

ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH NEEDS AND SERVICES FOR IN-SCHOOL DEAF ADOLESCENTS IN UGANDA SCHOOL FOR THE DEAF AND MULAGO SCHOOL FOR THE DEAF

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DECLARATION

I hereby declare that this dissertation, submitted to the faculty of Public Health, Nursing and Midwifery, Uganda Christian University for award of degree of Masters in Public Health, has not been previously submitted to any other university. It is my own work in design and execution, and that all the material contained herein has been duly acknowledged.

Signature: 

Date 

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APPROVAL

This is to certify that this dissertation has been prepared by Ajete Dorothy under my supervision for submission to the faculty of Public Health, Nursing and Midwifery, Uganda Christian University as a requirement for award of Masters of Public Health.

Signature.....

Date.....⁴¹ 8 MAY 2024

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DEDICATION

I dedicate this thesis to my dear parents and family for the support rendered to me during my initial stages of education. They opened the doors of success to me. I also dedicate it to all organizations working with adolescent deaf children in Uganda especially Signs of Hope, through this study awareness on their SRH needs and services will be increased to help in addressing their issues.

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ABSTRACT

Sexual and reproductive health is a critical societal and personal concern; and this phenomenon strongly applies to the young population in the adolescent age bracket. Some of the common consequences of not managing adolescents sexual and reproductive health includes; early sexual encounters, teen age pregnancy, rape, defilement and others. Therefore, this study focused on SRH needs and services of in-school deaf adolescents.

This study aimed at examining the various sexual and reproductive health (SRH) needs and services offered to in-school deaf adolescents in two deaf schools in Uganda. The researcher used a cross sectional research design deploying a mixed method approach in collecting data. The total sample size was 136, of which 115 deaf adolescents were surveyed, and 7 key informants were interviewed (2 head teachers, senior women, matron each and 1 senior male teacher).

The study finding revealed that majority of the study respondents identified life skills, provision of school health program and sensitive counseling sessions as their preferred SRH needs; language barrier was cited as the biggest challenge in accessing SRH services. Provision of life skills coupled with counselling sessions will play a major role in enhancing the deaf adolescent's self-esteem and their ability to utilize SRH services. As such the researcher recommends the deaf adolescents be given life skills, government and school administrations to commit to communicating SRH issues in ways understandable by the deaf, and parents to get involved in supporting their deaf children to learn more about SRH.

Key Words: Sexual reproductive health, deaf adolescents, health services

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ACRONYMS AND ABBREVIATION

UNICEF	:	United Nations Children’s Emergency Fund
WHO	:	World Health Organization
UNESCO	:	United Nations Educational, Scientific and Cultural Organization
HIV	:	Human Immune- Deficiency Virus
AIDS	:	Acquired Immuno- Deficiency Syndrome
STI’s	:	Sexually Transmitted Infections
STD’s	:	Sexually Transmitted Diseases
UBOS	:	Uganda Bureau of Statistics
UDHS	:	Uganda Demographic Health Survey
UN	:	United Nations
MOH	:	Ministry of Health
HSSIP	:	Health Sector Strategic and Investment Plan
KNRC	:	Kamparingisa National Rehabilitation Centre
SRH	:	Sexual Reproductive Health

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Introduction

This study is premised on one of the critical societal and personal concern that relates with the young people especially those in adolescent age bracket. Due to numerous adolescents' related issues like early sexual encounters, teenage pregnancy, rape, defilement and others, it is imperative that sexual and reproductive health services are extended to these youthful categories of the population in the friendliest manner in order to ensure adequate uptake of the services. In regards to the aforementioned, this study focused on examining adolescent sexual and reproductive health needs and services for in-school deaf adolescents in Uganda school for the deaf and Mulago School for the Deaf.

1.2 Background of the Study

This study focused on one of the critical stages in human growth and development known as the adolescent's stage. Hochberg & Konner (2020) indicated that adolescent stage is the most fertile and productive age in a human life. Therefore, during this stage in life, adolescents must pay maximum attention on how to manage their reproductive life. Similarly, UNFPA (2020) profoundly defined reproductive health as a state of complete physical, mental, emotional and social wellbeing, and not merely the absence of disease. The above definition embraces the notion that adolescents should have the capability to willingly choose when to engage in sexual activities especially those that may lead in to pregnancy.

In addition, it is ultimately natural and human for everybody to enjoy healthy sexual and reproductive life styles in which a person experiences a state of complete bodily, emotional, intellectual and social safety in all matters relating to reproduction and the reproductive system. The human satisfaction derived from practicing a healthy sexual and reproductive life style must at all cost be jealously protected and maintained, this implies that individuals must be able to access and receive correct information concerning the safety and relevance of sexual and reproductive health in order to empower and secure themselves from sexually transmitted infections, unintended pregnancies among other things. Alomair, et al (2022)

Further still, the WHO (2020) defined adolescence as a transition chapter in progressive growth and development from childhood into adulthood primarily for persons between the ages of 10 and 19 years. Adolescent stage is the age bracket that experiences a lot of physical and biological growth and development in humans. In relation, Graber, et al (2018) noted that it is not surprising for millions of young people around the world, that the commencement of adolescence period is not only a matter of biological changes in their bodies but it comes with varied susceptibilities especially to human rights abuses mostly in the areas of sexuality.

In this 21st century, some communities have adopted a human based approach in dealing with the complex nature with which sexual and reproductive health can be approached. Ganie et al. (2020) further emphasized that the implementation of human rights framework to dealing with sexual and reproductive health (SRH) underscores the necessity for everyone to preserve a fit sexual and reproductive health mainly to ensuring access to truthful information regarding reproductive health. Therefore, access to the right information from the right sources about SRH by adolescents' forms the principal basis upon which all other strategies for promoting healthy SRH among adolescents is anchored.

In relation, the failure to access the right information about SRH by adolescents means that the nature of risks in involving in abusive SRH among the adolescents is even elevated. To Shangase et al (2021) young adolescents in Sub-Saharan Africa are at high risk of involving themselves in risky sexual behaviors, and these risky behaviors form the chief reasons for the persistent high rate of sexually transmitted infections and its associated repercussion including but not limited to unintended pregnancies. The issues associated with risky sexual encounters among the adolescent age bracket in Africa is further echoed by Melesse et al (2020) who revealed that adolescent's population in Africa and specifically in sub-Saharan Africa are at abundant risks of realizing a number of adverse health repercussions linked with premature and dangerous sexual encounters.

Furthermore, Ahinkorah et al (2020) observed that sub-Saharan Africa was reported as the region with the vilest profile of adolescent health indicators, and this was largely attributed to the fact that the adolescents in that region got engaged in early, careless and unsafe sexual behaviors including too early sexual introduction, involvement in numerous sexual relationships and the practice of condomless sexual interactions. In regards to the above, Oluwasegun (2019) provided further

evidence to the effect that 36.9 million individuals were living with HIV by the end of 2017 and that Sub-Saharan Africa alone accounted for 70% of the global population of people living with HIV.

This study centers on adolescent sexual and reproductive health needs and services for in-school deaf adolescents in Uganda. The choice of this study area is due to the fact that in this modern era, many adolescents including the deaf students struggle in their attempts to access the required SRH care services, this explains why in most institution of learning there are established school-based health centers as appoint of contact for students to access SRH care services. According to Moriarty et al (2020), school-based health centers (SBHCs) are an important source of medical care for adolescents, and has proved an excellent way in addressing several sexual related health concerns like unintended pregnancy.

Despite of the fact that SRH of adolescents continues to receive massive attention globally, according to Mills (2020), there has been little focus placed on the SRH needs of adolescents with disabilities especially those located within developing countries. In regards to the above, Rugoho & Maphosa (2021) reiterated that historically persons with disabilities have been deprived of their SRH rights severally and to add on it this negation, no much is comprehensively known about the situation for adolescents with disabilities especially for those in a school setting.

The deprivations in accessing SRH among adolescents with disability especially in Uganda is further deliberated by the Uganda health sector strategic plan (2010/11-2014/15), in which it was recognized that most of Uganda's 160,000 deaf children grow up with limited to no support with communication or language. This means that they are incapacitated as far as accessing general education services is concerned, but in a more specific sense their ability to access information about SRH is defeated. The obvious consequences about such plight of adolescent is the experience of sexual abuse, undesired pregnancy and even in a worse state contracting HIV.

Nuri et al (2020) noted that due to the difficulties in accessing information from formal sources, the deaf children often turn to informal sources such as close friends and sometime family members for information. Conversely, this infers that deaf children are less likely to have accurate knowledge as information from informal sources. Further still, Kirungi (2019) noted that in situations where deaf adolescents have wrong and poor information as knowledge about SRH, they

are very likely to engage in risky sexual behaviors given the fact that they are vulnerable in protecting themselves from adverse sexual related consequences like STIs, unwanted pregnancies and others.

In regards to the background information above, this study sought to examine the adolescent sexual and reproductive health needs and services for in-school deaf adolescents in Uganda school for the deaf and Mulago School for the Deaf

1.3 Problem Statement

The importance of addressing adolescent sexual and reproductive health (ASRH) issues cannot be over emphasized. According to Bulleret al (2018), it was stressed that investing in ASRH have a profound effect on delaying early pregnancy, improves on health outcomes of women and substantially contributes towards achieving sustainable development goals (SDG). In regards to deaf adolescent children, special effort is required to deal with their SRH needs largely due to their distinctive mode of communication.

According to Basañez et al (2018), the proportion of children in formal education with true hearing disability then stood at 5.5%. The study further noted that the incidence of failed hearing screening and hearing loss was similar to other populations within the country. Important to stress is the fact that deaf children often miss out on important issues that relate with them including accessing youth programming on sexual health. Furthermore, Nassozi (2021) reiterated that deaf children are denied life opportunities and grow up as disgruntled disenfranchised adults. According Nakabooza (2019), upon attaining puberty, deaf adolescents struggle to deal with biological and physical body changes for example menstruation, breast development, intense emotions, and other issues that adolescents face.

Despite the efforts by government and other stakeholders to provide information on communication, sexual and reproductive health to improve on the welfare and self-esteem of the adolescent deaf children in Uganda, it still remains unclear whether these intervention measures are speaking to the needs of deaf adolescent children. As such this study sought to examine adolescent sexual and reproductive health needs and services for in-school deaf adolescents in Uganda school for the deaf and Mulago School for the Deaf.

1.4 General Objective

To identify and examine the various sexual and reproductive health (SRH) needs and services offered to in-school deaf adolescents at Uganda school for the Deaf and Mulago School for the deaf in Uganda, Kampala.

1.4.1 Specific Objectives:

1. To identify SRH needs among in-school deaf adolescents in Uganda school for the deaf and Mulago school for the deaf.
2. To analyze the available sexual and reproductive health services provided to the in-school deaf adolescents at Uganda school for the Deaf and Mulago School for the Deaf in Uganda.
3. To explore the various challenges experienced by in-school deaf adolescents in accessing friendly SRH services.

1.5 Research questions

1. What are the SRH needs of in-school deaf adolescents in Uganda school for the deaf and Mulago School for the deaf?
2. What are the available sexual and reproductive health services provided to the in-school deaf adolescents at Uganda school for the Deaf and Mulago School for the deaf in Uganda?
3. What challenges are experienced by in-school deaf adolescents in accessing friendly SRH services?

1.6 Scope of the study

1.6.1 Content scope

The major focus of this study was centered on identifying the sexual reproductive health needs of in-school deaf adolescents, but also to understand the available sexual and reproductive health services provided to the in-school deaf adolescents and finally the study content extended to understand the various challenges faced and experienced by in-school deaf adolescents in accessing friendly SRH services from Uganda school for the deaf and Mulago school for the deaf

1.6.2 Time scope

This study looked at a five-year time scope starting from 2019 to 2022, the researcher chose this time period for two main reasons; firstly, the number of deaf adolescents has increased over this

period of time, and secondly it was during this period when access to education and information about SRH was severely affected due to the effect of Covid-19.

