ACCESS TO HEALTH CARE SERVICES IN PUBLIC HEALTH FACILITIES BY WOMEN WITH DEAFNESS IN KAMPALA CAPITAL CITY AUTHORITY

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A DISSERTATION SUBMITTED TO THE DIRECTORATE OF RESEARCH AND GRADUATE TRAINING IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SPECIAL NEEDS EDUCATION OF KYAMBOGO UNIVERSITY

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DECALARATION

This is to attest that this study Dissertation was entirely created by me, Amanya WyneYvone and has never been submitted to any university for consideration of any kind of award.

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APPROVAL

This is to certify that Amanya Wyne Yvone successfully wrote this Research Dissertation titled "Access to Healthcare Information in Public Health Facilities by Women with Deafness in Kampala District" and I certify that the report is now ready for submission to the Directorate of Research and Graduate Training of Kyambogo University for examination.

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DEDICATION

To the Almighty God for the strength, wisdom, mercy and protection he gave me freely towards the completion of this research, my deceased Parents Mr. & Mrs. **Olive and Solomon Rwanshure** who always encouraged me to aim high but, they never lived to see me through, equally to my husband Mr. Muhwezi Ambrose, my children, Reagan and Rebecca whom I denied most of my time to turn into a “Bookholic”. May God bless them abundantly!

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ABBREVIATIONS AND ACRONYMS

AAC	Augmentative and Alternative Communication
ABC	Abstinence, Be Faithful, Use a Condom
ACM	Association Committee Member
AIDS	Acquired Immunodeficiency Syndrome
ASL	American Sign Language
CART	Cloud and Radiation Testbed
DHH	Deaf or Hard of Hearing
EU	European Union
HISB	Health Information Seeking Behavior
HIV	Human Immunodeficiency Virus
ISER	Initiative for Social and Economic Rights
NSL	National Sign Language
PHW	Professional Health worker
PWDs	Persons with Disabilities
TVs	Televisions
UK	United Kingdom
UN	United Nations
UNAD	Uganda National Association of the Deaf
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNPF	United Nations Population Fund
USA	United States of America
WHO	World Health Organization
WwD	Woman with Deafness
NIDCD	National Institute on Deafness and other Communication Disorder

ABSTRACT

The purpose of the study was to investigate access to health care information in public health facilities by women with deafness. The study also sought to establish ways by which women with deafness access healthcare information in public health facilities in Kampala capital city authority, assess availability and usage of assistive technologies to access healthcare information in public health facilities by women with deafness in Kampala capital city authority and to establish ways in which professional health workers' (nurses) attitudes affect women with deafness' access to healthcare information in public health facilities in Kampala capital city authority. This qualitative study adopted a phenomenology research design, conducted in Kampala Capital city Authority with a sample of 8 participants that included 4 women with deafness, 2 professional health workers (nurses) and 2 members of the association of women with deafness. All participants were selected purposively and data was collected using interview guides which were narrative, in addition to observation and document review. The study established that women with deafness mainly accessed healthcare information through written communication with the health workers (nurses) and sign language interpreters to those who could not read and write. Findings also established that there were very few assistive technologies used to access healthcare information by women with deafness other than the locally improvised mechanisms, mainly the use of pen and paper, and more so, the study findings established that the negative attitudes of nurses in public health facilities translated into improper diagnosis and wrong prescriptions of treatment for women with deafness. It was generally concluded that access to healthcare information in public health facilities by women with deafness in Kampala capital city authority is still a very big dispute including treatment for majority of persons with deafness. The study recommended that the government should provide free interpreters with skills in sign language for ease of communication between professional health workers (nurses) and patients with deafness in public health facilities, that more technological devices be purchased and used to easily identify patients with deafness for special service to avoid missing healthcare information as well as treatment and community awareness about deafness and hearing loss was recommended for health workers to understand and appreciate deafness.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study aimed at finding out access to healthcare services in healthcare facilities by women with deafness in Kampala Capital City Authority. This chapter describes the background to this study, statement of the problem, the theoretical framework, the purpose of the study, objectives of the study and the research questions, the scope of the study, the significance of the study, and definitions of key terms.

1.1 Background of the study

Access to healthcare without barriers is a clearly stated right of persons with disabilities according to the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2016). Deaf persons have a clearly defined right mandated to them to receive healthcare services without obstacles (UNCRPD, 2016). There should always be widespread palatable and excellent access to healthcare services by the deaf (Lombe, 2017). Subsequently, Article 25 of the United Nations Universal Declaration of Human Rights (UNUDHR, 1948) plainly states that, "Everybody has the right to a standard of living reasonable to access the basic human need intended for the health and well-being of himself and his family".

Deafness crosses barriers of gender, ethnicity, age, economic status, and certain Deaf groups are at further risk for marginalization (Sporek, 2014). A group of special concern is women with deafness. Deaf females adolescent face unique challenges accessing web-based health information including questions about body image, physical activity and nutrition, puberty, and relationships (Smith, Massey-Stokes, & Lieberth, 2012). It is noted, that the global problems existing in healthcare system is the lack of a thorough and coordinated strategy to address how people with deafness can

access healthcare services in public health facilities, (WHO 2011). Although there are still some gaps, the increasing view on access to healthcare services has largely been realized, healthcare service systems are developed, and more attainable goals are honored (Pollard et al., 2014; Smeijers & Pfau, 2009; Ubido, Huntington, & Warburton,2002). However, some areas, such as access to healthcare information communication and the access to assistive technology and usage for people with deafness, who are downgraded to a less advantaged category in access to healthcare services in general, have remained low. It is correct that access to health care information, access to assistive technology are part of healthcare services, the objectives are also not properly targeted to reach women with deafness and making them unworthy of the silent community, which requires reconsideration, (Mann, 2019).

Globally, deafness is one of the most common disabilities. Nearly 80% of the 460 million people or more than 5% of the population who have hearing loss, live in low-and middle-income countries (WHO, 2021. Over 700 million individuals will have debilitating hearing loss that by2050, (Mann, 2019). Deafness remains an invisible impairment in terms of accessibility as it doesn't require physical modifications like persons with reduced mobility do (Costa & Silva, 2012). A partial or profound loss of hearing is referred to as deafness, a sensory impairment that prevents the reception and processing of everyday conversation or loud noises (Hull City Council, 2016). The effectiveness of the health services in addressing the needs of deaf persons must be evaluated in order to advance ease of access (Mann, 2019).

In this view, access includes access to communication, information, education, and culture (Kuenburg, Fellinger & Fellinger, 2016). Between patients and medical professionals, deafness can make communication difficult and frequently becomes a barrier (Rocha, Roberto, Parlato-Oliveira, Melo, Guerra & Carvalho, 2017). Since sign language is the preferred means of communication for the deaf, efforts must be taken to raise awareness of deafness in the general public and educate

healthcare professionals on how to use, interpret, and translate sign language (Hull City Council, 2016; Rocha et al., 2017). However, the overall picture shows that due to communication issues, deaf persons have restricted access to information in healthcare facilities.

According to research, sign language interpreters are available in hospitals in Australia, the United Kingdom, New Zealand, and the United States. Nevertheless, because appointments must be made in advance, the interpreter isn't always readily accessible to provide the services to people with deafness or hard of hearing (DHH) (Cabral, Muhr, & Savageau, 2013; Earis, & Reynolds, 2009; Witko, Boyles, Smiler & McKee, 2017; Terry, Lê, & Nguyen, 2016). This therefore needs serious attention to allow patients with deafness easily communicate with medical professionals during appointments (Alexander, Ladd & Powell, 2012).

In Africa, deafness has had a considerable impact on communication, particularly in sub-Saharan Africa, which has hampered access to information. The majority of deaf patients in Africa are poor, which results in low literacy rates and makes it difficult for them to acquire healthcare information (Haricharan, Heap, Hacking & Lau, 2017). The ultimate choice regarding the patient's care may be compromised if sign language is not used and the consultation is not translated (Masuku, More & Van deMerwe, 2021, Chinkonono et al., 2020). Patients with deafness encounter communication challenges when utilizing healthcare services, a fundamental human right, according to research from South Africa, Botswana, Ghana, and Nigeria (Masuku et al., 2021). Unfortunately, these communication problems have an impact on the level of healthcare provided to the deaf population when they attend healthcare facilities, from a clinical and ethical standpoint (Masuku, More & Van deMerwe, 2021; Chinkonono et al., 2022; Adigun & Mngomezulu, 2020). Women with deafness experience discrimination and isolation from the medical facilities. This is as a result of

communication barriers such as the inability of most of the health workers to communicate in sign language (Masuku et al., 2021).

The implications of being "female" and "Deaf" on one's identity obstacles and a way to connect with the outside world make it difficult to live a fulfilling life and form a strong sense of self (Harris, 2020). The impact of deafness, deaf culture, and gender on their daily lives, may be more difficult for women with deafness to receive information in public health facilities (Kuenburg, Fellinger & Fellinger, 2016). This result in women with deafness receiving less information about health issues and not knowing where to get particular healthcare services, thereby necessitating prompt action to lessen the impact of the issue ((Masuku, More & Van deMerwe, 2021; Chinkonono et al., 2022; Adigun & Mngomezulu, 2020).

In Uganda, nearly 3.4% of Uganda's population have deafness with women making up 14.5% of this group by Uganda National Association of the Deaf (UNAD, 2019). When utilizing healthcare services in medical facilities, women with deafness are vulnerable and others are taken advantage of (Mulumba et al., 2014). For the purpose of using healthcare services in a public facility, access is regarded as a right (DeMeulder, 2015). This is in accordance with the Declaration of the Rights of Persons with Disabilities and the 1948 Charter of Rights and Freedoms by the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD's 2016), the Convention on the Rights of Persons with Disabilities (CRPD,2016) through its mandates also translates the obligations of the other United Nations human rights treaties to suit the needs of disabled people, who face discriminatory attitudes against visible human rights claimants ‘rights to access to healthcare and inclusive provision of the basic needs (UNCRPD, 2016; Lombe, 2017).

The Access to Information Act of 2005 and Article 41 of Uganda's 1995 Constitution both recognize sign language as being one of the 3 official languages of the country. The Persons with Disability

Act also clarifies the necessity of including sign language in the training programs for healthcare professionals and mandates that all television stations must provide information that is accessible to persons with deafness by offering interpretation services and subtitling. Little is truly known about how women with deafness obtain healthcare information in public health facilities in Uganda, particularly Kampala capital city authority. Considering that women with deafness typically encounter and continue to encounter gender-based discrimination from both Deaf culture and the hearing world, as well as social prejudice and stereotypes from the hearing world based on their deafness, this is a serious concern (Harris, 2020). Their growth, identity, education, income, relationships, and success as individuals, much as they are all important for them to receive healthcare information at public health facilities, a bigger percentage is negatively impacted by these biases (Harris, 2020).

Several patients from different regions of Uganda are referred to Mulago national referral hospital in Kampala District, which is the public healthcare facility taken into consideration for the study. Among these patients are women with deafness. The goal is to receive higher-level health care from the referral hospital, but sadly, 84% of patients who are referred are from rural regions (DeMeulder, 2015), meaning that their literacy skills are quite poor and as a result, they might not be able to read and understand printed medical information in these healthcare facilities. Patients with deafness must be able to express their demands to the healthcare service provider and grasp it clearly if they are to be able to receive information, such as discussions about diagnosis/treatment choices, financial commitments for treatments, and instructions for homecare (DeMeulder, 2015). Between patients with deafness and healthcare providers, deafness can hinder communication and in turn, affect access of women with deafness to healthcare information in health facilities (Costa & Silva, 2012). The occurrence of this condition lowers patients' quality of life and infringing on their human

rights and basic needs , resulting in low utilization of medical services and insufficient diagnoses (Rocha, Roberto et al., 2017). Therefore, the intention of this study is to check on the situation of access to healthcare information in public health facilities by women with deafness in Kampala District, which include; establishing ways by which women with deafness access healthcare information in public health facilities in Kampala capital city authority, assess availability and usage of assistive technologies to access healthcare information in public health facilities by women with deafness in Kampala district and to establish ways in which professional health workers(nurse)'s attitudes affect women with deafness 'access to healthcare information in public health facilities in Kampala capital city authority.

