues on Accessing Healthcare

11. a) Many factors can prevent deaf people from visiting hospital or health centers for treatment or advice. If you want to visit a health center for treatment or advice, how difficult would it be.....

	Mark (✓) the one that applies to you			
Factor	Not Difficult	Difficult	Very Difficult	Not Applicable
01. Knowing where to go?				
02. Getting permission to go?				
03. Getting money to go?				
04. Not wanting to go alone?				
05. Having to take transport?				
06. Getting an interpreter?				
07. Other				



12. b) What do you believe is the attitude of healthcare personnel towards you and your others colleague deaf students.

i) Patronizing ii)

Indifferent iii)

Accommodating iv)

Pleasant Instruction:

Below are two

statements for each

issue. I would like you

to tell me two things

about the statements: In

the first statement tell

me how important the

issue is to you

personally. In the

second statement tell

me how satisfied you

are with the current

situation.

12a. I have education on healthcare accessibility

01 Very important ☐

02 Some what important ☐

03 Not important ☐

<p>b. How satisfied are you with current education you receive on healthcare accessibility?</p> <p>01 Very satisfied <input type="checkbox"/></p> <p>02 Some what satisfied <input type="checkbox"/></p> <p>03 Not satisfied <input type="checkbox"/> c. What are your reasons?.....</p>
<p>13 a. There are always interpretation services at all departments of a hospital or health center to interpret procedures and health information for me (and other deaf people).</p> <p>01 Very important <input type="checkbox"/></p> <p>02 Somewhat important <input type="checkbox"/></p> <p>03 Not important <input type="checkbox"/></p>
<p>b. How satisfied are you with the interpretation services at all departments of a hospital or health center?</p> <p>01. Very satisfied <input type="checkbox"/></p> <p>02. Somewhat satisfied <input type="checkbox"/></p> <p>03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....</p>
<p>14a. Interpreters are able to interpret health information ie (terminology) for me</p> <p>01. Very important <input type="checkbox"/></p> <p>02. Somewhat important <input type="checkbox"/></p> <p>03. Not important <input type="checkbox"/></p>
<p>b. How satisfied are you with the way interpreters interpret procedures or health information for you?</p> <p>01. Very satisfied <input type="checkbox"/></p> <p>02. Somewhat satisfied <input type="checkbox"/></p> <p>03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....</p>

<p>15a. Health procedures and messages are in simple and accessible forms, such as dramas, videos and pictures.</p> <p>01 Very important <input type="checkbox"/></p> <p>02 Somewhat important <input type="checkbox"/></p> <p>03 Not important <input type="checkbox"/></p>
<p>01. How satisfied are you with the current form in which procedures and information on health is presented to you?</p> <p>2. Very satisfied <input type="checkbox"/></p> <p>3. Somewhat satisfied <input type="checkbox"/></p> <p>4. Not satisfied <input type="checkbox"/></p>
<p>16a. Health Professionals treat me well as a deaf person</p> <p>01. Very important <input type="checkbox"/></p> <p>02. Somewhat important <input type="checkbox"/></p> <p>03. Not important <input type="checkbox"/></p>

<p>b. How satisfied are you with the respect you get from health workers?</p> <p>01. Very satisfied      <input type="checkbox"/></p> <p>02. Somewhat satisfied   <input type="checkbox"/></p> <p>03. Not satisfied        <input type="checkbox"/> c. What are your reasons?.....</p>	
<p>17a. I need privacy from parents and family members who attend hospital with you</p> <p>01Very important      <input type="checkbox"/></p> <p>02Somewhat important   <input type="checkbox"/></p> <p>03 Not important        <input type="checkbox"/></p>	
<p>b. How satisfied are you with the privacy you get from parents or family members whom you attend hospital with you?</p> <p>01.Very satisfied      <input type="checkbox"/></p> <p>02. Somewhat satisfied   <input type="checkbox"/></p> <p>03. Not satisfied        <input type="checkbox"/> c. What are your reasons?.....</p>	
<p>18a. I need privacy from health workers</p> <p>01Very important      <input type="checkbox"/></p> <p>02Somewhat important   <input type="checkbox"/></p> <p>03 Not important        <input type="checkbox"/></p>	
<p>b. How satisfied are you with the privacy you get from health workers?</p> <p>01.Very satisfied      <input type="checkbox"/></p> <p>02. Somewhat satisfied   <input type="checkbox"/></p> <p>03. Not satisfied        <input type="checkbox"/> c. What are your reasons?.....</p>	
<p>19a. I get support from family members when searching for health information</p> <p>01 Very important      <input type="checkbox"/></p> <p>02 Somewhat important   <input type="checkbox"/></p> <p>03 Not important        <input type="checkbox"/></p>	
<p>b. How satisfied are you with the current support you get from your family members when searching for health information</p> <p>01. Very satisfied      <input type="checkbox"/></p> <p>02. Somewhat satisfied   <input type="checkbox"/></p> <p>03. Not satisfied        <input type="checkbox"/></p>	
<p>20a. I get support from peers/friends when searching for health information</p> <p>01 Very important      <input type="checkbox"/></p> <p>02 Somewhat important   <input type="checkbox"/></p> <p>03 Not important        <input type="checkbox"/></p>	

b. How satisfied are you with the current support you get from your peers/friends when searching for health information