1.6.3 Geographical Scope

This research was carried out in Kampala District which is the capital city of Uganda. The study sites; Uganda School for the Deaf Ntinda and Mulago School for the Deaf are both located within the territorial jurisdiction of Kampala, Uganda. It is important to emphasize that there are fourteen (14) schools for the deaf scattered across the country, however the researcher chose Uganda School for the Deaf and Mulago School for the Deaf because of the following reasons; they are the first schools for the deaf in the whole country, they are government aided, have boarding sections with the largest compared to all the schools for the deaf in Uganda and they attract pupils across the East African region including; Rwanda, Sudan, Eritrea and others, above all they have sick bay through which adolescent sexual reproductive health programs are implemented with support from some concerned NGO's like Girl Up Initiative Uganda (GUIU).

1.7 Justification of the study

In Uganda, the right to access and utilize information is provided for under Article 41 of the 1995 Constitution of the republic of Uganda, it is stated that every citizen has a right of access to information in the possession of the State or any other organ of the state except where the release of the information is likely to interfere with the security of the State.

According to Mambo, et al (2020), out of the 724 respondents who participated in their study, 203 (28%) reported not having any information or education concerning sexual and reproductive health (SRH) in Uganda. The respondents cited knowledge and cost of services (62.2%) as the key hindering factors. Furthermore, Ninsiima, et al (2021) reiterated structural obstacles like unskillfulness and bad attitude of health workers, coupled with individual barriers in the form of lack of knowledge among youth regarding SRH.

The above is supported by the evidence from the study of Hailemariam, et al (2021), in which it was revealed that deaf adolescents experience several challenges ranging from socio-cultural barriers, health system barriers, perceived legal barrier, inadequate information regarding sexual reproductive health service, low parent-deaf adolescent communication. In brief, the findings

above suggest that deaf adolescents are more likely to face unique and mountains of difficulties in utilizing even the common sources of information about SRH than their hearing counterparts.

As such, this study sought to address the constitutional rights of the deaf adolescents to access information on SRH, provide evidence about the gap in knowledge about the plight of in-school deaf adolescent in accessing and utilizing SRH services.

1.8 Significance of the study

This information will be useful to the Policy makers for people with disabilities and schools for deaf children, parents and other relevant stakeholders in designing user-friendly SRH services and to be sensitive to deaf children's SRH needs and concerns.

The research hoped that this study finding will contribute to the knowledge base which may boost awareness among relevant government and non-governmental responsible institutions on how they can effectively address the SRH needs of in- school adolescents and specifically deaf adolescents in the country.

The study will help future researchers by acting as a source of literature, but also serve as a source of reference for those handling issues that relate to in-school deaf adolescents.

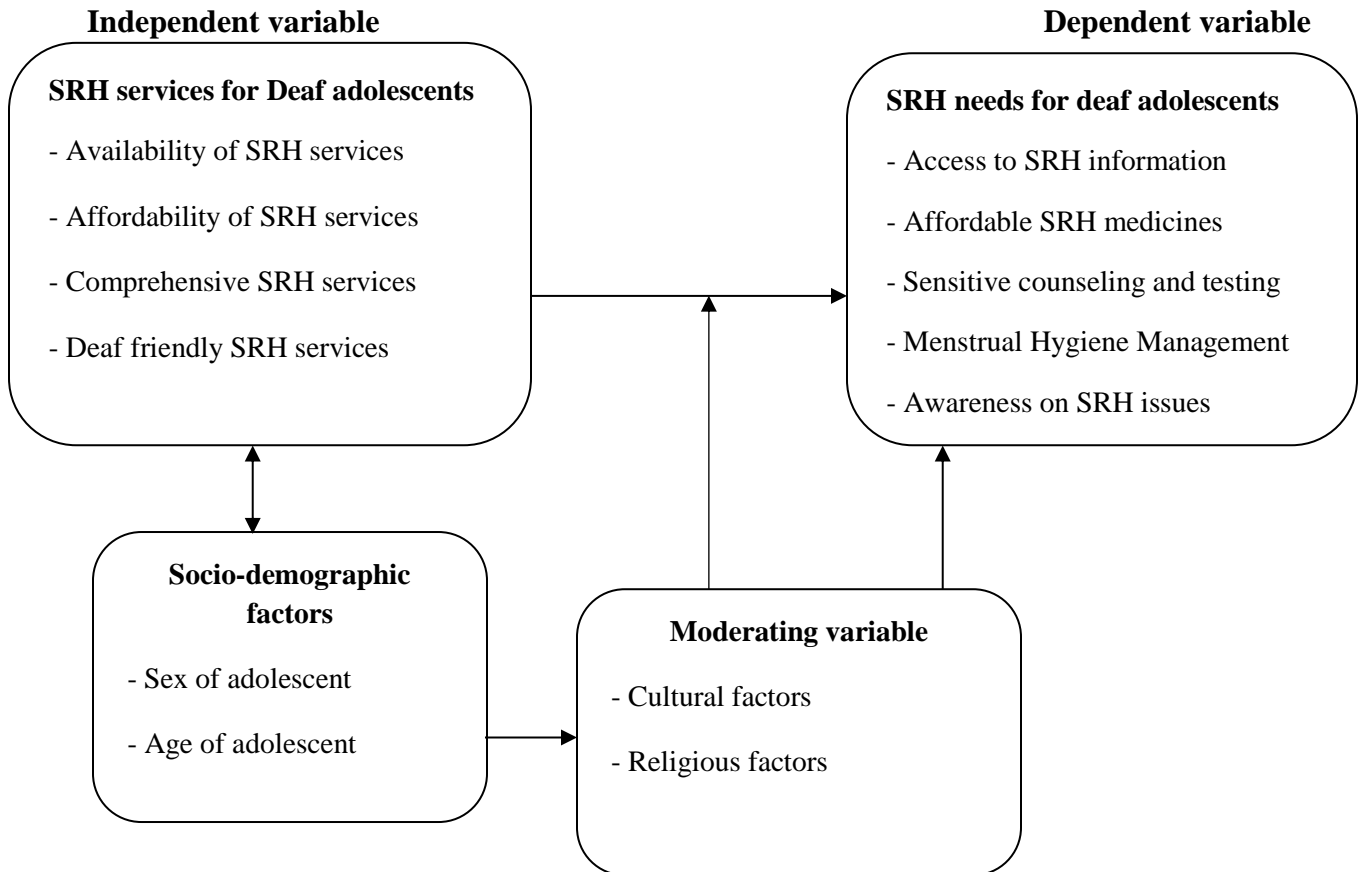
1.9. Conceptual frame work

The diagrammatic expression below demonstrates the relation between the independent variable; SRH services for the deaf adolescents, and the dependent variable; SRH needs for deaf adolescents). The researcher envisioned that a successful implementation of attributes of the independent variable as pointed out by El Ayoubi, et al (2021); that if adolescents are subjected to sensitive counseling and testing, proper Menstrual Hygiene Management practices and they are made fully aware about SRH issues then there will come to the realization of the dependent variable in the form of availability, affordability, comprehensiveness and deaf adolescent SRH services, Ndayishimiye, et al (2020). Despite of the above envisioned relationship, the researcher is very cognizant with the fact that other factors like the demographic variables, religious and cultural background can significantly influence the envisioned relationship.

In regards to the conceptual frame work, the study finding disclosed that the most preferred SRH needs for the in school deaf adolescents included among other; life support skills, sensitive

counselling and the communication of all SRH information in a language understandable by the deaf population

CONCEPTUAL FRAMEWORK SHOWING THE RELATIONSHIP BETWEEN SRH SERVICES AND THE SRH NEEDS OF IN-SCHOOL DEAF ADOLESCENTS



The above conceptual framework is the original creation of the researcher; however, it was largely informed by several related scientific literatures reviewed by the research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this second chapter of the study, the researcher presents a detailed analysis of related literatures to the topic of study. The analysis of literature focused on adolescent sexual and reproductive health with key focus on the deaf adolescents. This chapter largely contains related studies undertaken by other researchers in the same field of study to this research; importantly the literature review is organized based on themes established from the research objectives.

2.2 Sexual and Reproductive Health (SRH) needs among in-school deaf adolescents

One of the vital elements in dealing with SRH generally is the ability of all concerned stakeholders to be able to generate authentic information backed by verifiable data about sexual and reproductive health. Secondly, this information must be shared to the concerned adolescents by those who are knowledgeable about them and in the most reliable means possible. This in the end will ensure that the adolescents have access to authentic, correct and verifiable information about sexual and reproductive health issues. In regards to the above) Alomair, et al (2022) concluded that a profound lack of SRH knowledge among adolescent women greatly contributed to the negative experiences about SRH both while they were minors through their adulthood. This finding stressed the value of knowledge about SRH among young people.

In regards to the above, Rubinsky, et al (2020) further demonstrated the importance authentic SRH among adolescents, his study found that lack of knowledge about menstruation among adolescent girls often caused emotional distress while they experienced menarche, this was further associated with bad memories and negative emotions that the girls revealed. The above findings clearly indicate that if the girls had true knowledge about the biological body changes during adolescent, such kind of negative memories wouldn't have been experienced.

In a more specific sense, evidence suggests that most of the knowledge about SRH is passed in forms that are not accessible to adolescents with special needs. For instance, people with hearing disability cannot listen to messages passed orally and other ways except through the aid of sign language. According to Ganle, et al (2020), it was revealed that people with disabilities face a

myriad of demand and supply side barriers to accessing sexual and reproductive healthcare in sub-Saharan Africa. In reality, the deaf are met with unique problem concerning this issue in point.

It is very important to pay attention to demographic factors when dealing with SRH that involves vulnerable populations. As a matter of fact, not all adolescents experiences an equal measure of vulnerability, this is largely due to the fact that the categorization of adolescents varies; their specific needs according to the various categories for healthcare service uptakes and information provision largely depends on their groupings and categories. According to Gur, Dolaner&Turan (2020) due to their circumstances, some adolescents tend to be more vulnerable than others to health and social problems. The above position was reiterated by Chapman & Dammeyer (2021) who revealed that for majority of deaf adolescents, they experience a significantly lower level of health literacy, which is significantly associated with the poor communication regarding medication instructions.

As afore mentioned, it is very critical for researchers and policy makers to pay maximum attention to issues of variations in disability in order for them to implement functional policies and programs. According to Liang,et al (2019), the importance of understanding the unique needs of different people with varied disabilities when designing policies and programs was emphasized. The study stressed the ideology of evading ‘a one-size-fits-all’ policies on issues concerning SRH especially among people with different disabilities.

In order to affirm the above proposition, Mailhot, et al (2021) findings disclosed that among people with disabilities, deaf women were the ones who were the most at risk of being raped or experiencing sexual violence. This was largely due to the fact that such women lacked access to information concerning their security and protective measures. In relation, Mahmoud & Ibrahim (2020) further suggested that subjecting deaf adolescent children to undergo a formal education process is of great importance for their development since schools provide an enabling environment for acquiring knowledge and inculcating thinking skills.

According to Atuyambe et al, (2019) formal education is a very key instrument for realizing socio-economic development including the realization of positive health outcomes. In the context of dealing with SRH of deaf adolescents, this would mean an all-round and relevant educational program that suits the capabilities of the deaf adolescents. However, it must be emphasized that

deaf children and the adolescents in low income countries have rarer opportunities for those special kind categories of education that suits their situations as compared to their counterparts with other forms of disabilities and also those in developed countries. According to Atuyambe et al, (2019), in the least developed countries, only 13% of the girls and 22% of the boys with some sort of learning impairment enroll for secondary education.

Further still, Kumi-Kyereme (2021) pointed out that adolescent with hearing disability have unique health related needs that requires special attention. Some of these unique issues are very unique to individual persons were as others apply to a reasonable population size. To Winarsih, et al (2020) deaf children, and deaf adolescents in particular have lower levels of understanding medical conditions like the operation of HIV transmission and access to HIV information and reproductive health services relative to those with no disability or with some other sort of disability. It's important to note that the lower understanding level of SRH issues among the deaf children are partly associated to factors like picking information from their peers who in some way gives them in correct information which is very unreliable Midega et al (2019).