1.2 Statement of the problem

People with disabilities have a clearly defined right to unhindered access to healthcare information in public health facilities, according to the United Nations Declaration on the Rights of Persons with Disabilities (UNDRPD), which addresses the provision of inclusive healthcare services too (CRPD, 2016). This United Nations Declaration mandates Section 15(1a-b) of the Ugandan Persons with Disabilities Act, 2020, to encourage the use of sign language, communication information and usage of assistive devices and technology. Unfortunately, there is currently little research that documents the aspects of access to healthcare information by women with deafness (Sporek, 2014). This is particularly so, in low-income countries where it is more difficult to field test hearing levels, diagnose and report the level of hearing accurately. It is reportedly indicated that women with deafness continue to be ostracized and encounter barriers while trying to seek emergency medical care (Sporek, 2014). In a recent Uganda National Association for the Deaf survey, it was indicated that 87% of individuals with deafness lack access to social services due to communication difficulties that prevent them from receiving healthcare and education (UNAD, 2019). Making

progress is challenging due to these complex difficulties, which limit access to relevant healthcare information by women with deafness and violate their rights as outlined in the Convention on the Rights of Persons with Disabilities (CRPD, 2016). Persons with deafness have clearly defined right to unhindered access to healthcare services in public health facilities, Persons with disability Acts and many articles are in support of these laws and rights that are explained to the hearing community, it's unfortunate the many persons with deafness have been crippled from accessing health care services as they cannot communicate or hear the language and even interpret it. Therefore, it is from this background that more investigation was needed to come up with suggestions on how to resolve the problem. The study therefore, has contributed to closing of the information gap by investigating access to healthcare services in public health facilities by women with deafness in Kampala capital city authority.

1.3 The theoretical framework

The theoretical underpinning used in this study is Mike Olivier's social model of disability from the 1980s which complements to the Convention on the Rights of Persons with Disabilities (CRPD, 2016). For the past 40 years, 'models' of disability have featured prominently in shaping disability Politics, Disability Studies and human rights for disabled people (Anna & Angharad, 2021).

According to the social model of disability, a person's impairment is an impediment caused by a contemporary social structure that overlooks and prevents them from participating in the majority of social activities (Oliver, 1983). Regardless of how serious their handicap may be, everyone is treated equally under the social model. The society however, is the one that puts up the obstacles which limit Persons with Disabilities s' (PWDs) chances and prohibit them from participating. The model emphasizes the physical and societal, legal, cultural, and attitudinal impediments that people with a disability face rather than their own inadequacies or abnormality. These obstacles are external to the

persons and render them disabled (Oliver, 1990). Therefore, the social model moves along with the UNCRPDs rights and the convention of rights of people with disabilities CRPD, (2016). Then, thinking about the relationship between the long-standing social model of disability and the rapidly emerging human rights model. In particular, it contests the influential view that the latter develops and improves upon the former and argues instead that the two models are complementary (Anna, L. and Angharad, E. B. 2021). Human rights are the effective tool for enhancing the rights of the deaf and worked hard to advance the interests and needs of the deaf particularly women with deafness (Mbulamwana, 2017), to advocate for the provision of assistive technologies and sign language interpreters that would facilitate access to healthcare information in public health facilities by persons with deafness in Kampala capital city authority.

Deaf individuals still have a difficult time accessing healthcare services especially in high income nations. (Pollard et al, 2014). Therefore, there is a need for coordinated initiatives to improve the deaf 'access to healthcare information in public health facilities. More so, women with deafness too would benefit by easily accessing healthcare information. The social model also advocates for training of healthcare professionals in sign language that would change their attitudes toward provision of healthcare information to women with deafness in public health facilities. The aforementioned explanations for the social model of disability are in compliance with the norms of the United Nations and Uganda's Persons with Disabilities Act, 2020, Section 15(1a-b), that promote the teaching and use of sign language as well as the availability of information technology and assistive equipment (UN&UPWD Act, 2020, Section 15(1a-b).

1.4 Purpose of the study

The purpose of the study was to investigate access to healthcare information in public health facilities by women with deafness in Kampala capital city authority.

1.5 Objectives of the study

This study was guided by the following objectives:

1. To establish ways by which women with deafness access healthcare information in public health facilities in Kampala capital city authority.
2. To find out the availability and usage of assistive technologies to access healthcare information in public health facilities by women with deafness in Kampala capital city authority.
3. To establish ways in which professional health workers' (nurses) attitudes affect women with deafness' access to healthcare information in public health facilities in Kampala capital city authority.

1.6 Research questions

1. How do women with deafness access healthcare information in public health facilities?
2. What are the available assistive technologies and how are they used in access to healthcare information in public health facilities by women with deafness?
3. How do the attitudes of professional health workers (nurse) affect women with deafness in accessing healthcare information in public health facilities?

1.7 Scope of the study

The investigation was bounded by the study objectives that were intended to ascertain ways by which women with deafness access healthcare information in public health facilities, assess availability and usage of assistive devices and technologies and establish ways in which professional health workers (nurses) 'attitudes affect women with deafness in access to healthcare information in public health facilities in Kampala district. Mulago referral hospital was considered as areas of investigation and concentration because this referral is supplied with sufficient specialized resources

and materials served from the Ministry of Health for equal service delivery. The study areas included; Mulango National Referral hospital, Deaf women Organization in Kamwokya, and women with deafness in institutions and in their area of residence in Kampala district having been referred to them by other participants in the study. Study participants were selected on voluntary basis for the study on access to healthcare information in public healthcare facilities by women with deafness, the study included women with deafness, Associations for Women with Deafness, and Professional health workers (nurses). These professionals and members of the Deaf Women Associations worked as the gatekeepers of suitable information on access to health services by women with deafness for the research study. In order to gather recent and pertinent material that match the investigation in contrast to the body of existing knowledge regarding the subject of inquiry, the investigation took into account literature from 2016 to 2022. It was carried out for a period of Six months i.e., from September 2022 to February 2023 so as to study events logically and systematically concerning access to healthcare information by women with deafness.

1.8 Significance of the study

The study provides a springboard for educating local and global strategic policy planners and implementers on the rights of women with deafness to equal and non - discriminatory availability of healthcare information in public healthcare facilities.

The study also is to be used to direct national policy makers, lawmakers from the legislative council of the government, and other stakeholders in the formulation and review of policies, budgeting, and planning. Additionally, it is to assist stakeholders in comprehending the significance of unrestricted access to healthcare, the absence of prejudice at public health facilities, and general understanding of disability accommodations around the world.

The study recommendations serve as a national manual for medical professionals, doctors, and other stakeholders on the favorable attitudes toward the underserved communities in terms of access to healthcare services.

The study findings inform recommendations for future research on women with deafness, including health policies and variances in how medical staff members treat women with deafness who seek medical care in Kampala capital city authority.

The study was utilized to advance the researcher's career as a professional investigator, broaden her work options, and get a better understanding of cultural differences, behavioral patterns, and the inclusion of women with deafness in society on an equal footing.

In terms of future researchers' access to linked literature, the study serves as new knowledge that supports other upcoming studies on the same or related fields.

1.9 Operation definition of terms

Access: This is a complex issue that touches on the attitudes of trained healthcare professionals as well as access to healthcare information, assistive technology, and delivery methods.

Healthcare services: These services seek to teach and educate everyone about the state of their own and their family members' health, as well as to identify at-risk women with deafness and provide them with the necessary measures.

Healthcare Information: This refers to information about a person’s medical history, including symptoms, diagnosis, treatments, and results, as well as information displayed in the open (visual imaging) of the health facility about emerging medical conditions.

Deafness: This is a condition brought on by a partial or complete loss of hearing. The word is inclusive of all people regardless of gender, race, age, or socioeconomic standing, and some Deaf groups are more vulnerable to marginalization and exclusion.

Assistive devices as a mode of delivery: These are tools or assistive technologies that make communication possible for those who are deaf or have voice, speech, or language issues. An individual's wellbeing is increased through the use of assistive devices that maintain or enhance their functioning and independence.

Attitudes: These are described as the person's blend of thoughts and emotions that lead them to act in a particular way. It consists of behavioral, cognitive, and affective components. A person's behavior or the way they think and feel about others is influenced by a feeling or a style of thinking. The sum of a person's experiences, whether favorable or unpleasant, influences their attitudes.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter analyzed the research on access to healthcare services in public health facilities by women with deafness. 8 participants were purposively selected for Kampala capital city authority including 4 women with deafness, 2 professional health workers (nurses) and 2 members of women with deafness. The review is based on the study objectives and for this matter; literature was reviewed from theoretical underpinning of the study by Mike Olivier's social model of disability from the 1980s and Human rights disability model following the study objectives. The chapter proceeds with the identification of the knowledge gap that serves as the foundation of the study which formulated the study in qualitative approach. The study was delivered in form of a summarized literature. These incorporate; academic research dissertations, journals, articles, and internet blogs.

2.1 Access to healthcare information by women with deafness in public health facilities

Information seeking is a complicated activity that requires access to a variety of information resources in order to address problems of deaf women's access to healthcare services. A review of relevant literature on information needs and Health Information Seeking Behavior (HISB) found that, the concept of deafness has received more attention in recent years (Javanmardi, 2019). Health institutions are required by law to give hearing-impaired people access to healthcare services, including operational communication, whether they are patients or people with the power to make choices regarding the patient's treatment.

The Convention on the Rights of Persons with Disabilities (CRPD, 2016), which is an effective tool for advancing the human rights of deaf people, has contributed to advancing the interests of the Deaf

community, particularly women with deafness (Mbulamwana, 2017). In a similar vein, Art.9 of the(UNCRPD) stipulates that state parties to the treaty with in United State of America(USA) and all member States of (UE) have formed legislation to ensure access to healthcare services for persons with deafness, ostensibly outlining their legal obligation to provide inclusive healthcare services in accordance with WHO guidelines (Wheatley,2021).

However, the deaf still struggle to receive healthcare information, particularly the families of those who cannot read, write or understand the language (Pollard et al., 2014). As a result, concerted efforts are required to enhance the Deaf person's access to healthcare information at public health institutions as a whole (Wheatley, 2021).

The constitution of Uganda has sign language as one of the official languages of the nation. According to the persons with Disabilities Act of 2006 (PWD), which harmonizes with the Access to Information, citizens have the right to information (Pollard et al., 2014). Persons with disabilities highlight the need to include sign language in the training of healthcare professionals (Kembabazi, 2014). The Persons with Disability Act also stipulates that all television stations must make services accessible to the deaf NSL, (The Persons with Disability Act, 2006). The majority of people with hearing impairments are known to be illiterate in sign language and have limited ability to communicate in it. This makes the cost of interpreters' services in medical facilities higher than what women with deafness can comfortably pay.

The Government of Uganda does not recognize sign language interpreters as part of the public service system, therefore people with hearing loss cannot obtain enough information in hospitals, benches, the police, jails, schools, or other locations as majority of these practitioners and persons with deafness cannot speak or sign the language. Due to this practice, deaf individuals are

frequently alienated and stigmatized, especially the silent group, which is illiterate (Mbulamwana, 2009).

Deaf community organizations create and distribute material on their own in many nations, allowing for tailored delivery that takes into consideration the language and cultural demands of people with deafness (Murray, 2017). The ISER Executive Director explained that lack of interpreter's means that the entire community does not have access to healthcare advice and self-advocacy like the rest of the general public and what we are talking about is discrimination (Namusobya, 2015). This prevents the deaf from gaining the same benefits as the general public from life-saving public health education and information (Mbulamwana, 2009).

Sign language, lip reading, written language, and spoken language are just a few of the ways that deaf individuals can communicate (Beaver & Carty 2021). However, studies have found that specialist sign language interpreters are infrequently used in health visits, despite the fact that their use may help women with deafness obtain basic healthcare information from medical professionals and reduce the burden of information communication issues. Sign language users typically use little or no spoken language and expert sign language interpreters in sharing information with their hearing audiences (Borg & Ostergen, 2015).

Furthermore, it is said that written information about medical issues and ailments is typically available in English and other languages. However, due to educational disadvantage, those who are deaf since birth or in infancy may have lower levels of literacy or even know nothing at all (Beaver & Carty 2021). What is worse is that the medical system has barriers for hearing-impaired people built right in, like limited access to interpreters who can translate medical information into National Sign Language.

It is apparent that women with Deafness whose impairment can be regarded "silent" may be badly ostracized and neglected from getting necessary healthcare information from public hospitals and healthcare personnel because the bulk of communication methods are not in sign language. There is a potential that they will misinterpret some information because they don't grasp the medical vocabulary and utilizing people as interpreters need to be discouraged all (Beaver & Carty 2021).

