THE UNIVERSITY OF ZAMBIA

PRACTICES IN DISSEMINATING HIV AND AIDS INFORMATION TO INDIVIDUALS WITH HEARING IMPAIRMENTS: A CASE OF LUSAKA URBAN DISTRICT, ZAMBIA

By

JANET MWANSA KAKUSA

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AUTHOR'S DECLARATION

I, Janet Mwansa Kakusa declare that this dissertation is my own work and that it has not been previously submitted for a master's degree at the University of Zambia or at any other University.

SIGNED:……

DATE:……

CERTIFICATE OF APPROVAL

This dissertation of Janet Mwansa Kakusa has been accepted as fulfilling the partial requirements for the award of the degree of Master of Education in Special Education of the University of Zambia.

SIGNED:……**DATE:**…….

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DEDICATION

This dissertation is dedicated to my husband Lawrence Wonani, my lovely children Siphiwe, Mwiche, Lois, Dina and Towela, my mentor and mother Eunice Namonje and Mukuka Kakusa my sister who have been a source of inspiration to me. This work is also dedicated to my late brother Louis, late dad Joel Kakusa and my late in-laws, Uncle Frank, Uncle Wilfred, Atata and Amama, you are surely missed.

To the marginalised Individuals with Hearing Impairments who have been forgotten in issues that deal with the dissemination of HIV and AIDs information in Zambia and globally, I hope that this piece of work may prompt policy makers to include multi-sensory information in the education system, communities, medical field and media by making sign language a must in all HIV and AIDS programmes for the individuals with Hearing Impairment.

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Above all I thank 'JEHOVAH-ROHI' because I cast all my burdens upon him during this programme and He has seen me through.

ABSTRACT

This study sought to investigate practices of disseminating HIV and AIDS information to individuals with hearing impairments. The study was guided by four objectives; to establish the mode of disseminating HIV and AIDS information to individuals with hearing impairment, to determine how knowledgeable individuals with hearing impairments were about HIV and AIDS; to identify the challenges faced by individuals with hearing impairments in accessing HIV and AIDS information, to identify strategies used to disseminate HIV and AIDS information to individuals with hearing impairments.

The descriptive survey design was used in order to obtain true comprehensive picture of the study.In this report descriptive method was used because of its usefulness in describing the situation with regards to attitudes of stake holders in practices of dissemination of HIV and AIDS information to individuals with hearing impairments. The study used both qualitative and quantitative methods of data collection. The target population in this study comprised grade eight to twelve pupils with hearing impairments from Munali Secondary schools in Lusaka district and out of school individuals with hearing impairments from Zambia National Association for the Deaf (ZNAD). The sample also included parents of children with hearing impairments, media personnel from Zambia National Broadcasting Corporation (ZNBC) and teachers from Munali Secondary School. Data were collected using structured questionnaires and semi-structured interview guides. Purposive sampling technique was used to pick a sample of sixty-eight(68) respondents, which comprised of twenty-seven (27)learners with hearing impairments; twenty (20) out of school youths with hearingimpairments, nine (9) teachers, five (5) parents and five (5) mass media personnel.

The results revealed that the modes of disseminating HIV and AIDS information to individuals with hearing impairments were through drama, peer education, television and life skills. The study also brought to light the fact that individuals with hearing impairments were knowledgeable about HIV and AIDS but they lacked detailed information about the pandemic. It was revealed that individuals with hearing impairments did have access to information through the radio, television and newspaper and other literature with comprehensive language. In terms of the strategies used in disseminating HIV and AIDS information, the findings were that television, the teachers, books and friends were the source. As a result of the communication

barrier the strategies used in disseminating HIV and AIDS information established that individuals with hearing impairments had greater reliance on relatives, family members, and friends for information.

The following recommendations were made; detailed information on HIV and AIDS to be disseminated to individuals with hearing impairments through a familiar language which is sign language. Multi-sensory methods should be used in the sensitive topics using various pictorial methods, videos, drama and role-play. Furthermore disseminators of information on HIV and AIDS should use more visual aids when disseminating information on HIV and AIDS to individuals with hearing impairment. HIV and AIDS messages should therefore be written in adapted language to suit the needs of the individuals with hearing impairments.

CONTENTS

AUTHOR'S DECLARATION i
CERTIFICATE OF APPROVAL ii
DEDICATION iii
ACKNOWLEDGEMENT iv
ABSTRACT v
CHAPTER ONE : INTRODUCTION 1
1.0 Background 1
1.1 Purpose of the Study 11
1.2 Statement of the Problem 12
1.3 Objectives 12
1.4 Research Questions 12
1.5 Significance of the Study 12
1.6 Theoretical Framework 13
1.7 Limitation of the Study 14
1.8Definition of Terms in the Study 14
CHAPTER TWO: Literature Review 16
2.0 Introduction 16
2.1 Established Modes of Disseminating HIV and AIDS Information 16
2.2 Knowledge on HIV and AIDS among Individuals with Hearing Impairments. 24
2.3 Challenges Faced By Individuals with Hearing Impairments in Accessing HIV and AIDS Information 28
2.4 Strategies used in Disseminating HIV AND AIDS Information to Individuals with Hearing Impairments 37
CHAPTER THREE: METHODOLOGY 49
3.0 INTRODUCTION 49
3.1 Research Design 49
3.2 Target Population 49
3.4 Sampling Procedures 50
3.5 Research Instruments 50
3.6 Data Collection Procedures 52
4.0 DATA ANALYSIS 53
4.1 Ethical Consideration 53
CHAPTER FOUR: PRESENTENTATION OF FINDINGS 55

4.0 Introduction 55
4.1 Modes of disseminating information on HIV and AIDS to individuals with hearing impairment. .. 55
4.2 Knowledge by learners and out of school youths with hearing impairments about HIV and AIDS 66
4.3 Challenges Faced By the Individuals with Hearing Impairments in Accessing HIV and AIDS Information 95
4.4 Strategies used in disseminating HIV and AIDS information to individuals with hearing impairments 103
CHAPTER FIVE: DISCUSSION OF FINDINGS 110
5.0 INTRODUCTION 110
5.1 Modes of Disseminating Information about HIV and AIDS to Individuals with Hearing Impairment. 110
5.2. Knowledge about HIV and AIDS. 113
5.3 Challenges Faced By the Individuals with Hearing Impairments in Accessing HIV And AIDS Information. 115
5.4 Strategies Used In Disseminating HIV AND AIDS Information to Individuals with Hearing Impairments 119
CHAPTER SIX: CONCLUSION AND RECOMMENDETIONS 122
CONCLUSION 122
6.2 RECOMMENDATIONS 125
REFERENCES 126
APPENDIX I “Deaf Play with Deaf” Resource Paper 133
APPENDIX IISTANDARD ENGLISH QUESTIONNAIRE 136
INSTRUCTIONS 136
APPENDIX IIISTANDARD ENGLISH QUESTIONNAIRE 141
APPENDIX IV:INTERVIEW SCHEDULE FOR THE TEACHERS 146
APPENDIX V: INTERVIEW SCHEDULE FOR PARENTS 147
APPENDIX VI: INTERVIEW SCHEDULE FOR MASS MEDIA INSTITUTION ON HIV/AIDS SENSITAZATION TO THE HEARING IMPAIRED 148
APPENDIX VII:MODIFIED QUESTIONNAIRE FOR HEARING IMPAIRED PUPILS (SCHOOL) . 149
APPENDIX VIII: MODIFIED QUESTIONNAIRE FOR THE HEARING IMPAIRED YOUTHS (ZNAD 154

LIST OF TABLES

Table 3.3.1 Sample description 50
Table 4.2.1.2 Learners' Knowledge about HIV and AIDS 67
Table 4.2.1.3 HIV transmission by mosquitoes and other insects which have bitten an infected person 69
Table 4.2.1.4 HIV could be transmitted through an individual suffering from TB 70
Table 4.2.1.5 Learners knowledge on whether HIV can be cured 72
Table 4.2.1.6 Perception on treatment of HIV by having sexual intercourse with a baby 72
Table 4.2.1.7 Perception on treatment of HIV by having sexual intercourse with a virgin 73
Table 4.2.1.8 Perception on treatment of HIV by taking ARVS 73
Table 4.2.1.9 Perception on treatment of HIV by visiting witch doctor 74
Table 4.2.1.10 Knowledge on whether HIV is a preventable infection 75
Table 4.2.1.11 Knowledge on condom use 75
Table 4.2.1.12 Knowledge of VCT 76
Table 4.2.1.13 Awareness of the confidentiality of VCT results 76
Table 4.2.1.14 Knowledge on how HIV and AIDS are acquired 77
Table 4.2.1.15 Knowledge of HIV Status 78
Table 4.2.1.16 Awareness if stigma and denial both enhances the spread of HIV 78
Table 4.2.1.17 Numbers of boyfriends and girlfriends among learners with hearing impairments 79

LIST OF FIGURES

Figure 1: Relative BCC Campaign Tool: Banners, Flyers & Brochures 32
Figure 2: Ways in which HIV Does Not Spread 36
Figure 3: ZAPD Card 46
Figure 4 Learners Knowledge on Modes of Transmission of HIV 68
Figure 5 Transmission of HIV by casual contact in any place or setting. 68
Figure 6 Modes of Prevention of HIV and AIDS 71
Figure 7 Knowledge on modes of transmission of HIV 81
Figure 8 Transmission of HIV by casual contact in any place or setting 83
Figure 9 Modes of prevention of HIV and AIDS 85
Figure 10 Knowledge of HIV status 92
Figure 11 Graph: 4.4.7 Strategies used in disseminating HIV and AIDS information to the learners with hearing impairments 103
Figure 12 Source of information on HIV and AIDS by the youths 105

LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ASOs	AIDS Service Organisations
ART	Antiretroviral therapy
BCC	Behavioural Change Communication
CBH	Central Board of Health
CSO	Central Statistics Office
CRAIDS	Community Response to HIV and AIDS
DHAT	Disability, HIV and AIDS Trust
DPO	Disabled People Organisation
GALA	Gay and Lesbian Archives of South Africa
GRZ	Government of the Republic of Zambia
GNAD	Ghana National Association of the Deaf
HEART	Helping Each Other Act Responsibly Together
HIV:	Human Immunodeficiency Virus
IEC:	Information Education Communication
MOE:	Ministry of Education
MESVTEE	Ministry of Education, Science, Vocational Training and Early Education
MOH	Ministry of Health
NAC	National HIV/ AIDS/STI/TB, Council, Zambia
PTA	Parent Teacher Association
PLWHA	People living with HIV/AIDS
PLWD	People Living With Disabilities
SEN	Special Education Needs
SHIA	Swedish Handicapped International Association
SNAD	Swedish National Association of the Deaf
STIs	Sexually Transmitted Infections
TV	Television
UNAIDS	United Nations Joint Programme on HIV and AIDS
UNESCO	United Nations Educational Scientific and Cultural Organisation

ZAFOD Zambia Federation of the Disabled

ZNAD Zambia National Association of the Deaf

ZNBC Zambia National Broadcasting Cooperation

CHAPTER ONE: INTRODUCTION

1.0 Background

Population of person with disabilities was estimated at 282684 of which 5.7% (16,113) were hearing impairments (CSO, 2010). The census report further revealed that, those with hearing impairments at national level were as follows; deaf 2.5%, deaf and dumb 2.5%, dumb 1.9 % and hard of hearing 9.2 %. This population has not been spared by the scourge of HIV and AIDS.

The pandemic of the Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV and AIDS) has been a serious health and economic problem with 39.5 million people living with the HIV virus globally (UNAIDS/WHO, 2006). Sub-Saharan Africa has not been spared from pandemic with more than 22.5million people living with HIV and AIDS (PLWHA). Women constituted the majority of people living with HIV at 61% and an estimated 11 million children were orphaned by the pandemic (UNAIDS, 2007). HIV and AIDS in Zambia has been a major public and social health issue that has demanded for a more aggressive approach in order to tackle it successfully (NAC 2006).

In Zambia the HIV and AIDS pandemic has had devastating effects on children and society in general. The national prevalence rate was at 17% among persons aged between 15 and 49 years. This is among the highest in Sub Saharan Africa (NAC, 2006).This escalating prevalence level has prompted the Zambian government and civil society organizations to intensify HIV and AIDS awareness campaigns aimed at preventing the spread of the pandemic. According to National HIV and AIDS Council (2009), the basic knowledge about HIV and AIDs pandemic stands at 99% among the adult population and was mainly through print and electronic media. There was clear evidence that information is a key resource in fighting the HIV pandemic. It was reported that people not only need to know how to protect themselves but also the means of prevention. While dissemination of HIV and AIDS information was comprehensive across the population, individuals with hearing impairments have received inadequate access to HIV and AIDS related information mainly due to the modes used.

According to Kelly (2000), HIV is a virus; the Human Immune-Deficiency Virus, which weakens the body's ability to fight off infections. The virus is spread when body fluids from an infected person enter the body of an uninfected person. This occurs in three principal ways:

- Through unprotected sexual contact with an infected person and through the transfusion of contaminated blood.
- Through the shared use of sharp instruments that may carry contaminated blood (as can happen with the sharing of razor blades or the sharing of needles among injecting drug users).
- The virus can also be transmitted from an infected woman to her child during pregnancy, at the time of childbirth or through breastfeeding (mother-to-child transmission, MTCT).

NAC (2004) report described HIV as a virus which is a tiny invisible particle that works by attaching itself to a host cell. It was stated that viruses are the cause of a number of diseases, which include influenza and the common cold. NAC further indicated that HIV belonged to a class of viruses that are slow in progression and are readily transmittable. HIV therefore, attacks the immune system and destroys the biological ability of the human body to fight off opportunistic infections such as tuberculosis (TB). AIDS itself was defined in terms of how much deterioration of the immune system has taken place as seen by the presence of opportunistic infections. Infected people would do not die from AIDS, rather they would die as a result of opportunistic infections that invade the body with the breakdown of the immune system. The infected person may not show any symptoms of illness, instead they continue to look healthy and feel well while the deadly virus has remained active within the systems of the body. The result is what was known as opportunistic infections and tumours. This viral activity would make the body susceptible to the breakdown of the body's immune system thus the body will be unable to recover from other diseases. It was noted that during the period of deterioration the virus could be transmitted through body fluids from the infected person to another.

Haualand and Allen (2009) noted that it was evident that little was known about how much HIV and AIDS had affected persons with disabilities. However there was evidence that persons with disabilities were profoundly vulnerable and needed special attention on issues pertaining to HIV and AIDS. Since the advent of the HIV and AIDS pandemic a lot of campaigns have emerged on the rights of individuals with Hearing Impairments (HI).The World Federation of the Deaf (WFD) in association with the Swedish National Association of the Deaf (SNAD), held a conference with 93 countries that submitted various issues on human rights and Deaf People.

The purpose of the conference was to come up with strategies of disseminating HIV and AIDS information to individuals with hearing impairments without them being left out.

It was observed that individuals with hearing impairment have often been marginalized they and lacked literature on HIV and AIDS. The key results of the conference were that policymakers on HIV and AIDS have only concentrated on dissemination of information on HIV and AIDS to the persons who do not have challenges of hearing impairments. It was reported that the majority of the counsellors did not know sign language and had perceived individuals with hearing impairments to be at the same level as those without hearing impairments.

Haualand and Allen (2009) further revealed that individuals with hearing impairment whose natural languagewas sign language were denied the use of sign language in most situations. It was mentioned that individuals with hearing impairments had experienced discrimination in various areas of life when it came to interacting with other people because they used sign language.

During the Swedish Conference it was resolved that individuals with hearing impairments could not be educated without sign language. Therefore use of sign language interpreters, access to various areas of life should not be limited including information on HIV and AIDS awareness. However the many outcomes at the Swedish international conference under SNAD, was that a sign language dictionary would be a fundamental tool to promote and enhance the use of sign language. This meant that there was need for all individuals with hearing impairments, teachers of the learners with hearing impairment, sign language interpreters, parents of persons with hearing impairment, members of the family and the society at large needed to learn how to use the sign language dictionary. The sign language dictionarywas a useful tool for both persons with and without hearing impairments.The other outcomes of the conference was that various methods of communication such as visuals aids, drama, sign language books and videos be modified according to the needs of the individuals with hearing impairments for easier understanding of HIV and AIDS.

UNAIDS (2007), established that in recent years there have been attempts to include persons with disabilities in HIV and AIDS programmes, campaigns and services. In a study conducted in the Sub-Saharan African countries there was abundant evidence which revealed the importance

of the inclusion of persons with disabilities. From the above report there were no statistics which indicated the number of individuals with hearing impairments involved within Sub-Saharan Africa.

Despite the figures of people living with HIV and AIDS revealed in this study, globally and from Sub-Saharan countries of PLWHA, there was no special mention on how many of those had hearing impairments. These statistics were not equitable because individuals with hearing impairments had continued to lag in accessing information on HIV and AIDS. Therefore the assumption was that individuals with hearing impairments have not received information on HIV and AIDS which mostly was disseminated through print media, electronic media or orally (spoken language).

The researcher observed that there were numerous reasons for the limited attention to the linkages between HIV and AIDS and disabilities. This included the following but not limited to; the low social status frequently accorded to persons with disabilities due to discrimination, stigma, and exclusion; myths associated with illicit sex and disability; lack of awareness among policy makers, medical personnel, the advocates for HIV and AIDS, society in general: and the lack of engagement, until recently, of persons with disabilities.

In addition, Mbewe (2005) reported that illiteracy and poverty levels had contributed to high levels of the lack of access to HIV and AIDS information. The illiteracy levels obviously brought out negative discrimination for the majority of individuals with hearing impairments. In turn, there was clear indication that high illiteracy rates marginalised the majority of the individuals with hearing impairments' access to HIV and AIDS information.

A study conducted by ZNAD (2007) indicated that there were approximately 900,000 adults and children with hearing impairments in Zambia. Unfortunately they lacked extensive sensitization on HIV and AIDS. Therefore, individuals with hearing impairments also needed to be adequately informed about the HIV and AIDS pandemic in order to enable them to make informed decisions in matters related to sexual behavior.

Heward and Orlansky (1988)agreed that individuals with hearing impairments were more vulnerable to HIV infections. Therefore it is a the fact the individuals with hearing impairments were unable to access HIV and AIDS information on their own because of their inability to

speak, hear and understand many things. In order for them to grasp any concept they have relied more on sight. In this vein, the individuals hearing impairments have been excluded from processing linguistic information resulting in their inability to hear and this has adversely disadvantaged them.

Mbewe (2005) had revealed that the hearing impaired community have been a disadvantaged group in the acquisition of HIV and AIDS information. This was because individuals with hearing impairments have not been spared in this pandemic though they have been marginalized in extensive sensitization on HIV and AIDS. ZNAD (2007) mentioned that effective dissemination of information to the individuals with hearing impairments on HIV and AIDS could significantly contribute to the reduction of the HIV and AIDS prevalence.

The evident differences between the individuals with hearing impairments and the hearing was that the hearing had the ability to use their five senses and grasp concepts easily while the individuals with hearing impairments have solely relied on the sense of sight, taste, smell and touch. They do not use the sense of hearing for the acquisition of information. Much of the practices on HIV and AIDS campaigns have basically targeted those without hearing impairments. Therefore, individualswith hearing impairments have been at greater risk of HIV infections than their hearing counter-parts.

Heward and Orlansky (1988) noted that there were very few HIV and AIDS educators who knew sign language. This has made it extremely difficult in assisting to disseminate HIV and AIDS information to individuals with hearing impairments. To this effect the HIV and AIDS educators have had communication difficulties in using adequate signs and vocabulary related to HIV and AIDS matters. Even though the individuals with hearing impairments had information about the word HIV, it was observed that there have been only few symbols or patterns made available to them through messages received and sent. Therefore language has affected them in terms of accessing HIV and AIDS information.

Additionally Friess (1998) and Crowe (2003) conducted studies which stated that there wasa language barrier in accessing information on HIV and AIDS. It was mentioned that individuals with hearing impairments had gotten affected by HIV and AIDS in disproportionate numbers when compared to hearing persons. Among studies conducted, Friess described this as being

problematic forindividuals the hearingimpairments community as an AIDS risk group. The approach in the public health model to study and conduct interventions among disease risk groups have proved to be futile, because it has created a distance between the general population and the risk groups who are theindividualswith hearing impairments.

In support with the above, Crowe (2003) stated that there had been numerous structural forces which shaped and constrained the choices and behaviors of individuals with hearing impairments in the United States. Historically an under-resourced educational system and discrimination have also been rooted in communication barriers between the hearing and persons with hearing impairments. Consequently, individuals with hearing impairments in the United States frequently have continued to live in an environment of oppression that may have fostered the risk of HIV infection. Rompay (2007) supported the fact that even after twenty five years of gaining visibility the HIV pandemic has continued to ravage many corners of the globe. It was further stated that some ways of transmitting of this virus could be done by using the theoretical perspective by the extraction of literature for example from books. However, the researcher analysed that even though proper awareness and communication had continued to be the first weapons and despite all our medical and technological advances, many hearing impairments communities in the world still lacked access to comprehensive health information and medical care.

For effective dissemination of HIV and AIDS to the individuals with hearing impairments Conrad (1979) agreed, they needed sign language as a basic tool of communication. Conrad defined sign language as a mode of communication that involved visible facial gestures, fingers, hands and arms as a mode of communication. In addition, sign language was defined as vocabulary which permitted discussion of educational topics which benefitted the individuals with hearing impairments.

However during the association with persons with hearing impairments, the researcher observed that a knowledge gap was created where most people who were able to hear erroneously assumed individuals with hearing impairments could read or that many of them did not know sign language. This has resulted in materials often being culturally inappropriate and linguistically incomprehensible to individuals with hearing impairments.

The researcher observed that persons with hearing impairments had not been aware of their rights and they had their lives highly marginalised. This case has not only been in Zambia but globally in most developed countries. In line with the above statement, ZNAD (2001)stated that in Zambia, there was very little access to information on HIV and AIDS implying that the individuals with hearing impairments had not even known what was happening in their immediate societies.

Disability, HIV and AIDS Trust, (2011) revealed that a workshop had been conducted by national stakeholders in Zambia with participants from Botswana, Malawi, Swaziland, and Zimbabwe which focused on the dissemination of HIV and AIDS to People Living Disabilities (PLWDs). Advocacy for equal access to HIV and AIDS information and treatment among people with hearing impairments was emphasised coupled with outreach messages and programmes using sign language interpreters.

NAC (2004), promoted implementation of Behaviours Change Communication (BCC) which sought to change behaviours amongst individuals in different societies. NAC revealed that BCC was a process for specific target groups and audiences with the intention of influencing them to adopt sustained change in sexual behaviours. This varied depending on the target group and a particular programme that wasaimed to be achieved. In Zambia, BCC programmes have been intended for individuals and communities. Most BCC messages had often been delivered through various activities including electronic media. The main target group were the young people because they accounted for most of the new infections and they were the primary focus for BCC campaigns. Groups such as sex workers, truck drivers and migrant workers had often been targeted by BCC programmes due to the prevalence of sexual activities that have continued to have enhanced infections.

In the case of persons with hearing impairments, high levels of knowledge and awareness have often been matched by sustained changes in sexual behaviour BCC was reported to help have achieved sustained changes in behaviours. Therefore the whole process has moved the audience from awareness to highly motivated and shared action. To date, Zambia has developed extensive BCC programmes because the sexual behaviors of youths have been critical to controlling the course of the HIV and AIDS pandemic in Zambia.

Basically different activities have been designed by NAC (2004) as indicated below:

- Utilization of skills – tools known as the "Education for life programme," to champion abstinence among young people.
- Producing of a youth magazine that has blended entertainment news with reproductive health messages that have appealed to the youth culture.
- Implementation of youth talk shows that addressed various youth concerns and HIV and AIDS issues.
- Supporting of anti-AIDS clubs in schools and communities around the country.
- Employing of sports which have mobilized rural communities to implement HIV and AIDS and reproductive health activities in various communities.
- Usage of entertainment and education strategies have increased knowledge and awareness of HIVAIDS among young people who have been more sexually active with multiple partners.

In line with NAC, MOE (2006) observed that the education sector had a great challenge in mitigation of the HIV and AIDS pandemic in the workplace as well as the communities. This was as a result of the education sector experiencing the effects of the pandemic due to the fact that teachers, learners were getting affected through loss of beloved ones or getting infected. However MOE opted to publish a work policy on HIV and AIDS. It was hoped that the policy would act as a guide in the prevention, care and support of people who had been affected or infected by HIV and AIDS. MOE was hopeful that the development of the Education Sector of Policy on HIV and AIDS would have prevention programmes that would fight against HIV and AIDS. It was stated that information on HIV and AIDS would be disseminated to the teachers who in turn would teach the learners in order for them to have responsible behaviours. Hence, it was stated that information was meant to be disseminated to all the learners including those with Special Educational Needs (SEN).

In the MOE (2005)report, it was stated that time would be allocated in all learning institutions in order to provide messages on issues of HIV and AIDS. In addition it was revealed that MOE that, would train peer educators in the methods of appropriate HIV and AIDS prevention messages by using various kinds of communication methods. It was further suggested that age

appropriate Information Learning Communication (IEC) materials would be provided for learners as well as Continuing Professional Developed (CPD) in the area of counseling for healthy life styles. The IEC materials were to be developed in order to support the curriculum intervention on HIV and AIDS. It was further reported that information on HIV and AIDS would be to culturally sensitive, have age appropriate language, and be gender sensitive.

Other scholars such as Kelly (2008), Kanyengo (2009), stated that HIV and AIDS programmes would be targeted at schools by ensuring that every learner would be well equipped with correct information on HIV and AIDS and its modes of transmission as there had been a rise in fresh transmissions in the younger population. The promotion of abstinence however was considered as the most effective method of preventing HIV transmissions.

Groce (2004) stated that it was of great importance for HIV and AIDS education, intervention, and services to reach out to individuals with hearing impairment worldwide. It was for this reason that he suggested that disability-specific adaptations were to be made with existing materials and new ones be developed and adapted in order to reach out to individuals with hearing impairments.

Additionally, the researcher noted that Groce's study was based on training and hiring of HIV and AIDS educators and staff specialised in the issues related to serving persons with disabilities, especially persons with hearing impairments.

Therefore training of disability advocates to be AIDS educators specifically for the hearing impaired community was to be effected. Videos in sign language for the individualswith hearing impairments were to be designed and produced. This was specifically meant to target the schools and institutions serving individuals with hearing impairments. Educational training materials were to be simplified in sign language for easier understanding format as the majority of the individuals were illiterate or had limited reading skills. It was further suggested that sign language interpreters should be available in clinics and hospitals to explain appropriate complicated information on HIV and AIDS to theindividuals with hearing impairments. Therefore it was mentioned that all HIV and AIDS educators and service providers would be trained on disability issues, especially on how to handle and understand the needs of individuals with hearing impairments.

Odueme (2008) supported the notion that the HIV and AIDS pandemic had increased. Importantly Odueme was of the view that young people especially those from the handicapped population would be provided adequately with information on HIV and AIDS. This therefore was to be effected by the use of preventative measures that would have had adequate information on the deadly virus among individuals with hearing impairments as well.

However, in Zambia both in MOE (2005) and MOE (2006) it was stated that prevention strategies would be disseminated even to learners with SEN. It was observed that very few of these programmes mentioned have been used to enlighten individuals with hearing impairments. The individuals with hearing impairments have had limited information on HIV and AIDS with its modes of transmission and prevention. Further it was observed that both of MOE's policies had no specific information on sign language with comprehensive IEC materials for learners with hearing impairments. Even though there was mention of learners with special needs in both of MOE's "National Policy on HIV and AIDS andHIV and AIDS Work Policyit was evident that there were no practices that had targeted individuals with hearing impairments as observed.

Kanyengo (2009) revealed that individuals with hearing impairments required alternative means of communication in order to understand what HIV and AIDS is all about and the effects It had upon people's lives. With the HIV and AIDS pandemic spreading all over the world, one of the most overlooked group has been People Living With Disabilities (PLWDS)especially theindividuals with hearing impairmentscommunity. Therefore to appreciate the magnitude of HIV related problems facing the individuals withhearingimpairments community, one needed to gain the insight of the individuals withhearing impairments cultural community and their culture. Complications such as differing viewpoints and life experiences have greatly affected the avenues of information into theindividuals withhearing impairments community, and the deaf community's receptivity to the dangers of HIV and AIDS.

Additionally, MOE (2006)asserted that the education system provided an important avenue for combating HIV and AIDS to the learners. Therefore the school was the place where information and support services would be located to serve a wide audience simultaneously. This is because schools have offered the destination for all learners regardless of whether they have special needs or not. Consequently MOE has arranged programmes through the curriculum and co-curricular

activities, meaning that education should always be considered when developing sustainable strategies and practices to prevent or combat HIV and AIDS infections.