According to Mcharo (2021) in a study that scrutinized deaf people's perceptions of barriers in accessing SRH information and services, the study respondents revealed that post abortion care services was of a great need that was not catered for. Furthermore, Adom-Asomaning (2020) disclosed that knowledge of in-schools and out of school deaf adolescents who had used traditional dangerous methods and other unsafe means to get rid of unwanted pregnancies were common. The study further revealed that even with the knowledge of adverse consequences associated with barbaric practice of using traditional medicine to deal with SRH issues, adolescents generally still practiced the rudimental method with the deaf being more vulnerable to the practice.

The above study findings can be corroborated with other such related studies in Uganda, for instance a report by MOH (2019) about the national adolescent health landscape for improved service delivery. Some of the study findings powerfully showed that adolescents very strongly want to access sexual and reproductive health and rights information with their associated services relevant to their needs. For instance, part of the above report indicated that the adolescents demonstrated interest of need to access HIV counseling and testing, prevention and treatment of STIs and HIV.

According to Akweongo et al (2021), study respondents including adolescents strongly expressed a need for empowerment, prevention and response to harmful practices associated with SRH including but not limited to female genital mutilation and child marriage which has gravely contributed to the high prevailing cases of teenage pregnancy and unwanted pregnancies. Additional SRH needs of adolescents is information about obstetric fistula, dangers of abortion, access to maternal and newborn health care like antenatal care and delivery services due to high teenage pregnancies. Furthermore, Abebe et al (2020) reiterated that Menstrual Hygiene Management (MHM) facilities especially in schools were strongly mentioned by the adolescents, they supplementary mentioned that they need water, hand-washing facilities, latrines proportion to pupil's population and a regular school health parades as part of the various efforts to promote good hygiene practices which in turn promotes positive SRH among the adolescents.

In summary, the above literature revealed that there is a gap in dealing with SRH issues for in-school deaf adolescents. Primarily a lot of attention must be paid to the special and unique needs of the deaf adolescents when designing action programs to support their needs

2.3 Availability of SRH services among in-school deaf adolescents

It is public knowledge that many people with disabilities do not have equal access to health care and education services, and more importantly access to employment opportunities are even more difficult. As such people with some sort of disabilities for obvious reasons do not receive the disability-related services that appeals to their needs. As a result of the above, they are marred with numerous experiences of exclusion in all of their day to day life activities.

Despite of the nature and magnitude of the issues affecting the welfare of people living varied disabilities, there seems to be very scanty knowledge and information specifically about the experiences of adolescent's deaf people in accessing and utilizing SRH services across the globe. According to WHO (2011) there are few documents providing a compilation and analysis of the ways countries have developed policies and responses to address the needs of people with disabilities generally.

In regards to deaf people, Kumi-Kyereme, et al (2021) revealed that this very unique population of vulnerable population face greater challenges and vulnerabilities about SRH services compared to people with other forms of disability; this is largely due to the mainstream sources of information

which are not very accessible to them. According to Ochieng (2019), deaf adolescents are usually less likely to obtain information from formal sources such as health professionals and television broadcasts compared to those with other forms of disabilities or people without disability at all. In Uganda, adolescent health and development is constrained by translation of the relevant policies to practice, a problem which does not only affect disability programs but even other sectors of the population's programs. In relation, Atuyambe et al, (2015) revealed that there is need for a critical assessment of adolescent friendly services (AFS) especially on issues concerning SRH.

According to Mills (2020), a study that focused on systems of communicating sexual and reproductive health issues between hearing parents and their deaf adolescent children, the study finding disclosed that deaf adolescent children face greater challenges in accessing information, particularly on sexual and reproductive health (SRH) than those with other forms of disability. It is obvious that parents and family members are the immediate persons to represent the first source of information for their deaf children. What is of interest to ponder on is the fact that do parents and immediate family members to the deaf know their language of communication, and if not how would they share information on pertinent issues like SRH.

The above concerns raised, corroborates with some studies conducted on deaf people in other countries like Ghana indicates that deaf children demonstrates very limited access to mainstream information including information concerning SRH. This challenge means that the deaf adolescents are resigned to have very limited knowledge on SRH issues which in the long run negatively affects their livelihoods. Conversely, Wisdom (2019) urges that the above cited studies do not in any way offer wide-ranging SRH data that can directly relate to the deaf community especially those in a school setting. Still along the challenges faced by deaf adolescents, Freedman (2021) findings indicated that health professionals were unable to communicate effectively with their deaf clients; this affected the quality and meaning the healthcare services which included several aspects of SRH.

According to Nmadu, et al (2020), the study findings revealed that adolescents who were asked whether they have ever visited any health facilities to seek for SRH information, literally 65% of the respondents reported that they have never gone to the health facilities to seek SRH information. However, the deaf adolescents indicated that lack of information about the availability of SRH

services at the health facilities were the key barriers in accessing the SRH information; while others feared to seek services in the same facilities with the older community members and with different sex of health workers.

It is a common challenge in which adolescents may not easily find someone to freely share or seek information about their SRH needs. According to Nketsia, et al (2022), deaf adolescents cited talking to arrays of people about their SRH issues including but not limited to teachers, peers, health professionals, parents and siblings about their SRH issues. What was further revealed was that the adolescents revealed challenges and reservations about communication with these groups of people in their social environment. A similar finding was revealed by Suariyani, et al (2020) in which informants disclosed having had insufficient knowledge regarding reproductive health generally. The study further disclosed that the school had no specific subject in the curriculum regarding SRH and teachers did not specifically provide reproductive health information. To the disadvantage of the deaf children the school had no reproductive health services that were provided largely due to the limited number of healthcare workers who could use sign language.

On a rather positive note, other studies like Kumi-Kyereme (2021) confirmed the benefit of running healthcare programs for in-school deaf adolescents. The study overall disclosed that there was high uptake of SRHS utilization amongst the in-school YPWDs but the positive connotation was significantly associated with some predisposing, need and enabling factors.

In conclusion, it is in the best interest of the deaf children that SRH services that appeal to their aspirations must be extended to all in school adolescents especially the deaf ones since they have teachers who speak and understand their language of communication.

2.4 Challenges experienced by in- school deaf adolescents in accessing SRH services

Although the SRH concerns of people with disabilities are similar to people without disabilities, the former often face numerous barriers according to Rusinga, (2012) when accessing information and services due to many factors including but not limited to ignorance, negative attitudes, and lack of services tailored to accommodate their unique needs. Also, Vaughan, C. et al (2020) reveals that usually people with disabilities are rarely included in SRH prevention and outreach programs, SRH information is often not provided in accessible formats such as sign language, thereby depriving access to those with hearing disability.

Rights and needs of PLWDs are practically neglected in the provision of sexual and reproductive health services. For instance, according to Deaf child worldwide (2019), Sexual and Reproductive Health (SRH) education for children and young people with disabilities are often severely limited or nonexistent. Access to SRH information in school is limited by the fact that persons with disabilities often are denied even the most basic education and this worsens the situation for the deaf children.

According to Allen & Morere (2020), majority of children with various form of disabilities including the deaf receives formal education and only stops at the lowest primary levels, and few remain in school long enough to reach upper level classes where specific SRH education is offered. As a result, many persons with disabilities cannot read or write, and even those who are literate may not have enough education to be health literate. When developing programs for persons with disabilities, these efforts should be well integrated in to other programs addressing the needs of persons with little education or low literacy that need information (VSO, 2018).

As generally acknowledgement, deaf people are distinguished from the hearing population not only by their hearing loss, but by having distinct cultural and linguistic characteristics, which include a communication system that is different from the spoken language, as well as cultural values that are different from those found amongst hearing people which makes it hard for them to access SRH services at the available centers Mprah (2013). In addition, individualism is generally a dominant cultural feature in the hearing population (with some exception), collectivism is dominant amongst deaf people, and the members of the deaf community often consider themselves as close-knit and interconnected group (Young et al, 2011).

In particular, according to Jones, Seager & Yadete, (2021), adolescents with hearing impairment face severe challenges, because it is often difficult for parents, educators, and counselors to discuss SRH issues with them, since they are perceived to be sexually inactive. Consequently, many of these young people are not familiar with basic physiological changes their bodies are undergoing, cannot describe what is happening to them and are therefore vulnerable to SRH problems and sexual exploitation (VSO, 2018). Information on the SRH status of deaf people suggests that they are more likely to face difficulties in accessing common sources of information than their hearing counterparts (Ochieng et al., 2019).

Deaf people are less likely to access media such as television and radio. They also encounter communication barriers in the healthcare system because healthcare providers typically cannot communicate with deaf people. According to Kassa et al, (2016), healthcare providers often underestimate the difficulties of speech reading and overestimate deaf people's ability to understand written notes. Furthermore, Midega et al, (2019) indicated that hearing impaired adolescent children experience communication challenges, identity formation and low self-esteem that have serious implications for their health and development. Moreover, studies have shown that they are more likely to have experienced child abuse compared to their hearing peers.

Schools provide a natural entry point for reaching young people with health education and services. It is also important to ensure that services provided at school have community support. Many head teachers are concerned that they will open themselves to criticism if they provide services for young people. Efforts among the school and community are required to ensure that such moves are supported. According to Atuyambe et al (2015), there are evidence to the effect that parents welcome other responsible adults talking to their children about sensitive issues, as they often feel unable to deal with these issues at home.

Gender considerations are fundamental, a good understanding of the biological differences in the growth and development of males and females (through the years of adolescence), and of the different ways in which they are affected by health problems is important. Equally important is a good understanding of the different social and cultural influences on males and females, and how this affects the way in which adolescent males and females view themselves and relate with others (Kassa, 2016).

Uganda has developed various policies, regulation frameworks and strategies to address adolescent health and development. Evidence from the 2016 Uganda Demographic and Health Survey presented positive trends in health indices. Also overall national funding for health sector has been improving over time yet despite this elaborate policy framework and increased funding of the health sector over time, adolescent health and development indicators continue to be poor (UNFPA annual report, 2018). No regular visits of health workers to schools to carryout health education. Health clubs are supposed to be formed in schools but it is not institutionalized. It's important to advocate for this in schools (MOH, 2019).

Adolescent-friendly reproductive health education and awareness raising on HIV transmission and prevention, using various platforms like clubs, sports, music, dance and drama is still lacking in many schools. The Presidential Initiative on AIDS Strategy for Communication to Youth (PIASCY) program from the schools reached seems to have scaled down. Recent statistics show that by age 15, only 32% and 38% of young women and men between 15-24 years have never had intercourse respectively (UDHS, 2016). According to MOES (2016), among the sexually active girls, 36% had ever used contraceptives.

The information is quite lacking to bring out the picture of SRH challenges unique to in-school deaf adolescents. Therefore, the purpose of this study is to find out adolescent sexual and reproductive health needs and services for in-school deaf adolescents of Kampala.

2.5 Summary of literature review

In reference to the literature review above, available information reveal evidence to the effect that deaf adolescents generally lack basic knowledge about SRH, this is regardless whether they were at school or out of school. The lack of knowledge was reportedly more prevalent among the deaf adolescent girls compared to their boys' counterparts. This was partly because there were specific studies that targeted the deaf adolescent girls whom reports revealed that they were most at risk of being sexually abused due to lack of knowledge about SRH. There is evidence from the literatures to the effect that the knowledge about SRH are passed in forms and mediums that are not accessible to adolescents with special needs like the deaf population. The literature reviews further disclosed that almost all SRH information is passed over the radios, televisions and in some other oral or audio mediums without the assistance of sign language interpreters of which the deaf adolescents cannot verily perceive and understand the information. In regards to the literature review above, it appears evident that there is scanty knowledge about the experiences, attitudes and needs of the deaf adolescent (both in-school and out of school) in accessing and utilizing SRH services across the globe and Uganda in particular.

CHAPTER THREE

STUDY METHODOLOGY

3.1 Introduction

In this chapter, the researcher largely explained the process and procedures that were embraced in carrying out this study. Over-all, the researcher provided the reasoning behind the choice and application of the specific procedures in identifying and analyzing data; all this was done with the view to gain an in-depth knowledge of the research problem associated with the adolescent deaf children at schools. Therefore, this chapter contains among other things; the study design, study population, sampling, data collection methods, data quality control, ethical consideration, data management and analysis.