Furthermore, the unique relationship with the deaf raises concerns about impartiality and reliability, particularly when there is a chance that the content provided by the doctor or patient may be concealed or rephrased (concealment). As a result, there is a gap in communication between "patients" and "health practitioners," which could alter how women with deafness perceive how those experts will attend to them (Middleton et al., 2010). There is a serious lack of health literacy and knowledge at different levels across countries in different deaf communities, according to the literature that is currently available, and there are significant difficulties in establishing and maintaining communication between people with deafness and health-care providers (Middleton et al., 2010). Women, ethnic minorities, and the elderly who are deaf may be more at risk for health care treatment, as well as for other communication-restraining variables like low socio-economic level and lack of education (Harris, 2020). These need special consideration in order to develop cutting-edge methods of delivering healthcare services. Healthcare teaching and information materials in sign language are generally lacking (O'Hearn, & Haynes, 2009).

The deaf community in the USA faces a lack of training for health care providers related to deaf awareness and having the healthcare providers possessing insufficient knowledge about the persons with deafness and their languages (Harris, 2020). It is disclosed that patients with deafness report fear, mistrust, and frustration in health care encounters. The majority of medical workers, including

doctors, lack the necessary training to effectively interact with and accommodate deaf people (Wheatley, 2021).

"A health facility should not discriminate against persons with disabilities on the basis of their disability status in the provision of health care services," as rightly stated in Uganda's Persons with Disabilities Act (2020), Article 3, Sections 7 and 8.

The Uganda National Association of the Deaf (UNAD) met to call for an end to discrimination against people with hearing loss in Uganda`s health system. "The lack of interpreters means that health advice is inaccessible to the entire community," said a UNAD executive (Namusobya, 2017).

According to Wheatley (2021), people with deafness frequently encounter ongoing challenges when dealing with healthcare professionals who do not know sign language and must rely on sign language interpreters. This has prevented individuals with deafness from receiving information in their native language and gaining access to the information they require directly from the healthcare professionals. Persons with deafness and their families are more likely to have trouble accessing health information, which can have a variety of negative effects on their overall health, such as making them less inclined to use healthcare services thus, depriving them of vital knowledge and high-quality medical care (Mitsi et al., 2014).

People with deafness occasionally bring young family members to interpret for them information as they are considered for knowing their well-being if the healthcare experts do not provide sign language interpreters during consultations (Blog, 2021). Such scenarios traumatize girls and women with deafness that is denied their privacy and autonomy by healthcare nurses; this is a significant burden that has been placed on them.

Although women with different infirmities have the same or even greater biological and social needs as a genuine right to access health education information and care WHO and UNPFA (2009) had this to say, women with deafness face a glut of challenges in access to high-quality, affordable fleshly and generative, healthcare information on primary healthcare, diagnosis and treatment when compared to women without disabilities which places them at a higher risk of always being bulled and branded as "vegetative" or a "hushed community. This has deprived many women with deafness access to healthcare services in public health facilities as a result of mistrust, trauma and discrimination (Bright & Kuper et al., (2018). In a similar vein, Article 9 of the UNCRPD stipulates that State Parties to the Treaty with the United States of America (USA) and all Members of the European Union (EU) have formed legislation to ensure access to healthcare information services for persons with deafness, ostensibly outlining their legal obligations to provide inclusive healthcare services in accordance with WHO guidelines (Wheatley, 2021).

In Uganda, there is a disparity regarding women with deafness's access to healthcare services in public health facilities, according to a study on women with deafness and access to healthcare services in south-western Uganda and the Gulu region (Namusobya, 2017). The deaf are repeatedly denied access to healthcare information in the healthcare facilities owing to lack of sign language interpreters, phone massages, finger spelling and more.

Unfortunately, women with deafness still struggle to get access to health screenings at public health facilities because some rely on assistive equipment or sign language interpreters, while others rely solely on written messages when knowledge of the sign language in use is scarce or nonexistent. Women with deafness and adolescent girls are a particular concern much as they have a right to access health information about their health and wellbeing they face special difficulties in doing so, including issues with body image, physical activity and nutrition, puberty, and relationships (Smith

et al., 2012). Professional sign language instruction is very complex and difficult. Even in nations where deaf people are legally entitled to competent medical communication (Henning et al., 2011). As prior mentioned, the situation in Uganda is not remote from those of other countries or states world over.

Kampala is therefore, considered a fertile ground for testing how women with deafness can access healthcare information in public health facilities. In order to enhance the number of health services available to women with deafness, the study used Kampala capital city authority as a research point. Knowing the close proximity and geographic accessibility of a study and the constrained period of study allowed, Kampala is seen as a legitimate research area.

2.2 Availability and usage of assistive technologies to access healthcare information

An assistive device, often known as an assistive technology, is any item, piece of equipment, software program or product system that is used to improve the functional capabilities of persons with disabilities (Assistive Technology in Industry Association, 2023). It makes communication possible for those who have hearing loss, voice, speech, or language issues. "Assistive technology" is a comprehensive term used to define the systems and services related to the delivery of assistive products and services. The maintenance or improvement of a person's independence and functional capacity via assistive products increases that person's wellbeing (Karki, Rushton, Bhattarai & DeWitte (2021).

The UNCRPD, a binding legal treaty that defines disability in terms of rights, guarantees access to assistive technology (AT) services as a fundamental human right. According to Karki, Rushton, Bhattarai & DeWitte (2020), the UNCRPD is a powerful human rights document that demands the right of PWDs to have equal access to general programs, social protection programs, and disability-specific programs like rehabilitation and assistive technology. These expressions frequently refer to

tools that make it easier to understand and comprehend sign language or to uncomplicated definite ideas. With the development of digital and wireless technology, a number of tools have been invented to assist persons with hearing, speech, and language impairments participate fully in daily life and have more meaningful conversations (UNCRPD, 2016). Individuals with communication snags can express themselves with the aid of augmentative and alternative communication (AAC) tools. These tools could be anything from an open whiteboard to a program that converts text into speech on a computer (Mitsi et al., 2014). There are other alerting devices installed that are connected to doorbells, phone vibrations, or alarms that make a loud sound or a flashing light to notify the Deaf of an occurrence in their proximity (Harris, 2020). Many of these readily available assistive technologies may not be helpful for women with deafness because some of them are outdated and others, professionals do not know how to use them. Also, the only means of communication is sign language, and use of an interpreter to mediate health services to the deaf community (Harris, 2020).

National Institute on Deafness and other Communication Disorder (NIDCD, 2021) reported that using a cochlear implant necessitates both surgery and extensive therapy to retrain the sense of hearing. With this tool, not everyone performs at the same level. The choice to get an implant should be made after consulting with medical experts, such as an expert cochlear-implant surgeon (Witko et al., 2017). Bypassing damaged ear tissue, cochlear implants stimulate the auditory nerve directly. The auditory nerve transmits impulses produced by the implant to the brain, which interprets them as sound. It takes some time to retrain one's ears to hear with a cochlear implant because it differs from regular hearing. Yet, it enables lots of people to hear conversation in person or over the phone, interpret other noises in the environment, and notice warning signals (NIDCD, 2021).

Kusters (2017) asserts that deaf signers frequently utilize gestures to converse with hearing non-signers in various parts of the world. However, writing in a variety of ways on paper, a mobile device, with finger writing on the hand, arm, or table, for example can be used to supplement the use of gestures. According to Kusters and Sahasrabudhe (2020), many deaf persons carry paper and a pen to interact with hearing people who are hard of hearing and don't understand sign language. They might also request a pen to write with you (Kusters & Sahasrabudhe, 2020). Without writing, successful gesture-based communications with the deaf and deaf-blind occur frequently. Unfortunately, gestures made by humans are not always precise enough, therefore combining gesturing with writing is a potential remedy for anticipated or real understanding issues (Kusters 2017).

In the USA, facilities that receive federal assistance are subject to the requirements of Section 504, which mandates accommodation for individuals with disabilities (Kingsley, 2020). Most people with deafness, particularly women with deafness, can be accommodated with the use of sign language interpreters. Staff training is essential for this reason as others might need a Communication Access Real-time Translation (CART) or note-taking equipment as an assistive listening aid. Few people employ sign language interpreters, but hospitals are required to provide these tools in addition to genuine communication when patient education videos are used (such as captions or printed materials communicating the information). Closed captioning should be available on patient TVs, and the captions should be able to be turned on with the remote (Kingsley, 2020). The most effective way to communicate is by sign language, which is utilized by many deaf individuals who communicate visually. Sign language interpreters may be used to communicate with most deaf people, remarkably women with deafness (Witko et al., 2017).

There are several different varieties of sign language, including Uganda Sign Language, American Sign Language (ASL), and Signed English (USL). It's unfortunate that not all deaf persons are trained as verbal interpreters in sign language; some people with hearing loss have received training in speech reading and therefore can comprehend spoken words reasonably well with the aid of a verbalized interpreter. Cued speech interpreters perform the same tasks as oral interpreters, with the exception that each speech sound is additionally represented by a hand code, or cue (Mitsi et al., 2014).

The above statement rhymes with the American Disabilities Act of 1990. It states regarding participants with deafness that it may be essential to provide a qualified sign language interpreter for more complex, interactive communications, such as a patient's discussion on symptoms with a health professional, a doctor's presentation of treatment options and diagnosis to patients or family members, or a group speech therapy session. But paying for services can also be difficulty (Adigun & Mngomezulu, 2020).

As a result, even though the use of these assistive and lodging techniques for deafened women's access to these health care services is essential, evaluating women with deafness' access to assistive devices in public hospitals may be challenging due to a lack of competence, access, capability, and procedures of health systems.

2.3 How attitudes of professional health workers (nurses) affect women with deafness from accessing healthcare information

A person's attitude is described as the confluence of their thoughts and emotions that leans them toward a particular course of behavior. It consists of behavioral, cognitive, and affective elements (Devkota et al., 2017). A person's beliefs and feelings mixed together to produce a particular

behavior is known as having an attitude. This consists of behavioral, cognitive, and emotional aspects (Devkota et al., 2017). Attitudes of medical professionals can have an impact on how women with deafness seek services and receive care (Beaver & Carty, 2021). Individual and group experiences that provide either positive or negative reinforcement have an impact on attitudes. Behaviors and attitudes are interconnected. Additionally, societal expectations and peer pressure can have an impact on how people behave (Kritzinger, 2011).

According to Art 25 of the Convetion on the Rights of Persons with Disabilities (CRPD, 2020) State Parties have a duty to uphold the health rights of people with disabilities, notably women with deafness, without discrimination. However, it is difficult for persons with deafness in the European Union (EU) to exercise their right to obtain healthcare services. The CRPD addresses the three-primary health-related challenges facing the deaf people. Health workers' lack of knowledge and training, access to national sign language, and barriers that sign language interpreters and the deaf, particularly women with deafness, face while trying to receive health services are all taken into consideration. Majority of deaf persons have age-related hearing loss, although others are born deaf or experience hearing loss in their early years (Witko et al., 2017). Age of onset, educational level, preferred methods of communication, and use of hearing aids all differ significantly.

Notwithstanding their origin, women with deafness encounter a number of challenges in the healthcare system, many of which are related to the assumption that deaf individuals have some intrinsic health deficiencies (Beaver & Carty, 2021). The negative attitudes and foul behaviors of health professionals and Sign language interpreters have also been identified as one or the other challenge faced by women with deafness in access to health care services (WHO, 2018). The challenge of bulling and labeling names to deaf patients affects their attendance to health care services.

Mulumba et'al., (2014) contends that the overwhelming negative attitude toward people with disabilities and hearing loss in general erodes their fundamental rights and freedoms. The women with deafness in the study around the world also reported experiencing feelings of marginalization and stigma (Mulumba et'al., 2014). These are prejudiced in part by the perception that their communities ruled over them due to their disability. The stigma of being "less than their neighbors" would have a negative impact not only on people's health but also on how they live their daily lives, leading to higher levels of stress and anxiety (Mulumba et'al., 2014).

By consolidating health systems to recognize and accommodate the needs of those with disabilities, the international community has stressed disability-inclusive health services (Khasnabis et al., 2015). The estrangement, exclusion, downgrading, discrimination, faintness, lack of independence, and self-sufficiency of women with deafness when accessing healthcare services are examples of other noted attitudes of health professionals.

Additionally, research has been conducted on deafness and the utilization of health facilities, access to health insurance by people with impairments and on the perspectives of healthcare providers regarding hearing impairment in particular with less research done (Witko et al., 2017). There is lack of deaf knowledge, apprehension when working with members of the silent community, and healthcare misconceptions regarding deafness. The hypothesis by health professionals and sign language interpreters on women with deafness regarding them as "sexually inactive"/"asexual" has become a hindrance to these deaf patients in accessing reproductive healthcare services in public health facilities (Witko et al., 2017).