It is a fact that the biggest challenge that the individuals with hearing impairments had in understanding the language wasdue to the medium of instruction, which was according to MOE's sentiments. It was observed that even most of the HIV and AIDS advocates had embarked on the role of controlling and implementing strategies in order to lessen or stop fresh infection of the pandemic. There was an existing gap and challenges which had been identified in many ways. One of them was inadequate BCC strategies and which had lacked effective continuity in the content and coverage used. However, it was noted that there wasinsufficient materials even in local languages as well as sign language IECs. Meanwhile even the BCC activities have not adapted comprehensive and appropriate activities at community level and they have been inadequate for the individuals withhearing impairments culture. Therefore a number of gaps and challenges have been identified in the prevention and transmission of HIV.

NAC (2009) came up with indicative intervention in support of programmes of vulnerable groups from the Zambia Federation of the Disabled (ZAFOD), and the PLWDs. Thus, it came up in support of specific intervention for the vulnerable groups as a link to prevention of HIV. ZAFOD (2008) mentioned that, most persons with disabilities such as hearing impairments had not accessed information through electronic and print media, Kanyengo (2009) supported this assertion by ZAFOD on lack of access to literature for individuals with hearing impairments. It is clear that this information lag has even been more pronounced for individuals who have hearing impairments. The scholar stated that individuals with special needs have been reported to be generally ignored by the mainstream in HIV and AIDS awareness programmes. This was inclusive of many individuals with hearing impairments who have been ignored by traditional information sources such as developed IEC materials and television. It wasobserved that many individuals with hearing impairments in Zambia and other developing countries have been deprived of quality HIV and AIDS information, and hence they had limited literacy levels.

1.1 Purpose of the Study

This study aimed at establishing practices in disseminating HIV and AIDS information to individuals with hearing impairments.

1.2 Statement of the Problem

Although HIV and AIDS information waswidely disseminated among the hearing population, individuals with hearing impairments still have inadequate access to HIV and AIDS information and intervention services in Zambia (Kanyengo, 2009; ZNAD, 2007). Most of the information dissemination in Zambia was through oral and audio means such as radios, television and public presentations where sign language interpreters may not be available. However, little is known on the practices of disseminating HIV and AIDS information to individuals with hearing impairments hence the need for the present study.

1.3Objectives

1. To establish modes of disseminating HIV and AIDS information to individuals with hearing impairments
2. To determine how knowledgeable individuals with hearing impairments were about HIV and AIDS.
3. To identify the challenges faced by the individuals with hearing impairments in accessing HIV and AIDS information.
4. To identify strategies used in disseminating HIV and AIDS information to individuals with hearing impairments.

1.4 Research Questions

1. What are the modes of disseminating information on HIV and AIDS to individuals with hearing impairments?
2. How knowledgeable are learners and youths with hearing impairment about HIV and AIDS?
3. What are the challenges faced by the individuals with hearing impairments in accessing HIV and AIDS information?
4. What are the strategies used in the disseminating of HIV and AIDS information to individuals with hearing impairments?

1.5 Significance of the Study

This study was aimed at investigating the practices that are used in disseminating HIV and AIDS information to individuals with hearing impairments. It is hoped that the findings of this study will contribute to the body of literature. This study also hoped to assist the Ministry of

Education, Science, Vocational Training and Early Education (MESVTEE), mass media, policy makers and other stakeholders to make informed decisions in the dissemination of HIV and AIDS awareness to the individuals with hearing impairments. Furthermore it is hoped that this study would motivate more researchers in the practises of disseminating HIV and AIDS information among the individuals with hearing impairments.

1.6 Theoretical Framework

The study employs Vygotsky's (1978) adaptation model of socio-cultural theory which was based socio-cultural model and was modified for productive collaborative activities that were needed to engage flow of information from teachers to learners. It was outlined that teachers, peers and parents should be more skilled or knowledgeable and referred to this term as "more competent other". This was based on teachers and learners having experiences which should be classroom based and have knowledge derived from various socio-cultures Further it was emphasised that knowledge was a social construction developed through social interaction.

Therefore on modes of disseminating HIV and AIDS information, the researcher proposed this theoretical framework and adopted it in the study. This involved teachers, parents, media and peers as facilitators on information dissemination through the hearing impaired culture. This framework enhanced beliefs and characteristics which influenced the acquisition of knowledge for teachers, parents and learners in order to interact with individuals with hearing impairments as learners. The researcher acknowledged that the socio-cultural theory of learning had its dynamic interplay between teachers and learners through interaction.

The socio-cultural theory in this study was helpful because of interaction of theindividuals with hearing impairments with communities around them. Therefore it was important to find out whether the individuals with hearingimpairments were limited in the development of interaction. It was also important to find out the level of sign language used between the individuals with hearing impairments, hearing peers, teachers, parents and mass media during the dissemination of HIV and AIDS information. Knowledge acquiredwas fortified by books, drama and sign language. This helped the researcher to establish the amount of assistance the individuals with hearing impairments received from peers, teachers, parents and the media to enable knowledge acquisition in HIV and AIDS.

This research was conducive to HIV and AIDS related issues in school currently based on activities which were interactive on life skills. However knowledge disseminating would be based on social interactions fortified by books, drama, sign language, peer, media to enable communication acquisition in HIV AIDS for individual the hearing impairments.

The principal focus of this study was to establish practices of dissemination of HIV and AIDS information to individuals with hearing impairments along socio-cultural theory described by Vygotsky as a tool.

1.7 Limitation of the Study

The study was conducted at one secondary school that offered education for learners with hearing impairments, out of school youths with hearing impairments ZNAD in Lusaka district, and ZNBC, the national media institution. The findings of study should be generalised with caution to areas which may not have similar characteristics within Lusaka urban.

1.8Definition of Terms in the Study

- **Access:** Able to get information or something.
- **AIDS:** A condition characterised by a combination of signs and symptoms caused by HIV which attacks and weakens the body's immune system by other diseases.
- **Augmentative**: alternative language using pictures
- **Awareness:** Knowledge of understanding particular situations
- **Deaf and dumb:** Complete loss of sense of hearing and speech. The lack or loss of the ability to hear and speak**.**
- **Deaf:** Complete loss of sense of hearing. The lack or loss of the ability to hear**.**
- **Difficulties:** Hindrances or impediments to carry out an action smoothly.
- **Disability:** A physical problem that makes someone unable to use a part of their body properly.
- **Dissemination:** A way of conveying information to people.
- **Education Sector** All the programmes ,activities and the players in the

field of education

- **Hard of hearing and dumb:** Residue of hearing but lack the ability to speak
- **HIV:** Human immunodeficiency Virus- which undermines The immune system and leads to AIDS
- **Hearing impairments:** The inability to hear sound or have hearing loss. It Includes both individuals with Hearing impairments and hard of hearing conditions.
- **Impairments:** Problems in body function or changes in body Structure such as blindness
- **Information:** Knowledge acquired through experience or study.
- **Life skills:** Skills taught practically to learners as part of the curriculum, to educate them in real life issues in order to protect them from HIV infection
- **Sign language:** This is language for the individuals with hearing impairments.
- **Special educational needs learners**: Learners within the education with diverse kinds of challenges.
- **Nymphomaniacs:** Excessive desire for sex

This chapter formed the first part the dissertation. It was the synopsis in which the research problem was. It established the problem that led to the study and reach out to the consumers of research. In the following chapter review of literature on practises of disseminating HIV and AIDS information to the individuals with hearing impairments were done.

CHAPTER TWO: Literature Review

2.0 Introduction

The previous chapter presented the introduction to the study. The gist of the whole dissertation was discussed. The chapter also discussed the problem and the gap identified. This chapter presents review of relevant literature on Practices of Dissemination of HIV and AIDS Information to Individuals with Hearing Impairments. The themes were derived from the objectives on established modes of disseminating HIV and AIDS information to individuals with hearing impairments which were to determine how knowledgeable learners and out of school youths with hearing impairments were about HIV and AIDS, challenges faced by individuals with hearing impairments in accessing HIV and AIDS information and identify strategies used in disseminating HIV and AIDS information to individuals with hearing impairments. Literature concerning dissemination of HIV and AIDS information to the individuals with hearing impairments was documented by a number of scholars. This review therefore looked at literature generated by these scholars and what other authorities have said on the same subject.

Dylk (2003) conducted a study on HIV and AIDS that made a tremendous impact on the medical, psycho- social, spiritual, educational and economic life of the infected persons, affected family and community as a whole. The study revealed that HIV and AIDS had affected people of all statuses, thus the only way to prevent the disease was by behavioural change. The researcher observed that there were a lot of peer educators, churches, counsellors and other significant people involved in the work of HIV and AIDS awareness campaigns leaving out individuals with special needs such as individuals whose hearing was impaired.

2.1 Established Modes of Disseminating HIV and AIDS Information

Mprah (2011) stated that the modes of disseminating knowledge on HIV and AIDS towards persons with hearing impairments in Ghana, aimed at identifying correct possible gaps and awareness for them. The Ghana National Association of the Deaf (GNAD) targeted the individuals with hearing impairments who were fluent in the Ghanaian Sign Language (GSL). Mprah mentioned that, there was a lack of in-depth understanding and awareness on critical issues on HIV and AIDS among the individuals with hearing impairments in Ghana.

However, there was a clear indication that individuals with hearing impairments had misconceptions that one could get HIV and AIDS by physically interacting with people who

have the condition. This research was based on misconceptions on HIV and AIDS, preventive methods that could be disseminated to the individuals with hearingimpairments.Basically it wasin order to disseminate information to the individuals with hearing impairments on HIV and AIDS by helping them develop and acquire positive altitudes. This was done by coming up with programmes and services for the hearing impaired community on HIV and AIDS. A friendly training centre was designed for the individuals with hearing impairmentsfor the acquisition of more knowledge on HIV and AIDS.

Therefore persons with hearing impairments were trained in counselling on HIV and AIDS. A training centre was established for counsellors in sign language in collaboration with GNAD. It was formed by networking, scaling-up sensitisation projects and mobilisation of PLWDs to access HIV and AIDS interventions. Teachers, parents, church members, family members, persons with disabilities were among those trained as counsellors in HIV and AIDS. The researcher observed that this was a turning point for close members of the family and society to be involved by working hand in hand with the individuals with hearing impairments on issues of HIV and AIDS.

Poku (2008), supported the assertion that lack of accessible friendly or appropriate information for individuals with hearing impairments was a possible reason for ignorance and access to quality information on HIV and AIDS. The study encouraged many teachers, parents, health practitioners to be trained in sign language. This was in order to reach out to many individuals with hearing impairments on issues of HIV and AIDS. Additionally in a different study conducted by Groce (2005) it was stated that people with disabilities were a vulnerable group on HIV and AIDS. This was as a result of believing in wrong modes of transmission. It was mentioned that service providers were unfriendly and persons with disabilities complained of health workers who behaved rudely towards them because of misunderstanding each other. Through interaction with persons with hearing impairments the researcher observed that they felt discouraged from going to health workers who could give them useful information about HIV and AIDS. Therefore the researcher was of the view that Groce's study on training of the church members, NGOs, persons with hearing impairments including those without hearing impairments in sign language on HIV and AIDS issues was timely.

In another study, Groce, Trasi and Yousafzai (2006)mentioned that due to lack of special programmes from government and the private sector, targeting of people with disabilities on HIV and AIDS related issues was proposed. The above mentioned scholars' main concern was coming up with outreach efforts for persons with hearing impairments on modes of disseminating HIV and AIDS information. This was as a result of the lack of education of individuals with hearing impairment which inhibited them from having the ability to obtain and process information. It was observed that information on HIV and AIDS was in inaccessible formats such as the radio campaigns and billboards which had complex language. It was noted that most information on HIV and AIDS had complex or vague messages as a result the individuals with hearing impairments could not understand. The researcher was of the view that clinics and services had inaccessible services for the individuals with hearing impairments due to language barrier. Therefore the above scholars advocated for more disseminating of HIV and AIDS information by simpler means of producing ICEs in language the individuals with hearing impairments would acquire including sign language and training more individuals with hearing impairments.

Further in line with studies conducted by Groce, Trasi, and Yousafzi:(2008),Meena,(2005) supported this at a continental HIV and AIDS sensitisation workshop for the individuals with hearing impairments in Dar es salaam,Tanzania. She observed that the individuals with hearing impairments were a marginalised group. This was as a result continued risk behaviours, vulnerability and lack of access to HIV and AIDS information and services. It was further revealed that little information reached the individuals with hearing impairments because the majority could neither read nor write.

Meena, proposed for education training on HIV and AIDS to be provided by means of print (newspapers, magazines, newsletters, pamphlets etc.), electronic (Radio, TV, internet, telephone (through messages). It was indicated that traditional and cultural (theatre, drama shows, sport and many more) sources would be appropriate and some of these were already effected in Tanzania by involving NGO's, the media, health personnel, teachers and parents . It was important that the individuals with hearing impairments could acquire knowledge and skills to read and write. The researcher observed that in Tanzania the modes of disseminating information had contributed significantly to the higher level of HIV and AIDS awareness to the individuals with hearing impairments. The most effective modes of disseminating information were through

the use IEC materials, drama, songs and video shows. These training programs were tailored to meet the needs of all the persons with hearing impairments.

Consequently the researcher observed that as a result of non-streamlined roles of potential partners in mainstreaming HIV and AIDS issues caused lack of proper dissemination of HIV and AIDS information. This was specifically to individuals with hearing impairments in many regions, Zambia inclusive**.** The researcher further observed that there had been lack of health trained service providers to help persons with hearing impairments globally. Persons with hearing impairments were less likely to receive information and resources to ensure "safer sex" because common prevention programmes were not included for them(with disability-specific approaches). Therefore it was observed that they were excluded or deprived of education, particularly sex education and HIV and AIDS. This was as a result of being marginalised, and the double stigma of disability plus HIV and AIDS.

In the same vein, the researcher reported on the Caputo (1988) study which stated that Uganda's success in reducing HIV prevalence was attributed to strong political commitment from all levels of government. This was as a result of a positive attitude of openness to address HIV and AIDS issues which had claimed many lives of people in Uganda. This was achieved by strong communication at family and community levels, multi-sectoral approach. Uganda had implemented programs for prevention, VCT, treatment, and care. There was emphasis on behaviour change which was displayed with an attitude of concern and care. Additionally, Low-Beer and Stoneburner (2004) reported that Ugandans responded to the call on reducing the pandemic by avoiding risky behaviours through abstinence or postponing sexual activities. This was advocated by remaining faithful to their partners. It was observed that despite strong political representation, disabled persons had been marginalized at various levels. Although, there were high levels of awareness on HIV and AIDS among the general public in Uganda, some categories of disabilities especially the blind and the individuals with hearing impairments were reported to be ignorant of the deadly disease. This left individuals with hearing impairments very vulnerable to the HIV virus.

Further, Low-Beer and Stoneburner (2004) in their studies revealed that health and wellness was one of these development programs categorised under human rights for individuals with hearing impairment. Promotion of health and wellness living was an exercise embarked on to raise

awareness and enhance preventive measures against and causes of the killer diseases among individuals with hearing impairment. Uganda's programs were not specifically created following the inclusion of individuals with hearing impairments by mainstreaming them to work with NGOs. It was revealed that dissemination of HIV and AIDS was effected but not working in collaboration with Disability, HIV and AIDS Trust (DHAT) which promoted HIV and AIDS issues by addressing the needs of persons with hearing impairments. It was against this background that sensitisation of HIV and AIDS started being advocated for the individuals with hearing impairments in Uganda.

Persons with hearing impairments were recruited and trained as health and wellness programme officers with the purpose of educating individuals with hearing impairment on HIV and AIDS. The training programme comprised awareness, causes, transmission, prevention and control of HIV and AIDS. It was stated that lessons and teaching materials production on HIV and AIDS were to be made available.

Mbewe (2005) stated that the provision of literacy to 38% of the individuals with hearing impairments learners was in schools while 62.3% out of school individuals with hearing impairments were illiterate. This brought about ignorance to individuals with hearing impairment on HIV and AIDS. Mbewe further explained that in spite of the efforts made on practices of disseminating information on HIV and AIDS, language was a barrier for individuals with hearing impairments.

In Zambia the revised curriculum of the MOESVTEE (2013) the issues of life skills were integrated in all subjects of the school curriculum. MOESVTEE further mentioned that HIV and AIDS would be incorporated for learners with SEN to acquire knowledge. This was a way of equipping the learners with knowledge, values and skills. This was aimed at providing improved, updated IEC materials and knowledge dissemination on HIV and AIDS. However, appropriate support materials for learners and teachers were to be developed in order to support curriculum intervention. It was indicated that individuals with hearing impairments were amongst other learners with SEN to equally benefit in acquiring knowledge on HIV and AIDS.

Apart from the earlier policies and documents, other researchers have conducted studies on HIV and AIDS awareness practices; One worth noting is Kelly's (2008) opinion which stated that

modes of disseminating HIV and AIDS information in Zambia would be ideal for all the learners. Kelly stated that education programmes of school going and young school leavers should be made available to channels that can influence the learners with a curriculum that had values on issues of HIV and AIDS. This was to provide information which would develop skills aimed at strengthening young learners in order to impart skills that would promote good behaviour and self-protection. Kelly's opinion included learners with hearing impairment. He further mentioned that it was appropriate that the curriculum should also target those in formal and informal education. Among other studies UNAIDS (1999) campaigned for deliberate policies of integrating quality life skills, sexual health and HIV and AIDS education to be included in the curriculum.

It was suggested by Kelly(2008) that disseminating of HIV and AIDS information would start at primary school level and continued through to secondary school. This notion was supported by MOE so that schools would work in collaboration with MOE and Parent Teacher Association (PTA). The participation of learners' representatives had been cardinal, reason being that learners have been the window of hope for the future. Carmody (2004) observed that education had contributed to solutions that have made learners make informed choices. The roles of educators have been to fight against HIV and AIDS and this now has provided information to learners about the pandemic. Paramount to information dissemination, were messages on transmission, symptoms and effects on the family, the community, and the nation as a whole.

UNESCO (2000) in their pursuit to add value to on-going researches suggested the need for educational planning for BCC activities to succeed. They mentioned that such activities needed to be targeted, with flexible prolonged Southern Africa AIDS Training programmes. These programmes were meant for the involvement of school learners by promoting HIV and AIDS with the classroom and curriculum activities. These activities encouraged peer education amongst young people both in schools and out of schools in order to share information they already acquired with the school programme and out of schools.

Another UNESCO (2005) document stated that Southern African countries, Zambia inclusive, had effected BCC HIV and AIDS information dissemination programmes through anti-AIDS clubs, songs, electronic and IEC material. This was done in order to enhance positive attitudes and practices that promote protection of self. It was revealed that other countries such as

Thailand only opted for essay competition within schools, while in Uganda it was through drama presentation.

Meanwhile the researcher noted that the international media, governments and NGOs had increasingly emphasized the necessity for establishing ways of strengthening and validating literacy programs on modes of dissemination of HIV and AIDS worldwide to individuals with hearing impairments.

The NAC (2004) evaluations portrayed youths who had good understanding of messages which enhanced positive attitudes. These bordered on abstinence, delayed sexual activity and condom use. According to the researcher the above evaluations of BCC activities have been spread around urban Zambia disadvantaging the rural and remote. The researcher observed that whilst this had been taking place, individuals with hearing impairments received less or no attention on BCC programmes.

It is a clear indication that BCC had extended to peer education programmes for various age groups. Audiences were expanded and strengthened in communities, schools, work places, service centres, and traditional networks. The researcher observed that peer-education programmes existed for teachers, miners, youths, religious leaders, and a range of other groups in Zambia. The MOE (1996) objectives included Anti-AIDS clubs to give all young people access to information on AIDS written in a comprehensible way. Therefore, there was support for the Anti-AIDS Programme and for Anti-AIDS Clubs in schools which continued spearheading important awareness movements gradually reaching out to most learners.

It was observed that even though it was mentioned that specific IEC materials would be provided with more training of peer educators in BCC programmes, as stated not much was done to develop materials for the individuals with hearing impairments. Even though there was mention of learners with special needs by MOE on HIV and AIDS, there were no specific practices which targeted the individual with hearing impairments and other disabilities in Zambia unlike other countries. The researcher observed that the majority of what had been reported in Zambia had not been effected, especially concerning the welfare of individuals with hearing impairments. Even the reports from NAC have not benefitted the individuals with hearing impairments because none of it wasuser friendly at all. It was observed that both MOE and NAC had not

trained any peer educators in BCC programmes in a sign language and HIV and AIDS related issues to cater for the individuals with hearing impairments in Zambia.

Meanwhile Rompay (2007) alluded to the fact that in Kenya, there was a specific training manual developed by indigenous peer education network. The researcher noted that the document comprised of interactive-based activities of sexual health, HIV and AIDS published based on practices of disseminating HIV and AIDS information for individuals with hearing impairments. This document was meant for free distribution to the community to promote peer education on HIV-related issues. However, it was observed that even though this manual had been in existence, it was evident that some individuals had been using it for commercial purposes. The researcher observed that the contents in the manual have been participatory and interactive. Therefore it is a clear indication that a lot had been advocated for specific programmes which enhanced positive practices of disseminating HIV and AIDS awareness to individuals with hearing impairments. The project was designed to enhance leadership skills and health awareness for communities of individuals with hearing impairments toward making informed decisions for their health.

Another scholar Steven's (1998) analysis on HIV and AIDS among the individuals with hearing impairment warned against the homogenisation of the community stressing the various differences within the larger community. This author drew attention to the issues of sexual indulgence, high risk to infection and access to care which could come as a result of hearing impairments. The fundamental issue was more on sexual indulgence and HIV risk in the hearing impaired community. After all this was analysed Steven recommended that HIV and AIDS education materials and methods needed to be designed in American Sign Language (ASL) and other types of Sign Language used globally.

The researcher observed that Steven recommended the use of IEC pictorial visual tools, role-playing exercises and small group meetings conducted by peer educators. The peer educators Steven referred to were individuals with hearing impairments. On the other hand it was revealed that due to the cultural cohesion of the hearing impaired community, all educational materials were to be developed in partnership with individuals with hearing impairments. Therefore all materials included pamphlets that provided specific explanations along with visual aids and sign language with structured word phrases. Steven stated that advocates in the HIV and AIDS

campaign were encouraged to convey the message in sign language video tapes with written captions.

One aspect highlighted was that posters that included people signing to one another were to be displayed specifically portraying HIV and AIDS with regard to individuals with hearing impairments. It was mentioned that sexual, HIV and AIDS education programs were to be introduced in all school-based-instruction for the individuals with hearing impairments both in the mainstream or residential schools.

However, the researcher observed that different modes of disseminating information on HIV and AIDS which have been implemented locally and globally has a knowledge gap in disseminating HIV and AIDS information to the individuals with hearing impairments.

2.2 Knowledge on HIV and AIDS among Individuals with Hearing Impairments.

Regarding knowledge of HIV and AIDS among individuals with hearing impairments, different researchers have conducted studies to ascertain adequacy of knowledge.

There was inadequate knowledge among the students with hearing impairments. About 62% of the study respondents have believed that one could not get HIV and AIDS if they had unprotected sexual intercourse while 67% said they would not get infected with the virus if they chose healthy looking partners.

The Sangowawa and Owoaje (2001) study however revealed that in the United States of America only 15% of the respondents had knowledge and awareness of how HIV was transmitted. The hearing impaired community were said to be eight years behind the hearing population in HIV and AIDS knowledge. The conclusion was that students with hearing impairments had much less knowledge about HIV and AIDS transmission than their hearing counterparts.

Katuta's (2012) report based on a research done at Munali boys and Munali girls high schools brought to light a unique scenario. The report depicted gross engagement in unsafe sexual acts amongst youths with hearing impairments which came from the lack of knowledge. The study ultimately sought to establish an institution based approach to initiate health promotion and HIV prevention among learners with hearing impairments at Munali boys and Munali girls high schools.

Masuwa (2011) conducted a study on HIV and AIDS knowledge among high school learners with hearing impairments in Zambia. The aim of the study was to establish how much knowledge learners with hearing impartments had on HIV and AIDS. Masuwa's report disclosed the fact that the learners with hearing impairments were side-lined in acquisition and information enrichment regarding HIV and AIDS. The reason being that the developed were materials not tailored for the individuals with hearing impairments. It was reported that there was no time allocated to imparting knowledge to the individuals with hearing impairments in the curriculum, and further they had no access to anti-AIDS club facilities. Hence the resultant was lack of adequate knowledge among the individuals with hearing impairments.

While Malambo (2000) indicated that in primary and secondary schools, knowledge on HIV and AIDS was accessed through extra-curricular activities which included drama and cultural clubs which have been used to disseminate HIV and AIDS awareness information. The study was much more general in approach and did not specifically target the interest group of this study, who are the individuals with hearing impairments.

Groce (2006) conducted another study in Nigeria on HIV and AIDS and disability which revealed that the radio was the main source of information but it was inaccessible to the individuals with hearing impairments. Notably the individuals with hearing impairments relied only on their sight. It was disclosed that the church which was the main source of disseminating HIV and AIDS information to the hearing impaired community displayed 50% of inaccessibility to information. However, the study indicated that 86% of the respondents with hearing impairments were reported to have low literacy levels. Information obtained from the stated study revealed that 22% was from magazines, 20% newspapers and 17% from posters. Therefore accessing information from the general community by individuals with hearing impairments was at 8%.The other source of knowledge on HIV and AIDS was reported to have been obtained from family meeting places.

Groce, Yousafzai, Dlamini, and Wirtz (2003) mentioned in the study conducted in Swaziland on HIV and AIDS that there were three sources of dissemination of information about HIV and AIDS for Disabled Peoples Organisation and the individuals with hearing impairments. This was mainly from posters and the television but language barrier was a problem.

Meleste, 2008 in Washington DC, Deaf Peer Health Educators (DPHE) at Gallaudet University formally and informally taught on sexual indulgence and HIV and AIDS. The DPHEs were extensively trained to become knowledgeable and skilled role models, using a variety of visual approaches which included workshops, presentation drama plays, flyers, and banners. This proved to be an effective way of passing information to college students with hearing impairments

Another scholar Freiss (2001) explored on barriers of seeking information on HIV and AIDS for the individuals with hearing impairments. He raised important issues concerning American Sign Language and its inherent difference from spoken English, functional literacy, and health care access. Freiss examined some practical psychological problems faced by individuals with hearing impairment. This document envisioned the individuals with hearing impairments being more likely to be affected by HIV and AIDS in disproportionate numbers to hearing persons.

It was stated that language used in disseminating HIV and AIDS was not user friendly as it is spoken only. The above mentioned scholar further indicated that individuals with hearing impairments were more of the AIDS risk group as they were ignorant on risk behaviours associated with getting infected with HIV and AIDS. It was revealed that due to lack of appropriate language which was user friendly for the individuals with hearing impairments, made them get involved in risky behaviour such as excessive beer drinking and having multiple sexual partners. However, Freiss further stated that the individuals with hearing impairments were not knowledgeable of the dangers of HIV and AIDS hence they lagged in understanding the dangers of HIV and AIDS.

In the same vein, UNAIDS (2002) highlighted information on HIV and AIDS for the individuals with hearing impairments. UNAIDS raised important issues which concerned ASL, and the difference it had from spoken English, functional literacy, and health care access. UNAIDS emphasised the need to recognise the hearing impaired community as a risk group that must be catered for. It further stated that there was a Nepalese program which revealed materials created with support from UNAIDS and National Association for Deaf. The Nepalese programme comprised a teaching aid and flipchart manual with illustrated pages and a “closed caption section” containing Nepalese SL drawings. It also included method of transmission of HIV,

condom use and primary prevention. It was revealed that graphics that were explicit and were used for HIV and AIDS education for all adult groups.

It is from this factor that the learners with hearing impairments from Nepal obtained knowledge on HIV and AIDS. UNAIDS mentioned that a number of studies have been compiled in Nepal specifically for the individuals with hearing impairments and this has enhanced HIV and AIDS knowledge awareness.

Ogumstine, (2006) in this survey expressed the fact that individuals with hearing impairments often had limited access to HIV and AIDS information as it was presented either in spoken or written language. As a result, the majority of healthcare providers were not been able to communicate in sign language. There is because of the communication barrier in the medical setting. During this survey Ogumstine, revealed that 450 individuals with hearing impairments from eight states in the United States of America participated in basic HIV and AIDS seminar.