3.2 Study Design

In any given research undertaking, research design forms one of the cornerstone that must be correctly identified and appropriately applied. Taves & Paloutzian (2021) pointed out that research design refers to the overall strategy that integrates the different components of the study in a coherent and logical way.

In the pursuit of this study, the researcher identified and adopted a cross sectional research design as the most appropriate design to carry out this study. According to Spector (2019), a cross-sectional research is a type of research design in which a researcher collects data from several diverse targeted study participants but at a single point in time. The researcher adopted this research design because of its flexibility in allowing the collection of both quantitative and qualitative data. This is very important because the weaknesses inherent in quantitative data is covered up by the strength of qualitative data and the reverse is true.

3.3 Study area

This study was carried out in Kampala, the capital city of Uganda which is located in central part of Uganda. The city has an estimated population of 1, 680,000 people and its divided in to five divisions of Kampala Central Division, Kawempe Division, Makindye Division, Nakawa Division and Rubaga Division. Coordinates 00 18' 49"N 32 34'52"E.

The study was specifically carried out at the Ugandan School for the Deaf which was the first school for the Deaf in Uganda. It was established in 1959 by the Uganda Society for the Deaf at Namirembe Hill on a leased land from the church of Uganda. The School is currently a government aided Primary School that brings together all categories of Deaf children, including Deaf children with multiple disabilities. The second school where the study was carried out from was Mulago School for the Deaf, formerly known as Parents of Deaf Children Association which was founded by Fr. Hurry Tullemans in 1998. As of 2022, there are a total of fourteen (14) schools for the deaf across Uganda; Uganda School for the deaf has a minimum population capacity of 215 pupils, eleven (11) teachers, and they receive pupils across East African countries including Democratic Republic of Congo (DRC), Rwanda, South Sudan and Eritrea. Conversely, Mulago School for the Deaf has a minimum of 160 pupils with thirteen (13) teachers. Both schools have sick bay where health related activities are coordinated and performed.

3.4 Research study population

3.4.1 The target population

In a research context, target population refers to the whole set of people or entity to which researcher was interested in generalizing the conclusions of their study. According to Englander (2019), the target population typically has variable features and in some situations it is referred to as the theoretical population of the study. In the context of this study, the target population was the deaf adolescent.

There is a sufficient amount of evidence to the effect that deaf adolescents are not studied much especially in the area of SRH, for instance according to Mprah, *et al* (2022), in which deaf adolescents indicated they were disgruntled with SRH services largely due to hurdles like sign language interpreters and inaccessible information. In Uganda, evidence from Shaffa (2020) highlighted gaps in evidence concerning the welfare of deaf adolescents in accessing SRH services and the study suggested more rigorous study to be carried out. In line with the above recommendation, the researcher found it worthwhile to focus this study specifically to this specific population.

3.4.2 The accessible population

On the other hand, Asiamah, et al (2017) specified that the accessible population consists of the population in research to which the researchers can ably apply their research conclusions. In other words, the accessible population is a subset of the target population sometimes commonly recognised as the study population. It is from the accessible population that researchers draw their samples. In this study, the study population consisted of the in-school deaf adolescents specifically those aged 15-19 years.

Uganda School for the deaf has a minimum population capacity of 215 pupils and Mulago School for the Deaf has a minimum of 160 pupils, thus the total number of pupils is 375. In both schools there is no specific data spelling out the number of adolescent deaf children, however in both schools the headmasters revealed that they receive pupils who have delayed joining school due to their special need situation. As such majority of the pupil from primary three upwards are over ten years old; this implied that majority of the pupil population were adolescents, as such the researcher estimated that at least 80% of the pupils in both schools were adolescents, hence giving a population size of 300 deaf adolescents that the researcher was interested in.

3.5 Sampling and sampling techniques

3.5.1 Sampling method and sampling procedure

One of the sampling methods used by the researcher was the simple random sampling method, according to Mendoza (2021), simple random sampling is a sampling method in which potential samples in a study population are drawn randomly, as such this makes it possible for every unit in the population to have an equal and independent chance of being included in the sample. The justification for the choice of this sampling method was because of its probability nature which inherently eliminates the possibilities of bias in personal judgment of the researcher when picking a sample. The researcher used this method to identify and pick in-school deaf adolescents to participate in the study.

The researcher also used purposive sampling method. According to Denieffe (2020) it is a sampling techniques in which units are selected based on their unique features that a researcher is interested in. In executing this method, the researcher relied on own judgment in choosing sample of interest to participate in the study. The researcher adopted purposive sampling method because

it enabled the gathering of vital and detailed qualitative data from the key informants that were purposively identified and interviewed included that head teachers 2, senior woman teacher 2, senior man 1, in house mothers and the matron 4.

Table 1: Sample size

<i>Population category</i>	Population	Sample	Sampling method	Data collection method
<i>Deaf adolescent</i>	300	136	Simple random	Survey
<i>Head teacher</i>	2	2	Purposive	In-depth interview
<i>Senior woman teacher</i>	2	2	Purposive	In-depth interview
<i>In house mother/ matron</i>	4	2	Purposive	In-depth interview
<i>Senior man teacher</i>	2	1	Purposive	In-depth interview
<i>Total</i>	310	143		

Source: Primary data, 2024

Regarding the sample size, table 1 indicates that, the researcher surveyed 136 pupils from a total population of 300 deaf adolescents from both schools. Furthermore, the researcher had an in-depth interview with the head teachers, senior woman teacher, matron and senior man; in total the key informants were 7.

3.5.2 Sample Size determination

In any given research undertaking, researchers heavily rely on samples to carry out their investigation and make logical conclusions. It was observed by Lakens (2022) that samples in any research undertaking is basically used to make inferences about the populations of study interest. This proposition makes the identification and determination of the approximate sample extremely vital in order to be able to make valid and reliable inferences.

In regards to the above, the head teacher of Mulago School for the deaf revealed that the school had a total pupil population capacity of 160 pupils, and the head teacher of Ntinda School for the deaf disclosed that they had a pupil population of 215. In general, the researcher added the two populations and derived at 375 as the study population size of this study. In order to determine the most appropriate sample size, the researcher adopted an online scientific sample size calculator known as calculator.net. According to Calculator.Net (2022) the following parameters were used;

a confidence level of 95%, margin of error of 5%, population proportion of 80% and an estimated population size of 300, thus giving a total sample size of 136.

The researcher managed to attain 85% response rate by interviewing 115 respondents of the anticipated 136. According to Hendra & Hill (2019) a survey response rate of 80% or higher was scientifically concluded as an ideal response rate. As such the attainment of 85% by the researcher in this study is thorough enough to make valid conclusions.

3.6 Variables of the study and their indicators

In this study, the independent variable; SRH services for the deaf adolescents, is measured by its attributes; sensitive counseling and testing, proper Menstrual Hygiene Management practices and awareness about SRH. The dependent variable; SRH needs for deaf adolescents is measured by the following attributes; availability, affordability, comprehensiveness and presence of deaf adolescent SRH services

3.7 Data collection methods and their tools

The researcher acknowledges the fact that research data collection instruments is one of the key elements in research process as it aids data collection which are subsequently analyzed to answer the research questions. In this study, questionnaire and interview guides were used to collect data from potential respondents.

3.7.1 Survey and questionnaire

The researcher used a survey method to evaluate views and beliefs of the potential study respondents with the view to gain detailed material information about SRH needs and the services provided to the in-school deaf adolescents. In order to achieve the purpose of using survey in data collection, the data in this study was attained with the aid of a standardized questionnaire which played a vital role in ensuring validity and reliability of data collected.

According to Singh (2017) a questionnaire is data collection tool that comprises of a sequence of research questions that are carefully identified and chosen with the view to solicit for data that will subsequently provide information to answer the research questions. The researcher chose to use questionnaire in this study to specifically collect data from the deaf adolescent pupils because

questionnaires generally are standardized for collecting responses with a significant degree of internal validity due to their uniformity in design.

3.7.2 In-depth interview and interview guide

The researcher also deployed in-depth interview method to collect data about the services provided to the in-school deaf adolescent pupil at the two identified schools. Interview is a method of data collection in which the researcher interviews potential study respondents especially those that are key informants. The interview process was guided by a sequence of well formulated questions that were specifically designed to elicit information from key informants like the head teachers, senior woman and male teachers, and the matrons on a particular thematic area about the study.

In executing the interviews, the researcher used an interview guide which is a data collection instrument mostly used in collecting qualitative data. According to Roberts, R. E. (2020), interview guide is an instrument that contains series of sensibly selected themes which a researcher uses as a general guide for drafting interview questions meant to solicit for answers to answer research questions. The researcher used an unstructured interview guide to solicit for data from key informants which included the head teachers, senior woman and male teachers, and the matrons.

3.8 Data analysis plan

3.8.1 Quality control mechanism

The entire idea behind quality control mechanism in data collection was to ensure that the data collection tools that were used are very appropriate and the data collection process is meted with excellent ethical considerations.

3.8.2 Validity in the research

In the process of constructing the data collection tools, the draft tools were shared with the supervisor for perusal to establish and confirm that the data collection tools were correctly measuring what it intended to measure, but also that they were correctly collecting the data that was envisaged in the research question under chapter one of this study. After identifying the vague and ambiguous questions by the university supervisor, the researcher made the necessary corrections to ensure that the data collection tools measuring what it was designed to measure and final data collection tools were prepared.

3.8.3 Reliability in the research

Another element of quality data control that the researcher considered was the reliability of the data collection instruments. In order to ensure that potential respondents were understanding the survey questions, the researcher carried out pretest was performed to ensure that there is consistency of respondents' answers to all questions being asked. The result of SPSS version 24 using Cronbach Alpha reliability test model disclosed a result of 0.829 which is above the 0.70 minimal acceptable thresholds; this implied that the data collection instrument met the reliability tests

Table 2: Reliability Statistical test

Reliability Statistical test		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.829	.847	30

Source: Pretest field data, 2024

3.9 Data management and analysis plan

All data that were collected were tightly kept and no data was lost, thus maintained the sample error to a minimal degree. Secondly, after data collection was completed, the researcher coded and entered the data in SPSS version 24 upon which basic frequency analysis was performed on all the variables to ensure that no data was improperly recorded or were lost.

Furthermore, analysis of the data was performed using the SPSS version 24 in which descriptive and inferential statistics were performed. The researcher performed univariate analysis in the form of descriptive statistics to establish frequencies especially of demographic variables and other related variables of interests. The researcher also performed bivariate analysis to assess relationships that exist between key variables of interest.

On the other hand, qualitative data was thematically analysed and common themes were developed in relation to the specific objectives of the study but also with the general objective of answering the research question.

3.10 Ethical consideration

The researcher submitted the study protocol and obtained ethical clearance from Uganda National Council of Science and Technology through the school for Research and Post graduate studies Uganda Christian University (UCUREC).

The clearance from UCUREC was further presented to UCU School of post graduate studies to obtain introduction letter that was presented to the two schools where data was collected for administrative clearances.

While administering the survey questionnaire, all assent forms were clearly explained by the researcher to the deaf adolescents but with the aid of sign language interpreters before they assented to participate in the study.

All research works, annual reports and several publications that the researcher used to inform this study was comprehensively cited and referenced to avoid committing plagiarism.

3.11 Methodological constraints

The researcher anticipated to attain a low response rate due to the fact that the deaf adolescents would not respond to participate in the study; however the researcher managed to attain 85% response rate by interviewing 115 respondents of the anticipated 136.

The researcher also anticipated to experience challenges of language barrier as she did not know the sign language that the respondents spoke and understood. However, two schoolteachers at the schools volunteered to help and interpret the verbal language used by the researcher to sign language and then the sign language to the verbal language to the researcher.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

In any research that is carried out, one of the output is to present study findings; as such this chapter presents the findings of the study in regards to the specific objectives and research question that the researcher posed in the first chapter to this study report. The researcher also labored to present the findings in the chronological and thematic manner as informed by the study objectives.