A case in point is a deaf person who was asked about the meaning of the abbreviation ABC (Abstinence, Be Faithful, use a Condom) strategy to fight HIV/AIDS and thought it meant ABC toothpaste (Uganda National Association for the Deaf Report, 2019).

The Deaf have often reported to Initiative for Social and Economic Rights (ISER) that, medical professionals frequently dispense drugs or conduct laboratory procedures without adequate explanations and testing such as HIV testing to them without providing adequate pre- and post-treatment counseling. Several of them said that health professionals frequently don't explain the purpose of tests or the results. In the absence of sign language interpreters and professional health workers trained in sign language, health professionals have also expressed limitations in their ability to serve deaf patients (Mbulamwana, 2017).

Family involvement can extend even further in some instances, for example a family member might end up making medical decisions for deaf patients without their knowledge if a medical professional is unable to directly obtain their consent (Kembabazi, 2017).

If sign language interpreters are not provided by the healthcare professionals during consultations, the deaf have to bring members of the family to interpret for them which place a significant burden on the deaf patient (Kembabazi, 2017). Therefore, it is essential to analyze healthcare professionals' and sign language interpreters' attitudes toward women with deafness. In order to comprehend the effects of these attitudes and to enhance healthcare professionals' training to be in place to promote positive attitudes to the deaf when accessing health care services.

To enhance healthcare services for these vulnerable members of society and alter healthcare workers' attitudes toward marginalized groups, policymakers would do better to develop intervention techniques. The situation would be hopeful if they had a greater appreciation for the intricate interplay between knowledge, attitude, and behaviors (Devkota et al, 2017).

The literature stated above serves as an example of how crucial it is for women who are deaf to have access to healthcare information in public health facilities in order to provide high-quality medical

care. Most of researches, if not all, were conducted outside the current field of study (access to healthcare information by deaf women in public health facilities) and lacked sufficient evidence when applied to Uganda. Most of the studies examined in the literature review were quantitative in nature and sought out secondary data; however, the current study is entirely qualitative and looked at gaps from women with deafness, professional health workers (nurses), and the Association for Women with Deafness in Kampala capital city authority. In consideration of the above, the current study was built on the already existing literature and the Human Rights Disability Model that complements the Social Model of disability to address these gaps investigating on ways by which women with deafness access healthcare information in public health facilities, the availability and usage of assistive technologies in public health facilities and ways in which professional health workers (nurses)' attitudes affect women with deafness in access to healthcare information in public health facilities in Kampala capital city authority.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This study aimed at finding out access to healthcare services in public healthcare facilities by women with deafness in Kampala Capital City Authority. This study was guided by the following objectives: to establish ways by which women with deafness access healthcare information in public health facilities in Kampala capital city authority; to find out the availability and usage of assistive technologies to access healthcare information in public health facilities by women with deafness in Kampala capital city authority; and to establish ways in which professional health workers' (nurses) attitudes affect women with deafness' access to healthcare information in public health facilities in Kampala capital city authority. This chapter contains; the study title, target population, location of the study, research design, sample size, sampling, data collection techniques, data collection procedure, and ethical issues are all presented, along with the study's credibility and trustworthiness.

3.1 Research approach

Qualitative approach was helpful in interpreting the opinions and perceptions of women with deafness, members of their associations, and professional health workers (nurses) about how women with deafness accessed to healthcare services in public health facilities in Kampala capital city authority.

3.2 Research design

A phenomenology research design was used for the investigation. A phenomenology design is a wide-ranging form of design which the study looks to gather information that explains how individuals experience a phenomenon and how they feel about it (Hoover, 2021). This model recognizes that there is no single objective reality; instead, everyone experiences things differently.

Determining and comprehending the significance of persons or groups linked to a societal issue through in-depth, a face to face interviews with the participants (Hoover, 2021). When little is known about the issue being studied, the technique is adopted (Shelden et al., 2014).

3.3 Study participants

Eight (8) women participated in this study; they included 4 women with deafness, 2 professional health workers (nurses) and 2 members of the association of women with deafness. In this regard, women with deafness were actually the major participants and the study entirely concentrating on their feelings emotions and their own experience on access to healthcare services in public health facilities. The consideration of members of the Association of women with deafness was because they advocate for the rights of the deaf community as well as the right to know everything about the aspects and information on the problem at hand in the health facilities. The professional health workers were taken as part of the study participants because they provide healthcare services to women with deafness and they bear a burden to interpret the healthcare information to them.

This sample of 8 participants was considered in order to get the desired information since at this number; a point of saturation is normally attained as put forth by Creswell (2013). The study also, desired to find out how a situation regarding difficulties and solutions to women with deafness's access to healthcare information in public health facilities in the study area could be achieved.

3.4 Study area

The investigation was conducted in Kampala capital city Authority, with different participants in Association of Women with Deafness in Kamwokya, Public Health facility of Mulago national referral hospital harmoniously and within the communities in the study where these women with deafness participants were identified. To find out ways in which women with deafness accessed

thealthcare service in public health facilities and assistive devices are applied in the study area. The training of sign language skills. Community sensitization, through edutainment and accommodative methods for equal access to healthcare facilities by women with deafness.

3.5 Sampling procedure

Purposive sampling was used to select the participants of the study. Purposive sampling is the deliberate choosing of sources based on their capacity to clarify a certain theme, concept, or phenomenon (Michalos, 2014). Purposive selection of women with deafness was based on the fact that they were the major participants and concern to a researcher which was investigated on. Members of the associations of women with deafness were purposively selected based on the fact that they advocate for the rights of the deaf community as well as the right to know everything about the aspects and information as one of the services on the problem at hand in the health facilities. While, the professional health workers were selected purposively because they provide healthcare services to women with deafness and they bear a burden to interpret healthcare information in a language that is not understood by both professional health workers (nurses) and women with deafness. The purposive sampling technique was preferred by the study because it helped in considering participants that were more knowledgeable about the investigation and gave detailed information about how women with deafness access healthcare services.

3.5 Data collection methods

Data from the participants in the study was gathered using interview, observation, and documentary review method to analyze documents that are deemed to contain relevant data for the study. The documents reviewed included the weekly OPD registers, monthly reports as well as referral recommendations from different departments.

Interview method: This comprised of personal (face-to-face) interviews with professional health workers (nurses) and members of association of women with deafness. This helped the study to get the immediate responses, feelings, emotions and attitudes of the participants at the time of interaction (Creswell, 2013). Data collection instrument was an interview guide with semi structured and generally open-ended questions to enable the researcher obtain enough data about the topic of inquiry.

Regarding data collection from the three women with deafness who are educated and use sign language, the study used written pre-set questions and left space for them to write answers on their own. However, one woman with deafness who could not read and write the study sought for assistance from interpreters. In some cases sign language would accompany written questions, the study used hired sign language interpreter to help to collect data for interpretation purposes as written down directly by the investigator to form interview.

Observation: This was also used because the study wanted to watch and observe practical sessions where the Deaf women were accessing health care services like, how professional health works use sign language with women with deafness where both could not even know how to communicate in sign language or interpret it, the behaviors and healthcare information dissemination modes in public health facilities (Mulago National Referral Hospital). The researcher observed and took notes about the participants' actual feelings through minute signals and clues when responding to questions regarding access to healthcare information in public health facilities by women with deafness. Presence of interpreters and indicators of the flash lights on the entries for directions to find diagnosis and treatment

Document review: The study also viewed displayed visual images, pictures pinned on walls of the public health facilities and the language in which they are written in, Available documents facilitated

a clear non-judgmental and quick data editing on issues that seemed not clear and not understandable by the study and reports from the health facilities. Document review also included looking at aspects such as the healthcare services available from heath facility's weekly reports, out patents registers and then, how healthcare information was disseminated, education and assistive technology when women with deafness are accessing healthcare services. In addition, the method utilized precautions while examining how health workers perceive, act, and feel about women with deafness that were able to access information about healthcare and assistive technology.

3.7 Data collection procedure

The Department of Special Needs Education at Kyambogo University provided a letter of introduction to the researcher to seek necessary informed consents and permission from the members of Associations of women with deafness as well as Mulago Research and ethics committee. The letter and consent forms were also presented to women with deafness before data was collected from them. Appointments were arranged from the first visit to the study area (pilot visit), and investigator was given an endorsed consent form Mulago Research and Ethics Committee, to professionals health workers (nurses) to be filled and to ensure that their day-to-day activities are not interrupted. Voluntary participation was welcomed by the participants and a researcher promised confidentially. This enabled the researcher to get enough time to ask all the questions related to the study. The first stage of collecting data from the study participants focused on building rapport with them before interviews were conducted at times and places convenient to them while ensuring privacy.

Data collection was conducted in English to those who could read, understand and write the language by the study participants, as well as written messages including documents communication like referrals and laboratory examinations notes to the participants. The use of sign language by the

hired interpreter was applied to women with deafness and uneducated that took part in the study, considered most vulnerable, excluded and highly at risk than those patients who were literate.

In addition, audio recordings from the participants who could speak were done with their consent.

All scholars whose information was used in the study are honored by quoting them as sources of information.

3.7 Data analysis and presentation

The data collected for the study was analyzed using thematic analysis. The data recorded in form of audio voices were transcribed and then coded for common phrases that discussed the same ideas or meaning. Comparison of codes was carried out and similar idea phrases were put together in the same category. Relevant codes were eliminated, and equivalent category codes were added to the appropriate topics to be constructed in accordance with the specific objectives of the study. The comparison of the results acquired from various participants was done to carry out a more thorough interpretation. Themes based on the qualitative data were supported with actual quotes from the sources.

3.9 Credibility and trustworthiness

Credibility: Credibility is strengthened by steps such as triangulation in data collection phases in order to cross-check on data obtained from different data, collective approval and piloting the study area by collection methods in one study for the purpose of comparison of findings (Creswell, 2018). Data was gathered through a combination of three different methods, including interviews, observation, and document review to assure the study authenticity.

Trustworthiness: The verbatim reporting considered four primary characteristics in research: conformability, dependability, dependability, integrity (rather than internal validity) (in preference to

objectives). To verify the accuracy of the data collected, the researcher made sure the technical apparatus (the recorder) was tested and trustworthy. Also, transcriptions were done accurately

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter presents the findings of the study, analysis and discussion of findings based on the objectives of the study. The purpose of this study was to investigate access to healthcare information in public health facilities by women with deafness in Kampala capital city authority. This study was guided by the following objectives: to establish ways by which women with deafness access healthcare information in public health facilities in Kampala capital city authority; to find out the availability and usage of assistive technologies to access healthcare information in public health facilities by women with deafness in Kampala capital city authority; and to establish ways in which professional health workers' (nurses) attitudes affect women with deafness' access to healthcare information in public health facilities in Kampala capital city authority. Presentation of findings begins with the socio-demographic data of participants (Table 4.1). It is followed by themes as regards to the study objectives: Ways by which women with deafness accessed healthcare information in public health facilities in Kampala capital city authority, availability and usage of assistive technologies to access healthcare information by women with deafness in public health facilities in Kampala capital city authority, and ways in which professional workers (nurses)' attitudes affect women with deafness 'access to healthcare information in public health facilities in Kampala District. Selected verbatim quotes from participants were used to highlight findings identified in relation to guiding topic.

Table 4.1: Socio-demographic data of participants

Participants	Gender	Age	Level of Education	Marital status
PHW 1	Female	41-50	Diploma holder	Married
PHW 2	Female	35-40	Diploma holder	Single mother
ACM 1	Female	50 above	Degree holder	Married
ACM 2	Female	35-40	Diploma holder	Single
WwD 1	Female	51 above	Degree holder	Single mother
WwD 2	Female	25 Yrs	Certificate	Single
WwD 3	Female	30 yrs	Still at the university	Single
WwD 4	Female	55 above	Uneducated.	Single

KEY

PHW Professional Health Workers.

ACM Association committee Member.

WwD Women with Deafness

4.1 Ways by which women with deafness access healthcare information in public health facilities

The study sought to establish ways by which women with deafness access healthcare information in public health facilities in Kampala capital city authority. Results of the study revealed the following as expressed below.