After this seminar individuals with hearing impairments acquired knowledge of the existence of HIV and AIDS. Even though the individuals with hearing impairments were knowledgeable that HIV and AIDS existed it was reported they lacked adequate knowledge about its transmission and ways of protecting themselves.

UNAIDS (2007) in a case study of the Jamaica Council of Persons with Disabilities (JCPD) a programme worth 100, 000 US dollars was designed and conducted to educate individuals with hearing impairments about HIV and AIDS and other sexually transmitted infections. UNAIDS reported that the programme was a successful one, as results revealed were on the positive side. It was observed later that individuals with hearing impairments have been able to portray necessary skills that address their social, cultural, and economic vulnerability to HIV and AIDS in Hochimin City. After notable results UNAIDS further empowered a youth club which had innovative peer educators on educational matters regarding HIV and AIDS. This was as a result of having limited knowledge on HIV and AIDS information by individuals with hearing impairments.

2.3 Challenges Faced By Individuals with Hearing Impairments in Accessing HIV and AIDS Information

Individuals with hearing impairments have had challenges in accessing HIV and AIDS information due to the exclusivity in the language utilised.

Raymann (2004) advocated for accessibility of all information to the individuals with hearing impairments by the media through government services. This was as a result of observing that many institutions rarely used sign language to enable persons with hearing impairments to live independently. It was mentioned that people with hearing impairments were entitled to participate fully on HIV and AIDS related issues. The researcher observed that provision of professional sign language interpreters by the media was facilitated in order to have accessibility to information on HIV and AIDS. It was intended to enlighten the individuals with hearing impairments on HIV and AIDS. The radio programmes were reported to be inaccessible for the individuals with hearing impairments and this was reported as the greatest challenge in accessing information which was only spoken.

However it was further observed that sign language on public television was the most effective way to provide information and news to the individuals with hearing impairments. The TV programmes with sign language interpreter were provided on HIV and AIDS information directly in sign language, captioning of news and current affairs programmes which were of benefit to the individuals with hearing impairments. It was further revealed that there were regional differences in conveying information in sign language because it was presented differently thus it created barriers which were identified due to lack of accessible information.

The Tataryn (2008) research revealed that the knowledge, attitudes and practices among Vietnamese learners with hearing-impairments aimed at assessing the impact of the programme on the media and HIV and AIDS. Tatary made recommendations that scale up the project nationally by working hand in hand with the media for the project to succeed. It was mentioned that the media in collaboration with schools would have rooms equipped with sign language videos, leaflets and books in order to disseminate HIV and AIDS information to the individuals with hearing impairments.

NAC (2009) stated that it would come up with indicative intervention in support of vulnerable groups from ZAFOD which would include the individuals with hearing impairments.
However, BCC audiences have varied depending on the target group and particular programme aimed to be achieved. BCC communication have been intended for individuals and communities of the hearing impaired as well. Most BCC messages have often been delivered through various activities including electronic media. The main target group were young people because they account for most of the new infections, hence becoming the primary focus for BCC campaigns. Some of the programmes were intended for younger groups due to the prevalence of sexual activities that enhance infections. The individuals with hearing impairments have not received much attention in the BCC intervention because the information was too general and not specified.

According to the researcher's observation high levels of knowledge and awareness have often been matched by sustained changes in sexual behavior in Zambia and elsewhere. BCC was reported to help achieve sustained changes in behaviours. Therefore the whole process had moved the audience from awareness to highly motivated and shared action. To date, Zambia has developed extensive BCC programmes because the sexual behaviors of youths have been critical to controlling the course of the HIV and AIDS epidemic in Zambia. Basically different activities have been designed such as drama, talk shows, brochures and posters. The individuals with hearing impairments have only benefited much from drama; this is as a result of the hearing challenge. Drama was effective as individuals with hearing impairments could make sense from what was performed than talk shows, brochures and posters.

The researcher noted that BCC programmes have varied thus, depending on what particular programme or any intervention to be achieved. ZAFOD observed that most BCC programmes have been through mass media; and targeted for young people who have been primary focus of BCC campaigns through drama, talk shows and posters.

However, it was revealed that ZNBC would incorporate dissemination of HIV and AIDS information for individuals with hearing impairments through the sign language interpreters. This was because needs and demands of HIV and AIDS dissemination programmes have been of importance for every human being worldwide, however this has not been the case in Zambia and globally.

Even though HIV affects and can infect everyone because it is not discriminative, in terms of dissemination of information on HIV and AIDS for the individuals with hearing impairments not much was done by NAC as well as the majority stakeholders globally. NAC stated that, if one is not affected then he or she is infected. Therefore the media's role was to cater for the individuals with hearing impairments in national events by providing sign language interpreters during news and scrolls below the screen. It was hoped that the media would offer more platforms for all individuals with different disabilities. This is because the media has free public service health programmes on HIV and AIDS.

According to the researcher's observation ZNBC had platforms of HIV and AIDS programmes but the challenge was, ZNBC did not target individuals with disabilities including those with hearing impairments. It was revealed that the media had not offered any platforms specifically for the individuals with hearing impairments which could be stated as increase for windows of hope for people with disabilities. The researcher further indicated that there was serious need to broadcast in response to the needs of intended audiences. An audio-visual dimension would be more appropriate to demonstrate things visually for the individuals with hearing impairments. Printed materials such as posters, brochures and leaflets have not had relevant adapted language for the individuals with hearing impairments. The posters televised did not have conducive strategies of information which could be described as useful with relevant and comprehensible language for the intended target.

The researcher also observed that there had been challenges in most strategies used by the media to disseminate HIV and AIDS information through billboards, charts and posters. This is because none of them had been user friendly to individuals with hearing impairments. Programmes on HIV and AIDS have not had experts in special education to help reach out to the individuals with hearing impairments. It would have been more professional and user friendly if the media could have simple eye catching posters with striking pictures and colours as indicated in figure 1 below. The figure 1has words written in adapted language for individuals with hearing impairments below each picture.

ZNBC has usually been advertising posters on HIV and AIDS, such as figure 1 below. However it was very easy for experts who have dealt with individuals with hearing impairments to observe the challenge the posters had. The language has not been an augmentative language to suit the

needs of individuals with hearing impairments. This means that the language which was used had never been self-explanatory to the individuals with hearing impairments on dangers of HIV and AIDS or message being disseminated.

In addition the researcher was of the view that all pictorial information as illustrated in figure 1 below could be of greater benefit to the individuals with hearing impairments. The BCC figure 1had the most used amongst all strategies to disseminate HIV and AIDS information, though it has not been modified according to the needs of individuals with hearing impairments. However the researcher included captions below each picture in signed English which could be understood by individuals with special needs.

Figure 1: Relative BCC Campaign Tool: Banners, Flyers & Brochures

Relative BCC campaign tools banners, flyers, and brochures used to disseminate information on HIV and AIDS worldwide.

HIV/AIDS STOP!

SEX NO! POWER GIRL
HIV/AIDS STOP

GOOD CONDOM USE

SEX GIRL NO STOP AIDS

TRUE HIV/AIDS KNOW

Source*: http://pulitzercenter.org/projects/zambia-aids-hiv-virus-usaid-ministry-health-government-microbicide-14/10/2014*

Grosjean, (2001) revealed that accessibility of HIV and AIDS information to individuals with hearing impairments have proved futile globally. There have been very little information from the mass media and the governments worldwide. It was brought to light that even though there was accessibility in sign language for individuals with hearing impairments, campaigns on HIV and AIDS rarely had sign language interpreters available. However Grosjean stated that the majority of the individuals with hearing impairments have totally been assumed illiterate education wise. In view of the above, it was observed that most written information in the print media had limited effect on individuals with hearing impairments. This phenomenon wasinclusive of the electronic media with captions on HIV and AIDS. Itwas a great challenge for individuals with hearing impairments to access written and electronic documents on HIV and AIDS.

Therefore from the Grosjean's document, the researcher was of the view that individuals with hearing impairments were formally denied the opportunity to make informed and independent decisions on HIV and AIDS due to lack of knowledge. It is worth noting that individuals with hearing impairments had less knowledge on behaviours associated with HIV and AIDS due to lack of appropriate language that is user friendly to them. In addition the researcher observed the lack of use of sign languages, augmentative and other alternative means of communication to access information on HIV and AIDS. Conclusively the researcher observed the validity of Grosjean's document emphasising the lacking application of the strategies highlighted.

Allan, Linden, Schwable and Hulley (1991) stated that sexual intercourse as being the major route of transmission of HIV throughout the world. These scholars stressed that HIV transmission could be from a single act of sexual intercourse with an infected person. It appears that some people have multiple sexual contacts with infected persons without acquiring HIV. Others have become infected as a result of a single sexual encounter. From this study there wasa clear indication that HIV was not just a disease of prostitutes nor persons who were sexually "promiscuous" because the individuals with hearing impairmentshave been equally at great risk due to their hearing Impairment.

Another scholar Lifson (1998) stated that direct exposure to HIV infected blood was through sharing of infected needles especially by drug users, tainted blood transfusion is the major cause of infection, even the sharing of non-sterile razor blades for tattoos and ritual scarring by

traditional healers makes one vulnerable to infection. It was explained that even an accidental needle prick was also another way to transmit HIV. It was stressed that traditional healers' utilisation of their mouths to suck blood from patients as a part of disease management were yet another mode of transmission in Southern Africa.

Additionally the researcher observed that prevalent modes of transmission have been through fluids of an infected person such as blood, semen, vaginal fluid or breast milk. This was in line with Lifson's research which supported the notion that HIV could be transmitted by having sex with an infected person. It was mentioned that mother to child transmission through pregnancy, during birth or breast feeding from an HIV infected mother was another aspect mentioned.

Although modes of transmission were explained so clearly, the researcher observed that most of the literature had not been conducive to imparting knowledge of HIV and AIDS. Pictorial modes of disseminating transmission of HIV and AIDS information would have been of more benefit to individuals with hearing impairments than the written as illustrated in figure 2 below.

It was noted that the document was meant to be accessed by every person since HIV and AIDS was a global concern. From this document the researcher was of the view that other HIV and AIDS advocates should adopt the use of Lifson's pictorial charts as a strategy for disseminating information to individuals with hearing impairments. However, the major challenge in the use of pictorial charts was the lack of captions in sign language

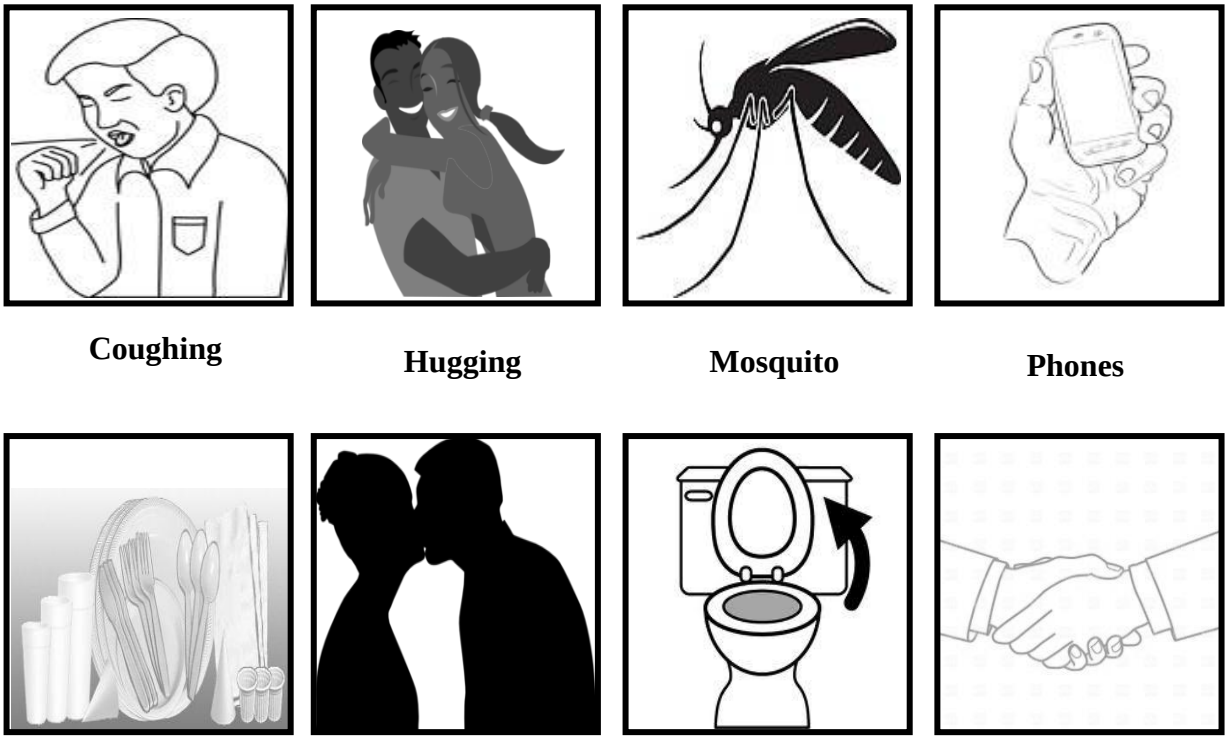
The scholar asserted that there had been no epidemiological evidence that contact with saliva, tears or urine could result in HIV infection. It was reported that HIV was not transmitted by the respiratory route or by casual contact in any setting, whether household, social work, school or prison. In this study it was mentioned that HIV was also not transmitted by food, water, toilet, swimming pools, shared eating and drinking utensils or other objects such as second hand clothing or telephones. Further, it was explained that when a mosquito bit a person, it sucked small amounts of blood from the individual, but could not deposit any blood into the individual.

While this literature was very rich the researcher observed that very little were accessible to individuals with hearing impairments. The literature was well elaborated but the challenge was that itwasin written form only with few pictorial charts as a form of augmentative language. Therefore itwas a challenge for the individuals with hearing impairments to understand more

ways by which HIV could infect a person. Many individuals with hearing impairment had no idea about Lifson's rich research.

Furthermore Mann, Tarantola, Netter (1992) in a similar study alluded to the fact that HIV was only present in body fluid such as semen, vaginal fluid, blood or blood products for it to be transmitted. It was mentioned that HIV only survived during the period it could be in the body as long as it is stored in the blood, but its life span is quite short in most situations. These scholars stated that, the HIV virus was supposed to get into a person in order to get infected. It was noted that the skin formed a barrier for the HIV virus to enter into the blood stream. However every individual would become vulnerable if the skin was damaged through mucus membranes of the anus and vagina. It was also revealed that even acids in the stomach could activate the virus. The above scholars agreed that casual contact was not a mode of transmission as believed by many people. HIV was not transmitted by casual contact, such as touching, shaking hands, from toilets, urinals, sharing towels, utensils, cups and saucers including swimming pools and village panels. The emphasis in the above statement came in the wake of the stigma that had existed as result of speculation surrounding the issue of infection. This was illustrated in figure 2 below: 'Ways in which HIV and AIDS does not spread.

Figure 2: Ways in which HIV Does Not Spread



Source: http://www.clker.com/clipart-silhouetted-kiss.html
www.google.com-14/10/2014

The researcher noted that this kind of information was very educative but complex for individuals who have challenges of hearing. Most of the strategies highlighted have been explained in word from making it inaccessible to the individuals with hearing impairment.

The researcher was of the view that the pictorial information from figure 2 slightly benefited individuals with hearing impairment. This was because individuals with hearing impairment have relied more on sight and understand concepts put across when presented in pictorial form. Figure 2 would be more beneficial to individuals with hearing impairment if the message on it was written in augmentative language. The modes of transmission of HIV and AIDS were presented by different scholars rich only in terms of pictures for the sake of individuals with hearing impairment. The researcher was of the view that a symbol which indicated the word

"NO" should have been in the diagram for the sake of the illiterate individuals with hearing impairments in form of a hand shape in sign language.

2.4Strategies used in Disseminating HIV AND AIDS Information to Individuals with Hearing Impairments

Different strategies have been used in disseminating HIV and AIDS information for individuals with hearing impairments. In Zambia much was done in the area of research shown through the NAC (2004). NAC has disseminated HIV and AIDS information through electronic and print media. Public service announcements and documentation have been widely utilised countrywide. One of NAC's better known national activities in Zambia is the Helping Each Other Act Responsibly Together (HEART) youth media campaign of countrywide nature. HEART is a component of BCC a core of Zambian response to HIV and AIDS. BCC have different focus programmes based on activities spread around urban Zambia and have transferred information and skills to help persons change or avoid unsafe sexual practices.

The researcher was of the view that the BCC programmes had been targeted for different audiences from all walks of life such as miners, drivers, teachers and many more. There had been more activities with a special focus for BCC campaigns on youths because of their vulnerability to HIV and AIDS. The researcher further observed that most youths had failed to desist from sexual intercourse; as a result these activities have been quite helpful. BCC strategies have included frequency of messages and linkages to available services that have had keys to improving dissemination of HIV and AIDS information. HEART in Zambia was a campaign that has managed to reach 71% of urban youth and 37% of rural youths. Individuals with hearing impairment have equally benefitted through BCC extra co-curriculum activities such as life skills.

Youths had a good understanding of messages which influenced their attitudes towards abstinence. HEART campaigns have played a more proactive role in BCC programmes even in schools with extra co-curriculum activities. Meanwhile BCC has continued to be an integral part of the Zambian response in issues relating to HIV and AIDS. As the pandemic still continues, both the importance of and the challenges faced in BCC programmes have intensified. Most of these BCC programmes were in collaboration with HEART. These strategies have been used in disseminating HIV AND AIDS information in Zambia. The most effective strategies used for

individuals with hearing impairments in Zambian schools have been drama, games, and participative activities that individuals with hearing impairments have engaged in. However the majority of the print media and documents have not been user friendly because of language barriers.

Strategies that the individuals with hearing impairments benefited from included co-curriculum activities such as Anti-AIDS clubs in schools and communities around the country. MOE (1996) had Anti-AIDS clubs as one of its objectives in order to give all young people access to information on HIV and AIDS written in a comprehensible way. Therefore, the researcher revealed that there was more need for support for the Anti-AIDS Programmes and for Anti-AIDS Clubs in schools. These programmes have continued spearheading the importance of awareness which graduallywas reaching out to every pupil regardless of the disability.

MOE (2006) stated that information on HIV and AIDS would be culturally sensitive, appropriate language context, age, gender and special needs in order to be in line with accurate information available. Time allocation was to be provided for in all learning institutions with these programmes. However it was done in consultation with relevant stakeholders who later on embarked on training peer educators using appropriate HIV and AIDS prevention messages. This helped in promoting change in risk behaviours. Currently some of the IEC materials being utilised have not been appropriate for different age groups of the learners. The teachers were updating learners with knowledge for guidance on healthy lifestyles by avoiding risky behaviours. All of the IEC, which were developed by MOE and other stakeholders, have not been in support of the curriculum intervention on HIV and AIDS. Whilst all this was effected, it was observed that learners with hearing impairments had not benefitted because the IEC materials were not user friendly as language was not culturally sensitive.

Kanyengo (2009) mentioned that while there was a lot of research and literature on issues of HIV and AIDS, there was literally nothing for individuals with hearing impairments in Zambia.Kanyengo asserted that different parts of the world, Zambia inclusive, had paid little attention to such programmes. As observed in the introduction, Kanyengo agreed with the revelation by ZAFOD which says that, most persons with disabilities do not have access to information through the electronic and print media. Malambo (2000) revealed that HIV and AIDS prevention was taught in schools but no materials were provided. It was stated that

teachers were inexperienced due to inadequate training in issues pertaining to HIV and AIDS. Teachers received inadequate training in preparing them for teaching HIV and AIDS. However even teachers mentioned that HIV and AIDS programmes were not part of the curriculum, therefore it was not possible to go in detail.

Meanwhile ZNAD (2007) conducted a survey by Disability HIV and AIDS Trust (DHAT) involving ZAFOD, Zambia National Association of Women with Disabilities (ZNAWD), Disacare and Zambia Association for the Blind and ZNAD. It was established that people with disabilities faced many challenges and limitations in accessing interventions for HIV and AIDS. Voluntary Counselling and Testing (VCT), Anti-retroviral Treatment (ART) and other services were only offered in presentations that had not been accessible to PLWDs. Individuals with hearing impairment and speech disabilities could hardly access adequate information on VCT, ART, Prevention of Mother to Child Transmission (PMTCT) and other services due to communication barriers between them and service providers. ZNAD acknowledged that intervention strategies which had taken place in Zambia had been inadequate for individuals with hearing impairments including other PLWDs.

ZNAD (2007) further mentioned that the former Minister of Health in Zambia, Brigadier General Doctor. Brian Chituwo acknowledged the inadequacy of HIV and AIDS intervention strategies to meet the needs of PLWDs. The former Minister of Health pointed out that 10% of the Zambian population of PLWDs have been side-lined by policy makers and resource providers in the intervention strategies used in disseminating of HIV and AIDS information.

Heutell and Rothstein (2001) mentioned that the apparent lack of accurate knowledge of the consequences of sexual indulgence showed that the youths with hearing impairments were prevalently unaware of HIV and AIDS transmission and prevention.

Gaskins (1999) and Monaghan (2003) wrote similar reports which focused on the strategies that could be utilized by various organizations ensuring the delivery of HIV and AIDS services to the individuals with hearing impairments. A study conducted in Maryland USA showed that individuals with hearing impairments were 2:10 times likely to be HIV positive. This was attributed to poor access individuals with hearing impairments had on information about HIV and AIDS and safe sex.

Therefore the above scholars in similar reports suggested strategies that could be employed by different stakeholders to deliver required HIV and AIDS services to the individuals hearing impairments. Strategies such as participatory approach in HIV and AIDS awareness and VCT, Care and Treatment services were to be effected. They advocated for education and awareness on HIV and AIDS to enable individuals with hearing impairments make informed decisions in relation to living positively.

Gaskins (1999) adapted the use of participatory strategies that had been reported to enable individuals with hearing impairments to share ideas and engage in constructive messages. However it was stressed that during the compilation of the handbook, organizations working for and with disabled people utilized outreach forums such as workshops, seminars, home visits and mobilization. This was in order to disseminate information regarding HIV and AIDS transmission, prevention, care and treatment. In these fora various people with different disabilities including individuals with hearing impairments were involved in dissemination of HIV and AIDS information. Basic successful approaches were utilised by using various programmes to enhance awareness that included peer education and BCC programmes.

Studies on youths with hearing impairments on knowledge of HIV and AIDS revealed that high school students with hearing impairments had extremely limited core knowledge. It was mentioned that youths tend to be unaware of which behaviors place them at risk.Meletse's (2008) report was about enhancing the well-being of the individuals with hearing impairments after taking into consideration the stigmatisation throughout South Africa. The researcher's observation was that individuals with hearing impairment were classified as second-rate citizens. This was so due to their inability to either speak or hear and that they encountered obstacles in developing their sense of well-being. However, the researcher agreed that it was difficulty in reaching out to the individuals with hearing impairment on HIV and AIDS was the relatively low levels of literacy amongst them.

Meletse (2008) established best means of increasing access to HIV and AIDS information for the individuals with hearing impairments in the Republic of South Africa (S.A). A Gay and Lesbian Archives (GALA) association produced a comic book as part of the Deaf Oral History Project and Outreach Programme for disseminating HIV and AIDS awareness. This comic was endorsed by Sign Language Education and Development (SLED). Meleste living with hearing impairment,

gay and HIV positive was the co-ordinator of this programme. Therefore he wrote a comic book which depicted issues of sexual violence, Sexually Transmitted Infections (STIs), HIV and AIDS and different sexual behavioural tendencies in the hearing impaired community. He targeted teachers, organisational leaders and anyone working with the youths with hearing impairments. The comic book served as a resource in Life Orientation for the individuals with hearing impairments.

Crowe (2003) in his study entitled "Using Focused Groups to Create Culturally Appropriate HIV modes and Prevention Material" for the individuals with hearing impairments, highlighted many important issues to consider in creating credible HIV educational materials. In that data, it was clear that some individuals who have hearing impairments have not fully grasped the practices highlighted in prevention materials. These materials were not matched to their cultural and linguistic needs ofindividuals with hearing impairments.

The researcher noted that the extreme importance of visual aids in sign language-structured word phrases needed to be employed when creating these materials. Indeed, these design principles would benefit not only individuals with hearing impairments, but persons with diverse disabilities. It was evident that their failure to create appropriate educational materials according to basic universal design principles and this has highlighted the false assumptions made under traditional public health risk group model. This assertion has brought to the fore the vitality of the exercise on account of its inexpensive nature.

Dolnick, (1993) reported that the major problem of disseminating HIV and AIDS information was due to communication, and literacy barriers between the hearing and individuals with hearing impairmentsas pervasive. It was observed that the average sixteen-year-old learners with hearing impairments read at the level of a hearing eight-year-old, and when they leave school three out of four have been unable to read a newspaper. This therefore has shown large disparities between hearing and the individuals with hearing impairments in terms of reading and writing levels. The whole issue was reported to be complex, making HIV and AIDS educational materials more universally inaccessible for individuals with hearing impairments. Furthermore, Dolnick explained that most HIV and AIDS educational materials were written for the consumption of eighth grade level learners.

As earlier alluded to, the NAC (2004) BCC programmes have been the best way of reaching out to them. It was revealed that it's known best practices that have enhanced programmes which have championed abstinence among young people. A youth magazine was produced which blended entertainment news with reproductive health messages that were appealing to the youths. Implementation of youth talks have addressed various youth concerns on HIV and AIDS which now on course in Zambia. This has supported Anti-AIDS clubs in schools and communities around the country. Life skills activities such as sports have been the number one activity in the community which kept youths busy to restrain them from behaviours that would likely lead them to illicit sex. Last but not least, usage of entertainment and education strategies has increased knowledge and awareness of HIV and AIDS among young people. Life skills, Anti-AIDS clubs have been the only activities which learners and out of school youths with hearing impairments have benefitted from in Zambia.

Kwathu (2011) published a magazine named 'Knowledge For life' with implementing partners of SADC HIV and AIDS information. Kwathu indicated that HIV infections had increased because of too much circulation of money among continental long distance drivers. Mbewe (2005) report endorsed Kwathu magazine as an important source of information for individuals with hearing impairments. This magazine had pictorial literature based on reducing multiple sexual partners for the drivers. It was reported as an inspiring magazine which any person could learn from. The individuals with hearing impairment have not been exceptions of multiple sex partners due to low literacy levels and poverty. Individuals with hearing impairment have been among the high risk groups due to the nature of the disability. However, Mbewe, being one of the directors from ZNAD, revealed that Kwathu magazine was used to educate the registered members at ZNAD on risk behaviours of dating truck drivers. It was revealed that the individuals with hearing impairments had benefitted from Kwathu magazine though the challenge was language barrier.

In the same vein Mbewe (2005) had come up with augmentative language as a source of information to individuals with hearing impairments.He wrote a resource paper titled "Deaf play with Death." This is evident that Mbewe was up-to-date, the oldest in age and member who had spent most of his working life among the individuals with hearing impairments at ZNAD. Mbewe compiled a report which dwelt on real observations of the behaviour of individuals with

hearing impairments as members while working with them. This resource paper had been available at ZNAD for the individuals with hearing impairments.

Further it was revealed that resource paper was graphic presentation of how Zambian individuals with hearing impairments played daring games which ultimately have led to death. It was explained that individuals with hearing impairments were in the habit of taking alcohol and exchange sexual partners freely and willingly. This has caused the majority of the individuals with hearing impairments get so involved in illicit sex and continued to exchange partners anyhow without worrying about HIV and AIDS. This behaviour wasobserved in the majority of individuals with hearing impairments globally. Therefore this prompted Mbewe to address the issue as "Deaf Play with Death or Deaf Have Fun with Death."

In view of Mbewe 2005 augmentative language resource paper as a medium of instructions on educating the individuals with hearing impairments about HIV and AIDS, the researcher elaborated more. Augmentative and Alternative Communication (AAC) was another way of communication which increased the force of the idea to be conveyed. Rosenberg, Westling and Mcleskey (2011) explained that ACC was a method of communication that supplemented or replaced speech in order to convey a message properly so that it is understood.

Nevertheless there have been different kinds of ACC language, for instance aided and unaided communication system. Rosenberg, Westling and Mcleskey (2011) further stated that the aided augmentative system was electronic and required use of battery and electricity. Aided augmentative communication system was used by individuals with hearing impairments who utilised hearing aids which required batteries or electricity for charging. Meanwhile unaided augmentative systems did not require electricity or batteries, but only required the use of, body language, sign language, graphic, communication boards, symbols and many more. This was reported as an alternative means of communication which had encouraged for Augmentative and Alternative Communication skills.