4.2 Summary of demographic variable

One of the vital and basic data the researcher collected about this study were the demographic data; and basically the researcher focused on presenting three of the demographics due to ethical but also validity issue of the study. As such, the first table below presents the summary data about the age categories of the study respondents who took part in the study.

Table 3: Age of the study respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15	72	62.6	62.6	62.6
	16	33	28.7	28.7	91.3
	17	8	7.0	7.0	98.3
	19	2	1.7	1.7	100.0
	Total	115	100.0	100.0	

Source: Primary data, 2024

The finding in table 3 above revealed that 72 (62.6%) of the study respondents were deaf adolescents aged 15 years, 33 (28.7%) of the respondent were aged 16 years, 8 (7%) of the respondent were 17 hears, and finally 2 (1.7%) of the respondent were aged 19 years old. In a more general sense, a total of 91.3% of the study respondents were aged 15 and 16 year olds. The above findings infer that majority of the respondents were mid-teenage adolescents; this age category experiences a lot of biological and physical changes as far as puberty stage is concerned. As such the researcher managed to access the correct population of the study.

Table 4: The gender of study respondents

The Sex of study respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	46	40.0	40.0	40.0
	Female	69	60.0	60.0	100.0
	Total	115	100.0	100.0	

Source: Primary data, 2024

The finding presented in table 4 above unveiled that 46 (40%) of the study respondents were male respondents while 69 (60%) were female. This finding mirrors the ideal structure of the school population in which the proportion of female where more than that of the male, but importantly, the participation of both male and female deaf adolescents means that the experiences of both sexes were captures as far as accessing SRH is concerned

Table 5: Class level of the respondents

Class level of the respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary 5	14	12.2	12.2	12.2
	Primary 6	54	47.0	47.0	59.1
	Primary 7	39	33.9	33.9	93.0
	Others	8	7.0	7.0	100.0
	Total	115	100.0	100.0	

Source: Primary data, 2024

In reference to the study findings presented in table 5 above, it is revealed that 54(47%) of the study respondents were those from primary six (P.6), 39 (33.9%) of the respondent were those from primary 7 (P.7), 14 (12.2%) of the respondent were those from primary (P.5) and lastly 8 (7%) of the respondent were those categorized as others. The category others included the

respondents who had their class level not captured during the data collection process. From the findings above, it can be deduced that majority of the respondents were adolescents in upper primary schools. This presupposes that this category are pupils who understands and can explain their experience in accessing SRH services at the school with utmost confidence as opposed to if they were younger than this age.

Table 6: Understanding and Knowledge of SRH

Understanding and Knowledge of SRH					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Others	1	.9	.9	.9
	Yes	112	97.4	97.4	98.3
	No	2	1.7	1.7	100.0
	Total	115	100.0	100.0	

Source: Primary data, 2024

In regarded to the table 6 above, the study finding revealed that out of the 115 respondent who took part in the study, 112 (97.4%) constituted category of respondent who demonstrated knowledge of both definition and interpretation of the term SRH. This also implies that the researcher managed to collect information from knowledgeable study participants as far as the nature of SRH is concerned.

4.3 Sexual Reproductive Health needs of the in-school deaf adolescents

This section present study findings about the first specific research objective which was to identify SRH needs among in-school deaf adolescents in Uganda school for the deaf and Mulago school for the deaf.

Table 7: Sexual reproductive needs of the study respondents

Sexual reproductive needs of the study respondents				
		Responses		Percent of Cases
		N	Percent	
Sexual Reproductive needs	SHP	102	14.9%	88.7%
	MHM	100	14.6%	87.0%
	Testing STI	83	12.2%	72.2%
	Awareness	98	14.3%	85.2%
	Counseling	101	14.8%	87.8%
	Education	84	12.3%	73.0%
	Life skills	115	16.8%	100.0%
Total		683	100.0%	593.9%

Source: Primary data, 2024

The results in table 7 above were solicited from the study respondents when they were asked to tick which of the varied SRH needs strongly appealed to their needs among the various options provided. In response, 101 (14.9%) ticked provision of sensitive counseling sessions, 98 (14.3%) ticked sensitization or awareness creation as their preferred SRH needs, and (12.2%) ticked provision of testing for pregnancy and STI's as their preferred SRH needs.

It is important to note that most respondent ticked more than one of the presented options that is why the total response resulted into 683 which appears far more than the sample size of 115. This demonstrated that the deaf adolescents had varied and more than one type of SRH needs that they preferred could be addressed.

4.4 Availability of SRH services at School

This section focuses on presenting study findings on the second specific study objective which was to analyze the available sexual and reproductive health services provided to the in-school deaf adolescents at Uganda school for the Deaf and Mulago School for the deaf in Uganda.

Table 8: Availability of SRH services at school

Availability of SRH services at school					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	2	1.7	1.7	1.7
	Yes	102	88.7	88.7	90.4
	No	11	9.6	9.6	100.0
	Total	115	100.0	100.0	

Source: Primary data; 2024

According to result presented in table 8 above in which the researcher inquired from the respondents whether they receive SRH services from school, 102 (88.7%) of the respondents indicated that they receive SRH services while at school, while 11 (9.6%) of the respondents indicated that they do not receive SRH services while at school. The result also captured 2 (1.7%) of the respondents who did not provide a response to the above presented question.

Table 9: Types of available SRH services at schools

Types of available SRH services at schools				
		Responses		Percent of Cases
		N	Percent	
Availability of SRHS	MHM	95	23.8%	93.1%
	Testing	12	3.0%	11.8%
	Training	89	22.3%	87.3%
	Sick Bay	43	10.8%	42.2%
	Information	70	17.5%	68.6%
	Behavioral	90	22.6%	88.2%
Total		399	100.0%	391.2%

Source: Primary data, 2024

The results in table 9 above disclosed the findings in which the study respondents were asked to tick the type of SRH services they get while at school. In response, 70 (17.5%) ticked interpreted SRH education and information service, 43 (10.8%) ticked sick bay services at school and 12 (3%) of the respondents specified testing and counseling for pregnancy and STIs at school as some of the SRH services provided at the school accordingly.

4.5 The challenges faced by in-school adolescents in accessing SRH services

One of the aspects that prevent access to SRH services across all population are the challenges that the service consumers (adolescents in this case) face in accessing the various SRH care services. The researcher ventured to understand some of the challenges in-school deaf adolescents face in accessing SRH care services while they are at school. This thematic area captures their specific objective of the study which was to explore the various challenges experienced by in-school deaf adolescents in accessing friendly SRH services.

Table 10: Challenges in accessing SRH services

Challenges in accessing SRH services				
		Responses		Percent of Cases
		N	Percent	
Challenges	Long waiting time	91	19.1%	79.1%
	Poor quality service	65	13.6%	56.5%
	Costs involved	80	16.8%	69.6%
	Low self esteem	37	7.8%	32.2%
	Lack awareness	72	15.1%	62.6%
	Language barrier	60	12.6%	52.2%
	In accessibility to friendly SRHS	45	9.4%	39.1%
	Privacy	27	5.7%	23.5%
Total		477	100.0%	414.8%

Source: Primary data, 2024

According to the result in table 10 above, the study findings concerns the challenges deaf adolescents experience in accessing SRH services while at school. In response, 80 (16.8%) of the respondents indicated that some of the SRH care services comes at a cost which scare them from

utilizing them, 72 (15.1%) reported lack of awareness about comprehensive SRH services, 65 (13%) of the respondents indicated poor quality services, and 60 (12.6%) indicated language barrier as some of the key challenges that negatively affects them in accessing and utilizing SRH services at school.

4.5.1 Bivariate analysis

The researcher performed a bivariate analysis and the results are as presented below.

4.5.2 The relationship between Awareness and Sex

The table below shows the relationship between awareness and sex of the study respondents

Table 11: Cross tabulation between Awareness and Sex

Cross tabulation between Awareness and Sex				
		Awareness/ Sensitization		Total
		No	Yes	
Sex	Male	5	41	46
	Female	12	57	69
Total		17	98	115

Source: Primary data, 2024

According to the table 11 above, more female than male indicated sensitization and awareness about sexual reproductive health as their topmost priority needs of SRH services while in school. In comparison, a considerate number of male deaf adolescent (41) indicated sensitization and awareness about SRH as their topmost priority needs of SRH services while in school

The relationship between Age and Menstrual hygiene management

Table 12: Cross tabulation between MHM and Age

		MHM		Total
		No	Yes	
Age	15	9	63	72
	16	5	28	33
	17	0	8	8
	19	1	1	2
Total		15	100	115

Source: Primary data, 2024

According to the table 12 above, more young deaf adolescents aged 15 indicated menstrual hygiene management (MHM) on SRH as their top priority needs of SRH services while in school, and followed by deaf adolescent aged 16 years (28) who also indicated counseling services as their priority needs for SRH services

4.5.3 The relationship between counselling and Age

Table 13: Counseling and Age

		Counseling and Age		Total
		No	Yes	
Age	15	7	65	72
	16	4	29	33
	17	3	5	8
	19	0	2	2
Total		14	101	115

Source: Primary data, 2024

According to the table 13 below, more young (65) deaf adolescent aged 15 indicated counseling as their top priority needs of SRH services while in school, and followed by deaf adolescent aged 16 years (29) who also indicated counseling services as their priority needs for SRH services

4.5.4 Multivariate analysis

The researcher also performed a multivariate analysis with the view of understanding the nature of relationships between and among some of the most significant variables of interest in the study.

Table 14: Coefficient correlation analysis

Coefficient correlation analysis						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	SHP	.273	.163	.173	1.673	.097
	MHM	-.513	.134	-.346	-3.836	.000
	STI	-.004	.112	-.003	-.034	.973
	Awareness	-.049	.142	-.035	-.347	.730
	Counseling	.477	.135	.312	3.530	.001
	Education	-.029	.101	-.026	-.290	.772
a. Dependent Variable: language.						

Source: Primary data, 2024

According to table 14 above, the independent variables; testing for pregnancy and STI (0.973), Awareness/sensitization of SRH issues (0.730) and SRH education/ information (0.772) all showed a strong positive relationship with the dependent variable language barrier in accessing SRH services. This implies that a positive increase in the dependent variable (language barrier) leads to a proportionate positive increase in the desire to test for pregnancy and STI, awareness/sensitization about SRH issues and education/ information about SRH.

4.6 Key Informant Responses on Sexual and Reproductive Health Needs and Services for in School Deaf Adolescents

In order to provide a comprehensive answer to the research questions posed in chapter one of this study, the researcher under took an in-depth interview with some key informants from the two identified schools; the key informants included the head teachers, senior female and senior male

teachers, the matrons and in house mothers. The result of the in-depth interview is presented along the identified and developed themes as below.

4.6.1 The needs of in-school deaf adolescent pupils

The researcher asked the key in-formants based on their knowledge and experience to provide information about what they think the deaf adolescents needed most as far as SRH is concerned. In response the following were provided;

The key informant indicated that both adolescent boys and girls need to be properly and continuously sensitized on critical issues relating to SRH. The key informant further suggested that the sensitization should include giving appropriate, factual and correct information on SRH to the deaf adolescent. One of the key informant said

“issues of sexual education is a sensitive matter, when passing sexual related information to the deaf adolescent, you must be careful and ensure you pass on an informed information otherwise you will mislead the children into dangers”.

Some of the elements pointed out about SRH sensitization included the provision of appropriate sex education, various body change awareness and their meanings. Furthermore, it was revealed that the adolescent need to be counseled and guided on sexual behaviors in order to alert them from the dangers of indulging in risky sexual behaviors.

The key informants also disclosed that the deaf adolescent needed regular and free checkup services on STIs and pregnancy for girls. One of the needs severally stated by the key informants included the provision of sanitary pads for the girls. They noted that most of the girls come from humble and poor background as such most of them cannot easily afford regular provision of pads to keep them safe and healthy during their menace. On top of provision of the pads, it was further suggested that girls needed to be provided exchange rooms where they can safely change their pads and clothes when necessary to help maintain privacy and secrecy.