4.1.1 Pen and Pad Method

Seven study participants out of eight unanimously attested to the fact that the most common ways of accessing healthcare information by women with deafness in public health facilities in Kampala capital city authority was through Pen and Pad method. The study participants revealed that nurses and other healthcare providers received written messages from women with deafness trying to explain to them about the treatment and consultation services they were seeking. For example, **PHW 2** expressed:

> *"Access to healthcare information to these women with deafness is the use of a pen and notebooks or a pen and a paper which they always come with".* **PHW 2**

In relation to the above, **ACM 2** also showed that written communication was frequently used, especially between healthcare workers and women with deafness who understood how to read and write. It was common for women with deafness who could express themselves well in writing and at the same time, could read and interpret the written message very well. In this regard, the participant expressed that:

> *"The communication between nurses and women with deafness in public health facilities is through writing that is if they understand writing"* **ACM 2**

Furthermore, it was revealed that doctors accepted more of written communication than when talking to women with deafness that accessed the facilities with sorts of sicknesses:

> *"When I am sick, I usually go with a pen and paper to see the doctor because he accepts communicating in writing"* (**WwD 1**).

The above expressions thus, showed that 90% women with deafness found no problem interacting with their doctors and nurses in public health facilities through communicating in written messages. This was convenient to both the health workers and patients (women with deafness) because health workers could not communicate using sign language and yet, a chance was there that most of women with deafness who visited public health facilities for treatment in Kampala, could actually read and write. This is consistent with the findings of Masuku et al. (2021) that women with deafness experience discrimination and isolation from the medical community as a result of the communication challenges.

On the other hand, a participant made the argument that she found it challenging to communicate and receive written healthcare information since she couldn't read or write (uneducated). She would therefore not receive the information in the healthcare facilities if there was no interpreter, and as a

result, she would miss out on treatment and other healthcare services. This infringe on their rights as human beings as stipulated in Uganda constitution of 1995 and Persons with disability Act 2006.

This is congruent with Beaver and Carty (2021) who conceded that written information about medical issues and ailments is typically available in English and other languages. However, due to educational disadvantage, those who are deaf since birth or in infancy may have lower levels of literacy. In addition, the study findings also matched with Wheatley's (2021) findings, which demonstrated that interacting with healthcare workers who do not understand sign language and must rely on sign language interpreters presents persistent difficulties for people with deafness. This has made it difficult for people who are deaf to get information in their own language and get access to the information they need from health workers (Wheatley, 2021).

4.1.2 Accompanying family member support

The findings of the study revealed that some women with deafness depended on the support of family members to have access to healthcare information in public health facilities in Kampala. The results of the study showed that women with deafness found comfort in having a family member who knew sign language accompany them to the health facility. This made communication with health workers easy as well as interpretation of the written information on charts pinned on the walls of the public health facilities. This is exemplified by the expression made by **WwD 3** that:

> *"I am escorted by a member of the family who has trained himself in sign language and is the one who helps me to interpret the information to me".*

In another related scenario, **WwD 3** also expressed interest in marrying a man who can hear and interpret information for her in sign language so that he can be accompanying her to the health facility for treatment and other related services. She derived this from the fear she had that she would

be sexually harassed by male professional health workers in public health facilities. The participant was quoted verbatim:

> *"I think I should marry a man who can interpret for me because of the harassment from professional health worker".*

The study findings above indicate that women with deafness who visit healthcare services in public health facilities in Kampala are also able to access healthcare information through translation support by the accompanying family members. This dependence on support to facilitate communication is not only important in saving women with deafness from the struggles with interpretation of charts and other modes of healthcare information provision in public health facilities, but also saving them from sexual harassment. This is related to the finds of Beaver and Carty (2021) who conceded that written information about medical issues and ailments is typically available in English and other languages. However, due to educational disadvantage, those who are deaf since birth or in infancy may have lower levels of literacy.

4.1.3 Assistance from hearing "friends" with skills in sign language

Two out of the eight participants who took part in this study revealed that healthcare information access in public health facilities by women with deafness in Kampala was also through being assisted by hearing "friends". As a matter of fact, public health facilities in Kampala are general, which means that they receive all categories of patients including hearing patients with skills in sign language. Therefore, among these hearing patients, some women with deafness have their stranger "friends" they meet at the health facility and so, they are these "friends" who coincidently help communicate verbally with healthcare workers and interpret for women with deafness while at the health facilities. This is instanced in the following statement:

"Information is sometimes accessed through "friends" who are found at the health facility and they know sign language" (**ACM 2**).

Another participant added this:

"The person who escorts me to the hospital from home is a relative but she doesn't know sign language so, I normally find a "friend" who helps much in my communication interactions with my doctor"(**WwD2**).

The implication of the above findings is that hearing "friends" who can communicate in sign language become the immediate path through which women with deafness have access to healthcare information in public health facilities in Kampala. These hearing "friends" can communicate verbally with healthcare workers (nurses) and then interpret for women with deafness during social interactions at the health facilities although the professional ethics of privacy here is lost.

4.1.4 Short messaging service technology

The findings of the study revealed that healthcare information for women with deafness was also accessed through text messages. These were either through Short Message Service (SMS) or WhatsApp messages. One woman with deafness indicated during the study that she has observed several other deaf women, including her; utilize text messages on their phones to communicate with the healthcare professionals. In order for the health worker to pick up the message being sent, the patient puts a message on her phone and then hands it to him or her to read. After that, the health professional will perform the same action for the patient, and eventually, the patient will have access to the information. She stated in her own statement that:

"Some of the deaf persons use phones messages. They write a message on their phones and give the doctor to read; and the doctor will understand what is being communicated" (**WwD 2**).

Similarly, another form of messages through which women with deafness accessed healthcare information from the healthcare workers who attended to them in public health facilities in Kampala was digitalized messages e.g. WhatsApp. A certain participant revealed that some health workers relied on WhatsApp messages they sent to their patients, including women with deafness about their treatment service needs. In her own words, she expressed that:

"Some health workers send information to women with deafness through groups on WhatsApp to inform them about the circumstances, especially referrals" (**ACM 2**).

The above expressions indicate that text messages through SMSs and WhatsApp are good and convenient mechanisms for women with deafness to access healthcare information in public health facilities in Kampala District. This is in line with Murray's (2017) research that deaf community organizations create and distribute material on their own in many nations, allowing for tailored delivery that takes into consideration the language and cultural demands of people with deafness.

4.1.5 Referral mechanism

The two professional health workers who took part in the study reported that referral mechanism was also good for women with deafness to access information in public health facilities in Kampala. During interviews, the health workers revealed that some women with deafness visited their health facilities after being referred from Kisenyi Health Centre IV and along with them, they brought referral notes that explained the kind of treatment services they needed. Therefore, it would be easy to further treatment for that matter by these professional health workers. This scenario is exemplified in the following statement:

"Many are always referred from Kisenyi Health Center IV in central division and they come here with ready prescriptions of the previous treatments". So, it is that information we base on to further the treatment. It may not always need us to talk to them [women with deafness]" (**PHW 1**).

In addition, **PHW 2** reported that:

"Referrals made for patients [women with deafness] are good because, from there, these people come with their ready explanations. Therefore, for that matter, they can communicate in written messages by simply telling you what they already know so that you can start from there".

The essence of the above findings is that women with deafness access healthcare information from lower health units. Therefore, by the time they get to the big public health facilities, they already have the information to deliver to the healthcare workers (nurses) therefore further treatment. However, this has criticized by O'Hearn and Haynes (2009) who denoted that healthcare teaching and information materials in sign language are generally lacking.

4.1.6 Use of personal doctors with sign language skills

One of the women with deafness who participated in the study interviews revealed that she obtained her own healthcare information from a personal doctor with sign language proficiency that she had hired for herself to assist her whenever she would visit one of the public health facilities. The participant described her personal doctor as being exceptional in that he cared for her whenever she sought treatment from him, but what stood out most about him was his command of sign language. However this practice was seen from the one participant out of eight which is not considered good practice. The participant was cited as having said in her own words:

"I have a personal doctor that works on me and he knows sign language so, it becomes easy for me to communicate with him" (**WwD 2**).

The implication of the above finding is that some women with deafness try to make their communication and access to healthcare information easy in public health facilities in Kampala by paying personal healthcare workers with sign language skills to assist them in case of seeking healthcare in the facilities. The major work of a special doctor is to read and explain medication instructions, give simple advice, or suggest one to a health facility with deaf-friendly healthcare workers. This disagrees with DeMeulder (2015) who recommended that all patients with deafness must be able to express their demands to the healthcare service provider and grasp it clearly if they are to be able to receive information, such as discussions about diagnosis/treatment choices, financial commitments for treatments, and instructions for homecare.

4.1.7 General communication of healthcare workers

Besides the given ways above concerning healthcare information access by women with deafness, the study findings also revealed a very big communication challenge that limits access to information. According to the study findings, all participants unanimously agreed to the fact that many healthcare professionals in public health facilities in Kampala routinely wrote or merely shouted while making communication to their female patients with deafness. This happened since they did not understand the patients' specific communication needs. One of the professional health workers mentioned during interviews that Mulago National Referral Hospital, big as it is, only had one audiologist who again had to be paid highly for his service and yet, he did not know sign language. The participant expressed that:

"We have no knowledge on sign language. There is only one audiologist in the whole Mulago national referral hospital that is paid by the patient him/herself and expensively.

But also you find him not knowing how to interpret sign language; those who cannot read and write are at a disadvantage" (**PHW 2**).

The above expression implies that health workers' communication with women with deafness is difficult without an interpreter. In addition, it implies that many women with deafness are left unattended to due to failure of health workers to identify and recognize them, especially those who cannot afford to pay for audiology services at the health facility. This is exemplified further in the following statements:

"It is not easy to identify me as a deaf person even when they read the names from the register and there are no reports" (**WwD 2**).

The Health worker (nurse) too had this to say, *"Other patients can't respond to their names when are call to go for services. They remain seated after other patients are all gone. You find them isolated from other patients but in many cases; it is difficult for us to identify them"* (**PHW 1**).

The above expressions indicate that due to failure to be recognized or identified easily by health workers, women with deafness also miss healthcare information as a result of not being able to hear their names when they are called upon from the waiting area to go and get healthcare services. These findings concur with Sporek (2014) who reported that women with deafness continue to be ostracized and encounter barriers while trying to seek emergency medical care. This is also the same as in a recent UNAD survey in which it was found that 87 percent of individuals with deafness in Uganda lack access to social services due to communication difficulties that prevent them from receiving healthcare and education (UNAD, 2019).

In addition to the aforementioned, other two participants unfolded also missing services by women with deafness in public health facilities due to communication barriers. This mainly emerged due to illiteracy of some women with deafness that they could not read and write. In this regard, two participants expressed as follows:

> *"Majority of deaf women are illiterate and face communication barriers that prevent them accessing health services in mainstream"* (**ACM 1**).

> *"I missed antenatal care services for mothers to be since I never got an interpreter during the monthly sessions"* (**WwD 1**).

The study findings above indicate that women with deafness do not access the same amount of healthcare information as the rest of the population in public health facilities in Kampala. This stems from the difficulties associated with their identification as a deaf group of patients by health workers and communication barriers due to lack of interpreters of sign language in the health facilities. The end results are; missing healthcare services as well as information required for good health. This is in agreement with Wheatley (2021) who found out that majority of medical workers, including doctors, lack the necessary training to effectively interact with and accommodate the deaf people.

4.1.8 Lip reading

The study findings also indicated that lip reading, as with the general population of people with deafness, is also a convenient way to access healthcare information by some women with deafness visiting public health facilities in Kampala capital city authority. One participant attested that some women with deafness got interpretation of the healthcare information through reading lips of the health workers in case there is no interpreter. In her own words, one of the participants expressed that:

"Information is through spoken like the case for immunization and women with deafness only need to get interpreters or read lips of the doctor" (**WwD 1**).

Following the above expression however, it can be put forth that lip reading is conveniently used to access information by women with deafness from only the talking health workers. Lip reading cannot help in situations of written prescriptions and other relevant documents containing healthcare information in public health facilities. The fact that speech reading is an advanced skill which is complicated by the fact that many similar words manifest the same way on a person's lips, lip reading is not a very reliable way of accessing healthcare information by women with deafness. These findings are consistent with Wheatley (2021) who found that people with deafness frequently encounter ongoing challenges when dealing with healthcare professionals who do not know sign language and must rely on lip reading.