01. Very satisfied ☐

02. Somewhat satisfied ☐

03. Not satisfied ☐

21a. I get support from teachers when searching for health information 01

Very important ☐

02 Somewhat important ☐

03 Not important ☐

b. How satisfied are you with the current support you get from teachers when looking for health information

01. Very important ☐

02. Somewhat important ☐

03. Not important ☐

22a. I receive care and guidance from my parents on health matters

01. Very important ☐

02. Somewhat important ☐

03. Not important ☐

b. How satisfied are you with the parental care and guidance on health matters?

01. Very satisfied ☐

02. Somewhat satisfied ☐

03. Not satisfied ☐

23a. I understand health messages on posters at the hospital reception

01. Very important ☐

02. Somewhat important ☐

03. Not important ☐

b. How satisfied are you that messages on posters and brochures/magazines are easy to understand at the hospital reception?

01. Very satisfied ☐

02. Somewhat satisfied ☐

03. Not satisfied ☐ c. What are your reasons?.....



24a. Health workers can communicate with me. 01. Very important <input type="checkbox"/> 02. Somewhat important <input type="checkbox"/> 03. Not important <input type="checkbox"/>	
b. How satisfied are you that health workers can communicate with you? 01. Very satisfied <input type="checkbox"/> 02. Somewhat satisfied <input type="checkbox"/> 03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....	
25 a. Health workers are friendly to me as a deaf person 01. Very important <input type="checkbox"/> 02. Somewhat important <input type="checkbox"/> 03. Not important <input type="checkbox"/>	
b. How satisfied are you that health workers are friendly to you as a deaf person? 01. Very satisfied <input type="checkbox"/> 02. Somewhat satisfied <input type="checkbox"/> 03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....	
26a. I need privacy from doctors in the consulting room 01 Very important <input type="checkbox"/> 02 Somewhat important <input type="checkbox"/> 03 Not important <input type="checkbox"/>	
b. How satisfied are you with the privacy you get from doctors in the consulting room? 01. Very satisfied <input type="checkbox"/> 02. Somewhat satisfied <input type="checkbox"/> 03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....	
27a. I need privacy from nurses if I am to be admitted into a hospital ward 01. Very important <input type="checkbox"/> 02. Somewhat important <input type="checkbox"/> 03. Not important <input type="checkbox"/>	
b. How satisfied are you with the privacy you are admitted into a ward? 01. Very satisfied <input type="checkbox"/> 02. Somewhat satisfied <input type="checkbox"/> 03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....	

28a. I want a good communication with doctors in the consulting room 01 Very important <input type="checkbox"/> 02 Somewhat important <input type="checkbox"/> 03 Not important <input type="checkbox"/>
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<p>b. How satisfied are you with the communication you get from doctors in the consulting room?</p> <p>01. Very satisfied <input type="checkbox"/></p> <p>02. Somewhat satisfied <input type="checkbox"/></p> <p>03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....</p>
<p>29a. I need communication with nurses if I am to visit or am admitted into a hospital ward</p> <p>01 Very important <input type="checkbox"/></p> <p>02 Somewhat important <input type="checkbox"/></p> <p>03 Not important <input type="checkbox"/></p>
<p>b. How satisfied are you with the communication when you visit or are admitted into a ward?</p> <p>01. Very satisfied <input type="checkbox"/></p> <p>02. Somewhat satisfied <input type="checkbox"/></p> <p>03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....</p>
<p>30a. I need better explanation on how to take drugs or medication</p> <p>01 Very important <input type="checkbox"/></p> <p>02 Somewhat important <input type="checkbox"/></p> <p>03 Not important <input type="checkbox"/></p>
<p>b. How satisfied are you with explanations on how to take drugs or medication</p> <p>01. Very satisfied <input type="checkbox"/></p> <p>02. Somewhat satisfied <input type="checkbox"/></p> <p>03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....</p>
<p>31a. I need care and guidance from health professionals</p> <p>5. Very important <input type="checkbox"/></p> <p>6. Somewhat important <input type="checkbox"/></p> <p>7. Not important <input type="checkbox"/></p>
<p>b. How satisfied are you with the care and guidance you get from Health Professional?</p> <p>01. Very satisfied <input type="checkbox"/></p> <p>02. Somewhat satisfied <input type="checkbox"/></p> <p>03. Not satisfied <input type="checkbox"/> c. What are your reasons?.....</p>

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