Another issue that was pointed out by the key informants is that all parents of deaf adolescent pupil needed get involved in handling SRH of their children. This they indicated that the parents can do it by providing parental guidance on various SRH issues, but also that the parents needed to receive

trainings on how to handle children with terminal illnesses like HIV/AIDS and STIs. The parenthood was extended to the in house parents within the schools who also must be trained on SRH issues.

Key informants also suggested that the deaf adolescent children needed to exercise and maintain high level of discipline citing that indiscipline is very costly to the life of an adolescent as it could ruin their education life journey completely. The head teachers noted that discipline is very important while they are at school, and that they should learn to respect everyone including the teachers, guardians, teaching and supportive staff members at school.

4.6.2 Challenges faced by deaf adolescent in accessing SRH services.

The key informants were also asked to cite some of the challenges that they thought of knew that deaf adolescents experienced especially in accessing SRH services. In response, they observed the following;

One of the challenges that was severally mentioned by all they key informants was the lack of parental involvement in exercising SRH issues about their children. One key informant indicated

“parents do not want to talk about sex and sexual life of their children with the children, some parents thinks it is in appropriate to talk about sexual issues with their children and this is a big mistake as we are all stakeholders in this sexual reproductive health matters”.

The key informants indicated that some parents were still culturally held not to openly talk about SRH issues with their children thus such a trajectory endangers the lives of the deaf adolescents. The parental responsibility also included providing constructive guidance on SRH matters to their children; this responsibility should also be provided by teachers and guardians who assume parental roles to the deaf children especially while they are at school.

The key informant also indicated a very low and limited level of education about SRH among deaf adolescent ensured that they received very inadequate awareness specifically on the issues associated with SRH. The key informant noted that the poor education could have been occasioned by the inherent communication challenges between the deaf adolescent and other members of the society that are not deaf.

4.6.3 Proposed way forward about the plight of the deaf adolescent

In light of the needs, services provided and the challenges experienced by the in-school adolescent deaf children, the researcher asked the key informants to suggest the most suitable ways to help deal with that issue; in response, they indicated the following;

The key informants suggested that overall the schools and parents need to continuously improve on offering counseling services to the concerned deaf adolescent. The key informant also designated non-teaching staff and teachers should be engaged on this aspect to build bonds with the children so as to help them easily when in trouble. Other than those mentioned above, parental involvement in SRH issues of their children was also proposed, and employment of trained counselor at school to counsel adolescent deaf pupils on S.R.H issues.

Secondly, it was suggested that the schools needed to create a friendly and befitting sick bay in the schools to be used specifically by the girls when in excessive pain during their menarche. The sick bay also must be filled with competent and well trained nurses at the schools to help in among other things doing pregnancy test and STIs at school especially when the pupils are coming back to school from home.

Thirdly, it was further proposed that the schools should periodically organize for seminars on that specifically focuses on SRH education in the schools. And also other community gathering places like praying places (Church, Mosques, and Cathedrals). On top of seminars, it was further proposed that things like talking compound on messages about prevention of STIs. Is abstinence, life skills should be planted and finally that the deaf adolescent should be given secret information box to post their secrets concerning sexual reproductive health

CHAPTER FIVE

SUMMARY OF FINDINGS AND DISCUSSIONS

5.1 Introduction

This fifth chapter of the research undertaking presents summary of key findings and discusses the findings as well. The findings are presented in a systematic way according how the study objectives were framed but also in the order in which the findings were presented. The summary of findings is discussed using a comparative analysis model with other study findings in several jurisdictions but on the same thematic area around municipal solid waste management.

5.2 The various SRH needs of in-school deaf adolescent

In the process of carrying out data collection, the researcher collected some demographic data about the study respondents which the researcher considered them as vital elements of this study. As such some of the basic background information revealed the following information.

5.2.1 Summary of demographic variable

The study findings disclosed that majority of the study respondents were deaf adolescents aged 15 and 16 year olds. The study noted that most adolescents with hearing disabilities start losing their hearing ability at tender age mostly due to predisposing factors including taking strong medications for treating other health conditions.

The study also found that there were more deaf adolescent females compared to their male counterparts. It must be noted that in Uganda, generally the population of women out numbers that of men, as such it is not surprising that such finding is unearthed. Important to emphasis is the fact that this study finding is associated with Shukla, et al (2020) in which a systematic review undertaking disclosed that several studies found an effect modification of gender such that among women, hearing loss was more strongly associated with loneliness and social isolation than among men. The systematic study findings above suggest that hearing loss affects even other aspects of human life other than hearing loss itself. For instance, the social isolation case pointed out above signifies a sense of low self-esteem for the deaf adolescents. In regards to the evidence from a systematic review by Ganle, et al (2020), one of the barriers facing persons with hearing disability

in accessing sexual and reproductive health services in sub-Saharan Africa was individual level barriers of which low self-esteem was amongst them.

5.3 Sexual reproductive health needs deaf Adolescents

In regards to the first specific research objective which was to identify SRH needs among in-school deaf adolescents in Uganda school for the deaf and Mulago school for the deaf, the study finding revealed that 16.8% of the respondents ticked the provision of life skills like self-esteem, positive behaviors, decision making as their preferred SRH needs. There are many studies whose findings are very similar with this finding, for instance according to Limaye (2020), female adolescents with hearing impairment worked very hard to fulfill their dream career in skill development. Furthermore, Toe et al (2020) whose study found out that social skills training has improved self-concept of teenage mothers leaving with hearing disability. In summary the above study finding confirms that hearing disability is not the end of human ability to learn new things and develop their potentials; this explains perhaps why deafer adolescence should consider skill enhancement education path ways.

In this study, the respondents indicated provision of school health program (SHP) as their preferred SRH needs. This is partly because accessibility of such programs within school premises would be easier compared to out of school settings. This study finding is similar to the qualitative study by Nketsia, et al (2022) in which through in-depth interviews, most parents revealed their dissatisfaction in not providing enough information to their deaf children on matters of SRH due to communication barrier, however the parents commended the schools from which their children were learning about SRH issues. Similarly, Suariyani, et al (2020) findings revealed that out of school deaf adolescents had little knowledge of contraceptive methods compared to their in-school counterparts. From the aforementioned findings, it can be logically concluded that the in-school deaf pupils have a comparative advantage and chance of learning from schools about SRH issues.

This study further disclosed that a number of the respondents indicated provision of sensitive counseling sessions as their preferred SRH needs. On matters pertaining to SRH, counseling is one of the key factors through which adolescent generally find SRH therapies from. According to Adzovie&Adzovie (2022), it was revealed that mothers were the most trusted sources of SRH information to adolescents. However, it was further noted that deaf adolescents revealed that their

source SRH information were mostly from their peers. This study suggests that provision of proper counselling to the deaf adolescents at school is vital in achieving sustainable SRH services for that special category of people with hearing disability.

The study also revealed that deaf adolescent pupils desire to have sensitization or awareness creation program as one of their SRH needs at school premises. A lot of research within menstrual hygiene management area which in other words forms part of the SRH package has been widely studied, according to Rajendran (2020) it was revealed that good and positive menstrual hygiene management triggers women's health, trust and self-esteem and is linked to gender equality and fundamental human rights. These aspects of SRH are very necessary for all women especially the adolescent deaf ones.

The study findings further disclosed that the participants indicated that part of the SRH needs was to have a provision of testing for pregnancy and STI's. This moves of testing aims at dealing with other sexual related illness that may not have discoursed otherwise. In fact, according to the study report by Senayah, et al (2019), deaf adolescents requested that such health care services should not only be done to in school pupils but also in the general communities at large.

5.4 Availability of SRH services at school

This section focuses on presenting study findings on the second specific research objective which was to analyze the available sexual and reproductive health services provided to the in-school deaf adolescents at Uganda school for the Deaf and Mulago School for the deaf in Uganda. In response, the study disclosed that 88.7% of the respondents indicated that they receive SRH services while at school; in essence this was a confirmatory proposition in which the pupils were confirmed that SRH program was being promoted at school.

5.5 Types of available SRH services at school

The results under this thematic area sheds some lights on the type of SRH services that is provided by the two schools to the in-school deaf adolescent students. In summary the findings reveal a positive commitment concerning how the two studied schools seriously took the health of their adolescent population.

To their knowledge, the study respondents reiterated that menstrual hygiene management (MHM) was the top SRH services provided at their respective schools. This study revelation can be corroborated with the study discussions above about menstrual hygiene management. However, the key informants in this study further revealed that both adolescent boys and girls needs to be properly and continuously sensitized on critical issues relating to SRH including MHM.

The key informant further suggested that the sensitization should include giving appropriate, factual and correct information on SRH to the deaf adolescent. Some of the elements pointed out about SRH sensitization included the provision of appropriate sex education, various body change awareness and their meanings. According to Chinyama, et al (2019) it was revealed that the adolescents need to be counseled and guided on sexual behaviors in order to alert them from the dangers of indulging in risky sexual behaviors.

In this study, further findings revealed that the respondents indicated behavioral change communication as another SRH service rendered within the school confines. While interviewing the key informants, they further suggested that the deaf adolescent children needed to exercise and maintain high level of discipline citing that indiscipline is very costly to the life of an adolescent as it could ruin their education life journey completely. The head teachers noted that discipline is very important while they are at school, and that they should learn to respect everyone including the teachers, guardians, teaching and supportive staff members at school. This finding is similar to Strassman, B. K., Marashian&Memon (2019) in which it was recommended that discipline must be taught in all academic undertaking including the disabled in order to have a professional career in their near future.

This study also revealed that adolescent wish to have sick bay services at school and with testing and counseling for pregnancy and STIs at school as some of the SRH services provided at the school accordingly. In comparison, the key informants also disclosed that the deaf adolescent needed regular and free checkup services on STIs and pregnancy for girls. One of the needs severally stated by the key informants included the provision of sanitary pads for the girls. They noted that most of the girls come from humble and poor background as such most of them cannot easily afford regular provision of pads to keep them safe and healthy during their menace. In comparison, a study by Crankshaw &Gumede (2020) disclosed that there was a complex

interaction between menstrual-related challenges and the experiences of deaf adolescent female learners. This finding suggest that the presence of a sick bay with all its facilities and human resource could play a vital role in helping the girls deal with their SRH needs of MHM.

5.6 The challenges faced by in-school adolescents in accessing SRH services

In regard to the third specific objective which was to explore the various challenges experienced by in-school deaf adolescents in accessing friendly SRH services, the study findings disclosed that the respondents cited long waiting hours at SRH service point as one of the biggest challenge. This could arise due to the fact that there are many people that get SRH services from the facilities or the human resource handling the issues of SRH may not be well qualified. According to a study by Gausman,et al (2021), it was reported that bad attitude by nurses and other health workers towards SRH seeking clients played a great role is discouraging young people from accessing and utilizing the SRH services at that hospitals.

Study respondents disclosed that some of the SRH care services come at a cost something that scares them from utilizing the services. This study finding relate with Eremutha & Gabriel (2019) in which young adult stopped utilizing SRH care services from government hospitals because of the hidden costs that are involved in accessing the healthcare service. Furthermore, this study respondent indicated that their lack of awareness about some of the various SRH services hinders them from consuming them. The above report was corroborated by the key informant who reiterated that low and limited level of education about SRH among deaf adolescent ensured that they received very inadequate awareness specifically on the issues associated with SRH. The key informant noted that the poor education could have been occasioned by the inherent communication challenges between the deaf adolescent and other members of the society that are not deaf (Hindley, 2019).

This study also acknowledges that poor and low quality services on top of poor attitude by the health workers also scares them from accessing SRH services Gausman, et al (2021). One of the leading and key challenges cited by the deaf adolescent in accessing SRH services is the problem of language barrier. According to Baratedi, et al (2022), when medical practitioners cannot talk to deaf people due to their mute language style, they do not end up getting medication. In relation to the above, all the key informants mentioned that lack of parental involvement in exercising SRH

issues about their children. The key informants indicated that some parents were still culturally held not to openly talk about SRH issues with their children thus such a trajectory helped to endanger the lives of the deaf adolescents. The parental responsibility also included providing constructive guidance on SRH matters to their children; this responsibility should also be provided by teachers and guardians who assume parental roles to the deaf children especially while they are at school.