4.2 Availability and usage of assistive technologies to access healthcare information by women with deafness in public health facilities

The second objective of the study was to assess availability and usage of assistive technologies to access healthcare information by women with deafness in public health facilities in Kampala capital city authority. The findings indicated that there were very few assistive technologies used to access healthcare information by women with deafness other than the locally improvised tools, mainly the pen and paper. Findings have been expressed under the following themes:

4.2.1 Pen and paper

Although not necessarily advanced technology, pen and paper combined together to make information access meaningful, were the major assistive technology readily available for use to enable women with deafness have access to healthcare information in public health facilities in Kampala. Majority of the study participants (five out of seven) indicated that pen and paper was

used by women with deafness and their health workers to exchange healthcare information. This came as a result of lack of known assistive devices/ technologies such as audio induction loop, FM system, infrared system, and personal amplified system among others in the public health facilities. For example, one of the women with deafness participants gave a testimony that:

> *"I usually go with a paper and a pen to communicate with healthcare workers"* (**WwD 1**).

Similarly, the study findings indicated that pen and paper were the commonest mode of information exchange in which women with deafness could write their health concerns on a piece of paper or notebooks and give health workers to read. In the same way, also, health workers replied by writing to the patients. This is exemplified in the following two statements:

> *"Sometimes, health workers and women with deafness use pen and paper to write the message as a way of communicating"* (**ACM 2**).

> *"Communication is with pen and paper where the message is just written for the doctor to read and understand what I am saying"* (**WwD 2**).

The implication of the above findings is that healthcare information to women with deafness is mainly delivered through the use of pen and paper for writing communication message. Pen and paper are used to deliver information communication services as a way of accommodating these persons with deafness. However, women with deafness who are illiterate and visit the public health facilities without literate escorts as well as hearing "friends" at the health facilities, end up not being attended to, or miss healthcare services. As findings of Kusters (2017) have it that, deaf signers frequently utilize gestures to converse with hearing non-signers to accompany the signed words in various parts of the world. Writing is in a variety of ways; on paper, a mobile device, with finger writing the hand, arm, or table, for example a cue can be used to supplement the use of gestures.

Kusters and Sahasrabudhe (2020), consistently sticks to the study findings above which revealed that many deaf persons carry paper and a pen to interact with hearing people who are hard of hearing and don't understand sign language.

4.2.2 Information display charts

Findings of the study revealed that little has been done to provide assistive technology in public health facilities in Kampala capital city authority. During interviews, nearly half of the participants reported that assistive technology was not there but public health facilities had only charts, which were again written in English rather than sign language that illiterate women with deafness could easily understand. This was derived from the expression made by **PHW 2** that:

> *"There is no assistive technology and charts or any information written in the language the people with deafness can access, all charts, are written in English which is not understood by many".*

Similarly, it was revealed that the healthcare information charts available in public health facilities did not favor women with deafness who could not read and write.

> *"Charts are there in the hospital but most of the deaf women do not know how to read and write. The charts are not written in sign language; they are written in English language"* (**WwD 2**).

> *"Charts are there to help the deaf to reach their destination"* (**ACM 2**).

With charts written in English language only, the public health facilities again do not have a single sign language interpreter, which makes the pinned healthcare information charts more for the general population other than inclusive to address matters of healthcare information access of women with deafness. In this regard, one of the professional health workers expressed that:

"No government sign language interpreter is provided in the whole Mulago National referral hospital and the hearing aids available here are very expensive. Many are referred to private clinics outside hospitals" (**PHW 2**).

The study findings above indicated that women with deafness are largely excluded from healthcare information, charts pinned on the walls of public health facilities in Kampala do not accommodate the silent community. This is inconsistent with Mitsi et al. (2014) who argued that individuals with communication snags can express themselves with the aid of augmentative and alternative communication (AAC) tools. These tools could be anything from an open whiteboard to a program that converts text into speech on a computer.

4.2.3 Social and mass media technologies

The findings of the study revealed that women with deafness are partly included in mass media attempts to enable them freely and easily access healthcare information although; this is done outside the public health facilities in Kampala District. One woman with deafness revealed that some non-government organization (NGOs), prepare and send healthcare information to women with deafness via social media in an attempt to inform them about the places where they can get free services.

"Some NGOs send information through social media and we come to understand where services for free can be got from" (**WwD 3**).

In addition, one professional health worker who participated in the study recommended for organizing TV shows and internet uploads that could facilitate access healthcare information by women with deafness. This meant that a sign language interpreter has to be present to interpret for women with deafness such that they can equally get the information like the general population. In her own statement, the professional health worker had this to say:

"There should be special programs on TVs', Internet, and other media to include these people with deafness in this digital world" (**PHW 2**).

The above findings is that social media, mass media and YouTube uploads may be a favorable alternative to make healthcare information available, and be utilized by women with deafness with the means of access to the media if considered by the government in public health facilities like the case for NGOs. However, a person may be vigilant not to access inappropriate and inaccurate information; especially from uncensored social media information and that possibly accessed via You-tube uploads from the wider community. This is well the same as suggested by Kingsley (2020) that closed captioning should be available on patient TVs, and the captions should be able to be turned on with the remote.

4.2.4 Lack of assessment booths and screening

The findings of the study revealed that assessing and screening of women with deafness in Kampala-based public health facilities is difficult and this means that access to healthcare information is equally difficult. One professional health worker who took part in the study reported that the public health facility in which she was working did not have an assessment booth and screening. In her own statement, she expressed that:

"…because we do not have the assessment booth and screening, it becomes hard for us to make these women with deafness, access health care information in these public hospitals" (**PHW 1**).

The above expression indicated that women with deafness are hardly assessed in public health facilities in Kampala to know their level of hearing impairment. This makes them miss vital healthcare information and communication is disturbed and as such, even treatment gaps may arise.

This is in line with Beaver and Carty (2021) who revealed that assessment and screening of individuals with deafness to know their status and way of handling issues misses in many health facilities. Hence, it limits many individuals with deafness from explaining their health issues to the medical personnel.

4.2.5 Potential information-led pamphlets

The findings of the study further indicated that none of the public health facilities visited for the study had pamphlets with pictures showing important healthcare information for women with deafness. One woman with deafness who was approached for an interview reported that it would be so much interesting to distribute pamphlets with pictures to women with deafness at all public health facilities for their self-study. However, this was just a myth. In this regard, the woman with deafness expressed that:

> *"Pamphlets with pictures describing information to the deaf would be so much interesting. However, here there is no information. Deaf women don't get such pamphlets"* (**WwD 1**).

The above expression indicated that information in printed pamphlets that would be carried home by women with deafness for later reading, with the purpose of accessing healthcare information is also not available in public health facilities. These pamphlets would actually be good for women with deafness to construct their understanding from the wording they understand in combination with the accompanying pictures. This is related to Smith et al. (2012) who agreed that women with deafness and adolescent girls are a particular concern as they have a right to access health information about their health and wellbeing but face special difficulties in doing so.

4.2.6 Cochlear implant

It is true that participants that the study involved did not have use the cochlear implant; the broad perspective accommodated the finding about the above sub title as a whole in the construction of the policies and planning. The findings of the study also revealed that there is limited use of cochlear implants to help women with deafness have access to healthcare information in public health facilities in Kampala district. One professional health worker revealed that for many years, Mulago National Referral Hospital has had only one successful cochlear implant, which is also very expensive. In her own statement, she expressed that:

> *"Here it was only once that cochlear implant was performed successfully in many years and very expensively. Many referred patients are babies with different ear difficulties*" (**PHW 2**).

The implication of the above finding is that public health facilities in Kampala capital city authority have limited assistance given to women with deafness with the aid of cochlear implant since the study looked at women with deafness (total deafness). NIDCD (2021), reported that using a cochlear implant necessitates both surgery and extensive therapy to retrain the sense of hearing, but in the case of the above findings there is no need to go for surgeon because women with deafness can't hear. With this tool, not everyone performs at the same level, and the choice to get an implant should be made after consulting with medical experts, such as an expert cochlear-implant surgeon (Witko et al., 2017).

4.3. Ways in which professional health workers' (nurses') attitudes affect women with deafness' access to healthcare information in public health facilities

The study sought to establish ways by which professional nurses' attitudes affected women with deafness' access to healthcare information in public health facilities in Kampala capital city authority. Given the situation that majority if not all professional health workers are hearing, and in this case, dealing with women with deafness, it was revealed that they were battling with negative and positive attitudes that adversely affected women with deafness' access to healthcare information in public health facilities in Kampala. Much as the attitudes are both positive and negative, the negative attitudes over rode the positive one and have been found affecting women access to information and they are presented in the following ways:

4.3.1 Improper diagnosis and prescriptions to women with deafness

The findings of the study revealed that the negative attitudes of professional nurses in public health facilities in Kampala district translated into improper diagnosis and prescriptions to women with deafness who visited the facilities for healthcare services. Participants showed that most of the professional health workers did not know sign language. Professionals only wrote on pieces of papers and in text messages as modes of communication between the two parties, which led to misinterpretations. For example, one committee member in Association of Women with Deafness expressed that:

> *"Because most health professionals don't know sign language and other visual modes of communication with the deaf, they fail to provide needed services and at times due to failure to communicate the information , they get frustrated with the deaf and hence failure to serve them appropriately"* (**ACM 1**).

Similarly, it was also reported that using a pen and pad between women with deafness and professional nurses only makes nurses fail to make right interpretations and eventually, women with deafness are treated for different diseases from those that they are suffering from and some ending up losing their lives.

> *"Through the use of pen and paper and sometimes we do not get exactly what they are telling us and we end up treating different disease"* (**PHW 2**).

The above-mentioned condition was also given as a testimony by one of the woman with deafness that:

> *"Sometimes I get wrong prescriptions and diagnosis; what I receive every visit is only panado"* (**WwD 3**).

The implication of the above findings is that due to lack of skills in signing by most of the professional health workers, they normally find it hard to attend to women with deafness. In this regard, such communication barriers lead to misinterpretation of information even in written form and thus, wrong diagnoses are done and thereafter, wrong health conditions for women with deafness are treated by professional health workers in public health facilities in Kampala District. This is consistent with the findings of Mitsi et al. (2014), who discovered that not all healthcare professionals have received training in verbal interpretation of sign language. Some hearing-impaired individuals have also received instruction in speech reading, and as a result, can understand spoken words fairly well with the help of a verbal interpreter.

4.3.2 Bad experience interacting with professional health workers

The findings of the study also revealed that women with deafness have always had bad experience interacting with professional nurses, especially in terms of discussions to do with the progress of treatment. One professional health worker in an interview played a representative role by showing

that as a health worker, who physically interacted with women with deafness in public health facilities, she observed that most of the health workers did not have skills in sign language and therefore, they could sometimes make wrong interpretations. This made those health workers even more scared to interact with women with deafness and as such, a lot of information that would guide proper treatment could be lost. Participant **PHW 1** expressed that:

> *"Many of us nurses who physically interact with them (women with deafness) do not know sign Language. In addition, we even don't know how to interpret it and this makes us scared to interact with the deaf" (**PHW 1**).*

In a related scenario, one of the women with deafness participant shared that out of fear of not knowing how to communicate with women with deafness, some of the professional nurses in public health facilities appeared to be rude to them i.e., through barking at them. This was less common among male health workers but rather, most common among female health workers. In this regard, participant **WwD 2** expressed that:

> *"Interaction with a male professional health worker is okay with me but female ones are sometimes rude. So, I even fear to communicate to them".*

In observation of the above expressions, it is indicated that where more healthcare information would be obtained by women with deafness from professional health workers for proper treatment, the negative attitude would instead complicate interaction arrangements. Hence, there is limited access to healthcare information by women with deafness in public health facilities in Kampala District. This is in line with Kritzinger (2011) who reported that attitudes of medical professionals can have an impact on how women with deafness seek services and receive care. Individual and group experiences that provide either positive or negative reinforcement have an impact on attitudes (Kritzinger, 2011).

4.3.3 Fear of being molested

The findings of the study showed that women with deafness also got fear of being molested by male health workers. Some participants reported that women with deafness in public health facilities in Kampala are sometimes molested by some male health workers who take advantage of them as they do not talk and cannot shout it out "*The tendencies of molesting us by male doctors, one cannot accommodate"* (**ACM 2).**

This meant that some women with deafness found it challenging to access healthcare information from unethical male professional health workers. This is further exemplified in a real-life scenario shared by a woman with deafness that:

> *"One time in Kampala-based health centre, a male health worker tried to molest me because of my disability but God helped me and I overpowered him and pushed him away from myself and went out"* (**WwD 2**).