In this study the researcher took time to explain on the resource paper by Mbewe. This paper had a positive impact for persons with hearing impairment in Zambia. It was based on life styles of the hearing impaired community and on how knowledge on HIV and AIDS was acquired. The resource paper was based on disseminating of knowledge, social interaction that enabled total

communication on dangers of multiple and exchange of sexual partners for individuals with hearing impairments. However it was asserted that individuals with hearing impairments had been facing challenges in understanding the dangers of HIV and AIDS. This was in line with the principal focus on this study on establishing strategies of disseminating HIV and AIDS information to individuals with hearing impairments along the social culture.Mbewe's paper had an evident tool of language barrier communication on HIV and AIDS by individuals with hearing impairments due to obscene behaviours portrayed.This resource paper was outstanding at ZNAD in terms of disseminating information on HIV and AIDS and the dangers of being ignorant having multiple sexual partners.Therefore the resercherattached Mbewe's resource paper which is more of a game on the appendices as Appendix 1.

The paper had an interesting graphic resource paper that stressed challenges in understanding the dangers of HIV and AIDS by individuals with hearing impairments. It was noted that Mbewe's presentation was based on the real life situation regarding promiscuous behaviours displayed by individuals with hearing impairment. Therefore this document was presented in augmentative language. Theoretically Mbewe further described this document as "deaf people having a habit of playing with death in the yard of Mr and Mrs HIV and AIDS and their children STI namely Bola Bola (Local Vernacular expression for sexually transmitted infections: STIs), syphilis, gonorrhoea, candida, cancroids (wounds), trichonosomiasis (TV), and warts.

The interpretation of the above stated (deaf people having a habit of playing with death in the yard of Mr and Mrs HIV and AIDS and their children STI) is that the individuals with hearing impairments do not understand that risky behaviours put them at risk of getting infected as well as being infected with STI's. There researcher resolved to describe Mbewe's views in augmentative language as presented below in order to show the gist of the presentation. This resource paper was presented in pictorial form since individuals with hearing impairment relied more on sight in order to understand what was being presented. This is because individuals with hearing impairments have been reported to understand concepts by using visual materials with creative visual methods that have benefitted the individuals with hearing impairments. The presentation in Appendix 1 was documented as a means of accessing information on HIV and AIDS. Major symbols were used such as a ribbon, an ear, a spider and a cobweb stating that HIV and AIDS infected individuals with hearing impairments the way a spider makes a cobweb and

would move from one end to another. Mbewe described that the games the individuals with hearing impairments who were members of ZNAD played as fivefold and as follows: forgetting awareness of HIV-AIDS; danger, poverty, beer, libido; sex competition for sweet partners; lovers exchange programme and Zambia Agency Protection for the deaf identity card.

Mbewe described as follows on the life style that the individuals with hearing impairments had ignorantly lead, augmentative language was used:

2.4.1 Forgotten About Awareness of HIV and AIDS;

It was explained that even with the little knowledge the individuals with hearing impairments had on HIV and AIDS they opted to forget how deadly AID was.

2.4.2 Danger, Poverty, Beer, Libido;

This was explained that it was as a result of living in abject poverty with no jobs, they engaged themselves in taking illicit beer which enhanced their libido, there after individuals with hearing impairments would engage themselves in risky sexual behaviours.

2.4.3 Sex Competition for Sweet Partners;

The individuals with hearing impairments were reported to have multiple partners. This was explained in augmentative language as "sex competition for sweet partners." This was how the individuals with hearing impairments would start having competitions by exchanging sexual partners who they called sweet sex partners.

2.4.4 Lover's Exchange Programme;

It was revealed that the exchange of sexual partners was referred to as "lover's exchange programme."

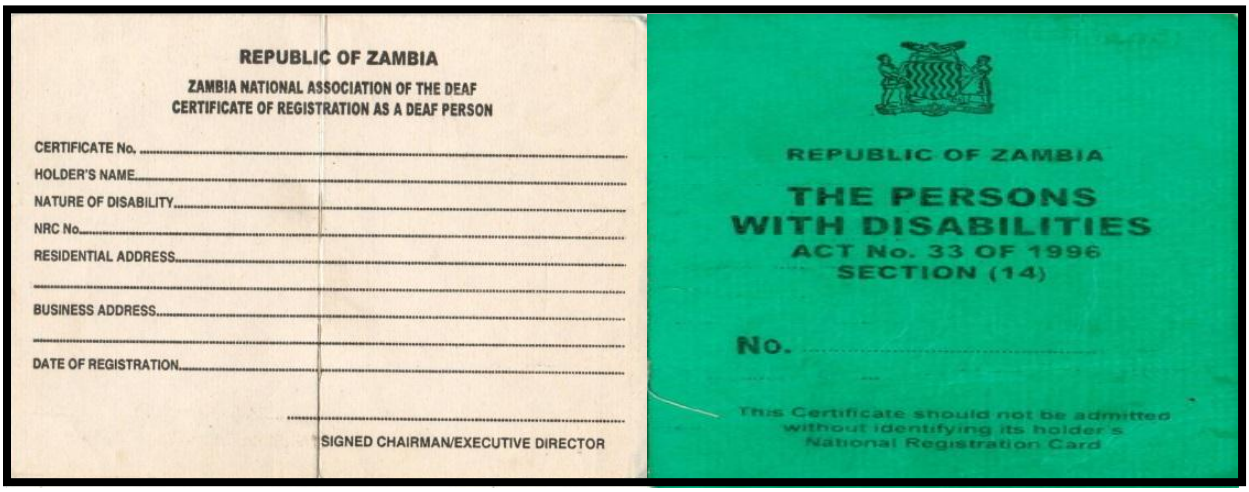
2.4.5 Zambia Agency Protection for the Deaf Identity Card:

It was revealed that the individuals with hearing impairments had a belief that the 'Zambia Agency Identity Card for the Deaf' protected them from being infected with HIV and AIDS. This card in augmentative language and sign language was abbreviated as ZAPD. In Zambia Mbewe reported that the individuals with hearings impairments had this myth that by waving

the "ZAPD" up in the air, HIV and AIDS would by pass them without infecting them. The author of this presentation had lived with individuals with hearing impairments himself for many decades and has known their ways of life. It was stressed that individuals with hearing impairment believed they could never be infected by HIV and AIDS. It was reported that the individuals with hearing impairments in Zambia have had a myth that God has considered them to be very special because of their impairment; therefore they had believed that they were protected from HIV and AIDS. Figure 3 is a copy of the "ZAPD". Therefore the relevance of the copy of ZAPD in this report was in order to give the gist of what wasthere rather than speculating on it as it was being revealed theoretically only.

Figure 3: ZAPD Card

Zambia National Association of the Deaf Certificate of Registration as a Deaf Person.



Source: ZNAD Deaf Identity Card

Mbewe's context of the games people with hearing impairments play has been illustrated. It was observed that Mbewe's major concern was HIV and AIDS with the diseases associated to STIs such as syphilis, gonorrhoea, candida, cancroids (wounds), trichonosomiasis (TV), and warts. In this context the researcher noted that the individuals with hearing impairments had been ignorant on issues of HIV and AIDS including other STIs by giving an example of the way a spider clings to a cobweb. It was stated that the spider is the virus which spreads optimistic infections widely as a cobweb and the individuals with hearing impairments got caught in the cobweb due to their risky behaviours. The researcher further noted that Mbewe's graphic resource paper had a meaningful way of educating the individuals with hearing impairments because of the

irresponsible behaviour of multiple sexual partners; dangers of poverty; beer drinking which enhanced high libido. Therefore the individuals with hearing impairments were believed to have high rate sex competition of exchanging sexual partners who they referred to as sweet partners. This was what the individuals with hearing impairments referred to as lovers exchange programme for money, sex, and other gifts. The researcher having associated with individuals with hearing impairments revealed that they even reach to the extent of consenting to each other in exchanging sexual partners with friends. For the individuals with hearing impairments this was deemed as a normal procedure and very few took offence of such an act.

In Zambia it was observed that the majority of the individuals with hearing impairments came from humble backgrounds, with no jobs. In most cases the individuals with hearing impairments were living in the same communities, townships, go to the same clubs, bars and churches. However, lack of adequate dissemination of HIV and AIDS has had a negative impact on behaviours of individuals with hearing impairments. This was what prompted Mbewe to address the specific needs of the individuals with hearing impairments on BCC, a core component on the Zambian response to HIV and AIDS related issues using the HEART campaign.

However, the researcher was of the view that Mbewe's resource paper had a positive impact towards abstinence, delayed onset of sexual activity and condom use by the registered individuals with hearing impairments at ZNAD. It was observed that the resource paper was one of outstanding strategies ZNAD was using for individuals with hearing impairments in accessing information on HIV and AIDS. The researcher observed that "Deaf Play with Death" is a well written document which targets individuals with hearing impairments. In Zambia, of all documents reviewed in this paper, Mbewe's stands out to reduce challenges faced by individuals with hearing impairments especially the youths registered at ZNAD.

This resource paper was strategically written and most individuals with hearing impairment benefitted from it. It illustrated how individuals with hearing impairments preferred to live in the same communities. Lack of jobs caused the individuals with hearing impairments live to in abject poverty and engage themselves in promiscuous behaviour which left much to be desired. It further revealed that individuals with hearing impairment also had preferred living in isolation and usually were patronising the same churches and clubs. This is the reason they liked

exchanging sexual partners and competed for sexual partners. ‘Deaf Play with Death was a clear indication of how the lives of individuals with hearing impairments are led.

Additionally the resource paper had more information stating that individuals with hearing impairments in Zambia believed that they were very special, therefore they could not be infected by the HIV virus. The “Zambia Association of the Deaf Certificate of Registration as a Deaf Person” identity card for the individuals with hearing impairments in Zambia was believed to protect them from getting infected with HIV and AIDS therefore revealed that the individuals with hearing impairments in Zambia had become careless and vulnerable to HIV infection due to this illusionary perception.

In this study the researcher identified several gaps in methods employed by different researchers in practices in disseminating HIV and AIDS information. Although a lot of HIV and AIDS campaign programmes have taken place in Zambia, it was noted that the individuals with hearing impairments were not considered. There were no activities and provision of HIV and AIDS IEC materials specifically for the individuals with hearing impairments. From the data and documentation arrived at by the many scholars with concerns regarding the plight of the individuals with hearing impairments; one can only say there is a lot more that needs to be considered.

In summary literature reviewed different modes of disseminating HIV and AIDS information to individuals with hearing impairments locally and globally. Knowledge on HIV and AIDS by individuals with hearing impairments reviewed that the individuals with hearing impairment lagged behind eight years to understand issues on HIV and AIDS than the hearing counterparts globally. The media faced challenge in disseminating HIV and AIDS information to individuals with hearing impairments as the language used was not comprehensive on the posters, flyers. It did not suit the needs of individuals with hearing impairments. It was reviewed that strategies of disseminating HIV and AIDS was through electronic and print media for individuals with hearing impairments. It is for this reason that the researcher endeavoured to carry out a study on the practices of disseminating HIV and AIDS information to individuals with hearing impairments. The next chapter presents the methodology of the study.

CHAPTER THREE:METHODOLOGY

3.0 INTRODUCTION

In chapter two relevant literature was reviewed under four themes on dissemination, knowledge, strategies and challenges in issues of HIV and AIDS for the persons with hearing impairments. This chapter presents the methodology of the study. The various aspects of the methodology were summarised under different subheadings: research design, target population, sample size, sampling procedure, research instruments, and data collection procedure and data analysis.

3.1 Research Design

The study took a descriptive survey design in conducting this research. The descriptive method was adopted because of its usefulness in describing the situation as regards modes of dissemination of HIV and AIDS information to the individuals with hearing impairments.

The study used both qualitative and quantitative methods of data collection. Qualitative in this context implies natural setting, where case studies of institutions and communities are incorporated. Whereas quantitative research seeks to quantify the reasoning perspective of the targeted community. Therefore descriptive research design was appropriate in this research. Kombo and Tromp (2006) explained that, descriptive design could be used when collecting information about people's opinions, social issues, attitudes, or any of the modes of education.

3.2 Target Population

The target population in this study comprised learners from Munali secondary school of grades eight to twelve in Lusaka district. The study population further comprised out of school youths with hearing impairments from ZNAD, parents, teachers and media personnel from ZNBC.

3.3 Sample Size

The sample size constituted of 68 respondents comprising 29 learners with hearing impairments, 20 out of youths with hearing impairments, 5 parents, 9 teachers and 5 Mass Media personnel.

Table 3.3.1Sample description

Category	Male	Female	Total
Teachers	5	4	9
Parents	2	3	5
Learners with HI	16	13	29
Out of school Youths with HI	10	10	20
Mass media personnel	3	2	5
TOTAL	**36**	**32**	**68**

Source: Field Data, 2014

3.4 Sampling Procedures

The researcher used purposive sampling technique in this study. Purposeful sampling was used to select learners with hearing impairments, out of school youths with hearing impairments from ZNAD, teachers for the individuals with hearing impairments learners, parents and guardians of the learners and youths with hearing impairments and mass media personnel from ZNBC. Purposive sampling technique was used because participants had specific information in the study on practices of disseminating HIV and AIDS information to individuals with hearing impairments (Cohen and Manion, 1994).

3.5 Research Instruments

Research instruments included structured questionnaires and interview guides. This helped the researcher to anticipate the type of information which was needed. There researcher used instruments according to Orodho and Kombo (2002) suitable for the respondents based on factors such as literacy levels and culture of the respondents with hearing impairments. Firstly pilot questionnaires were administered to the respondents with hearing impairments to analyse if it had appropriate information. After piloting the researcher made necessary amendments and revised the questionnaires due to language barrier as the respondents with hearing impairments were not able to understand and answer the questionnaire appropriately on practises of disseminating HIV and AIDS information to the individuals with hearing impairments. Therefore the study used modified structured questionnaires which were simple to understand. The language used was clear and straight forward. The advantages of the structured questionnaire

used covered a wide area. It was not biased on the researcher and the respondent. The disadvantage of the structured questionnaire responses was rated on the low side because the researcher was not direct in contact with the respondents. Therefore the researcher could not deal nor clarify any misunderstanding. In some cases questions remained unanswered. The researcher had no order of control in which questions were answered. .

The structured interview guide instrument was tailored for the teachers, parents and mass media personnel despite the instruments not being similar in nature. Therefore questions were asked orally and involved subjecting every informant with similar questions as in a case of survey. Combo and Tromp (2006) stated that structured interviews had advantages and disadvantages. The advantage were that reliability of the information collected was high as each informant was subjected to similar questions. This gave in-depth specific information and to the researcher on the case study. The disadvantage of structured interview guide instrument was that that it was too formal as the researcher did the questioning and the respondent simply gave answers. The respondent felt that he or she was under investigation or being probed.

There was a careful selection of the instruments which ensured that information that was generated was strong enough to verify the objectives. Cohen and Manion (1994) stated that structured interviews should have contents and procedures organised in advance. This means the sequence and the wording of the questions are determined by means of a schedule and the interviewer is left free to make modifications. The interviews in this research were in three parts which aimed at establishing modes of disseminating HIV and AIDS information to learners and out of school youths with hearing impairments. Other factors considered were the availability of reading materials on HIV and AIDS in school and home.

The last interviews were with the mass media personnel. Since individuals with hearing impairments benefit more from information presented visually, the research aimed at discovering whether mass media was using relevant technological instruments through electronic media. The interview helped the researcher establish challenges faced in accessing HIV and AIDS information by the individuals with hearing impairments. The interviews helped the researcher generate qualitative data which were recorded.

The study further opted to adapt structured questionnaires which were used to suit the language for the individuals with hearing impairments, for easier understanding. The questionnaires were self-administered but modified to signed English language. This technique was employed because the respondents were not conversant with Standard English language or vocabulary used. The structured questionnaire administered aimed at investigating how knowledgeable learners and out of school youths with hearing impairments were on HIV and AIDS.

The research instruments administered to the learners and out of school youths with hearing impairments had modified vocabulary in sign English for easier understanding of issues pertaining to HIV and AIDS. This was in line with sentiments made by Batavia (1993), that language significantly impedes advocacy efforts to construct a more equitable and accommodating environment for the individuals with hearing impairments. However, one should not conclude that the blame for all problems of people with disabilities (in this instance, people with hearing impairments) fall exclusively on the individual or on society. It is for this reason that the researcher adapted modified instruments in sign English for individuals with hearing impairments. Batavia, suggested that it is important to look at individual's impairments by coming up with enabling attitudes.

3.6 Data Collection Procedures

The following data collection procedures were used:

A pilot survey was earlier done using questionnaires which had Standard English. It was observed that 100% of both learners and out of school youths with hearing impairments were not able to read and give appropriate answers. However the researcher administered questionnaires which had conducive and understandable adapted language for both learners and non-learning youths with hearing impairments. The only difference on both questionnaires was the issue of marital status. The questionnaires for the learners with hearing impairments were administered in the presence of teachers from their respective grades and the coordinators of the youths from ZNAD. Both learners and out of school youths with hearing impairments answered the questionnaires independently administered to them.

Appointments were made through the Head teacher, Deputy Director of programmes from ZNBC, and the Director from ZNAD for the respondents' interviews to commence. The teachers

who were available in the school at that time were interviewed. Similarly members of staff from mass media institutions parents and guardians of individuals with hearing impairments were equally interviewed. This was in order to determine the nature and extent of practices of dissemination of HIV and AIDS information to learners and non-learning youths with hearing impairments. Two parents were interviewed from Munali secondary schools, two from ZNAD. However one parent who had a busy schedule after an appointment preferred to be interviewed on the telephone. This parent offered to call the researcher at the time he was free.

The answers to the interviews were written in a note book. However the researcher assured the respondents of confidentiality and encouraged them to be open minded. The researcher informed all respondents that the study at hand was going to be of benefit in implementing policies in the practices of disseminating HIV and AIDS to individuals with hearing impairments.

4.0 DATA ANALYSIS

Both qualitative and quantitative methods were used in analysing data. Qualitative data were analysed by different themes that emerged during the collection of data while quantitative data were analysed with the aid of the Statistical Package for Social Sciences (SPSS). Frequencies cross tabulations and percentages were used in describing the distribution of single and summated variables. This was achievable through inferential statistical analysis and percentile through finding the correlation between variables. Therefore this made it easy to present data in frequency table form.

4.1 Ethical Consideration

Skovdal and Abebe, (2012) stated that research ethics involved the application of fundamental principles in conducting research. Bearing in mind that the study was sensitive to the respondents, it was important to conduct research in confidentiality. The researcher obtained consent from administrators, teachers, parents, ZNAD President and Director of Programmes from ZNBC during the research. This is because different institutions including professionals normally have different norms suitable for different behaviours. The researcher ensured that there was voluntary participation of respondents; no harm to subjects was inflicted either emotionally or physically. The researcher maintained the integrity and privacy of participants, including assurance of anonymity and confidentiality of the information which was given during the course of the study. This was in line with Kvale and Brinkman's (2009) study, which states

that subjects, characteristics which are published have privacy, fictitious names. Finally ethical norms help to ensure that researchers can be held accountable for any false publication. The preceding chapter discusses presentation of findings.

In this chapter the methodology of the study was discussed. This was to enlighten the consumers of the research on the process of carrying out the research. Triangulation was used in this study which made data to be authenticated. This was to make sure the data were collected and the researcher was convinced that correct data were realized. The preceding chapter presented findings of the study. This chapter was devoted to the graphic and the thematic presentation of collected data from data collection instruments.

CHAPTER FOUR: PRESENTENTATION OF FINDINGS

4.0 Introduction

In the previous chapter the methodology of the study was done. The research process was discussed. This chapter presents the findings of the study which sought to find out the practices of disseminating HIV and AIDS awareness to individuals with hearing impairments .The results were presented according to the themes that emerged in the questionnaires and interview. 29 learners with hearing impairments and 9 teachers at Munali High School were available during the research. Another 20 out of school youths with hearing impairments from ZNAD, 5 parents for individuals with hearing impairments from different locations within Lusaka and 5 ZNBC personnel.

Both qualitative and quantitative methods addressed all the three research questions of this study. These are;

- What are the modes of disseminating information on HIV and AIDS to Individuals with hearing impairments?
- How knowledgeable are individuals with hearing impairments about HIV and AIDS?
- What are the challenges faced by the individuals with hearing impairments in accessing HIV and AIDS information?
- What are the strategies used in the practices of disseminating of HIV and AIDS information to individuals with hearing impairments?

4.1 Modes of disseminating information on HIV and AIDS to individuals with hearing impairment.

The first objective sought to find out modes of disseminating information on HIV and AIDS to individuals with hearing impairments. Teachers, parents and guardians were the respondents on modes of disseminating information on HIV and AIDS to individuals with hearing impairment was important in this study. The findings of the study revealed that the teachers, parents and guardians were not fully engaged in disseminating HIV and AIDS information due to the language barrier. The modes identified included; during school assembly, video shows,peer education, drama and life skills such sports.

It was revealed that it was difficult to use comprehensive vocabulary to educate the children with hearing impairments. This was due to insufficient materials tailored for the individuals with hearing impairments. Therefore this brought about challenging factors which the respondents faced in disseminating HIV and AIDS information. The following were the results:-

4.1.1 Teachers' knowledge about HIV and AIDS

Teachers of learners with hearing impairments were asked to state if they were knowledgeable about HIV and AIDS.

The findings revealed that all the 9 teachers interviewed were knowledgeable about HIV and AIDS. They all responded in the affirmative to the question about how knowledgeable they were on HIV and AIDS. They were able to explain issues correctly when probed further on dangers of HIV and AIDS.

4.1.2 Level of access to HIV related information by learners with hearing Impairment

Teachers were asked the level of access to HIV related information by learners with hearing impairments.

When teachers were asked about the level of access to information on HIV and AIDS by learners with hearing impairment, different answers were given by the teachers.

Out of the nine teachers five teachers three males and two female said that:

"Yes, the learners with hearing impairment have limited access to information."

Another two(one male and one female)teachers said:

"Yes, the learners access to information on HIV and AIDS was good."

One female respondent said:

"I am not sure."

The last one male said:

"I am aware that the access of information is very good in terms of performances during school assembly."

In trying to explain further on levels of access to HIV related information by learners with hearing impairments,

1 female teacher stated that:

"*I am aware that during the course of the term the school receives peer educators at least once in a while."*

4.1.3 Whether there were any activities which disseminated information on HIV and AIDS to individuals with hearing impairments in school.

The teachers were asked whether there were any activities that individuals with hearing impairments took part, which disseminated information on HIV and AIDS. The teachers were advised to state the following answers, yes, no, not sure and explain further if they had more answers to give**.**

The following were answers by the teachers**:** The findings revealed that individuals with hearing impairments had access to information on HIV and AIDS. Six out of nine of the teachers agreed, two indicated that there were no activities aimed at enhancing access information on HIV and AIDS to learners with hearing impairment.

However one female teacher had this to say:

> *"Yes as a school such activities take place during clubs and sports or extra curriculum activities."*

The findings revealed that the majority of teachers agreed that there were activities on HIV and AIDS information for learners with hearing impairments in school, while 2 female teachers completely disagreed and 1 was not sure.

4.1.4 Whether there were any factors that hindered learners with hearing impairment from accessing information on HIV and AIDS

Teachers were asked whether there were any factors that hindered learners with hearing impairments from accessing information on HIV and AIDS. All the nine respondents said yes.

All the nine teachers who participated in the study agreed that there were factors that hindered pupils with hearing impairment to access information on HIV and AIDS. All the teachers explained that the challenge was on language barrier.

One female teacher further stated that:

> "*Yes it is very difficult to disseminate information to the hearing impaired because of the limited vocabulary in sign language."*

The findings revealed that all the nine respondents agreed that there were factors that hindered learners with hearing impairments from accessing information on HIV and AIDS, such as inadequate vocabulary in sign language which was inclusive of language barrier.

4.1.5 Whether there were factors that hindered open discussion and access to HIV and AIDS information in schools

The teachers were asked whether there were factors that hindered open discussion and access to HIV and AIDS information in schools;

When asked whether the learners with hearing impairments were open to discussions on HIV and AIDS, five teachers agreed, while three said there were hindrances in disseminating HIV and AIDS information. Only one out of nine respondents was not sure.

One male teacher had this to say*:*

> *"The coordination of activities of HIV and AIDS are integrated in the main stream, it would be better if the learners can have activities of their own from the special education unit. I personally feel that if only most of the words can be in sign language most teachers would have been competent to lead the learners into an open discussion on HIV and AIDS."*

Another male teacher had this to say**:**

> *"The hearing impaired learners are disadvantaged. These learners are unable to participate in various activities on HIV and AIDS. This is because the language and literature available is complicated and does not suit the learners' needs. This is a source of concern as the majority of HIV and AIDS advocates do not know sign language at all. Therefore, this means that disseminating of HIV and AIDS information becomes limited and inaccessible to the hearing impaired"*

The above responses were confirmed by another male who had this to say**:**

> ***"****Hearing loss is a limiting factor in that one is unable to access HIV and AIDS information adequately especially that it is mainly disseminated electronically through the media. Learners with hearing impairments have poor access to public information on HIV and AIDS from the media due to hearing loss. Even the literature available makes it difficult to give adequate meaning. In short there is limited access to information due to general high levels of illiteracy among those with profound hearing loss. It is a source of concern that even the attitudes of the society perceives the individuals with hearing impairments not to be sexually active. This is because the levels of infection among the individuals with hearing impairments tend to be high due to rejection and sexual relationship among persons with disabilities."*

The majority of the teachers said the learners with hearing impairment had open ended discussions on HIV and AIDS; while others said there were hindrances in disseminating HIV and AIDS information. Only one out of nine teachers was not sure.

4.1.6 Whether information on HIV and AIDS education peer groups for learners with hearing impairments helped increase access to information on HIV and AIDS

Teachers were asked whether information on HIV and AIDS education peer groups for learners with hearing impairmentswould help increase access to information on HIV and AIDS.

It is worth noting that all the nine teachers had agreed that HIV and AIDS education peer groups for learners with hearing impairment would help increase access to information on HIV and AIDS.

All the teachers' responses were in affirmative.

The findings revealed that all the teachers agreed that information on HIV and AIDS education peer groups for learners with hearing impairments would help increase access to information on HIV and AIDS.

4.1.7 Whether the institution had the MESVTEE HIV and AIDS workplace policy

The teachers were asked whether the institution had the MESVTEE HIV and AIDS workplace policy.

Six teachers indicated that they did not know whether such a document existed. Only one female teacher revealed that the school had that policy. In addition, two of each male teacher said:

> *"Yes that document existed I am not sure whether the institution had the MESVTEE HIV and AIDS workplace policy."*

This study revealed that many teachers did not know that MESVTEE HIV and AIDS workplace policy document existed; only one teacher revealed that the school had a work policy on HIV and AIDS. However two teachers said they knew that such a document existed but they were not sure whether the institution had the MESVTEE HIV and AIDS work place policy.

4.1.8 Whether the institution had the MESVTEE Life Skills Framework

Teachers were asked whether the institution has the MESVTEE life skills framework.

When teachers were asked whether the school had the MESVTEE life skills framework available, four teachers said they did not know, two of them had indicated that the document was not available in the school. While three said that the MESVTEE framework was available at the school but it was not accessible for the teachers to use.

The responses from the participants were as follows:

Three female teachers gave the same responses;

"I do not know."

Two teachers one male and one female said*:*

"The MESVTEE document is not available in school."

Next three teachers' one female two males had this to say, the first one said:

"That document is there but not available for teachers."

Another one said:

"*The MESVTEE document is available in school but it is not accessible for the teachers to use".*

The last teacher said:

"I am aware that the document is there but we are not given, for some reason."

The finding revealed that the MESTVEE document on life skills was available in school but it was not made available to the teachers, but the majority said it was not there while 1 indicated not sure.

4.1.9 Whether life skills framework is circulated to all educators

Teachers were asked whether the life skills framework is circulated to all educator**s.**

On whether the MESVTEE framework was circulated to all educators, four out of nine had indicated that they did not know. Another 4 of the respondents had said that the framework was not circulated.

Only one out of the nine respondents had said:

"The document was made available but and it was not be accessed easily but upon requesting for it only."

The findings suggest that the majority eight respondents indicated that the MESVTEE document was not circulated to all educators, while one out of the nine respondents agreed.

Teachers were asked whether they had access to the life skills framework.

Asked whether the teachers had access to the life skill framework, four teachers indicated that they did not. Another three had said that they did have access to the document. While two said that they were not sure.

The findings revealed that even though seven out of nine teachers had indicated that they had no access to the life skill framework, three of the respondents indicated that they had access to it.

4.1.10 Whether the institution had materials on life skills available to learners

Teachers were asked whether the institution had materials on life skills available to learners.