The above presented challenges like language barrier are unique to the deaf adolescents which require special attention in order to be able to help them out of this danger of not accessing or utilizing SRH services brought to them at the schools where they study from.

5.7 The result from cross tabulation results

The researcher preferred to perform a cross tabulation model analysis over Pearson bivariate model analysis due to the type of data that was collected. According to Campbell (2016), it is quite apparent that cross tabulation can be statistically meaningful if one data (variable) is nominal and the other is nominal or ordinal, but also in cases where both variables are ordinal. However, according to scholars like Obilor& Amadi (2018), bivariate (Pearson correlation) model analysis can best be done if both variables are measured as either interval or ratio. In regards to this study, the researcher collected nominal data though technically presented as ordinal variable as depicted through the Likert scale response structure, thus cross tabulation is the most befitting model of analysis with this kind of data.

The researcher performed some cross tabulation model analysis to establish relationships between some key variables of interest and the result is provided as indicated below;

The researcher cross tabulated the one of the demographic variable (sex) with a dependent variable (sensitization), the result disclosed that in fact more female than male respondents in the study indicated that sensitization and awareness about SRH is their top priority needs of SRH services while in school. This finding confirms the notion that naturally women are very cautious about their health than men; this also means that in case they have any pressing issues concerning their SRH, they would be more willing to know more about it compared to men. Another cross tabulation was performed to establish the relationship between the demographic variable age and another variable of interest, thus the finding reveal that more young deaf adolescent aged 15 years

indicated menstrual hygiene management (MHM) on SRH as their top priority needs of SRH services while in school. This finding forms what has been discussed above.

The researcher also performed a multivariate analysis between the independent variable challenges affecting the deaf adolescent in accessing SRH (language barrier) against independent variables (testing for pregnancy and STI, Awareness/sensitization of SRH issues and SRH education/information). The finding disclosed that testing for pregnancy and STI (0.973), Awareness/sensitization of SRH issues (0.730) and SRH education/ information (0.772) all showed a strong positive relationship with the dependent variable language barrier in accessing SRH services. According to Winarsih & Wijayasari (2020), this infers that that a positive increase in the dependent variable of interest (language barrier) leads to proportionate positive increase in the desire to test for pregnancy and STI, awareness/sensitization about SRH issues and education/information about SRH.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

In this last chapter, the researcher presents key study findings from previous chapters upon which conclusions will be made. But most importantly, the associated recommendations are drawn from the summary of the study which shall be presented based on the specific study objectives in a chronological order.

6.2 General Conclusions

Majority of the study respondents were adolescents who were literally in their mid-teens (15 and 16). The study also found that there were deafer adolescent female compared to their male counterpart.

6.3 SRH needs of in-school deaf Adolescents

In regards to the first specific research objective which was to identify SRH needs among in-school deaf adolescents in Uganda school for the deaf and Mulago School for the deaf, the study finding revealed that 16.8% of the respondents identified, life skills, provision of school health program, provision of sensitive counseling sessions as their preferred SRH needs the desire to be sensitized to have a provision of testing for pregnancy and STI's.

Also majority of the respondents indicated that they receive SRH services while at their schools; in essence this was a confirmatory proposition in which the pupils were confirming the program being promoted at school.

6.4 Types of available SRH services at school

Menstrual hygiene management (MHM) as the top SRH services provided at school. Both adolescent boys and girls need to be properly and continuously sensitized on critical issues relating to SRH including MHM.

The study further revealed that the respondents indicated behavioral change communication as another service within the confines of SRH that is provided at the school.

The study also revealed that adolescent wish to have sick bay services at school and with testing and counseling services for pregnancy and STIs at school

6.5 The challenges faced by in-school adolescents in accessing SRH services

In regard to the third specific objective which was to explore the various challenges experienced by in-school deaf adolescents in accessing friendly SRH services, the study findings disclosed long waiting hours at SRH service point as one of the biggest challenge.

Study also disclosed that some of the SRH care services come at a cost something that scares them from utilizing the services.

This study also acknowledges that poor and low quality services on top of poor attitude by the health workers also scares them from accessing SRH services.

One of the leading and key challenges cited by the deaf adolescent in accessing SRH services is the problem of language barrier.

The lack of parental involvement in exercising SRH issues about their children. The key informants indicated that some parents were still culturally held back not to openly talk about SRH issues with their children

6.6 The result from cross tabulation results

The result disclosed that more female than male respondents in the study indicated that sensitization and awareness about SRH is their top priority needs of SRH services while in school.

Another cross tabulation found that more young deaf adolescent aged 15 years indicated menstrual hygiene management (MHM) on SRH as their top priority needs of SRH services while in school. This finding forms what has been discussed above.

The Pearson correlation analysis disclosed that testing for pregnancy and STI, Awareness/sensitization of SRH issues and SRH education/ information all had a strong positive relationship with the dependent variable of language barrier in accessing SRH services.

6.7 Study recommendations

In this subsection, the researcher provides very insightful recommendations that the two school for the deaf in this study and other stakeholders can adopt in order to help in dealing with the serious

problems of SRH issues affecting the adolescent deaf people. The recommendation below is informed by the study findings only and includes the following;

The study found that life skills, provision of school health program, sensitive counseling sessions are the preferred SRH needs of the in-school deaf adolescent pupils. In this regard, the researcher strongly recommends that the government should pass laws and policies detailing and categorizing these issues such that all schools teaching deaf pupils can adopt them.

The study found that SRH services were being promoted at schools for the deaf, in this regards the researcher recommends to the schools to cement a comprehensive implementation of the same program while reaching out to all stakeholders to participate to ensure sustainability.

The SRH services that is most prevalent was the Menstrual hygiene management (MHM), the researcher recommends that the schools take initiative to include the boy child, parents and other relevant stakeholders into the program in order to provide an enabling environment for the girl child to study and excel.

The study found that SRH consumers take long waiting hours, there are hidden costs in accessing SRH services, poor and low quality services, poor attitude by the health workers in accessing SRH services, in response the researcher recommends the schools together with the government should ensure that SRH services are professionally rendered and appropriate punishments be levied on those that violates human rights and policy directives about accessing SRH services.

The study found that deaf experienced problem of language barrier; the government and the school should invest in some genuine language interpreters, but also the deaf should be subjected to proper learning processes to easy the communication barrier issue.

In all SRH services, parents of the deaf children must get involved. They should be subjected to learn some sign language in order for them to be able to speak to their children in various issues including SRH.

6.7 Recommended areas for future research

The researcher recommends some possible areas that must be further researched in order to inform the best policies for managing SRH issues among deaf population generally. These

recommendations arose due to the fact that the researcher was constrained to the scope of the study which did allow these recommended areas to be studied.

As such the following are recommended areas for further studies;

- a) To examine the various family support systems for the deaf adolescent pupil both those within and out of school.
- b) To perform a comparative analysis of deaf adolescent out of school in rural areas with those in urban areas in accessing RSH services.
- c) A comparative analysis between the needs of deaf and sound hearing adolescents about accessing SRH care.

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APPENDICES

APPENDIX I: TIME FRAME WORK AND BUDGET ESTIMATES.

Activity	Period	BUDGET
Proposal writing (printing and binding)	April 2022-May 2022	200,000/=
Developing Questionnaire	Dec, 2022	60,000/=
Collection of data (Compensation of one sign language interpreter and one research assistant)	May, 2022 ,,	350,000/= 300,000
Data entry and analysis	May, 2022	1,000,000/=
Report writing	May-June, 2022	100,000/=
Report printing and binding	July, 2022	100,000/=
Report Submission	July, 2022	20,000/=
Dissemination of report	August 2022	100,000/=
TOTAL		2,230,000

APPENDIX II:

ASSENT FORM (Deaf Adolescents)

I have assented to participate in a study aimed to identify SRH needs, the available SRH services and the challenges in accessing these services among in-school deaf adolescents in Uganda school for the Deaf Ntinda and Mulago School for the deaf.

Procedure:

1. I understand that I will be asked questions about Sexual and Reproductive Health (SRH) needs, availability of SRH services, and the challenges experienced in SRH services
2. I will be taking part in an individual interview that will last approximately 1 hour or less.

The interview will be interpreted in Uganda Sign language by one of the research assistants who understand English and Ugandan sign language and some pictures will be taken, for reference at later dates to inform the research report. The pictures will be safely and securely handled for that purpose. I understand that the information from the study will be kept by the researcher and other persons that they deem fit and proper for information and not commercial purposes. The following ethics will be employed in the study:

Inform respondents the purpose of the study: The purpose of this study which is to provide information on adolescent SRH needs and services for in-school deaf adolescents in Uganda school for the deaf and Mulago School for the deaf in Kampala for an informed decision to intervene the situation by the relevant authorities will be clearly explained prior to commencement of the interview. Before the interview starts, all questions will be interpreted to the participant in sign language by an interpreter and the participant will be informed what is expected of this study and will be asked to assent to participate in the study, his/her decision whether to participate in this study or not will be final.

- i. **Benefits:** The information you will provide will help administrators and planners keep the deaf adolescents SRH needs and services in view in developing schemes and programs for the access to adolescent SRH services in order for the authorities to be able to design friendly SRH programs that best suit the special needs of in-school deaf adolescents in Kampala hence increasing access to SRH services.
- ii. **Voluntary Participation:** This study will be voluntary and no single child will be forced to participate. During the whole period the researcher will be keen to ensure that no act of giving any kind of incentive to a child in order to solicit for their participation is portrayed
- iii. **Minimum Risk consideration:** I do not anticipate any risk associated with this study; however some interview questions may feel a little embarrassing. However all the information you give will be kept confidential. Care will be taken with victims to minimize the risk that recounting their experiences could further traumatize them or put them at physical risk. If you are distressed as a result of taking part in the study, you will be supported to access counseling or support from an appropriate agency.
- iv. **Confidentiality:** Children will be assured of confidential nature of the interviews as a way to establish trust. Access to data will be restricted to only the researcher and people

involved in this study. In this sense, no actual name of a child will be recorded and data will be used for only the purpose of the study.

- v. **Zero expectation environments:** During the time of conducting this study, attention will be paid not to raise any expectation from the children by refraining from anything that will be translated to these children as a promise.
- vi. **Questions and Problems:** Lastly, in case of any concerns or queries regarding your participation in this study, please feel free to contact: **The Principal Investigator: Ajete Dorothy: 0774807299**
- vii. **Research Ethics Concerns.**

This Research was reviewed and Approved by Uganda Christian University Research Ethics Committee (UCU-REC) which is an accredited body by Uganda national council for Science and Technology (UNCST) registered UG REC-026. If you have any research ethics or your rights and welfare concerns, kindly contact Chairperson Prof. Peter Waiswa 0772405357, pwaiswa@musph.ac.ug or Secretariat Mr. Osborn Ahimbisibwe 0775737627, oahimbisibwe@ucu.ac.ug

The above information has been interpreted to me in sign language and I fully understand the contents. I hereby agree to take part in the study.

Participant

Witness

Signature/ thump print.....

Signature.....

Name.....

Date.....

Date.....

INFORMED CONSENT FORM

(Head Teacher or any other person in position to consent on behalf of the in-school Deaf Adolescents)

I have been asked to Consent on behalf of deaf adolescents in a study that aims to identify SRH needs, the available SRH services and the challenges in accessing these services among in-school deaf adolescents in Uganda school for the Deaf and Mulago School for the deaf.

Procedure: I understand that they will be asked questions about Sexual and Reproductive Health (SRH) needs, availability of SRH services, and the challenges experienced in accessing SRH services. They will be taking part in an individual interview that will last approximately 1hour 30 minutes or less.