Similarly, another participant demonstrated that some health workers had wrong opinions about how difficult it was to communicate with women with deafness. This came as a result of not knowing how to communicate in sign language. The essence of this is that health workers in public health facilities give little time to women with deafness, they stigmatize them and make them less aware of the need to seek out healthcare information. Other health workers believed it was not a priority to serve women with deafness as a special group. In relation to this, two participants stated the following:

> *"Some are prejudiced towards women with deafness due to ingrained social stigma. Social and cultural prejudices resulting from lack of understanding and appreciation of the deaf people; lack of sign language" (**ACM 1**).*

A response from another participant was:

> *"Nurses don't take it a priority to consider us first. We wait in the line and sometimes, they just call names and if you don't have someone to help you, you will miss the services" (**WwD 2**).*

What is noteworthy in the above findings is that some male professional nurses stigmatize women with deafness who seeks medical care in public health facilities based in Kampala capital city authority. As a result, they may find it unsettling to approach male nurses for the services in order to meet their needs. This suggests that they have a high likelihood of avoiding consultations because they are afraid of spending too much time with the male nurses that may lead them to be molested and, as a result, they end up not receiving the necessary healthcare information. These findings are in agreement with DeMeulder (2015) that when utilizing healthcare services in medical facilities, women with deafness are vulnerable and others are taken advantage of.

4.3.4 Neglecting of women with deafness for services

The study findings also indicated that sometimes because of negative attitudes, women with deafness are intentionally neglected by some health workers who shift their efforts to serving the hearing patients in public health facilities including Kampala. Two participants demonstrated that when women with deafness visit public health facilities in Kampala without their own interpreters and they get a nurse who doesn't know sign language; this nurse ends up not attending to them due to communication barrier. In their own statements, the participants expressed that:

> *"Nurses tend to neglect patients with deafness from public facilities and those commonly neglected are the ones who come along without interpreters and yet, the nurse also doesn't know sign language"* (**WwD 3**).

Another participant said:

"They (women with deafness) are not given services, especially the pregnant mothers" (**ACM 2**).

The implication of the above findings is that some of the women with deafness do not receive the medical care they seek in public health facilities due to do not hear and know sing language and also they cannot talk. Therefore, they have to choose between incurring a cost of hiring an interpreter or accepting to be forever dependent on an escorting family member or hearing "friend" for interpretation purposes. This is because; it is the only way to have access to medical care as well as healthcare information in public health facilities. The findings are convergent to Beaver and Carty (2021) who showed that women with deafness encounter a number of challenges in the healthcare system, many of which are related to the assumption that deaf individuals have some inherent health problems.

4.3.5 Lack of understanding and appreciation of women with deafness

The findings of the study revealed that there was lack of understanding and appreciation of women with deafness by professional nurses in public health facilities in Kampala capital city authority. Lack of provider knowledge and understanding around issues of deafness in public health facilities created access barriers for women with deafness. Two participants showed that most of the professional nurses who attended to them often overlooked the fundamental element of being deaf, or with a hearing loss. One would expect that in public health facilities in Kampala, where people with disabilities are seen commonly, health workers would be more aware of the nuances of specific disabilities, but they are not:

"Social and cultural prejudices result in lack of understanding and appreciation of deaf people; lack of sign language" (**ACM 1**).

A response from another participant was:

"…no, we do not have the records for these women with deafness because their ratio is negligible so they are registered like any other patients who come for treatment or diagnosis" (**PHW 2**).

In observation of the above expressions, there is lack of understanding of difficulties experienced by women with deafness in trying to access healthcare services as well as information due to communication barriers. Due to lack of appreciation of the deaf community, women with deafness end up being served like the rest of the population and as such, treatment is missed as well as morale for future access to public health facilities due to misinformation by professional health workers. This is in relation to the report by WHO (2018) that the negative attitudes and foul behaviors of health professionals and sign language interpreters have also been identified as another challenge faced by women with deafness in access to health care services.

4.3.6 Need for building rapport with nurses

A positive attitude is created when there is good relationship that is created towards nurses. In most cases, both the patient and nurses fail to understand each other either through lack of knowledge between them or anxiety. However, one participant revealed that some professional nurses had a positive attitude towards prioritizing the provision of medical care services to women with deafness first in public health facilities in Kampala. This finding was expressed as follows:

"Some nurses are positive if one introduces herself to them. There, attention will be given and served first" (**WwD 1**).

The above expression indicated that women with deafness, who try to build good rapport with professional nurses on their visit to public health facilities in Kampala for medical care, are welcomed and they get services first. This therefore implied that also, access to healthcare information for these women becomes easy since there is good social interaction. This, however,

conflicts with the claims made by Frohmader et al. (2013), who said that despite laws and policies being in place, culturally entrenched biases and practices, as well as a lack of enforcement, continue to lead to violations of the human rights of individuals with deafness (Human Rights Model of Disability).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter builds on the study findings presented in chapter four to bring out a summary, a conclusion and the recommendations of the study. They are presented following the objectives of the study thus to establish ways by which women with deafness access healthcare information in public health facilities; to find out the availability and usage of assistive technologies to access healthcare information in public health facilities by women with deafness; and to establish ways in which professional health workers' (nurses) attitudes affect women with deafness' access to healthcare information in public health facilities.

5.1 Summary

The following section brings out a summary of the main findings derived from the study and it follows the study objectives. The study aimed at investigating access to healthcare information in public health facilities by women with deafness in Kampala capital city authority. The study had three objectives: To establish ways by which women with deafness access healthcare information in public health facilities in Kampala capital city authority; to assess availability and usage of assistive technologies to access healthcare information in public health facilities by women with deafness in Kampala district; and to establish ways in which professional health workers' attitudes affect women with deafness' access to healthcare information in public health facilities in Kampala capital city authority. Participants were selected purposively and data was sourced from them using a semi-structured and open ended question interview. The study generally indicated that access to healthcare information by women with deafness in public health facilities in Kampala is still a very big challenge and that treatment for majority of them is missed. The study findings can be summarized as follows:

5.1.1 Ways by which women with deafness access healthcare information in public health facilities

Objective one sought to establish ways by which women with deafness access healthcare information in public health facilities in Kampala capital city authority. The study established that women with deafness mainly accessed healthcare information through written communication with the health workers. However, those who could not read and write, were mainly assisted by family members who escorted them to the health facilities as well as hearing "friends" who would also came for checkups and happened to interact with a hearing person with the knowledge in Sign language and Interpretation. These could communicate verbally with healthcare workers and then interpret for women with deafness in order to get the clear information. Other important ways through which healthcare information was accessed by women with deafness included; text messaging using SMSs and WhatsApp, information generated in form of referral letters for women with deafness to the public health facilities, and through the help of the hired personal health workers with skills in sign language to read and explain medication instructions, give simple advice/counseling, or suggest one to a health facility with deaf-friendly healthcare workers.

However, the study also established that some women with deafness who accessed public health facilities in Kampala capital city authority missed healthcare information due to lack of recognition by health workers and communication barriers that stemmed from lack of interpreters for sign language. On the other hand, those who could read lips were also accessing information conveniently although, it could not help in situations of written prescriptions and other relevant documents containing healthcare information in public health facilities.

5.1.2 Availability and usage of assistive technologies to access healthcare information in public health facilities by women with deafness

Objective two sought to assess availability and usage of assistive technologies to access healthcare information by women with deafness in public health facilities in Kampala capital city authority. The study findings indicated that there were very few assistive technologies used to access healthcare information by women with deafness other than the locally improvised mechanisms, mainly the use of pen and paper in written communication and in any case most of these assistive technologies could not be applied in the study, especially to the deaf illiterate. Regarding healthcare information charts pinned on the walls of the health facilities, the study established that women with deafness were largely excluded since the information was written in English rather than in sign language. In addition, social media, mass media and YouTube uploads were favorable alternatives for women with deafness to access healthcare information since NGOs were sharing it among women with deafness. However, there was no assessment for deafness of the patients in the health facilities due to limited number of aiding devices such as cochlear implant and other hearing aids like audio induction, FM system, infrared system, personal amplified system, and Bluetooth system among others, which meant that identification, would be so difficult. In the same way, the study findings indicated that printed pamphlets with accompanying pictures that would be carried home by women with deafness for later reading, with the purpose of accessing healthcare information, was also not available in public health facilities.

5.1.3 Ways in which professional health workers' attitudes affect women with deafness' access to healthcare information in public health facilities

Objective three sought to establish ways in which professional nurses' attitudes affect women with deafness' access to healthcare information in public health facilities in Kampala capital city

authority. The study established that the negative attitudes of professional nurses in public health facilities in Kampala capital city authority translated into improper diagnosis and prescriptions to women with deafness who visited the facilities for healthcare services. Access to healthcare information was negatively impacted by limited interactions between professional nurses and women with deafness, avoidance of consultation due to fear of being molested by male health workers, lack of knowledge for sign language among professional health workers accompanied by the absence of interpreters in the health facilities. In addition, the study also established that due to lack of understanding and appreciation by professional health workers, some women with deafness ended up being served like the rest of the population and as such, treatment was missed as well as failure action of accessing public health facilities for treatment. However, the findings also indicated that to a small extent, women with deafness who tried to build good rapport with professional nurses on their visit to the health facilities for medical care were welcomed with a positive attitude and they got served first.

5.2 Conclusions

Basing on the objectives and analysis of the study findings, the following conclusions were made:

The study came to the conclusion that public health facilities in Kampala capital city authority often do not provide women with deafness with access to healthcare information. This is because there were no sign language interpreters available thus; making written communication the most practical means of interaction between persons with deafness and the medical personnel. Women who were deaf and could not read or write were negatively affected by this. However, help was sought from hearing “friends” who were found at the facility as well as from family members who escorted them to the health facilities. Other significant ways of gaining access to healthcare information included; text messages sent via SMS and WhatsApp, information obtained through referring medical

professionals, especially hired doctors who could read and explain medication instructions, provide precise advice, or refer patients to a medical facility with deaf-friendly staff members, as well as lip reading, though it was ineffective in situations involving written health information, particularly for illiterates.

The study also concluded that, besides locally developed methods, primarily the use of pen and paper, relatively few assistive technologies were employed for women with deafness in public health facilities in Kampala to access healthcare information. The healthcare facilities had informational charts on the walls, but because the information was printed in English rather than sign language, it primarily excluded women with deafness. A few of these women also found social media, mainstream media, and YouTube uploads to be helpful ways to access NGOs' healthcare information that was intended for them and the same was suggested for health professionals in public health facilities. However, due to the constrained availability of assistive technology, such as cochlear implants and hearing aids, there was no assessment of the patients' deafness in addition to that, making identification extremely challenging. Printed pamphlets with accompanying images that might be taken home and read later were not given out in public health facilities either.

Finally, the study came to the conclusion that professional nurses' unfavorable attitudes in the public health facilities in Kampala capital city authority led to incorrect diagnoses and prescriptions for women with deafness. Limited interactions between professional nurses and these women as well as the scarcity of interpreters for sign language all had a detrimental effect on access to healthcare information. In addition, women with deafness also avoided consultations out of fear of being molested by male nurses and yet, they complained of being treated like the general population due to health professionals' lack of understanding and appreciation of the deaf community. This meant that treatment opportunities as well as future access to public health facilities were lost. However, some

women with deafness who attempted to establish a positive rapport with the nurses were welcomed and received treatment first before the rest.

5.3 Recommendations

Following the first objective of the study, it was concluded that public health facilities in Kampala District often do not provide women with deafness with access to clear healthcare information due to absence of sign language interpreters. Basing on the above conclusions, the study therefore recommends that the government through Ministry Of Health provide free interpreters with skills in sign language so that there is easy communication between professional health workers and patients with deafness in public health facilities in Kampala and other parts of Uganda. In addition, health workers also need to be trained in sign language such that still in the absence of sign language interpreters, they can easily make communications with patients with deafness. Furthermore, women with deafness should devise means of hiring personal health workers will the skill in sign language that can help them get along easily with access to healthcare information since; these are trained signing doctors as well.

Regarding the second objective of the study, it was concluded that, besides locally developed methods, primarily the use of pen and paper, relatively few assistive technologies were employed for women with deafness in public health facilities in Kampala to access healthcare information. The healthcare facilities had informational charts on the walls, but because the information was printed in English rather than sign language, it primarily excluded women with deafness. Basing on the above conclusions, the study recommends for the government, through the Ministry of Health, to put in place more technological devices that support patients with deafness to easily get identified from the general population like the screening and diagnosis booth, government paid sign language interpreter to recognize and serve the persons with deafness as a special group to avoid missing healthcare

information as well as treatment.. In addition, charts put on the walls of public health facilities should also be translated into sign language to enable patients with deafness also have equal access to information. Lastly, the study concluded that printed pamphlets with accompanying images that might be taken home and read later were not given out in public health facilities either. Therefore, the study recommends that pamphlets containing healthcare information with image descriptions for patients with deafness should be distributed free of charge to patients to enable them get access to healthcare information for proper treatment.