On whether the respective school had available materials on life skills for the development of learners with hearing impairment, six out of nine teachers said that the school had life skills materials, while three female teachers disagreed. Of the six responses given in affirmative;

Each of the five male teachers said:

> *"Yes our school has a lot of life skills materials such as sporting materials and gardening tools."*

One of the female respondents had this to say:

> *"Our school has plenty of life skills materials which are found in the home economics department. Here I am referring to all sorts of cooking utensils and sewing machines."*

The views of the six teachers were that the school had available materials on life skills for the development of learners with hearing impairments while three of the respondents disagreed.

4.1.11 Whether educators integrated life skills in their lessons

Teachers were asked whether as educators, integrate life skills in their lessons. On whether the educators integrated life skills in their lessons, six out of nine teachers agreed while three said they did not. The response from two of the teachers was as follows;

One female teacher had this to say:

> *"I always integrate my lessons of Home Economics by teaching learners how to make different types of doormats and other art related skills."*

While another female teacher had this to say:

> *"Yes I always integrate life skills in the Home Economics and Art and Design lessons even though it is not part of the curriculum. This is because I feel it is my obligation to impart the learners with skills which are meaningful in their lives as a way of keeping them busy."*

4.1.12 Parent's modes of disseminating HIV and AIDS information for learners and out of school youths with hearing impairment.

The researcher conducted another one on one interviews of the parents of learners and out of school learning youths with hearing impairments on, "Modes of disseminating HIV and AIDS information to the children with hearing impairments." Parents and guardians equally have an important role in the lives of their children. Therefore the researcher interviewed parents and guardians as a follow-up visit from teachers in this study. The following were the results:

4.1.13 Parents and knowledge on HIV and AIDS

Parents of the learners with hearing impairments were asked to state if they were knowledgeable about HIV and AIDS.

All the five parents when asked whether they were knowledgeable about HIV and AIDS, answered in the affirmative.

The findings revealed that all the five parents interviewed were knowledgeable about HIV and AIDS.

4.1.14 Communication of HIV and AIDS to the children.

With regard to how often the parents communicated HIV and AIDS information to the children with hearing impairments, parents gave multiple responses;

One female parent interviewed at Munali secondary school said:

> *"I always discourage my child on a daily basis from having girlfriends. I know that once my son is involved in a relationship with a girl, he can easily get infected with the HIV and AIDS virus. It is not easy to educate the hearing impaired on HIV and AIDS due to language barrier. So the best I do is just telling him girls are not good for him and I tell him this almost every day."*

Another one male parent interviewed through the telephone said*:*

"I do not really tell my son directly but teach him on moral behaviour. I also do not single out anything on HIV and AIDS related issues, because what I say to him on moral behaviour is enough."

One female parent interviewed at Munali secondary school stated that:

"I have made it a routine that at least twice a week, we have a meeting at home where I try by all means to teach my child on the dangers of HIV and AIDS. It is not easy, but as a parent I do my level best in spite of language barrier. My child is female and I have a lot of challenge because she has many male friends."

Additionally one male parent interviewed from ZNAD had this to say:

"To be honest it is not easy to educate my child on HIV and AIDS. Therefore I only do it once in a while especially when there is something related to HIV and AIDS on TV."

The last female at ZNAD stated that*:*

"I always talk to my child regarding HIV and AIDS though it is not easy. I always advise my son to avoid girls because I have noticed that my child is always surrounded by both elderly and younger hearing impaired ladies. As a parent it is a source of concern as the opposite sex even goes to the extent of fighting for him. So each time I am teaching him I always ask him to be careful and use a condom if he has started engaging himself in sexual intercourse."

The above observations were indicative of the fact that all the parents communicate to their children with hearing impairments on matters of HIV and AIDS. However, all the parents indicated language as a barrier.

4.1.15 Whether family members help communicate about HIV and AIDS to the children with hearing impairments.

Parents were asked whether other family members helped to communicate about HIV and AIDS to the children with hearing impairments.

One male parent within Lusaka via a telephone interview said*:*

"Yes my sister does that especially on good behaviour because she is HIV positive. She is very willing to educate her nephew. Since she is positive, she normally talks about her illness and gives an example of her infection. You know the problem is that my family has

lost a lot of siblings due to the deadly virus. So I believe that is the reason my sister feels it is her obligation to discuss HIV and AIDS with her nephew who she feels is vulnerable."

Another female respondent from Munali Secondary School said:

"My father is normally the one who goes into detail to educate my son on HIV and AIDS being the grandfather."

Another female parent from the same school said:

"My parents take up the role of disseminating information on HIV and AIDS."

Meanwhile each of the last two respondents at ZNAD (male and female) said:

One female parent said: *"No one apart from me communicates with my child on matters pertaining to HIV and AIDS."*

Another male parent said: *"I am the only one who communicates with my child on HIV and AIDS issues"*

The above responses confirm that other members of the family communicated to the children with hearing impairments on HIV and AIDS

4.1.16 Extent of how sensitized children with hearing impairment were

Parents were asked the extent to which the children with hearing impairments were sensitized on HIV and AIDS**.** The respondents gave several different responses;

One female parent at Munali secondary said:

"I always teach my child not to share used razor blades and not to have multiple girlfriends."

Another male parent stated through telephone interview:

"My son is well sensitised, at least he has 90% of the information. As a father I have bought books on teens and sexual activity which have components of HIV and AIDS."

One more female parent at Munali Secondary School mentioned that:

"All I say about this is that my child looks like he knows a lot as he has books on HIV and AIDS to the extent where the chid wears a red ribbon on his shirt, symbolising anti-HIV. It makes me happy as a parent."

The response of the male parent from ZNAD was:

"My son indicates that, they get sensitised from ZNAD on HIV and AIDS."

Another female parent from ZNAD said:

"It is very difficult for me to say whether my child is really sensitised because the behaviour he portrays is of a person who is not sensitised on HIV and AIDS, even though I take time to sensitise to him"

The responses of all parents indicated that their children were well sensitised on HIV and AIDS.

4.1.17 The extent to which parent's practised dissemination of information about HIV and AIDS to their children with hearing impairments.

This was to show how much information parents disseminated on HIV and AIDS to their children with individuals with Hearing Impairments.

The Reponses below indicate the extent to which parents have reached out to their children with hearing impairments in disseminating information about HIV and AIDS:

One male parent from within Lusaka through a telephone interview indicated that:

"As a concerned parent I have bought a video DVD which shows how HIV and AIDs can affect the country and the world at large for their child."

Another female respondent from ZNAD said*:*

"My child had told many times that AIDS has no cure therefore it is not good to play with women."

While each of the two respondents from Munali secondary school had similar responses said:

"I emphasise on more use of a condom, not sharing needles, razors, and avoiding girlfriends or boyfriends."

The male respondent at ZNAD said:

"My child does not receive information from me but it is done directly through books which have HIV and AIDS related cases. I believe he gets the books from school, though the books have language which is challenging."

The above study revealed that parents were involved in disseminating information on HIV and AIDS to their children with hearing impairments to a greater extent using different means.

4.1.18 Whether parents were free to disseminate information on HIV And AIDS to their children?

Parents of the hearing impaired learners were asked to state whether they were free to talk to their children about HIV and AIDS; the findings revealed that:

All the parents answered in affirmative. The findings further suggested that all the parents were concerned about their children's welfare and they were free to disseminate information on HIV and AIDS to their children.

One male parent through telephone interview stated*:*

> *"I would like my child to understand many aspects of life especially information on HIV and AIDS because he is vulnerable due to challenges of language. My child has complained that his friends from the deaf culture have wrong motives in life especially that all the friends discuss is sexual intercourse and girlfriends. Since then my child has stopped and refuses to join the deaf group communities. This is the reason I feel free to discuss HIV and AIDS with my child. As a parent I am very free to discuss issues of HIV and AIDS with my child."*

The findings of the study from the first objective revealed that most of the teachers and parents were slightly engaged in disseminating HIV and AIDS information due to language barrier. The modes for Comprehensive vocabulary and insufficient materials tailored for the hearing impairedwere the challenging factors faced in disseminating HIV and AIDS information for both the teachers and the parents. The modes for disseminating HIV and AIDS information were there such as drama, videos, school assemblies and life skills (sports).

4.2 Knowledge by learners and out of school youths with hearing impairments about HIV and AIDS

The second objective sought to find out how knowledgeable learners and out of school youths with hearing impairments were on HIV and AIDS. Knowledge on HIV and AIDS among individuals with hearing impairments was an exclusively important aspect. It was important to ascertain how much the individuals with hearing impairments knew about HIV and AIDS in terms of understanding HIV and AIDS, modes of transmission and prevention. This section therefore discussed the findings from the learners with hearing impairments from Munali Secondary School and out of school youths with hearing impairments from ZNAD. A total

number of 29 respondents of were sampled which 13 females respondents and 16 males answered the questionnaires administered. Questionnaires were administered to the respondents from grades 8 -12 and were answered independently. Most of the questionnaires that were answered effectively were those of learners from the higher grades, in particular grades 11 and 12 and ZNAD youths. All the learners in this study were at Munali Secondary School, while all the out of school youths were at ZNAD.

4.2.1 Learners with Hearing Impairments Were Asked How Knowledgeable They Were About HIV and AIDS

The table below revealed how knowledgeable learners with hearing impairments were about HIV and AIDS

Table 4.2.1.2 Learners' Knowledge about HIV and AIDS

Whether respondent Knows about HIV and AIDS	
	Frequency
Yes	27
No	2
Total	29

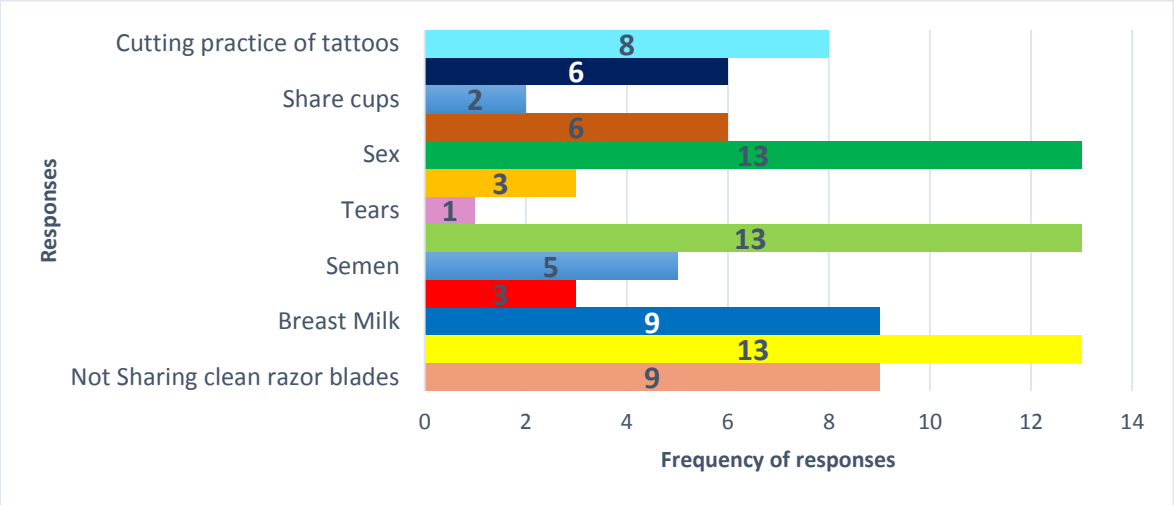
Source: Field Data, 2014

In terms of knowledge about HIV and AIDS a total of 27 respondents out of the 29 indicated that they knew about HIV and AIDS. Only 2 respondents out of 29 indicated that they did not. One respondent said,

> *"We do have knowledge about HIV and AIDS but the challenge is we rely more on visual aid so it is very difficult to understand a lot about HIV and AIDS".*

The above responses confirmed that learners were knowledgeable about HIV and AIDS, but relied more on visual aid in order to understand more about HIV and AIDS

Figure 4 ***Learners Knowledge on Modes of Transmission of HIV***



Source: Field Data, 2014

The figure above indicate the respondents' perception of the modes of HIV transmission. The respondents were allowed to tick on more than one option provided in the questionnaire.

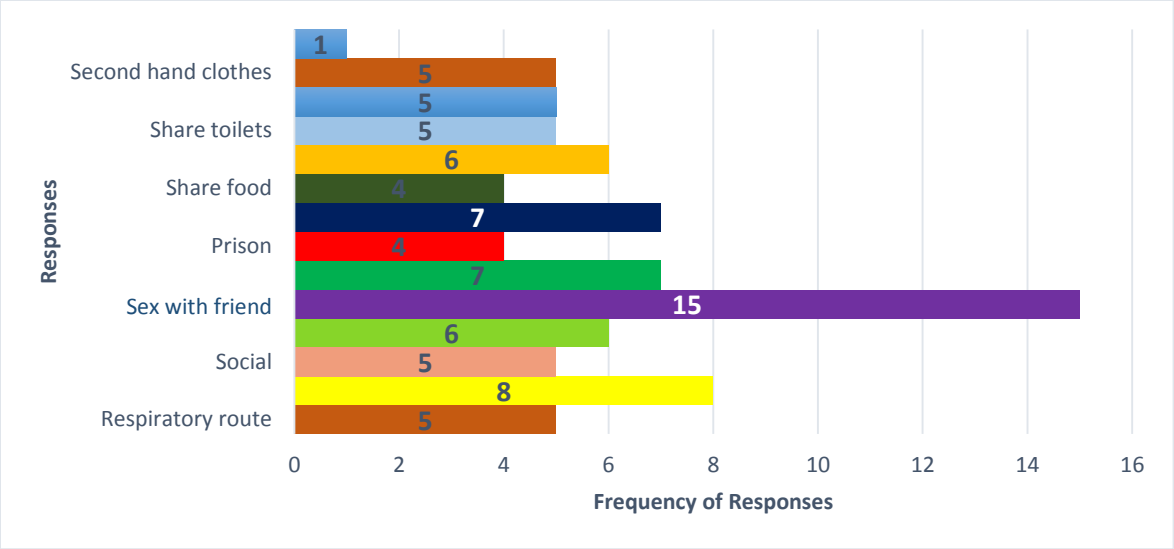
The learners with hearing impairments were asked on various modes by which HIV can be transmitted

As can be seen in the above table, through unprotected sexual intercourse 13 out of 29 accounted for it, 9 out of 29 stated that it is acquired from breast milk, 13 out of 29 through blood, and another 13 out of 29 explained that it was transmitted through blood transfusion. 6 out of 29 indicated on sharing of needles and razor blades.

It was worth noting that there was 13 responses of learners who acknowledged that the HIV virus could mainly be transmitted through activities that encompassed the transmission of fluids from one person to another. To be knowledgeable on different modes of transmission of HIV was very important because it helped to avoid getting infected.

Figure 5 ***Transmission of HIV by casual contact in any place or setting.***

Learners with hearing impairments were asked about the perception that HIV could be transmitted by casual contact in any place or setting .This was as a result of stigma because many people feared to share a lot of things with HIV infected people. There were multiples responses on figure 5



Source: Field Data, 2014

When asked whether HIV could be transmitted by casual contact in any place or setting,15 out of 29 of the respondents in grades 8-12 indicated that having casual sex could lead to the transmission of HIV. Others stated that living in the same household (where someone is HIV positive) could lead to HIV infection. 8 out of 29 of respondents from grade 11-12 said that it was possible. Interestingly 7 out of 29 said that HIV could be transmitted through cell phones, while 6 out of 29 said that it was possible to transmit HIV through water.

The findings in the study revealed that the majority of the learners in grades 8-12 knew that HIV was mainly transmitted through sexual intercourse. Interestingly learners in grades 8-10 indicated that HIV could be contracted through casual contact of second hand clothes, sharing of cups, toilets, water, and food, cell phones, in prison, school, and work, socializing, household and respiratory. The learners in grades 11 – 12 were more knowledgeable than other learners from lower grades.

Table 4.2.1.3 HIV transmission by mosquitoes and other insects which have bitten an infected person

Learners with hearing impairments were asked whether HIV could be transmitted by mosquitoes and other insects that had bitten an infected person. This was because when a mosquito bit an infected person it sucked blood and from that it was believed HIV infected blood was transmitted to another person.

HIV is transmitted by insects and mosquitoes which have bitten an infected person.	
	Frequency
Yes	13
No	14
Total	27

Source: Field Data, 2014

When asked whether HIV was transmitted through mosquitoes and other insects which have bitten an infected person? 13 out of 27 respondents had said that this was possible were while 14 out of 27 refuted this. It was worth noting that out of the number sampled only 27 respondents responded.

The above responses confirmed that close to half the number of learners with hearing impairments in grades 8-10 and two grade 11's believed HIV could be transmitted by mosquitoes and other insects which have been bitten an infected person. The other half of learners in grades 11-12 refuted that assertion.

Table 4.2.1.4 HIV could be transmitted through an individual suffering from TB

Learners were asked whether HIV could be transmitted through individuals suffering from TB as believed by many people. TB has been reported as an infectious airborne disease. This made people think that HIV could be transmitted through an individual suffering from TB. When the leaners with hearing impairments were asked if HIV could be transmitted through someone suffering from TB, the following were the responses.

HIV can be transmitted through someone suffering from TB.	
	Frequency
Yes	16
No	12
Total	28

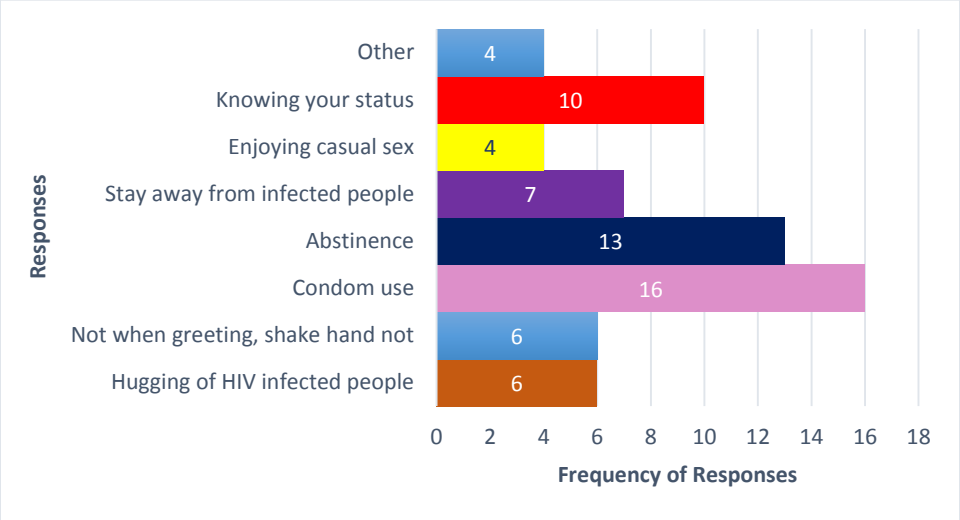
Source: Field Data, 2014

The table indicated responses on whether HIV could be transmitted through someone suffering from TB. The responses showed that out of the 28 who answered the questionnaire 16 out of 29, of grades 8 – 12 respondents had indicated that this was possible while, 12 out of 28 from grade 10-12 indicated that it was not possible to get HIV through someone suffering from TB. 1 respondent did not indicate did not attempt to answer the question.

The finding indicated that the majority of the learners sampled believed that HIV could be contracted from a person suffering from TB. Even some of the grades 11-12 learners who seemed to be knowledgeable in this research agreed that to this assertion.

Figure 6 ***Modes of Prevention of HIV and AIDS***

Learners were asked about different modes of prevention of HIV and AIDS. This was because it helped one understand the most effective ways of prevention in order not to get infected with the HIV virus.



Source: Field Data, 2014

There were multiple responses from the respondents sampled in figure 6.

On the modes of prevention of HIV and AIDS as seen from the above table, 16 out of 29 respondents in grades 8 to 12 indicated condom use, 13 out of 29 learners in grades 8 to 12 indicated abstinence, while 10 out of 29 learners from grade 11-12 indicated that knowing one's status was another way of preventing HIV.

Therefore the findings from these results showed that a significant number of the respondents in all the grades 8-12 knew how to prevent HIV transmission. Some of the respondents in grade 8-12 still indicated that HIV could be prevented by not hugging HIV infected people and by avoiding shaking their hands. Among those who indicated other options only 4 respondents indicated that there were other modes of preventing of HIV. It was worth noting that 4 other just ticked without mentioning what it represented.

Table 4.2.1.5 Learners knowledge on whether HIV can be cured

Learners with hearing impairments were asked whether HIV could be cured. This was because the majority of the people have been thinking that HIV could be cured simply because most people had been on medication and have looked very healthy for many years without having full blown AIDS.

HIV can be cured.	
	Frequency
Yes	14
No	11
Total	25

Source: Field Data, 2014

Learners with hearing impairments were asked if HIV could be cured. The majority of participants indicated that HIV could be cured 14 out of 25 respondents in grades 8 - 12, indicated that HIV could not be cured while 11out of 25 in grades 10- 12 disagreed. Out of the number all the respondents sampled only 25 responded to the question while 4 did not respond.

The findings from this study revealed that the majority of the learners in grades 8-12 believed HIV could be cured while the minority grades 10-12 refuted the assertion that HIV could be cured.

Table 4.2.1.6 Perception on treatment of HIV by having sexual intercourse with a baby

Learners with hearing impairments were asked on the perception that one could get treated of HIV by having sexual intercourse with a baby. This was because it was believed that a baby would totally clean and pure, therefore it could cure an HIV infected person.

HIV can be treated by having sex with a baby:	
	Frequency
Yes	2
No	14
Total	16

Source: Field Data, 2014

On the perception that HIV could be cured by having sexual intercourse with a baby, the findings were as follows:- There were only 16 responded to this question, 2 out 16 indicated yes, 14 out of 16 in grades 8-12 learners disagreed. They indicated that having sexual-intercourse with a

baby could not lead to the curing of HIV, while only 2 out of 29 respondents had agreed. Other 13respondents left the questions unanswered from the total number of respondents sampled. It was worth noting that the majority of the respondents in grades 8-9disagreed with this assertion which the majority of elderly men believed, while only two grade eights agreed.

Table 4.2.1.7 Perception on treatment of HIV by having sexual intercourse with a virgin

Learners were asked about the myth of a virgin curing HIV. The belief was based on the perception that one can get treated of HIV by having sexual intercourse with a virgin. This myth was centered on the belief that the purity of virgins could effectively cure an HIV infected person.

HIV can be treated by having sex with a virgin:	
	Frequency
Yes	12
No	5
Total	17

Source: Field Data, 2014

The perception that HIV could be cured by having sexual intercourse with a virgin: 12 out of 17 in grades 8-12 respondents agreed. The results showed that huge numbers of them believed that HIV could be treated by having sex with a virgin. Only 5 of the grade 12 learners disagreed. The rest of the 12 learners sampled did not attempt to answer the question.

The findings revealed that the majority of learners believed in the myth of having sexual intercourse with a virgin to cure HIV.

Table 4.2.1.8 Perception on treatment of HIV by taking ARVS

Learners with hearing impairments were asked on the perception of treatment of HIV by taking ARVs. This was as a result of people looking very healthy after commencing medication.

HIV can be treated by taking ARVs:	
	Frequency
Yes	13
No	4
Total	17

Source: Field Data, 2014

When the learners with hearing impairments were asked whether HIV could be treated by taking ARVs, the majority of the learners in grades 8-12 agreed. These were13 out of 17 who responded while 4 out of 17 respondents disagreed. Out of the number of the respondents sampled the remaining 12 respondents left the question unanswered.

The findings on whether HIV could be cured by taking ARVs revealed that the majority of the learners believed that one can be cured by ARVs. This was because people on ARVs start looking healthier and stronger. Therefore people have been deceived by thinking that ARVS cure HIV and AIDS.

Table 4.2.1.9 Perception on treatment of HIV by visiting witch doctor

Learners were asked about the perception of treatment of HIV by visiting a witch doctor as believed by a lot of people especially in Africa.

HIV can be treated by visiting a witch doctor:	
	Frequency
Yes	16
No	3
Total	19

Source: Field Data, 2014

Perception that HIV and AIDS could be cured by visiting a witch doctor: The majority of the learners in grades 8-12 agreed to this assertion. The findings on whether visiting a witch doctor was a means of treating HIV,16 out of 19 respondents agreed that it was an alternative. While3 out of 19 disagreed, and the rest of the learners left the questions unanswered. It is worth noting that out of the number of the respondents sampled only a total of 19 respondents responded while 10 did not attempt.

The findings were that the majority of the learners agreed and believed that one could get cured by visiting a witch doctor; however a small number of learners disagreed with this assertion. This was as result of witch doctors who had been deceiving people that herbs could treat HIV and AIDS, therefore even the respondents with hearing impairments believed in this.

Table 4.2.1.10 Knowledge on whether HIV is a preventable infection

Knowledge on whether HIV was preventable, this helped one to avoid getting infected if they are aware of this fact. The learners with hearing impairments were asked whether HIV was preventable.

Is HIV a preventable infection?	
	Frequency
Yes	14
No	11
Total	25

Source: Field Data, 2014

Knowledge on whether HIV was a preventable infection: - 14 out of 25 respondents in grades 8-12 agreed HIV was a preventable infection. However, a rather significant number 11 out of 25 in grades 11-12 disagreed, while the rest of the 5 respondents did not indicate anything.

The findings of this study showed that 14 respondents agreed that HIV could clearly be preventable, while 11 respondents disagreed.

Table 4.2.1.11 Knowledge on condom use

Learners with hearing impairments were asked whether they were knowledgeable about the use of condoms.

Do you know how to use a condom?	
	Frequency
Yes	22
No	5
Total	27

Source: Field Data, 2014

A significant number of the 22 out of 27 respondents said that they knew how to use a condom while 5 out of 27 respondents had indicated that they did not know, while 2 did not indicate anything.

It is worth noting that the majority of respondents were knowledgeable on how a condom could be used.

Table 4.2.1.12 Knowledge of VCT

Learners with hearing impairments were asked whether they had knowledge about VCT. This was because anyone who hoped to know his or her HIV status must have knowledge about VCT. Knowledge on VCT was stated that one must be able to volunteer to get tested and go through counseling. This was in in order to avoid get infected, know how to stay healthy if infected and avoid infecting others.

Do you know what VCT is?	
	Frequency
Yes	22
No	6
Total	28

Source: Field Data, 2014

About 22 out of 28 of the respondents from grade 8-12 had said they were aware of what VCT was. Only6 out of 28 indicted that they were not aware, while out of the number of respondents sampled only 1 did not respond.

The study revealed that the majority of learners with hearing impairments were knowledgeable of what VCT was; while a few stated that they did not know.

Table 4.2.1.13 Awareness of the confidentiality of VCT results

Learners with hearing impairments were asked on the importance of awareness of confidentiality of VCT results.

Awareness of the confidentiality of results	
	Frequency
Yes	20
No	7
Total	27

Source: Field Data, 2014

On awareness of confidentiality of VCT results 20 out of 27 of grades 8-12 knew that all results from VCT were strictly confidential. Another 7 out 27 respondents of grades 8-9 indicated that they did not know this and 2 respondents from the actual number sampled did not indicate anything.

The findings of this study suggested that the majority of the respondents were aware that VCT results were strictly confidential while seven respondents disagreed.

Table 4.2.1.14 Knowledge on how HIV and AIDS are acquired

Learners with hearing impairments were asked whether they were knowledgeable of how HIV and AIDS was acquired. This was because it was a very important aspect to every human being in order to avoid getting infected.

Whether or not respondent knows how he/she can get HIV and AIDS	
	Frequency
Yes	26
No	1
Total	27

Source: Field Data, 2014

The majority respondents from grades 8-12 respondents indicated that they were aware of how one could get HIV and AIDS. Almost all of the respondents, 26 out of 27 indicated that they aware of how HIV was transmitted. Only 1 out of 27 respondents in grades 8 had indicated that she was not aware of how HIV was transmitted:

One respondent explained that*:*

> *"I am HIV positive and I have never had sexual intercourse, therefore I am interested in learning more about HIV and AIDS if possible on a daily basis. This is because I do not know how I got infected."*

The above responses were confirmed that 26 out of 27 participants had knowledge on how HIV and AIDS, was acquired. Out of the actual number of all the respondents sampled only2 respondents did not attempt to respond

Table 4.2.1.15 Knowledge of HIV Status

Learners with hearing impairments were asked whether they knew about their HIV status as it was very important for one to know his or her status.