The interview will be interpreted in Uganda sign language and some pictures will be taken, for reference at later dates to inform the research report. The pictures will be safely and securely handled for that purpose. I understand that the information from the study will be kept by the researcher and other persons that they deem fit and proper for information and not commercial purposes. The following ethics will be employed in the study:

Inform respondents the purpose of the study: The purpose of this study which is to provide information on adolescent sexual and reproductive health needs and services for in-school deaf adolescents in Uganda school for the deaf Ntinda and Mulago School for the deaf in Kampala for an informed decision to intervene the situation by the relevant authorities will be clearly explained prior to commencement of the interview. Before the interview starts, all questions will be interpreted to the participant in sign language and the participant will be informed what is expected of this study and will be asked to assent to participate in the study and his/her decision whether to participate in this study or not will be final.

- i. Benefits:** The information you will provide will help administrators and planners keep the deaf adolescents SRH needs and services in view in developing schemes and programs for the access to adolescent SRH services in order for the authorities to be able to design friendly SRH programs that best suit the special needs of deaf adolescents in Kampala hence increasing access to SRH services.
- ii. Voluntary Participation:** This study will be voluntary and no single child will be forced to participate. During the whole period the researcher will be keen to ensure that no act of giving any kind of incentive to a child in order to solicit for their participation is portrayed.

- iii. **Minimum Risk consideration:** I do not anticipate any risk associated with this study; however some interview questions may feel a little embarrassing. However all the information they give will be kept confidential. Care will be taken with victims to minimize the risk that recounting their experiences could further traumatize them or put them at physical risk. If a child were found distressed as a result of taking part in the study, he/she will be supported to access counseling or support from an appropriate agency.
- iv. **Confidentiality:** Children will be assured of confidential nature of the interviews as a way to establish trust. Access to data will be restricted to only the researcher and people involved in this study. In this sense, no actual name of a child will be recorded and data will be used for only the purpose of the study.
- v. **Zero expectation environments:** During the time of conducting this study, attention will be paid not to raise any expectation from the children by refraining from anything that will be translated to these children as a promise.
- vi. **Questions and Problems:** Lastly, in case of any concerns or queries regarding this study, please feel free to contact: **The Principal Investigator: Ajete Dorothy: 0774807299**
The above information has been explained to me and I fully understand the contents. I hereby agree to give my informed consent on behalf of the deaf adolescents in my school under this study for their participation in the study.

vii. **Research Ethics Concerns.**

This Research was reviewed and Approved by Uganda Christian University Research Ethics Committee (UCU-REC) which is an accredited body by Uganda national council for Science and Technology (UNCST) registered UG REC-026. If you have any research ethics or your rights and welfare concerns, kindly contact Chairperson Prof. Peter Waiswa 0772405357, pwaiswa@musph.ac.ug or Secretariat Mr. Osborn Ahimbisibwe 0775737627, oahimbisibwe@ucu.ac.ug

Signature _____

Name _____

Date/stamp _____

INFORMED CONSENT *(For key informants)*

Introduction

Good morning/afternoon sir/Madam. My name is Ajete Dorothy, a student of Uganda Christian University Mukono, carrying out a study aimed to **identify SRH needs, the available SRH services and the challenges in accessing these services among in-school deaf adolescents in Uganda school for the Deaf and Mulago School for the deaf**

I am conducting a study on adolescent sexual and reproductive health needs and services for in-school deaf adolescents in. As a key informant in the area under study, you have been selected to give your views about it by answering a few questions. As part of this study, I therefore kindly request you to spare some time and participate in this discussion as honestly as possible. The information given will be purely for the purpose of this study which is to provide information on the SRH needs and services for in-school deaf adolescents for an informed decision to intervene the situation by the relevant authorities and the information you give will be treated with the utmost confidentiality it deserves.

Procedure: A questionnaire will be administered to you by the researcher or research assistant who will read to you the questions. A question can be read again if it is not clear to you. You will tell the researcher your answer to the questions and the interview is expected take 20 minutes or less. We shall be very grateful for your participation

Benefits: The information you will provide will help administrators and planners keep the deaf adolescents SRH needs and services in view in developing friendly SRH services and programs for the in-school deaf adolescents in Kampala that best suit them hence increasing their access to health services.

Risks and Confidentiality: I do not anticipate any risk associated with this study; however some interview questions may feel a little embarrassing. However all the information you give will be kept confidential. No one except the people involved in this study will share the information; will know your name and the date of this interview.

Voluntary consent: Your joining in the study is voluntary; you can opt not to answer any question or withdraw from the research without any conditions at any stage. You can ask questions before, during and after the interview.

Questions and Problems: Lastly, in case of any concerns or queries regarding your participation in this study, please feel free to contact: **The Principal Investigator: Ajete Dorothy: 0774807299**
Research Ethics Concerns.

This Research was reviewed and Approved by Uganda Christian University Research Ethics Committee (UCU-REC) which is an accredited body by Uganda national council for Science and Technology (UNCST) registered UG REC-026. If you have any research ethics or your rights and welfare concerns, kindly contact Chairperson Prof. Peter Waiswa 0772405357, pwaiswa@musph.ac.ug or Secretariat Mr. Osborn Ahimbisibwe 0775737627, oahimbisibwe@ucu.ac.ug

The above information has been explained to me and I fully understand the contents. I hereby agree to take part in the study.

Respondent's signature: _____ Date: __/__/__

Interviewer's Signature: _____ Date: __/__/__

APPENDIX V

QUESTIONNAIRE (DEAF ADOLESCENTS)

This questionnaire is considerate of the characteristics of these pupils whose attention span is limited. The questionnaire is kept simple and to the point.

End time for interview:

(A) Socio- Demographic Data

1. School.....

2. Class (write class in figures).....

3. Date.....

4. Sex

Male

Female

5. Age (in complete years)

Years.....

Don't know.....

(B) SRH Needs of in-school Deaf adolescents

3. What do you understand by Sexual and Reproductive Health? (Tick the correct answer

A state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.

Refers to the physiological changes that occur in early adolescence which result in the development of sexual and reproductive capacity.

7. What are your SRH needs while at school? (Multiple answers expected)

(Tick all that applies)

- School health programs
- Menstrual Hygiene Management (MHM)
- Testing for pregnancy and STIs
- Sensitization/ awareness on SRH issues
- Counseling
- Interpreted SRH Education/Information
- Life skills

(C) Availability of SRH service among in-school deaf adolescents

4. Are there SRH services in your school? (Tick what applies)

Yes

No

9. If yes, which services are offered? (Tick what applies)

- Menstrual Hygiene Management at school
- Testing and Counseling for pregnancy and STIs at school
- Life skills Training at school
- Sick bay services at school
- Interpreted SRH education and information
- Behavioral change communications (interpreted talking compound)

10. If No, where do you access SRH services? (Write the name of the places where you get SRH services from)?

Clinic

Home

Health centers

Hospital

11. In the places named above, what services do you receive from those places?

Menstrual Hygiene Management at school

Testing and Counseling for pregnancy and STIs at school

Life skills Training at school

Sick bay services at school

Interpreted SRH education and information

Behavioral change communications (interpreted talking compound)

(D) Challenges experienced by deaf adolescents in accessing friendly SRH services at school

12. What challenges do you experience in accessing adolescent SRH services at school?

- Long waiting time
- Poor quality of services
- Costs involved
- Low self esteem
- Lack of awareness
- Language barrier
- Inaccessibility to friendly health services

Privacy at school

13. What do you think can be done to address these challenges?

END

Interviewer: Please thank the Respondent

Thank you

NAME/SGNATURE.....

End time for interview:

APPENDIX VI

KEY INFORMANTS INTERVIEW GUIDE

My name is Dorothy Ajete a student of Uganda Christian University Mukono, carrying out a study aimed to find out adolescent sexual and reproductive health needs and services for in-school deaf adolescents in Uganda school for the deaf and Mulago School for the deaf

As a key informant in the area under study, you have been selected to give your views about it by answering a few questions. As part of this study, I therefore kindly request you to spare some time and participate in this interview as honestly as possible.

The information given will be purely for the purpose of this study which is to provide information on the SRH needs and services by in-school deaf adolescents for an informed decision to intervene the situation by the relevant authorities and the information you give will be treated with the utmost confidentiality it deserves.

Interview guide

1. What are the SRH needs of deaf adolescents while they are at school?
2. Which SRH services do you know are offered at school for deaf adolescents?
3. Which SRH services do you think can be offered to in-school deaf adolescents?
4. What challenges do you think deaf adolescents experience in accessing SRH services
5. What do you think can be done to improve access to friendly SRH services among in-school deaf adolescents?

Starting time _____ End time _____

Thank you for your co-operation

UGANDA CHRISTIAN UNIVERSITY

Dissertation Title: *Adolescent sexual and reproductive health needs and services for in-school deaf adolescents in Uganda school for the deaf and Mulago school for the deaf*

Student name: **AJETE DOROTHY**

Student Number: **RJ14M21/055**

Contact: 07748072299/0751068212

Date: April 22, 2024

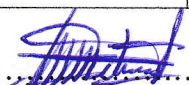
Through: Supervisor Dr. Edward Kibikyo Mukooza

Issues raised by **External, and VIVA Voce**


External Examiner	Concerns	My responses
<i>Preliminaries</i>	Under acronyms, correct KNRC and show what “K” stands for	The candidate revisited the section and provided the meaning of letter “K” to mean, Kamparingisa pg. x
<i>Chapter1: Introduction</i> Conceptual Framework	The general objectives is good but should be adjusted to be action oriented at the end of it as objectives are “SMART” and so are research questions. Chapter 1: Wide and well-presented but the conceptual frame work shall be revisited and factors like religion and cultural factors should be in the independent box.	The Candidate reworked on the section and included the action phrases (identify and examine) pg.5 The candidate reworked the conceptual framework and included the religion and cultural factors pg. 8.
<i>Methodology</i>	Labeling of table 6, should be improved to be self-explanatory	The candidate revisited the section and improved tables 1-14 for a self-narratively.

	<p>Table 7: More informative variable should be used e.g state if it is costly or unaffordable cost, e.t.c</p> <p>Table 8: Could have sex replaced by gender giving rise to male and female.</p> <p>The variable age should have age in years to be more specific in all the tables and narratives.</p> <p>On page 35, the sentence starting with the “key informant” should be corrected in terms of “boys and girls needs”.</p>	<p>explanatory narrative pg.29</p> <p>The Candidate revisited and used informative variables pg. 29</p> <p>The Candidate revisited the section and adopted the word gender pg. 29</p> <p>The candidate revisited the area and included the years</p> <p>The Candidate revisited the section and rectified the errors Pg. 35</p>
<p><i>Conceptual framework</i></p>	<p>Also further attention on use of plural for adolescent pupils not pupil in the paragraph adolescent above 4.6.2, and again under 4.6.3, 2nd paragraph, pay attention to use of plural words</p> <p>5.2.1 where the candidate is talking of “summary of demographic variable instead of variables”</p> <p>5.3: Should be sexual reproductive health needs “of” deaf adolescents and not the way it is in the book.</p>	<p>The Candidate rectified the section by replacing the word pupil with pupils throughout chapter Five.</p> <p>The candidate revisited the section and improved on the grammar (Section 5.2.1).</p> <p>The candidate revisited section 5.3 and used sexual reproductive health needs.</p>

	5.5: Should be re-visited and correctly stated paying attention to plural and singular words.	The candidate revisited the section and made corrections in regard to plural and singular (section 5.5).
VIVA VOCE	Concerns	My responses
<i>Limitation statement</i>	The limitation statement is not clear so it needs to be rewritten.	The candidate revisited the section on limitation and improved it.
<i>Sign language</i>	The sign language household be clearly shown in the study.	The candidate addressed the concern by clearly highlighting the sign language.
<i>Methodology</i>	The methods section should be clearly articulated especially samples and sampling.	The candidate revisited the section on sample size and sampling and expounded on them.
<i>Data analysis and presentation</i>	The qualitative results should be clearly shown. The student should make corrections especially the methods with supervision.	The candidate addressed the concern by indenting verbatim expressions throughout data presentation section.

Signature: 
AJETE DOROTHY

Date: 8th MAY 2024

Signature: 
DR. EDWARD KIBIKYO MUKOOZA

Date: 8th MAY 2024