In light of the third objective of the study, the study came to the conclusion that professional nurses' negative attitudes in the public health facilities in Kampala district led to incorrect diagnoses and prescriptions for women with deafness. In addition, women with deafness also avoided consultations out of fear of being molested by male nurses and yet, they complained of being treated like the general population due to health professionals' lack of understanding and appreciation of the deaf community. Basing on the above conclusions, the study recommends for community awareness about deafness and hearing loss so that health workers (nurses) as well as the general population get to understand and appreciate women with deafness as normal human being like the rest. This can be done through community drives, drama sessions and films staged in the places where these people with deafness reside and work, as well as about the importance of human rights law of equality for all. The study also concluded that some women with deafness who attempted to establish a positive rapport with the nurses were welcomed and received treatment first before the rest. Therefore, women with deafness who visit public health facilities in Kampala and other parts of the country should build good rapport with professional health workers for this can help to put good working relationships between the two parties.

5.4 Key areas for further research

Some insights have been drawn from the investigation concerning access to healthcare information in public health facilities by women with deafness in Kampala district. Nevertheless, some research gaps remained, assessment of deafness in public health facilities in Kampala has proved to be a myth therefore, it would be interesting to conduct further research in the area and explore the technology needed for assessing deafness, the challenges and solutions, study on the access to healthcare information in public health facilities by men with deafness in Kampala district would also be of much importance for gender equality as well as the potential of professional health workers being trained in disability management in public health facilities.

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Appendix 1: Consent Form

Title of study: Access to Healthcare Information in Public Health Facilities by Women with deafness in Kampala capital city authority.

Investigator and Sponsor:

The principal investigator of this study is **AMANYA WYNE YVONE**

REG.NO:20/U.GMSN/13083/WKD, Self - Sponsored

Purpose of the Study: is to investigate access to healthcare information in public health facilities by women with deafness in Kampala capital city authority including (Mulago National Referral Hospital).

Who and why particular participants:

This study will include 2 Professional health workers (nurses) because they provide healthcare services to women with deafness and they bear a burden to interpret the healthcare information to these women with deafness.

Procedures: Apart from the course requirement, Iam carrying out a study on: access to healthcare information in public health facilities by women with deafness in (Mulago National referral Hospital). I will visit the hospital meet with the Executive Director seeking permission to carry out my investigation in the facility, and then visit the Quality Control Office for direction and guidance on how my data collection will be performed. I proceeded by a review on the hospital records and attendance list of patients with deafness ,particularly women with deafness, Then identified my participants on voluntary basis, start by introducing myself to them and appreciate them for choosing to be part of my investigation using my interview guide as my tool for investigation.

Risks: I expect negligible or no risk in my investigations, however I might be strained with finance hardships but I will fight through small loans from my friends, and pulling from my small savings to make my dream come true.

Benefits: Participants in the study will absolutely be voluntary though vital and desirable and this will benefit both of us through understanding clearly the study topic, the policies that rhythm with the topic of my study on access to healthcare information and utilization of public health facilities by all human beings, particularly women with deafness and strategies to strengthen inclusive healthcare services.

Confidentiality; the information you will give me will be accorded a high degree of confidentiality. The generated information will be kept private and utilized for the study purpose.

Compensation for participation including time lost and inconveniences from procedures.

Compensation will be paid to the participants in kind as a token of appreciation for accepting to be part of my study and the reward will be a diary book and a pen.

You tick in the appropriate box below.

Proceed with study. ☐ Do not proceed with the study. ☐

Please feel free to contact me on the study topic on Tel. No. 0776385367.

Contact Person when a participant has questions about their rights. Please feel free to contact, the chair of REC, DR. Nakwagala Fredrick Nelson, on 0772325869.

I ……here by consent to participant in this research study titled Access to healthcare information in public health facilities by women with deafness in Kampala district.(Mulago National Referral Hospital). The information I will give will be genuine and true to the best of my knowledge and is to be used for only academic purpose.

Thank you.

Name of the participant…….....Date...../……..month……2023.

Name of the researcher……Date……../…….Month…….2023.

Appendix 2: Interview guide for Women with deafness and Deaf Women Association members

THE CONSENT FORM

Dear participants,

I am Amanya Wyne Yvone a graduate student of Kyambogo University, carrying out research on the Access to healthcare information in public health facilities by women with deafness. You have been identified as potential participants in this study and I kindly request you to take part in the Interview that I will take you through in not more than an hour. The questions will take a bit of your time and will require your patience. Participation in the study is absolutely voluntary but very vital and desirable. You can opt out any time if you so wish without being disadvantaged in any way. I kindly request you to genuinely give your responses and I promise to accord them a high degree of confidentiality. The information you give will only be used for academic purposes and will be very important in accessing healthcare information service in our community by women with deafness.

Interview questions

1. Age
2. Level of Education.
3. Marital status
4. Position

(a) Professional nurses (b) Deaf Women Association participant (c) Women with deafness

Research question.1. How do women with deafness access health care information in public health facilities in Kampala capital city authority?

The question will be distributed to the following sub questions on the interview guide,

i. *Would you like to share with me about yourself briefly, your healthcare experience with professional health workers (nurses) in public health facilities and your knowledge about healthcare services?*

ii. *How do you access healthcare information in public health facilities in your community?*

iii. *Would you like to discuss your healthcare issues with me?*

iv. *Can we share your experiences in the hands of professional health workers in a public health facility?*

v. *How do you communicate to the person you meet at a health facility? Or do you always have someone to help you access healthcare services (information)?*

vi. *Tell me about the attitudes of healthcare professional workers (nurses) towards you and the whole deaf community in access to healthcare information?*

vii. *Tell me about your challenges and problems you face in access to healthcare services especially healthcare information by women with deafness in your community?*

viii. *In your view, what do you think can be done for women with deafness on access to equal healthcare services (healthcare information) in public health facilities by;*

a) *Government?*

b) *Deaf Women Associations?*

c) *Professional health workers?*

Research question 2. How do women with deafness access and use assistive devices in public health facilities?

i. *Would you like to share with me your experience on assistive technology in access to healthcare information in public health facilities?*

ii. *Are the assistive devices available and usable in access to healthcare services in public health facilities?*

iii. *Let us share your experience in communicating with healthcare professional workers, Do health facilities provide you with sign language interpreter or how do you communicate with them on access to diagnosis, tests and treatment?*

iv. *Is it okay to share challenges you meet and how they have affected your life in access to healthcare information in public health facilities?*

Research question 3. What are the attitudes of professional health workers (nurses) towards women with deafness in accessing health care services in public health facilities in Kampala capital city authority?

i)Tell me about the attitudes of professional health workers towards you and others persons with hearing loss who come to access health care services in public health facilities and how has it affected your lives?

(ii) Would you like to share with me your experience while in the hands of?

(a) Female healthcare professional

(b) Male healthcare professional in access to healthcare information in public health facilities?

iii) How does lack of access to healthcare information services affect

a. The women with deafness?

b. The households?

c. The community?

iv) What can government put in place for equal and inclusive healthcare services at public health facilities in your village to help women with deafness use these health facilities easily?

Interview guide mangers of Deaf Women Organization

i. *Can we share your experiences of women with deafness in access to healthcare information in public health facilities?*
ii. *What in your view hinders their access to equal and inclusive healthcare services (information) in public health facilities?*
iii. *Which strategies can be put in place for these women with deafness to access equal healthcare services?*
iv. *You being the voice to the silent community what do you think can be done for these women with deafness access healthcare information in a public health facility?*
v. *How does poor or lack of access to healthcare information services affect*

    d. The women with deafness?

    e. The households?

    f. The community?

vi. *What is your role as a member of Deaf Women Organizing?*
vii. *In what ways have you participated in ensuring access to healthcare information services by women with deafness?*

viii. *What are some of the challenges you encounter in trying to disseminate healthcare information to public especially the women with deafness*

ix. *What do you think can be done to minimize the challenges on access to healthcare information?*

What can Government and the Ministry of Health put in place for equal and inclusive healthcare services in public health facilities in a silent community to help women with deafness access these health facilities and health information easily?

Appendix 3: Observation guide corresponding to the study objectives

The language used.

Visual imaging and written health information,

Presence of interpreters,

Flashing lights and vibrating devices, as well the social interactions between the deaf patients and professional health workers.

Appendix 4: Time Frame Indicating a Draft Work Plan

Year	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Fem	Mar
2022	Proposal writing and approval															
2022	Data collection and analysis															
2023	Report writing															
2023	Report Submission															

Appendix 5: Introductory letter

KYAMBOGO UNIVERSITY

P. O. BOX 1, KAMPALA
FACULTY OF SPECIAL NEEDS & REHABILITATION
Tel: 0414-286237/285001/2 Fax: 0414-220464
DEPARTMENT OF SPECIAL NEEDS STUDIES

21st November 2022

To whom it may concern

Dear Sir/Madam,

SUBJECT: INTRODUCTORY LETTER FOR DATA COLLECTION

This is to introduce the bearer..AMANYA WINE YVONE.....

Reg. No: ..20/U/GMSN/13083/WKD..... who is a bonafide student of Kyambogo University in the Department of Special Needs Studies. As partial fulfillment of the requirements for the award of a Master of Special Needs Education, she/~~he~~ is required to undertake a research on the approved area of study.

The purpose of this letter is to request you to allow ~~him~~/her to collect data for ~~his~~/her research study.

Kyambogo University will be grateful for any assistance rendered to the student.

Sincerely,

Dr. Okwaput Stackus

HEAD OF DEPARTMENT

Kyambogo University
21 NOV 2022
P.O.Box 1, Kyambogo
Department Of Special Needs Studies

Appendix 6: Acceptance letter one

TELEPHONE: +256-41554008/1
FAX: +256-414-5325591
E-mail: admin@mulago.or.ug
Website: www.mulago.or.ug

IN ANY CORRESPONDENCE ON THIS SUBJECT PLEASE QUOTES NO.....

MULAGO NATIONAL REFERRAL HOSPITAL
P. O. Box 7051
KAMPALA, UGANDA

11th January 2023.

APPROVED
APPROVAL DATE 10 JAN 2023 EXPIRY DATE 09 JAN 2024
MULAGO RESEARCH ETHICS COMMITTEE
IRC

Ms. Amanya Wyne Yvone
Principal Investigator
Faculty of Special Needs and Rehabilitation
Kyambogo University

Dear Ms. Amanya,

Re: Approval of Protocol MHREC 2414: "Access to Healthcare Information in Public Health Facilities by Women with Deafness in Kampala District".

The Mulago Hospital Research and Ethics Committee reviewed your proposal referenced above and granted approval of this study on 10th January 2023. The conduct of this study will therefore run for a period of one (1) year from 10th January 2023 to 9th January 2024.

This approval covers the protocol and the accompanying documents listed below;

- Consent form
- Interview guide

This approval is subjected to the following conditions:

1. That the study site may be monitored by the Mulago Hospital Research and Ethics Committee at any time.
2. That you will be abide by the regulations governing research in the country as set by the Ugandan National Council for Science and Technology including abiding to all reporting requirements for serious adverse events, unanticipated events and protocol violations.
3. That no changes to the protocol and study documents will be implemented until they are reviewed and approved by the Mulago Hospital Research and Ethics Committee.
4. That you provide quarterly progressive reports and request for renewal of approval at least 60 days before expiry of the current approval.
5. That you provide an end of study report upon completion of the study including a summary of the results and any publications.
6. That you will include Mulago Hospital in your acknowledgements in all your publications.

I wish you the best in this Endeavour.

DR. NAKWAGALA FREDERICK NELSON
CHAIRMAN- MULAGO HOSPITAL RESEARCH & ETHICS COMMITTEE

Appendix 6: Acceptance letter two

KYAMBOGO UNIVERSITY
P. O. BOX 1, KAMPALA
FACULTY OF SPECIAL NEEDS & REHABILITATION
Tel: 0414-286237/285001/2 Fax: 0414-220464
DEPARTMENT OF SPECIAL NEEDS STUDIES

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Kyambogo University will be grateful for any assistance rendered to the student.

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Dr. Okwaput Stackus

HEAD OF DEPARTMENT

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21 NOV 2022
P.O.Box 1, Kyambogo
Department Of Special Needs Studies

Received 13/1/2023
Please send soft copy to
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