Do you know your HIV status?	
	Responses
Did not want to know	1
Scared to know	1
Wanted to know	17
Tested	10
Total	29

Source: Field Data, 2014

A large number of 17 out of 29 from grade 11-12 indicated that they wanted to know their HIV status. 10 out 29 respondents in grades 12 said that they got tested and knew their own status. 1 out 29 in grade 11 indicated that he or she was scared to know.1 out 29 in grade10 respondent indicated that he or she did not want to know.

It was worth noting that 10 learners had gone through VCT and knew their HIV status. The majority of the respondents indicated that they wanted to know their HIV status, while one indicated that he or she wanted to know the other one was scared to know.

Table 4.2.1.16 Awareness if stigma and denial both enhances the spread of HIV

Learners with hearing impairments were asked whether they knew that stigma and denial enhanced spread of HIV and made one not to accept his or her status once HIV positive. This was because most HIV positive people once stigmatized began to feel out of place, felt unloved and denied a lot of facilities. Therefore this enhanced the spread of HIV because of feeling unloved and not cared for. At this stage most stigmatized HIV positive people have never cared about anything else and resulted in infecting others.

Stigma and denial both enhances the spread of HIV.	
	Frequency
Yes	11
No	11
Total	22

Source: Field Data, 2014

When asked if stigma and denial enhanced the spread of HIV 11 out of 22 of the respondents agreed while 11 out of 22 disagreed.

The finding revealed that half the number of respondents agreed that stigma and denial enhanced the spread of HIV while the other half disagreed. Of the total number of learners under scrutiny, 7 did not respond to their questionnaire.

Table 4.2.1.17 Numbers of boyfriends and girlfriends among learners with hearing impairments

Learners with hearing impairments were asked whether they had multiple sexual partners. This is because there was a belief that most individuals with hearing impairments have multiple partners. The respondents were asked to indicate whether they had more than one boyfriend or girlfriend on a questionnaire. For those with multiple partners there was a provision to give reasons.

Having more than one sex partner is very common for individuals with hearing impairments. The assertion had that individuals with hearing impairments compensated disability by being sexually active and that lead them into having multiple sexual partners.

Do you have more than one boyfriend or girlfriend	
	Frequency
Yes	15
No	12
Total	27

Source: Field Data, 2014

The findings indicated that15 out of 27 participants sampled represented in grade 8-12 learners had more than one boyfriend or girlfriend. While 12 out of 27 in grades 8-12 learners denied. Two participants did not indicate any answers from the actual number of all the respondents' sample.

The findings of the study revealed that the majority of respondents had multiple sexual partners.

4.2.2 Reason for having more than one boyfriend or girlfriends

The learners with hearing impairments were asked to give reasons for having more than one boyfriend or girlfriends, the following were some of the responses

A male in grade 12 explained that:

> *"We hearing impaired people like to have more than one girlfriend or boyfriend in order to have sex, Sometimes we just feel like having fun, to enjoy life and sex, or plan to have the right partner for marriage. Sometimes we hearing impaired people, especially girls, do it in order to exchange sex for money. I know that when the boyfriend's money finishes, girls start to look for other partners. That is why I do not care and therefore also have many girlfriends. These hearing impaired girls just like to get money from me and my friends for sex and not love."*

In line with the above observation, a female grade 12 respondent stated that:

> *"Sometimes we exchange boyfriends and girlfriends for fun. My friends and I share and exchange boyfriend for financial support and finding the right partner. This is because my boyfriend has a loving heart and cares for me a lot. I also have sex with my many boyfriends because sex is very nice. I also allow my girlfriend to sleep with my boyfriend because he has a loving heart."*

Another male respondent from grade 11:

> *"I and my friends and many hearing impaired people have many girls because sometimes our girlfriends cheat on us. Sometimes we just like exchanging girlfriends and boyfriends even when we know it is not good but we have human rights to exchange and have many girlfriends."*

Another grade 11 female respondent said:

> *"I need money and happiness that is why I have enough boyfriends. One is for buying airtime for my cell phone, one is for money, others are for grocery and one is a future husband. We all need to be in love and satisfy our physical needs because sex is very good. I am happy with my hearing impaired boyfriends and those who are not hearing impaired boyfriends although I know it is not a good idea."*

The findings of the study revealed that the majority of learners with hearing impairments had multiple sexual partners

4.2.3 Responses from out of school youths with hearing impairments at ZNAD

The following were responses from the out of school youths sampled in the study. After getting responses from the learners with hearing impairments, the researcher administered a questionnaire to out of school youths with hearing impairments from ZNAD. This was based on the second part of the second objective on: "How knowledgeable were individuals with hearing impairments on HIV and AIDS." Similar questionnaires as those for the learners from Munali secondary School were administered to the out of school youths regarding knowledge about HIV and AIDS, modes of transmission and prevention. A total number of 20 respondents of which 10 female's respondents and 10 males answered the questionnaire administered.

The findings and responses to the second part of the second objectives of the study were revealed below.

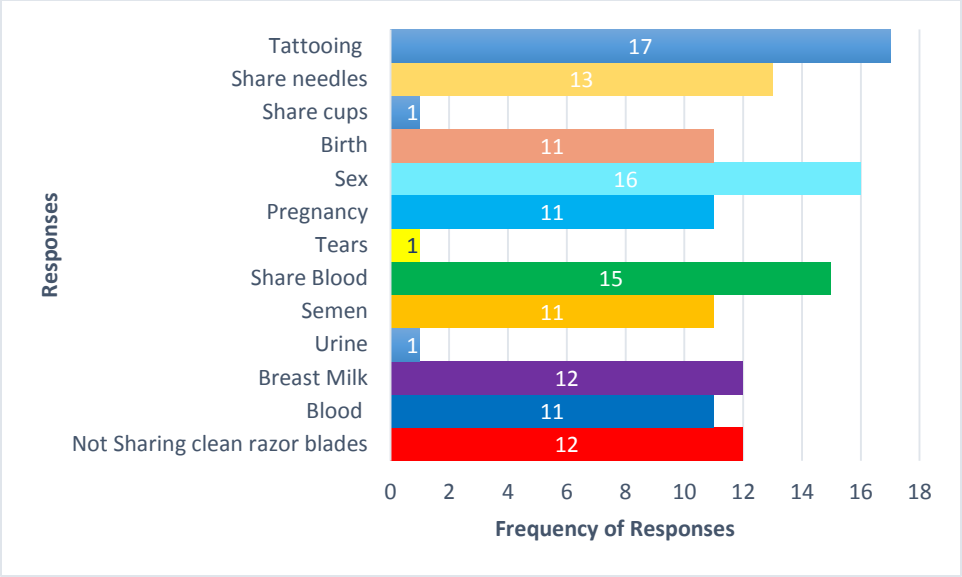
4.2.3.1 How knowledgeable were out of school youths with hearing impairments at ZNAD about HIV and AIDS?

Out of school youths with hearing impairments were asked whether they were knowledgeable about HIV and AIDS.

Thus, all the 20 respondents indicated that they were aware of HIV and AIDS

Figure 7 ***Knowledge on modes of transmission of HIV***

Out of school youths with hearing impairments were asked about various modes by which HIV could be transmitted. It was important to know different modes of transmission of HIV and AIDS. The following figures below were stressed to ascertain how much knowledge youths with hearing impairments at ZNAD had on modes of transmission



Source: Field Data, 2014

The figure above indicated the respondents' perception of the modes HIV transmission. The respondents were allowed to tick on more than one option provided in the questionnaire administered.

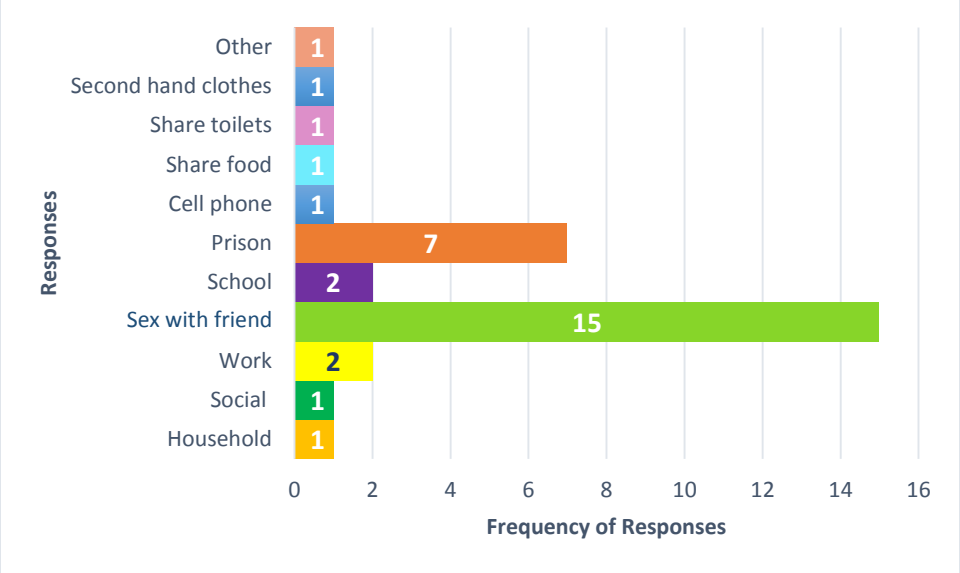
The responses above indicated that most youths with hearing impairments knew the various ways in which HIV is transmitted. About 15 out of 20 of the respondents, being 10 males and 4 females, indicated that HIV could be transmitted through the sharing of blood. 16 out of 20 of the females and male youths said HIV was transmittable through sex. Tattooing was indicated as one of the means through which HIV could be transmitted by 17 out of 20 of respondents. In 13 out of 20 and 12 out of 20 of instances respectively, respondents stated that sharing of needles and unclean razor blades could result in the transmission of HIV. While 15 out 20 indicated sharing of blood (in this case which was blood transmitted through blood transfusion), these were 10 males and 5 females.

Blood, pregnancy, semen, and birth were indicated to be the other means by which HIV could be transmitted 16 out of 20 of the most cases. It was worth noting that 16 out of 20 respondents revealed that the HIV virus could mainly be transmitted through activities that encompassed the transmission of fluids from one person to another.

The results above revealed that youths with hearing impairments at ZNAD were knowledgeable that HIV and AIDS could be transmitted in various ways. Different answers were indicated which revealed that the youths were aware HIV can be transmitted in different ways. .

Figure 8 Transmission of HIV by casual contact in any place or setting

Youths at ZNAD with hearing impairments were asked on the perception that HIV could be transmitted by casual contact in any place or setting. This was as a result of stigma because many people fear to share a lot of things with HIV infected people.There was a belief that transmission of HIV could be contracted by casual contact in any place or setting of the respiratory would take place, views of youths with hearing impairments were as follows:



Source: Field Data, 2014

The question above had multiple responses. About 15 out of 20 of the respondents being 10 females and 5 males believed that HIV could be transmitted through sexual intercourse. Others stated that work, school and prison were main places were HIV and AIDS could be transmitted. There were no multiple responses given. The other responses given were by only 2 out of school youths who indicated school and work. Another 7 of the respondents said it was through the prison. Only 1 male indicated on other option on how HIV could be transmitted.

Even though the majority of the youths with hearing impairments at ZNAD indicated that HIV could be transmitted through casual sex, there was a clear indication from the results above that

the youths with hearing impairments who believed HIV could be transmitted by casual contact in many other ways as indicated above. In addition respondents alluded to casual sex as a prominent mode of HIV transmission.

Table 4.2.3.1.8 Whether HIV is transmitted by insects and mosquitoes which have bitten an Infected Person

Youths with hearing impairments were asked whether HIV could be transmitted by mosquitoes and other insects which had bitten an infected person. This is because when a mosquito bite an infected person it sucks blood and from that it is believed HIV infected blood is transmitted to another person. Therefore, there was a belief that HIV was transmitted by insects and mosquitoes that have bitten an infected person. The findings were as follows.

Whether or not HIV is transmitted by insects and mosquitoes which have bitten an infected person	
	Frequency
Yes	3
No	17
Total	20

Source: Field Data, 2014

From the response on the table above it was revealed that 17 out of 20 of the respondents disagreed that HIV could be transmitted through mosquitoes or other insects while only 3 had agreed with the statement.

On whether HIV was transmitted by insects and mosquitoes which have bitten an infected person, notably the finding revealed that majority youths with hearing impairments at ZNAD at knew that HIV could never be transmitted by insects or mosquitoes.

Table 4.2.3.1.19 HIV transmission through someone who is suffering from TB

Youths with hearing impairments were asked about different modes of prevention of HIV and AIDS. This was because it helped one understand the most effective ways of prevention in order not to get infected with the HIV virus. This was as a result of believing that HIV could be transmitted through someone who was suffering from TB the findings from the youths were indicated below.

Whether or not HIV can be transmitted through someone who is suffering from TB	
	Frequency
Yes	4
No	16
Total	20

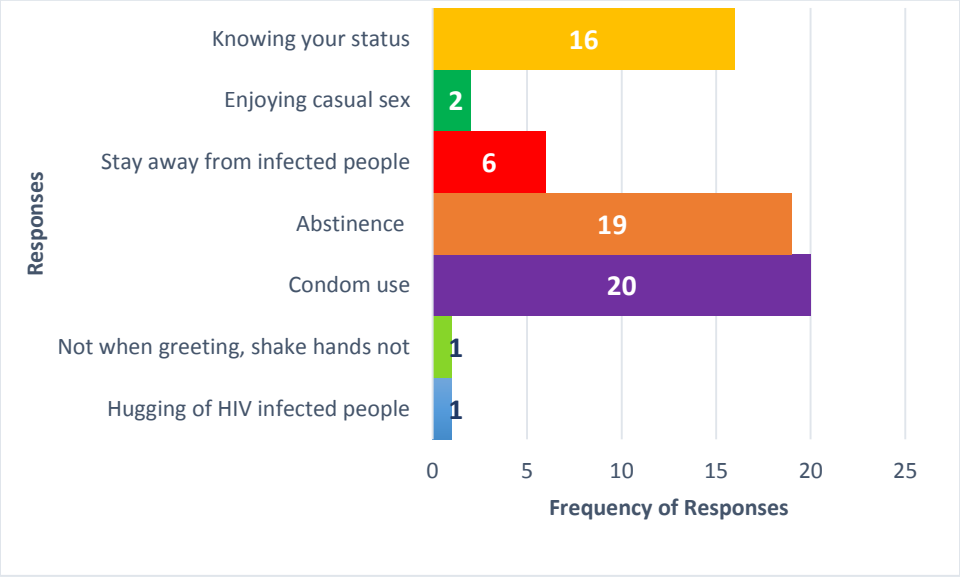
Source: Field Data, 2014

On whether HIV could be transmitted by someone suffering from TB, 16 out 20 of the respondents disagreed. 4 out of 20 agreed by indicating staying away from infected people could result in the prevention of the transmission of HIV.

The findings revealed that the majority of the youths with hearing impairments disagreed that HIV could be transmitted from someone suffering from TB while a few acknowledged.

Figure 9 Modes of prevention of HIV and AIDS

Youths with hearing impairments were asked on explicit modes of transmission of HIV and AIDS. The findings below reveal precise results from youths with hearing impairments commonly known.



Source: Field Data, 2014

The Figure above had multiple responses. The findings from the above table indicated that, respondents believed that condom use could prevent HIV and AIDS. 20 out of 20 respondents indicated condom use, 19 out 20 said abstinence, 16 out of 20 stated knowing ones status was

also the main ways of preventing the transmission of HIV and interestingly 6 others said staying away from infected people while others indicated explicit answers and enjoying casual sex.
The majority of the youths with hearing impairments believed that HV could be prevented by knowing one's status, by abstinence, and condom use. Other responses indicated that HIV could be prevented by casual contact such as a hand shake, avoiding hugging an infected person and staying away from an infected person.

Table 4.2.3.1.20 Knowledge whether HIV is curable

Youths with hearing impairments were asked whether HIV could be cured. This was because majority of the people thought that HIV could be cured simply because most people on medication looked very healthy for many years without having full blown AIDS. This was based on the myth that HIV could be cured; the following were the findings from the youths with hearing impairments.

Can HIV be cured?	
	Frequency
Yes	2
No	17
Total	19

Source: Field Data, 2014

The above table showed that a very high number of17 out of 19 respondents did not agree that HIV could not be cured, while 2 out 19 youths with hearing impairments 2 agreed, only 1 respondent did not answer the question.

Nearly all the youths with hearing impairments at ZNAD knew that HIV could not be cured while two agreed and one did not attempt to give an answer.

4.2.3.2 Perception of treatment of HIV and AIDS by having sex with a baby

Youths with hearing impairments were asked on the perception that one could get treated of HIV by having sexual intercourse with a baby. This was because it was believed that a baby was totally clean and pure therefore it cured an HIV infected person. Generally there was a perception of treatment of HIV and AIDS by having sex with a baby. The youths with hearing impairments responses were as follows:

The responses from the 20 respondents sampled indicted that only 11 out of 20 respondents disagreed that HIV could be treated by having sexual intercourse with a baby. However, it was be noted that only 11 respondents answered this particular question were the rest did not attempt to answer.

The findings revealed that 11 youths disagreed that HIV can be treated by having sexual intercourse with a baby. The remaining 9 youths did not attempt to answer the particular question. According to the findings the researcher interpreted it that the youths who did not answer the question did not believe that HIV can be cured b**y** having sexual intercourse with a baby.

One female respondent had this to say:

"It is foolish to think a baby can cure HIV and AIDS"

4.2.3.3 Perception of treatment of HIV and AIDS by having sex with a virgin

Youths with hearing impairments were asked on the myth of a virgin curing HIV. There is perception that one can get treated of HIV by having sexual intercourse with a virgin. This is because it is believed that the purity of virgins cures an HIV infected person. On the perception that HIV and AIDS could be treated by having sexual intercourse with a virgin. Most of the individuals with hearing impairments equally believed about this myth. The finding from the youths with hearing impairments were as follows.

The responses were as follows, 11 out of 20 of the respondents disagreed that HIV could be treated by having sex with a virgin. However, it was be noted that only 11 out of a total of 20 respondents answered this particular question while 9 did not even attempt to answer the question.

The assumption was that some youths with hearing impairments did not believe in the myth that HIV and AIDS could be cured by having sexual intercourse with a virgin while the majority of the youths disagreed. From this question the assumption was that the youths could have interpreted that a baby and the word virgin could mean the same thing, this is the resultant to giving similar answers with the previous question.

One male respondent had this to say:

"We the deaf just hear that babies and virgins can cure HIV and AIDS. My friends and I think maybe a virgin can cure AIDS. We want to try one day, but it is difficult to find a virgin among the deaf."

Table 4.2.3.1.21 Perception of treatment of HIV of AIDS by taking ARVs

Youths with hearing impairments were asked on the perception of treatment of HIV by taking ARVs. This was a result of people looking very well after commencing medication and the majority have had the perception that HIV and AIDS could be cured by ARVS. This myth had come up as a result of infected people looking much healthier and start feeling better after taking ARVS. The youths with hearing impairments when asked, the results were indicated below.

Can HIV be treated by taking ARVs?	
	Frequency
Yes	15
No	4
Total	19

Source: Field Data, 2014

As can be seen in the above table a majority 15 out 19 of the respondents indicated that HIV could be treated by taking ARVs. While a minority4 out 19 disagreed and 1 youth did not respond.

Most respondents believed that HIV could be treated by taking ARVs while the minority disagreed from the findings.

Table 4.2.3.1.22 Perception of treatment of HIV and AIDS by visiting a witch doctor

Youths with hearing impairments were asked on the perception of treatment of HIV by visiting witch doctors as believed by a lot of people, especially in Africa. This was as a result of the myth that HIV and AIDS could be treated by visiting a witch doctor. The youths had this to say:

Can HIV be treated by visiting a witch doctor?	
	Frequency
Yes	7
No	7
Total	14

Source: Field Data, 2014

Out of the number of 20 respondents sampled only a total of 14 respondents responded: The results indicated that 7out 14 youths were agreeable and another 7 out 14 disagreed that HIV and AIDS could be treated by visiting a witch doctor. The remaining number of 6 youths did not attempt to answer the question.

In reference to the above question one male respondent had this to say:

"A witch doctor is good just like doctors. I know a witch doctor can cure AIDS.

From the findings on the myth that HIV and AIDS could be cured by visiting the witchdoctor the results revealed that some youths believed HIV could be cured while the others did not believe in this myth. The fact that the others did not attempt to answer still left a question mark on whether they believed in the myth.

Table 4.2.3.1.23 Knowledge on whether HIV is a preventable infection

Knowledge on whether HIV was preventable was very important. This helped one to avoid getting infected if they were aware of this fact. The youths with hearing impairments were asked whether they were knowledgeable that HIV was preventable

HIV is a preventable infection	
	Frequency
Yes	7
No	11
Total	18

Source: Field Data, 2014

The above responses on whether HIV was a preventable infection, the youths' responses were as follows: 7 out of 18 respondents agreed while 11 out 18respondentsdisagreed while 2 participants did not indicate anything.

One female responded said:

"AIDS is not preventable because many deaf people like having sex and many partners."

Another male respondent reviewed said:

"God loves the deaf and they do not die from AIDS like many other people."

On the assertion that HIV was preventable the findings revealed that the majority of youths agreed, others disagreed while 2 out of 20sampled did not respond.

4.2.3.1. Knowledge on condom use

Youths with hearing impairments were asked whether they were knowledgeable on use of condoms. This was because it was an important aspect which helped one to know how to use it during sexual intercourse.A condom was reported as one of the safest modes of preventing HIV infection. Youths were asked whether they knew the use of a condom, the results were

Knowledge on Condom Use	
Yes	18
Never responded	2
Total	19

Source: Field Data, 2014

From the above,18 out of 20 of the respondents stated that they knew how to use a condom. 2 out of 20 of participants never responded.

Overwhelmingly the majority of the youths with hearing impairments revealed that they knew how a condom was used while only 2 of the participants did not respond. The above findings revealed that the word condom to the youths was something they were familiar with.

4.2.3.2. Knowledge on VCT

Youths with hearing impairments were asked whether they had knowledge on VCT. This was because anyone who hoped to know his or her HIV status should have knowledge on VCT. Knowledge on VCT stated that when one must be able to volunteer to get tested and go through counseling. VCT helps a person to understand its importance to one's life. This was in terms of avoiding to get infected, in order to stay healthy when infected and avoid infecting others.

When asked if the respondents knew what VCT was the findings revealed a very high majority of 18out of 19 had indicated that they understood what VCT was while1 out of19 participant did not respond to the question.

One respondent female respondent observed that:

"We learn from ZNAD that VCT is going to test for HIV with no problem."

It was worth noting that the majority of the youths with hearing impairments understood what VCT was.

Table 4.2.3.1.24 Awareness of confidentiality of results

Youths with hearing impairments were asked on the importance for one to be aware of confidentiality of VCT results. This was because it is very important to be aware that all results from VCT are kept strictly confidential. The following were the findings when the youths were asked about confidentiality of results.

Awareness that all results remain confidential	
	Frequency
Yes	15
No	4
Total	19

Source: Field Data, 2014

The response on whether the youths knew that all results from the VCT were kept strictly confidential, 15 out of 19 of the respondents agreed, 4 out of 20 felt that the results were not really kept confidential while only 1 out of 20 participants did not respond.

One female respondent said;

"I as a deaf person ,I know doctors keep secrets."

From the findings the majority of the participants indicated that the majority of youths were aware that the results from VCT were kept confidential, 4 said they did not know. 1 participant however did not indicate anything.

Table 4.2.3.1.25 Knowledge on how HIV is acquired

Knowledge on how HIV is acquired was very important as a way of avoiding getting infected. The youths were asked as to whether they knew how HIV was transmitted. The following were the results:

Do you know how HIV is transmitted?	
	Frequency
Yes	18

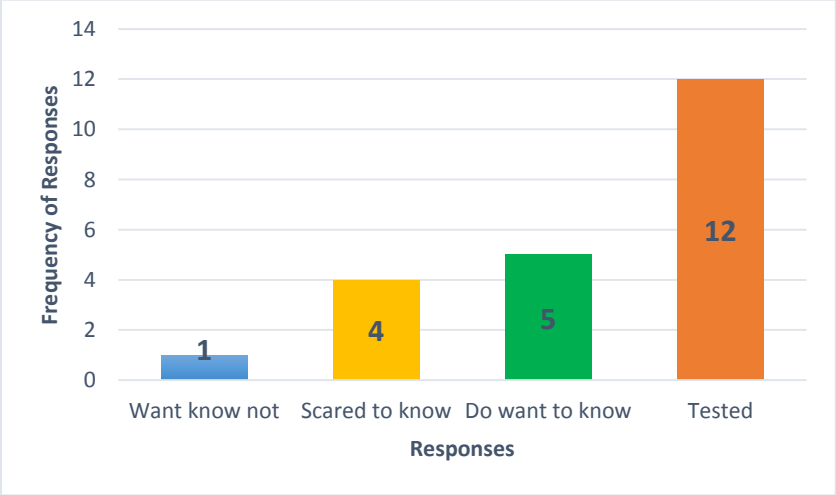
Source: Field Data, 2014

18 out of 18 of the respondents had said that they understood how HIV was transmitted. 2 participants did not indicate any answer.

The study revealed that the majority of the participants acknowledged how HIV was transmitted except for two participants who did not indicate anything.

Figure 10 ***Knowledge of HIV status***

Youths with hearing impairments were asked whether they knew their HIV status as it was very important for one to know his or her status. This was because knowing one's HIV status was very important and helped to individuals to remain negative or live positively by taking care of one's health.



Source: Field Data, 2014

The figure above had multiple response.

All the 20 respondents sampled answered the questions. From the table above on whether respondents knew their HIV status? It was noted that 12 out of 20 had tested for HIV. 5 out of 20 of the respondents stated that they wanted to know. 2 out of 20 indicated they were scared to know their HIV status. 1 out of 20 participants indicated they were too scared to know the HIV status.

The findings from this study revealed that the majority of youths with hearing impairments had tested and knew their HIV status. However there still remained a few participants who indicated they either did not want to know, or were too scared to know.

Table 4.2.3.1.26 Stigma and denial both enhance the spread of HIV

Youths with hearing impairments were asked whether they knew stigma and denial enhanced spread of HIV and made one not to accept his or her status once HIV positive. This was because most HIV positive people, once stigmatized, began to feel out of place, not feel loved and have been denied a lot of facilities. Therefore this enhanced the spread of HIV because of feeling unloved and cared for. At this stage most stigmatized HIV positive people have not cared about anything else and have resulted in infecting others.

Stigma and denial both enhances the spread of HIV	
	Frequency
Yes	7
No	9
Total	16

Source: Field Data, 2014

When asked if stigma and denial could spread HIV, 7 out of 16 of the respondents agreed. While 9 out of 16disagreed, 4 out of 20 of the remaining participants did not provide any response to the question. From the findings it was revealed that stigma and denial enhanced the spread of HIV the majority of the respondents seemed not to understand this assertion.

It was observed that the majority of 9 respondents disagreed, while the other four never indicated anything. The remaining seven agreed to this assertion.

Table 4.2.3.2.27 Do you have many boyfriends or girlfriends?

Youths with the hearing impairments were asked whether they had multiple sexual partners. This was because it was believed that most individuals with hearing impairments have multiple partners: Therefore respondents were asked to indicate whether they had more than one boyfriend or girlfriend on a questionnaire. For those with multiple partners there was a provision to give reasons.

Having more than one sex partner was very common for individuals with hearing impairments. The was because of the assertion that individuals with hearing impairments compensated their disability by being sexually active and opted to having multiple sexual partners.

Do you have many boyfriends or girlfriends?	
	Frequency
Yes	5
No	12
Total	17

Source: Field Data, 2014

Asked whether the respondents had many sexual partners, 5 out of 20 said that they did, while 12 out of 20 had said that they did not. The other 3 out of 20 participants did not write anything at all.

4.2.3.3 Out of school youths with hearing impairments at ZNAD; Asked to give reasons for having multiple partners:

The youths with hearing impairments were asked to give reasons for having more than one boyfriend or girlfriends, the following were some of the responses.

Response from a male out of school youth:

> *"I have many girlfriends because I learn from my friends. This helps me to have more sexual feelings for others. I feel very good, happy and I am able to attract others. The other reason for having many girls helps me to have strong relationships and learn more of 'hand shapes' in sign language."*

Another male respondent said*:*

> *"I change girlfriends because they are controlling and get under my skin which is different from the way other friends do. I always see bad characters with many girls and I do not even care. That is why I change girls because of their bad character."*

One female respondent had this to say:

> *"I change boyfriends because sometimes many boyfriends live far, I always want to be with them most of the time because sex is good. When my boyfriend is very rude I have the human right to forget about him and get another".*

Another male responded*:*

"We hearing impaired people always make a plan to be in a relationship when we want to have sex with our best friends. We have sex but it is not good. For us the hearing impaired after two people have sex and have problems with partners, we exchange and go to the others."

One more male respondent stated *that:*

"We copy the habit of having many girlfriends from hearing people; we do what the hearing do sometimes. We the hearing impaired also change when they become boring. I have many hearing girlfriends because they entertain me and though sometimes they are a problem and they have extra partners and pretend they love me, I know they just like money."

From the research of multiple sex partners, the responses given are a clear indication of lack of knowledge on the dangers of multiple sexual partners that could lead to getting infected with HIV and AIDS.

The findings from the out of school youths with hearing impairments at ZNAD suggested that the youths are more adequately knowledgeable than the learners with hearing impairments at Munali Secondary School. Most answers were precisely answered by the majority of respondents, while for those who felt they did not know the answers, preferred not to attempt answering the questions at all. The findings revealed that the youths are more knowledgeable than the learners with hearing impairments at Munali secondary School when you compare the two groups.

The findings to both questionnaires for learners and non-learning youths with hearing impairments revealed that questions with accurate answers were by the senior grades from grade 11-12 and from the youths at ZNAD. Learners in the junior grades had challenges in understanding most questions. Other questions remained unanswered due to language barrier.

4.3 Challenges Faced By the Individuals with Hearing Impairments in Accessing HIV and AIDS Information

The third objective of the study sought to investigate the challenges faced by Individuals with hearing impairments in accessing HIV and AIDS information:

Individuals with hearing impairments have had challenges in accessing HIV and AIDS information due to the exclusivity in the language utilised. In Zambia, ZNBC Mass media embarked on disseminating HIV and AIDS information through electronic media. This was through indicative intervention in support of vulnerable groups at ZAFOD. ZNBC mass media promoted multi-sectorial behavioural change campaigns and health through BCC. BCC had a process of dissemination and skills information shared to specific target group of people and audiences with the intention of influencing them to adopt sustained change of sexual behaviours. BCC audiences have thus varied and have, depended on what particular programme or any intervention which was be achieved through ZNBC mass media. It was revealed that the younger people had accounted for most new infections worldwide, hence the need for BCC campaigns to target them as brought to light by (NAC, 2009).

Notably most of the information dissemination of HIV and AIDS by ZNBC media was through audio-visual. The television healthy presentations have lacked sign language interpreters most of the times. Therefore, little was known on the practices of disseminating HIV and AIDS information to individuals with hearing impairments through media presentation. It was from this background that the researcher sought to investigate challenges faced by individuals with hearing impairments in accessing HIV and AIDS information.

There were only five respondents, 3 of which were males and 2 females, from ZNBC available to be interviewed. All of the respondents were in charge of programmes. Therefore interviews were conducted on a one on one basis.

4.3.1 HIV and AIDS awareness programmes and the media.

Mass media personnel were asked about what kind of HIV and AIDS awareness programmes they had embarked on in order to reach everyone. The follow up question was based on whether it was necessary to sensitise on HIV and AIDS programmes and challenges the media faced in broadcasting HIV and AIDS programmes.

When all the ZNBC mass media personnel were asked whether there were any HIV and AIDS awareness programmes which had been embarked on; all the 5 respondents agreed**.**

The findings revealed that there were HIV and AIDS programmes which were broadcasted in order to reach everyone.

4.3.2 Asked whether it was necessary to sensitise to individuals with hearing impairments on issues of HIV and AIDS, if so do you face any challenges.

The media personnel were asked if it was necessary to sensitise individuals with hearing impairments on issues of HIV and AIDS and whether they faced any challenges. The following were the diverse views from ZNBC personnel. All the respondents were affirmative to the question asked.

One male respondent had this to say*:*

> *"The individuals with hearing impairments have the right to information just like anyone else and this cannot be overemphasised. However it is a big challenge to sensitise HIV and AIDS information to the hearing impaired"*

Another male respondent said*:*

> *"Yes I am aware that most information targets the able bodied persons, and the hearing impaired are left disadvantaged. They only access 10% of disseminated information and this I can only say is very unfair. The challenge had been means of disseminating information on HIV and AIDS to the hearing impaired which has not easy. Meanwhile while the able bodied access 90% of disseminated information unlike those with hearing impairments."*

Another response from a male respondent was that:

> *"Interaction between the able bodied and the hearing impaired in HIV and AIDS issues can create an atmosphere of harmony that will be a pillar of strength toward the fight against HIV and AIDS infection rate. In this time and age it has been a greatest challenge. I believe HIV affects everyone. Therefore it is believed that if you are not infected, you are affected."*

On the other hand another female respondent stated that:

"The hearing impaired are also human beings and they need *to be catered for in terms of adequate information about HIV and AIDS. But universally it has be a great challenge to carter for them."*

Another female respondent had this to say:

"Yes they equally need to be empowered on VCT, preventions, information on drugs available, because they factually are deprived of adequate information and this is a challenge."

The responses above confirmed that the media had disadvantaged the individuals with hearing impairments on HIV and AIDS information. Sensitisation of people with hearing impairments on issues of HIV and AIDS could not be over emphasised.

4.3.3 Mode of awareness on HIV and AIDS information dissemination to the individuals with hearing impairments and the challenges the media face.

The study sought to establish the mode of awareness used and the challenges the media personnel faced on disseminating HIV and AIDS information to the hearing impaired and the. (For example sign language).

All the 5 mass media personnel revealed that**;**

The first female respondent said:

"The programmes conducted are only health messages to disseminate HIV and AIDS information for instance during health programme presentation and we rarely use sign language interpreters and that had a challenge."

The second male respondent said*:*

"The media has heavily relied on charts and real life health related stories in drama sponsored by other institutions but the challenge is none of the ICE materials are particularly for the hearing impaired"

The third male respondent had this to say:

"We use peer educators, who normally come up with programmes of action particularly following what is laid up on calendar for the programmes of the year. However these are not participated at any given point for individuals with hearing impairments.

The fourth male respondent said*:*

"The challenge is ,ZNBC as media normally uses peer educators from time to time but I wish to state that the hearing impaired have been marginalised. We have been having meetings with different stakeholders and we invite other Non-Governmental Organisations, on health related issues concerning HIV and AIDS,"

The last female respondent said:

"Sometimes as a media we televise programmes using charts and invite sign language interpreters during the programmes on world AIDS Day. This has been quiet unfair as the as us the hearing impaired only accessed information on World AIDS Day"

4.3.4 Media's challenge in sensitisation of HIV and AIDS towards persons with hearing impairments.

The mass media personnel were asked how much challenge there was in sensitisation towards persons with hearing impairments on HIV and AIDS. The following were the responses;

One male respondent said:

"*ZNBC has had numerous programmes which have been created in regard dissemination of HIV and AIDS. Frankly speaking the challenge is, there is no particular programme I can mention to be specific for the hearing impaired individuals."*

Yet another male respondent had this to say:

"ZNBC is involved with other partners who have created an opportunity by integrating HIV and AIDS involvement with the media. However, this also depends on the coverage on that particular day of the calendar such as World AIDS day. Sometimes just before that particular day ZNBC has a whole week of sensitization and sign language is utilised during those shows. I wish to state that ZNBC also has brochures, charts and adverts on billboards on HIV and AIDS but not targeting persons with hearing impairments. These

are general IEC materials for everyone as we believe all the literate persons including these with hearing impairments who can read and understand even though they cannot speak but the challenge is language barrier".

While the other female respondent had said*:*

"It is important to sensitise the individuals with hearing impairments, though there are no measures which have been taken by our institution."

In line with the above observation another male respondent had this to say:

"Truthfully speaking ZNBC does not have any programmes targeting persons with hearing impairments. As a media institution, it is only when we have World Aids Day those persons with hearing impairments benefit. But I remember while I was working from Kitwe, ZNBC used to have programmes at one time which targeted and involved all persons with disabilities an World AIDS Day. The event achieved it objectives on that particular day and a lot of people appreciated the event. I am no longer there, and since then it had been silent unless on other national issues but not HIV and AIDS related programmes. So as a result the hearing impaired are margnalised."

One male respondent had this to say in trying to describe what the respondents have said**:**

"*Basically the issue of the calendar becomes a challenge and yet HIV and AIDS has nothing to do with the calendar**.** It depends on the calendar for example during World AIDS days. The media institution invites different stake holders to speak about HIV and AIDS. This brings up programmes lined for the year on HIV and AIDS from MOH and NAC. Some are centred on Male Circumcision (MC) which is said to reduce HIV and AIDS. Mother to Child Transmission (MTCT) including cervical cancer was talked about on TV. ZNBC has 15 weeks in all for educational programmes. The media institution also uses scrolling for messages which are run below the television screen but they are still not user friendly for the hearing impaired individuals."*

4.3.5 The Media Personnel Asked Whether There Were Any Programmes Advocating For The Individuals With Hearing Impairments On Healthy Related Issues Particularly On HIV And AIDS, If Not What Challenges Did The Media Face.

Asked to state how the media advocated for the individuals with hearing impairments persons. The responses were as follows;

One male respondent said:

> ***"****This still remains a challenge but we hope to do It by incorporating comprehensive sign language and demands in all programming of HIV and AIDS related programmes".*

A male respondent said:

> *"Yes it is a challenge to voice out for the hearing impaired. However as a media we can only voice out for the hearing impaired by doing so much more than is being done currently, though the budget does not cater for them on HIV and AIDS related issues but we have other programmes the which hearing impaired have been carted for."*

One female respondent indicated that:

> *"As a media institution we want and hope to cater for them in national events by and providing sign language interpreters. The only challenge media has is lack of trained experts to deal with the hearing impaired individuals."*

The other male respondent had this to say:

> *"ZNBC will involve all commercials which will increase windows with a free platform for all with disabilities and hopes to create space as part of public service media, though the media in Zambia still has a long way to improve to cater for the hearing impaired."*

All the respondents indicated that even though they were sign language interpreters not much had been done to voice out on behalf of the hearing impaired persons. However as a media institution it was their duty to embark on programmes that would voice out for them but still it was a big challenge.

4.3.6 Asked whether the media had trained sign language interpreters in HIV and AIDS, if not how did they cater for individuals with hearing impairments?

The ZNBC media personnel were asked whether they had trained sign language interpreters in HIV and AIDS, if not how did the media cater for individuals with hearing impairments.

When the ZNBC media personal were asked whether they had trained sign language interpreters in HIV and AIDS information.

All the 5 respondents indicated that there are no trained sign language interpreters. The responses were as follows;

The response from one mass media personnel was:

One female participant said:

> **"***It is achieved by incorporating HIV and AIDS programmes for everyone, but when need arises especially during World AIDS Day we engage experts in sign language. However the challenge is we have never had any expert with sign language and HIV and AIDS"*

Another male media personnel interviewed had this to say:

> *"Currently a lot is being done than what was done compared to the past with regard to disseminating of HIV and AIDS information. The only hindrance is that the budget doesn't cater for the individuals with hearing impairments."*

Another male ZNBC media personnel observed that:

> *"We have programmes on HIV and AIDS related cases, but I wish to make it clear that all programmes are not specifically targeting the individuals with hearing impairments."*

On the other hand one respondent said:

> *"I can only say ZNBC as a media institution does not cater for individuals with hearing impairments on HIV and AIDS but other national events attract sign language interpreters due to the vitality of worldwide events covered. There are seldom HIV and AIDS programmes telecasted with the help of sign language interpreters I can think of, except news clips on 'World AIDS Day' events".*

In trying to describe this, another male respondent indicated that:

"As a media institution, we hope to offer more platforms, on health. These are free public service programmes on HIV and other health related matters. I wish to state that ZNBC or Zambia in general does not have experts to educate the deaf on HIV and AIDS by using IEC materials"

In line with the above question another female respondent said:

"ZNBC will involve all commercial advertisements and increase free platforms for all with disabilities and hopes to create programme space as part of public service media, though currently it is a big challenge. I am hoping that once you as the researcher you are through with this research you could work with us as an expert."

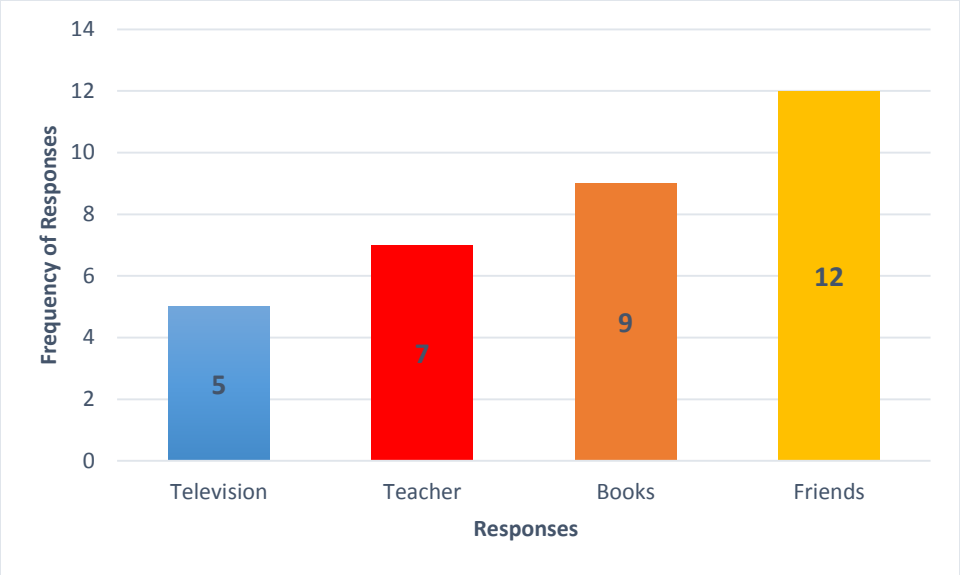
Findings from the third objective of the study as obtained through interviews at ZNBC media institution revealed that there were no specific educative programmes for the individuals with hearing impairments.

4.4 Strategies used in disseminating HIV and AIDS information to individuals with hearing impairments.

The fourth objective of this study discussed; Section D of the questionnaire for learners and out of school youths on different strategies used in disseminating HIV and AIDS information for individuals with hearing impairments. .

Figure 11Graph: 4.4.7 Strategies used in disseminating HIV and AIDS information to the learners with hearing impairments.

Learners with hearing impairments were asked on strategies of receiving HIV and AIDS information.



Source: Field Data, 2014

The figure above had multiple responses from respondents. When learners with hearing impairments were asked about strategies of receiving information regarding HIV and AIDS, they gave multiple responses. The majority stated that it was through friends 12 out of 29. Further 9 out of 29 indicated books as their source of information, while 7 out of 29 said teachers were their source. 5 out of 29 however, stated that television was their only source.

It was noted that the responses were more due to the fact that these were multiple responses as participant's submitted more than one option.

However, the findings suggested that the learners with hearing impairments received more knowledge on HIV and AIDS from friends and books.

Table 4.4.28 Provision of books on HIV and AIDS by school

Provision of HIV and AIDS books had one way of disseminating information to all individuals. Learners with hearing impairments were asked whether they were provided with books on HIV and AIDS.

Whether or not respondents' school provides books on HIV and AIDS	
	Frequency
Yes	16
No	13
Total	29

Source: Field Data, 2014

On whether books on HIV and AIDS were provided at school 16 out of 29 of the respondents indicated that they indeed were provided. While a huge proportion 13 out of 29 respondents also indicated that books were not provided.

The findings from the learners with hearing impairments revealed that the majority of the respondents indicated that HIV and AIDS books were provided.

Table 4.4.29 Frequency of teacher's lessons on HIV and AIDS

Learners with hearing impairments were asked how frequently teachers conducted lessons on HIV and AIDS in schools, in order to determine how much access to information they had on HIV and AIDS.

Number of times the teacher teaches on HIV and AIDS	
	Frequency
Once a week	7
Every Day	10
None	6
Other	4
Total	27

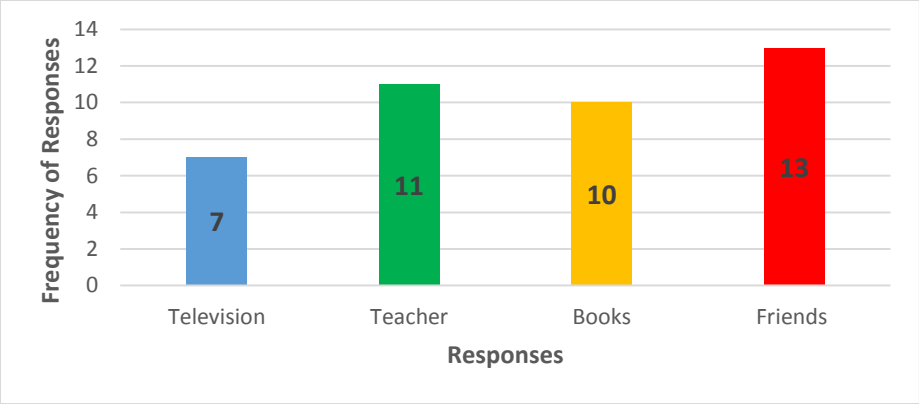
Source: Field Data, 2014

In terms of the number of times lessons on HIV and AIDS were taught, 10 out of 27 respondents said that this was done on a daily basis. 7 out of 27 said that this was done at least once a week. 6 out of 27 said they never received any information on HIV and AIDS. While 4 out of 27 of the respondents had chosen the 'other' option on the questionnaire and provided their own explanations. They stated that the teachers only mentioned something on HIV and AIDS but not precisely learning about it, while two did not indicate anything.

The findings on the frequency of lessons on HIV and AIDS revealed that the majority of the respondents acknowledged that they sometimes learnt about HIV and AIDS but lessons were not conducted frequently.

Figure 12 Source of information on HIV and AIDS by the youths

Youths with hearing impairments were asked their source of HIV and AIDS information.



Source: Field Data, 2014

There were multiple responses on the sources of information on HIV and AIDS from youths with hearing impairments. 13 out of 20of the cases, stated friends as the main source of information on HIV and AIDS among the youths with hearing impairments. 11 out of 20 of the respondents revealed that the teachers were one of the sources of information. Books were indicated to be the source of information by10 out of 20 of the cases. Television was the least acknowledged as a source at 7 out of 20.

The findings of the study revealed that there were multiple responses from out of school youths from ZNAD. The youths revealed that they have more access of HIV and AIDS information from friends, teachers than TV and books from ZNAD. It was also revealed that the responses confirmed that there have been more sources of information for out of school youths withhearing impairmentsthan the learners with hearing impairment.

Table 4.4.30 Provision of books on HIV and AIDS by school

Provision of HIV and AIDS books was one way of disseminating information to all individuals. Youths with hearing impairments were asked whether they were provided with books on HIV and AIDS.

Provision of books on HIV and AIDS by school	
	Frequency
Yes	4
No	16
Total	20

Source: Field Data, 2014

The results above indicated that books on HIV and AIDS were not provided in schools or by ZNAD. 16 out of 20 of the respondents indicated this. 4 out of 20 said that they received books from ZNAD.

The findings suggested that the majority of the youths at ZNAD did not have access to books on HIV and AIDS. Meanwhile only four agreed that they had books on HIV and AIDS.

Table 4.4.31 How often lessons about HIV and AIDS are conducted

Youths with hearing impairments were asked how frequently lessons on HIV and AIDS were conducted at ZNAD. This was in order to determine how much access to information about HIV and AIDS they received.

How often lessons on HIV and AIDS are conducted	
	Frequency
Once a week	5
Every Day	1
None	8
Other	5
Total	19

Source: Field Data, 2014

In terms of the number of times respondents received lessons on HIV and AIDS, 8 out of 20 said that they never received such lessons. 5 out of 20 said that they were taught at least once a week. 1 out of 20 said they that they were taught on HIV and AIDS every day. While other respondents:

Each of the 5 respondents said:

> "Yes"

One female indicated:

> *"We do not receive lessons on regular basis; at the most it is once a month, unless we request from ZNAD."*

It is worth noting that the non-learning youths with hearing impairments had scanty lessons on HIV and AIDS from ZNAD

In this chapter it was revealed that most of the teachers and parents were not adequately engaged in disseminating HIV and AIDS information due to language barrier. Inadequate sign language and literature tailored for the individuals with hearing impairments was a hindrance in disseminating HIV and AIDS information for both the teachers and the parents. It was observed that the teachers and parents had difficulties to educate their children on HIV and AIDS because they were not conversant in sign language which had exact vocabulary on HIV and AIDS.

As a result the individuals with hearing impairments were involved with multiple sex partners posing a risk of contracting HIV and AIDS because they were not knowledgeable on the dangers of HIV and AIDS. The findings indicated that learners and out of school youths with hearing impairments had problems to understand dangers of HIV and AIDS this was observed from the field data collected. However the findings indicated that out of school youths with hearing impairments at ZNAD were more knowledgeable on issues of HIV and AIDS compared to the learners with hearing impairments in school. This was due to the fact that out of school youths received more training and literature revealed from ZNAD indicated that there had been more training on HIV and AIDS for the youths than learners with hearing impairments at Munali Secondary school.

It was further observed that ZNBC as a media had equally embarked on disseminating information on HIV and AIDS to the general public. However it was observed there were a number of challenges on information disseminated on HIV and AIDS by ZNBC. Basically it was revealed that dissemination of HIV and AIDS was general and had broad information which was not specific to theindividuals with hearing impairments. None of the information disseminated on HIV and AIDS by ZNBC was tailored to suit persons with hearing impairments. Another challenge revealed was that ZNBC did not have any sign language interpreters to specifically disseminate information on HIV and AIDS to the individuals with hearing impairments.Sign language interpreters were just hired mainly for other programmes and once in a while for health related programmes. It was further revealed that none of the ZNBC personnel were trained in sign language therefore made it difficult to voice out for the individuals with hearing impairments.

The finding on strategies used in disseminating HIV and AIDS information indicated that there were no specific strategies used to disseminate information on HIV and AIDS to theindividuals with hearing impairments apart from drama and use of books on HIV and AIDS. However

results indicated that learners and out of school youths with hearing impairments mostly obtained information on HIV and AIDS from friends, books and sometimes from lessons taught by the teachers but these lessons were inadequate. It was observed that were no effective strategies used in sign language to disseminate HIV and AIDS information to individuals with hearing impairments was mostly from books, friends and teachers.

Last but not the least on strategies of disseminating HIV and AIDS information it was revealed that there have been no specific programmes nor strategies incorporated for the individuals with hearing impairments through the school, teachers, parents, and the media as a way of imparting them with more knowledge, values and skills on HIV and AIDS. It was observed that out of school youths with hearing impairments from ZNAD had more knowledge on HIV and AIDS than their counterparts due to that fact that ZNAD had more programmes and training specifically for the individuals with hearing impairments.

In summary this chapter discussed the research findings in four themes; modes of disseminating HIV and AIDS information to individuals with hearing impairments, knowledge individuals with hearing impairment had HIV and AIDS, the challenges faced by individuals with hearing impairments in accessing HIV and AIDS information and strategies used in disseminating HIV and AIDS information to individuals with hearing impairments the preceding chapter present the discussion of findings of the study.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.0 INTRODUCTION

The previous chapter presented the findings of the study by using tables, figures and verbatim this chapter discusses the findings which sought to address the four objectives namely:-

i. To establish the mode of disseminating HIV and AIDs information to individuals with Hearing Impairments.
ii. To determine how knowledgeable individuals with Hearing Impairments were about HIV and AIDS.
iii. To identify challenges faced by individuals with Hearing Impairments in accessing HIV and AIDS information.
iv. To identify strategies used in disseminating HIV and AIDS information to individuals with Hearing Impairments.

5.1 Modes of Disseminating Information about HIV and AIDS to Individuals with Hearing Impairment.

From the findings it was confirmed that the majority of teachers indicated that there were activities where learners and out of school youths with hearing impairments could access information on HIV and AIDS. These activities were mainly during school assembly and organised peer educators through the teachers, once in a while. It was further revealed that teachers were not being trained sufficiently to convey HIV and AIDS information through sign language. It was observed that the teachers could not effectively disseminate HIV and AIDS information to the learners with hearing impairments. Parents could not provide much of the necessary information to their children at home as they lacked sign language skills. Therefore disseminating of HIV and AIDS information was not adequately disseminated to their children with hearing impairments due to language. The teachers were not trained sufficiently to convey HIV and AIDS information through sign language.

In line with Mprah's (2011) report modes of disseminating HIV and AIDS information was based on training counsellors in sign language by networking and coming up with sensitisation projects. This was achieved by involving a multi-disciplinary team of health personnel, teachers, parents, church members, family members including persons with hearing impairments and those

with different disabilities to be trained as counsellors in HIV and AIDS. This was viewed as an achievement in disseminating information to persons with hearing impairments.

UNESCO (2000) indicated that activities to disseminate HIV and AIDS information would take place through T.V, Newspapers, clubs and sports (extra-curricular activities). MOE, (2006) and MESVTEE (2013) confirmed that several activities were developed in life skills and HIV and AIDS education pupil's books. The coordination of activities of HIV and AIDS were integrated in the main stream. The respondents further revealed that it would have been better if most of the words were in sign language. This would have made most teachers competent to lead the learners in an open discussion on HIV and AIDS. The challenge was that all materials developed were for the hearing learners and youths only. There was no specific literature for the individuals with hearing impairments.

Conrad, (1999) confirmed that sign language was appropriate for theindividuals with hearing impairments to learn effectively. He further stated that sign language had a vocabulary allowing discussions of educational value to the individuals with hearing impairments. In addition ZNAD (2001) added that sign language could help the individuals with Hearing Impairments because it was their mode of communication.

Furthermore some of the teachers revealed that learners with hearing impairments were unable to participate in various activities on HIV and AIDS due to language barrier and most HIV and AIDS materials were not in sign language. It was further stated that literature had a complicated English language and the majority of the advocates did not know sign language This limited the individuals with individuals with access to information on HIV and AIDS. According to Freiss, (1998) American Sign Language had inherent differences with spoken English and functional literacy to be understood by theindividuals with hearing impairments. Furthermore, Ogumstine, (2006) confirmed in his survey that most of the information on HIV and AIDS was presented in spoken or written language. He further stated that using sign language would benefit the individuals with hearing impairments more. In Swaziland, Groce etal (2003) mentioned that use of posters and Television was helpful in disseminating information on HIV and AIDS to the individuals with hearing impairments.

Hearing loss was a limiting factor to accessing HIV and AIDS information adequately especially electronically. In short there have been limited access to written information due to general high

levels of illiteracy among those with profound hearing loss. This was supported by Meleste, (2008) who indicated that using a variety of visual approaches as modes of disseminating HIV and AIDS information would benefit the individuals with hearing impairments. This was because of attitudes of the society that perceived the individuals with hearing impairments as though they were not sexually active.

With regard to life skills which enhance good morals, it was revealed that the school had a lot of sporting materials, and gardening tools. Art and Design skills and Home Economics were taught as subjects but by so doing the learners acquired life skills to keep them away from risky behaviour. It was stated that life skills and HIV and AIDS were incorporated in the revised school curriculum of (MESVTEE, 2013).

Parents being the first teachers of the children were interviewed on the modes of disseminating HIV and AIDS to the children with hearing impairments. Multiple responses were given by parents on modes of disseminating HIV and AIDS information. The findings revealed that all the parents were engaged in disseminating HIV and AIDS information to their children with hearing impairments. Some of the Parents said that their children with hearing impairments were advised to refrain from having girlfriends and boyfriends on daily basis, thus enhancing good moral behaviour. Some respondents stated that when educating their children, HIV and AIDS was not singled out but was among other issues especially those telecasted on TV.

Among the notable modes of disseminating information on HIV and AIDS to the children with hearing impairments, the findings were confirmed by Lifson (1998) literature reviewed. Parents went to the extent of sensitizing children with hearing impairments regarding modes of transmission of HIV and AIDS. It was revealed that children were educated on the dangers of sharing used razor blades, having multiple sexual patterns and use of condoms was emphasised. Lifson,(1998) identified similar modes of transmitting HIV and AIDS which most parents have used as a mode of disseminating HIV and AIDS information to their children with hearing impairments. It was mentioned that some children had more information as they were sensitised through books made available to them on teenage sexual activities with a component on HIV and AIDS. Further it was revealed that the children with hearing impairments had scanty knowledge as books on HIV and AIDS were available. Some of the children were reported to be well sensitised as they went to the extent of wearing red ribbons on their shirts symbolising HIV and

AIDS. The finding also indicated that one respondent used videos in disseminating HIV and AIDs information on how it had affected the country and the world at large. All the parents responded affirmatively that they were very free to discuss issues of HIV and AIDS with their children. Other members of the families were also involved in educating the children with hearing impairment. The only challenge teachers, parents and guardians faced to adequately disseminate HIV and AIDS information to their children was language barrier. All the respondents indicated that they had problems with sign language especially when it came to HIV and AIDS.

More scholars Poku (2008), Groce etal (2006) and Meena (2005) said that the dissemination of HIV and AIDS information was achieved by training people who were close to their children with hearing impairments such as teachers, parents, and health personnel. It was revealed that IEC materials (newspapers, magazines, newsletters and pamphlets) were produced in an easier language which the parents and teachers used to disseminate HIV and AIDS information to persons with hearing impairments.

5.2. Knowledge about HIV and AIDS.

According to the findings, it was evident that learners with hearing impairments in school were less knowledgeable than out of school youths at ZNAD. The assertion that individuals with hearing impairment lacked knowledge by several scholars was justified. Carmody (2004) observed that education contributed to empowering people to make informed choices in the role of fighting HIV and AIDS.

Although the majority of the learners and out of school youths with hearing impairments, knew a lot on HIV and AIDS, they lacked detailed knowledge. The knowledge which both parties had on HIV and AIDS was scanty. It was noted that the majority indicated that HIV could be cured. This confirmed that information was disseminated but not in sign language, therefore causing the misinterpretation of facts on HIV and AIDS by the individuals with hearing impairments. Sangowawa etal (2004) indicated that the individuals with hearing impairments had little information on HIV and AIDS because they believed HIV could be cured.

However, even if they were knowledgeable, it was evident that the challenge was on signs and visual learning, so it was very difficult to understand a lot of issues on HIV and AIDS. To

support this assertion, MOE (2006) stated that the education sector policy on HIV and AIDS would act as a practical guide for effective prevention care and support on the public sector. This policy pointed at the impact AIDS had on the education sector. Therefore, a mitigation purpose or policy was put in place in order to formalise every person's rights and responsibilities with regard to HIV and AIDS.

This did not exclude the learners with hearing impairments. In the same vein Kelly (2008) said that the education sector in Zambia had programmes of school going and young school leavers which had been made available with channels that influenced the learners with curricular that had values. According to Groce etal (2006) the individuals with hearing impairments had 8% information acquisition levels from the community. Most of the information was accessed from family members. There was need to disseminate HIV and AIDS information through various sources to the learners with hearing impairments as evidenced on the source of information. Malambo (2000) revealed that while HIV and AIDS was taught in school, there were no teaching materials provided. This had left many questions as to whether the books were really intended for the learners with hearing impairments, and whether they had basic tools addressing the needs of the learners.

According to MOE (2006) information on HIV and AIDS should be culturally sensitive, age appropriate, language contextual, gender for person with SEN in order to be in line with accurate information available. Katuta (2012) and Masuwa (2011) in similar studies reported low levels of information on HIV and AIDS among learners with Hearing Impairments. It was observed that these learners were not given an equal platform in knowledge acquisition on HIV and AIDS. The teaching and learning resources were not designed for the individuals with hearing impairments. Additionally time was not adequate in the curriculum to impart knowledge to the individuals with hearing impairments.

Freiss (2001) revealed that due to lack of appropriate user friendly language to the individuals with hearing impairments, they were involved in risky behaviour such as beer drinking having multiple sexual partners. Freiss further stated that the individuals with hearing impairments were not knowledgeable about the dangers of HIV and AIDS, hence lagged in understanding. Freiss (2001) revealed that lack of appropriate language and sign language for the individuals with hearing impairments enhanced them being involved in risky behaviour of having multiple sexual

partners. The findings regarding the risky behaviour of the individuals with hearing impairments in this study confirmed that they had multiple sexual partners. It was revealed from the field data that the individuals with hearing impairments had their human rights which allowed them to have multiple sexual partners who they would in turn exchange with their close friends. This kind of risky behaviour revealed how ignorant and unknowledgeable of the dangers of HIV the individuals with hearing impairments were and this has made them lag in understanding the dangers of HIV and AIDS.

Mbewe (2005) observed that the individuals with hearing impairments were so unknowledgeable that HIV is a transmittable disease as they were in the habit of sharing and exchanging sex partners. Mbewe indicated that the individuals with hearing impairments in Zambia believed they were very special and GOD loved them such that they could not be infected by the HIV virus. It was stated that the individuals with hearing impairments in Zambia had this myth on HIV which made them believe HIV could by-pass and not infect them whenever they waved their identity card in the air. All they would say is, *"God look at this card, I am hearing impaired"* With this belief God would simply have pity on them then HIV would just pass without infecting them. The findings revealed that the individuals with hearing impairments in this study were knowledgeable of the fact that HIV is real but lacked detailed knowledge.

However, it was also observed that out of school youths with hearing-impairments had more necessary knowledge information and facilities on HIV and AIDS than the learners with hearing impairments. This made them very ignorant about a lot of facts on HIV and AIDS. Lifson (1998) and Mann et al (1992) confirmed in their findings that HIV was not transmitted through casual contact of toilets, cell phone, clothes, food, water, or mosquito bites, sex with a baby or virgin and many other ways. However the findings revealed that the individuals with hearing impairments believed HIV could be transmitted through casual contact as many people believed these myths.

5.3 Challenges Faced By the Individuals with Hearing Impairments in Accessing HIV And AIDS Information.

The finding from the ZNBC media personnel revealed that the media had challenges in disseminating HIV and AIDS information to the individuals with hearing impairments because all the health related programmes including HIV and AIDS were generalised to all persons. The

respondents at ZNBC confirmed that the media had disadvantaged the individuals with hearing impairments on HIV and AIDS information. All the mass media respondents sampled at ZNBC said that the media faced challenges in disseminating HIV and AIDS information to the individuals with hearing impairments. None of the media personnel knew sign language. Only hired staff was available as sign language interpreters. At the time of the interview the sign language interpreters were not on duty. It was further revealed that HIV and AIDS information dissemination was generally for all the people with and without hearing impairments.

It was revealed that the media had faced challenges in disseminating HIV and AIDS information. This was as a result of not having any particular programme for the individuals with hearing impairments. The respondents indicated that there was nothing through electronic and print media for the individuals with hearing impairments. Even the language on print media was generally for everyone. Nothing was adapted for the needs of the individuals with hearing impairments. To confirm this, the NAC (2004) indicated that it would disseminate BCC programme through the media to target everyone. These campaigns have been through electronic media. The BCC campaign programme through drama, advertisements, youth talk shows on abstinence and entertainment had important strategies used though none of them were tailored for the individuals with hearing impairments.

Kanyengo (2009) and ZAFOD (2008) confirmed that there had been no accessibility of HIV and AIDS information through the electronic and print media for PLWDs who were inclusive of the individuals with hearing impairments.

The ZNBC personnel further confirmed that printed materials such as posters, brochures and leaflets which the media used did not have relevant adapted language for the individuals with hearing impairments. The posters televised never had strategies of information which were useful with relevant and comprehensible language for theindividuals with hearing impairments. It was further revealed that it was challenging to voice out for theindividuals with hearing impairments because all HIV and AIDS programmes were generally for everyone.

In the same vein, Grosjean (2001) reported that individuals with hearing impairments found it difficult to access information on HIV and AIDS globally through the media. Grosjean observed that even though there have been sign language interpreters for individuals with hearing

impairments, on campaigns of HIV and AIDS it was rare that the interpreters are available. Grosjean stated that the majority of individuals with hearing impairments have totally been assumed illiterate education wise. Most written information in the print media had limited effect on individuals with hearing impairments. Grosjean further confirmed that was a great challenge for individuals with hearing impairments to access written and electronic documents on HIV and AIDS because they relied more on sight.

Lifson (1998) explained, through pictorial forms, that transmission of HIV and AIDS information was not through casual contact. The researcher observed that Lifson's pictures were of more benefit to individuals with hearing impairments than the written as illustrated in figure 2 However, figure 2 would have benefited the individuals with hearing impairments more if it had adapted language that was suitable through short phrases from sign language. Notably Lifson's document revealed that other HIV and AIDS advocates should adopt the use of Lifson's pictorial charts as a strategy for disseminating information to individuals with hearing impairments. However, the major challenge in the use of pictorial charts was the lack of captions in sign language. This should have been the same with all pictorial advertisements ZNBC as a media institution in Zambia.

The findings of the study revealed that the modes and strategies used to disseminate HIV and AIDS information to the individuals with hearing impairments by teachers, parents and guardians in school and mass media were not related to the communication mode for the learners with hearing impairments. There were no multi-sensory methods used for the individuals with hearing impairments as they relied more on sight. It has been a well-known fact that the individuals with hearing impairments needed more multi-sensory methods of grasping and understanding concepts.

Crowe (2003) asserted that many important issues were needed to be considered in creating credible HIV educational materials. Crowe indicated that if the materials were not matched to the cultural and linguistic needs ofindividuals with hearing impairments thus it created a problem in grasping any concepts on HIV and AIDS. Therefore it would have been of extreme importance if visual aids in sign language-structured word phrases were to be employed when creating these materials with design principles which would have benefitted theindividuals with hearing impairments diversely. Dolnick (1993) agreed with Crowe's principle of disseminating HIV and AIDS information due to communication and literacy barriers for the individuals with hearing

impairments. Dolnick observed that the fact that average sixteen-year-old learners `with hearing impairments read at the level of a hearing eight-year-old. The majority of the individuals with hearing impairments were reported that they could hardly read when they left schools. Therefore HIV and AIDS educational materials have been more universally inaccessible for individuals with hearing impairments because mostly they have been culturally based according from where one comes from. This was because sign language differed from one region to another.

Raymann (2004) advocated for accessibility of HIV and AIDS information to the individuals with hearing impairments. This was as a result of observing that many institutions rarely used sign language. ZNBC personnel agreed that person's with hearing impairments were equally entitled to participate fully on HIV and AIDS related issues but this was a challenge in Zambia. It was observed that professional sign language interpreters by the media were facilitated only during national events in Zambia. It was disclosed that there were no media person trained in sign language in Zambia. Further in line Hauland and Allen (2009)the respondents from ZNBC media personnel revealed that TV programmes were sign language interpreter where made available was mostly during captioning of news and current affairs. These were the only programmes which persons with hearing impairments benefitted from.

The finding revealed that ZNBC as media did not have trained standard sign language interpreters and the challenge was that there media was not equipped with any specific IEC materials. Media in Zambia did not have education programmes on HIV and AIDS for persons with hearing-impairment which could be delivered in sign language. The researcher observed that the total broadcast hours in all countries Zambia inclusive, had portions of programmes on HIV and AIDS without sign language or it was rated to be very low. In this study, it was noted that persons with hearing impairments had been deprived of equal access to the mass media information on issues of HIV and AIDS. The challenge was that the individuals with hearing impairments had been given equal access with those without hearing impairments by the media even when in the actual sense the information was intended for the general public when televised.

5.4 Strategies Used In Disseminating HIV AND AIDS Information to Individuals with Hearing Impairments

The finding revealed that the strategies of disseminating HIV and AIDS were through friends, teachers and books. According to Mbewe (2005) the best strategy of disseminating HIV and AIDS information to the individuals with hearing impairments, as they relied more on sight, was through the use of graphic symbols and sign language. To confirm thislearners with hearing impairments indicated that the majority of the information on HIV and AIDS was provided through the picture in the books.

The findings revealed that the respondents obtained more information through multi-sensory methods. Visual aids have been found to be helpful in disseminating information regarding HIV and AIDS to the individuals with hearing impairments. Kwathu (2011) developed pictorial literature and Mbewe (2005) developed augmentative language which was used for disseminating HIV and AIDS information. To confirm it the respondents revealed that they received more information from books, friends and teachers.

Groce etal (2003) and Meletse (2008) revealed that strategies used to disseminate HIV and AIDS information to the individuals with hearing impairments in the USA and Swaziland were through posters, TV, workshop presentations, drama, flyers, and banners. In Zambia, NAC (2004) disseminated information through electronic media on clips shown on TV on HEART as a component of BCC interventions. BCC programmes had extracurricular activities such as life skills inclusive of sporting activities the individuals with hearing impairments have benefited from. The finding revealed that the individuals with hearing impairments benefited from the HEART strategies through drama, Anti-Aids club, games, sports as supported by revised MESVTEE (2013) and MOE (1996).

The findings further revealed that the other source of information among the individuals with hearing impairments were IEC educational materials with guidance on health life styles which were in pictorial form. The other sources of information revealed were friends who had the largest influence, TV, teachers and books were also mentioned as the major strategy for obtaining and accessing HIV and AIDS information. However Malambo (2000) indicated that HIV and AIDS was disseminated through the books but lacked information which would be of

benefit to the individuals with hearing impairments. Malambo further observed that teachers were not trained on HIV and AIDS as well and this posed a great challenge.

On the other strategies used to disseminate HIV and AIDS information, Gaskins etal (1999) confirmed this by indicating that more strategies which should have been used to disseminate HIV and AIDS information because the individuals with hearing impairments were 2:10 times likely to be HIV positive than other people without hearing impairments. Another scholar, Meletse (2008) living with hearing impairments and HIV positive and an activist confirmed Gaskins assertion. Meletse reported that individuals with hearing impairments were considered second rate citizen due to their impairments. Therefore Meletse produced a pictorial comic book which depicted issues of sexual violence for teachers and the individuals with hearing impairments as a resource book.

Crowe (2003) revealed that credible books on HIV and AIDS education with best strategies for the hearing impaired should be culturally matched and must have language for the hearing impaired community. Crowe therefore advocated for the visual aids to be in sign language and phrases to be designed according to the needs of the individuals with hearing impairments. The results showed that a significant number of respondents faced language problems regardless of the source of information. It is clear from the findings that the strategies used were generalised and had no particular information which targeted the individuals with hearing impairments on HIV and AIDS. Results indicated that the only strategies which were effective in accessing HIV and AIDS information were through some HIV and AIDS reproductive health textbooks, friends and teachers. It was revealed that books, friends, and teachers were the main strategies used to convey HIV and AIDS information to the learners with hearing impairments and out of school youths with hearing impairments. The researcher observed that this was one major issue which was a problem for the hearing-impaired. Up to date, there have never been national standard sign language systems in Zambia that can be utilised in strategies of disseminating HIV and AIDS information to individuals with hearing impairments.

In summary the modes of disseminating information on HIV and AIDS to individuals with hearing impairments were there and being used. Respondents with hearing impairments had inadequate knowledge on HIV and AIDS due to the comprehensive language used. The HIV and AIDS programs on media were there but none of them were tailored to suit the needs of

individuals with hearing impairments. The strategies used were through multi-sensory methods. The next chapter is the last chapter of this dissertation with a summary of the findings, a conclusion and recommendation of the study.

CHAPTER SIX: CONCLUSION AND RECOMMENDETIONS

The previous chapter presented the discussion of findings of the study. Data was interpreted using themes so that the research questions are answered. In this chapter, a summary of the study and the recommendations will be presented.

This chapter is divided into two sections namely

- Conclusions and
- Recommendations

CONCLUSION

The conclusion will summarise the findings according to the four themes namely; modes of disseminating HIV and AIDS information to individuals with hearing impairments; knowledge learners and out of school youths with hearing impairments have on HIV and AIDS; challenges faced by the individuals with hearing impairments in accessing information on HIV and AIDS and strategies used to disseminate information about HIV and AIDS to learners and Youths with Hearing impairments and.

Teachers indicated that there were different modes of disseminating information on HIV and AIDS but could not be accessed by learners with hearing impairments due to language barrier. The study revealed that the modes of disseminating information on HIV and AIDS to learners with hearing impairments by the teachers were through clubs and sports (extra-curricular activities)**.** However the challenge was that most of the activities of HIV and AIDS were mainly integrated in the main stream. There were no words in sign language about HIV and AIDS; this made it very difficult for most teachers to lead the learners into an open discussion on HIV and AIDS.It was revealed thatlearners with hearing impairment participated in various activities on HIV and AIDS during Anti-Aids club meetings only. It was further indicated that literature had complicated English, thus the majority of teachers found it difficult to disseminate HIV and AIDS information to the learners with hearing impairments. The teachers stated that the HIV and AIDS advocates did not know sign language; this limited access to literature which teachers could use as a mode of disseminating HIV and AIDS information to learners with hearing impairments. It was revealed that all the parents and guardians were actively involved in disseminating HIV and AIDS information despite language barrier. Some of the parents

mentioned that they took advantage of telecasted programmes on HIV and AIDS. The parents further said they also used books and DVD videos to disseminate HIV and AIDS information.

Lastly the parents said that they advised their children to desist from high risk behaviours though language barrier had been a great challenge for them.The study revealed that learners with hearing impairments were less knowledgeable than the out of school youths with hearing impairments on HIV and AIDS. The target population had scanty information, and it was observed that grasping concepts of anything relied more on visual aid so it was very difficult to understand a lot about HIV and AIDS. The study further revealed that the majority of learners and out of school youths with hearing impairments were less knowledgeable on HIV and AIDS hence the reason for multiple sexual partners. This was confirmed by risky behaviours amongst individuals with hearing impairments. Results revealed that the individuals with hearing impairments had a unique behaviour as stated that they had human rights which allowed them to have multiple sexual partners who they exchanged with their close friends.

This kind of risky behaviour revealed how ignorant and unknowledgeable of the dangers of HIV the individuals with hearing impairments were. This made them lag behind in understanding dangers of HIV and AIDS. It was also confirmed that the majority of learners and out of school youths with hearing impairments believed HIV was transmitted through casual contact with toilets, cell phones, clothes, food, water, or mosquito bites, sex with a baby or virgin and many more. However the findings revealed that out of school youth with hearing impairments were more knowledgeable than learners with hearing impairments on how HIV was transmitted.

The study further shed light on challenges faced by the media on disseminating HIV information to individuals with hearing impairment. It was disclosed that the media faced challenges to processes and disseminate HIV and AIDS information to persons with hearing impairments. The media only disseminated general health information on prevention of HIV and AIDS to the general public. However the findings revealed that it was not appropriate since the disseminators had no sign language skills. It was revealed that the only time the media disseminated HIV and AIDS information was during the week of World AIDS day. Mostly both electronic and print media were used but it was not appropriate for persons with hearing impairments. The electronic media, in most cases, had no sign language interpreters while the print media had Standard English which could not be understood by the individuals with hearing impairments. The results

further suggested that media campaigns on HIV and AIDS prevention had not been effective in shaping the knowledge of the individuals with hearing impairment with regards to HIV prevention techniques telecast.

The findings on strategies used in disseminating information on HIV and AIDS, revealed that friends, teachers and books had the largest influence for the individuals with hearing impairments. Television had very little influence for both the learners and out of school youths with hearing impairment at ZNAD. This was evidenced by the challenges media faced to disseminate information on HIV and AIDS to persons with hearing impairments. The findings revealed that most strategies of disseminating HIV and AIDS information contributed to poor behaviour portrayed by the individuals with hearing impairments. This was a clear indication from the data analysed above on the multiple sexual partners.

The study further revealed that learners and youths with hearing impairments had knowledge on HIV and AIDS but lacked detailed information on the pandemic. The individuals with hearing impairments understood signed English or telegraphic writing. This was evidenced during data collection questionnaires written in Standard English and was difficult to read for the individuals with hearing impairments. It was further revealed that, there were multiple strategies of HIV and AIDS information dissemination in spite of the fact that they were misunderstood in most cases. Therefore there were more HIV infections among learners with hearing impairments than the hearing peers. This was because of the inadequacies in information dissemination.

The learners and youths with hearing impairments were not able to answer almost all the questions on the questionnaires which had Standard English. The researcher had to adapt language in English in line with Batavia (1993).Batavia at meeting individual's functional impairments in terms of language. In this study it was established that language significantly impeded disseminating of HIV and AIDS information to individuals with hearing impairments.

The researcher observed that concerted efforts by all stakeholders could be the only way the implementation of the findings could be established. If properly disseminated, the information on HIV and AIDS will help individuals with hearing impairments to safe guard themselves against the pandemic. Furthermore there is hope that the spread of HIV and AIDS among the individuals with hearing impairments may reduce. This will be a move to support the government in

preventing and reducing the pandemic and mitigating the socio-economic impact of the disease, and increasing access to care and support for the people infected or affected by HIV and AIDS in Zambia.

6.2 RECOMMENDATIONS

Based on the findings, the following were the recommendations;

1. Teachers should give detailed information to learners with hearing impairments through a familiar language which is sign language.
2. Policy makers, teachers, and parents must ensure multi-sensory methods are used in sensitive topics (through various pictorial methods, videos, drama and role plays) which are culturally appropriate in disseminating HIV and AIDS information the individuals with hearing impairments.
3. Policy makers on HIV and AIDS must enhance knowledge on HIV and AIDS among individuals with hearing impairments by using more visual aids with sign language captions when disseminating information on HIV and AIDS.
4. There was need for media to come with HIV and AIDS programmes with trained sign language interpreters to disseminate HIV and AIDS information the individuals with hearing impairments.
5. The policy makers should declare sign language the eighth official language and it should be taught as a language as a strategy of disseminating HIV and AIDS information the individuals with hearing impairments.

Suggestion for future research

1. Further research on modes of accessing HIV and AIDS information by individuals with hearing impairments should be conducted.

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APPENDIX I "Deaf Play with Deaf" Resource Paper

The resource paper was reported as one of the important source of information which has enhanced behavioural change in HIV and AIDS for the individuals with hearing impairments especially those registered at ZNAD. This resource paper has strategies that have been user friendly for individuals with hearing impairments in disseminating information on HIV and AIDS. Mbewe illustrated the paper in adapted language signed English for individuals with hearing impairments; The title of the resource was "Deaf Play with Deaf" Mbewe used symbols such as the ear which depicted sign for being hearing impaired, the ribbon symbolised the sign for HIV and AIDS while the dove and cross indicated death . This resource paper was prepared in ACC language and symbols to suit the needs of the individuals with hearing impairments:

DEAF PLAY DEATH; 

The deaf play with death like a spider on the cobweb; 

Forgetting awareness of HIV and AIDS

Deaf communities: Deaf people live together in communities for example:





Deaf club, deaf church deaf family same township cities



Deaf members know other sick deaf members.

Deaf members see symptoms and know HIV –AIDS.



Deaf members know other deaf members dead.

Therefore deaf members are aware of HIV-AIDS as cause of death.

But why do deaf members continue to forget that awareness of HIV-Aids danger?

Poverty, Beer, Libido and Sex

Deaf members live in poverty.

Deaf members have no jobs, no house, and no food.

Deaf members drink Chibuku, Shake Shake beer. (Local beers)

After beer deaf member feel libido energy build up, want sex,

 Deaf members pick partners from pubs.

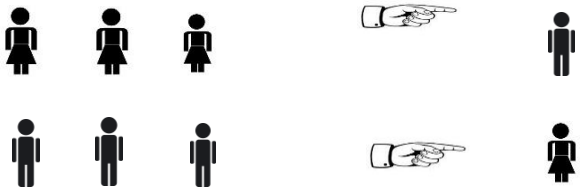
 Deaf members have sex. Deaf members catch HIV-aids.

 Deaf members become sick,

 Deaf members later die.

Competition for Sex Sweet Partners

Competing members want deaf partner



The sweet partner will give HIV – AIDS to competing deaf members

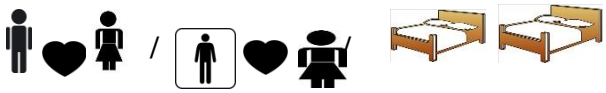
Some competing deaf members will give HIV-Aids to sweet partner

 Competing partners and sweet partners later die

---

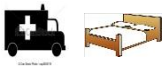
Lovers Exchange Program

Two deaf friends 

Two deaf lovers 

Two deaf lovers exchange sex partners 

Result, the two lovers exchange HIV –AIDS while playing sex.

 The lovers become sick. 

  The lovers die later

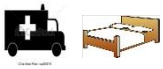
Deaf people play with death when exchanging sex partners

Zambia Agency for the Protection of the Deaf (ZAPD):ID.

  Some deaf members believe ZAPD ID protects them.

Deaf members boast they cannot catch HIV-Aids.

But many deaf members with ZAPD ID catch HIV-Aids 

 Become sick

 Later die

---

Source: *Microsoft office word 2007 – clipart library*

APPENDIX II STANDARD ENGLISH QUESTIONNAIRE

QUESTIONNAIRE FOR LEARNERS WITH HEARING IMPAIRMENT

Dear Respondent,

The purpose of this research is entirely educational. It is also to establish if the hearing impaired have awareness in HIV/AIDS. The questions will help the researcher gather information from the perspective of the awareness campaigns taking place. This will help to complement information to be gathered. Your cooperation is therefore of great importance in this regard, and every answer will strictly be confidential.

Below are instructions to guide you as you complete questionnaires

INSTRUCTIONS

Do not write your name on the questionnaire. Answer questions by ticking in the checkbox provided.

For those questions that require an explanation, write in the spaces provided.

1. Gender
   (a) Male ☐ (b) Female ☐
2. Age: ……..
3. Level of education
   (a) Primary ☐
   (b) Junior Secondary ☐
   (c) Senior secondary ☐
   (d) College/University ☐

SECTION A

KNOWLEDGE ON HIV

1. Have you ever heard of HIV and AIDS?
   (A) Yes ☐ (b) No ☐
   (B) ……..

Models of transmission (Tick only the correct answer)

Example:

You are deaf ☐ ✓

You are not deaf ☐

1. Do you know how HIV is transmitted?
   (a) Yes ☐ (b) No ☐
2. HIV is transmitted by the following in an infected person by;
   (a) Sharing unclean razor blades ☐
   (b) Blood ☐
   (c) Breast milk ☐
   (d) Urine ☐
   (e) Semen ☐
   (f) Blood transfusion ☐
   (g) Tears ☐
   (h) Pregnancy ☐
   (i) Un protected Sex ☐
   (j) Birth ☐
   (k) Shared cups ☐
   (l) Shared needles ☐
   (m) Cutting practice of tattoos ☐
   (n) Other……
3. HIV can be transmitted by casual contact in any setting by
   (a) Respiratory route ☐
   (b) Household ☐
   (c) Social ☐
   (d) Work ☐
   (e) Casual sex ☐
   (f) School ☐
   ☐

(g) Prison

(h) Cell phone ☐

(i) Sharing food ☐

(j) Water ☐

(k) Sharing toilets ☐

(l) Drinking utensil (cup) ☐

(m) Second hand clothes ☐

(n) Others……

4. HIV is transmitted by insects and mosquitoes which have bitten an infected person

   (a) Yes ☐ (b) No ☐

5. HIV can be transmitted through someone who is suffering from TB.

   (a) Yes ☐ (b) No ☐

SECTION B

Prevention of HIV and AIDS

1. How can HIV be prevented?

   (a) By not hugging HIV infected people ☐

   (b) By not shaking hands when greeting ☐

   (c) Condom use ☐

   (d) Abstinence ☐

   (e) Stay away from infected people ☐

   (f) Enjoying casual sex ☐

   (g) Knowing your status ☐

   (h) Other……

2. HIV can be cured

   (a) Yes ☐ No ☐

3. HIV can be treated by

   (a) Having sex with a baby Yes ☐ No ☐

   (b) Having sex with a virgin Yes ☐ No ☐

   (c) Taking ARVs Yes ☐ No ☐

   (d) Visiting the doctor Yes ☐ No ☐

(e) Other……

4. HIV is a clearly preventable infection
   (a) Yes ☐ (b) No ☐
5. Stigma and denial both fuel the spread of HIV
   (a) Yes ☐ (b) No ☐
6. Do you know how to use a condom?
   (a) Yes ☐ (b) No ☐

Section C

Voluntary Counselling (VCT)

1. Do you know what VCT is?
   (a) Yes ☐ No ☐
2. If the answer is yes, are you aware that all results remain confidential?
   (a) Yes ☐ (b) No ☐
3. VCT in an adult can determine one's HIV status
   (a) Yes ☐ (b) No ☐
4. VCT helps with behavioural change
   (a) Yes ☐ (b) No ☐
5. Do you know your HIV status?
   (a) Do not want to know ☐
   (b) Scared to know ☐
   (c) Do want to know ☐
   (d) Tested ☐
6. ARVs can cure AIDS
   (a) Yes ☐ (b) No ☐
7. Do you a have girlfriend or boyfriend. If you have, how many do you have?

……

……

……

……

……

……

……

……

(11) Give reason for having more than one girl or boyfriend.

……

……

……

……

……

……

……

……

SECTION D

SOURCE OF INFORMATION

1. If YES in 2 above, where did you hear of HIV/AIDS from?
   (a) Television ☐ (b) Teacher ☐
   (c) Books ☐ (d) Friends ☐
2. Does your school give you materials on HIV/AIDS?
   (a) Yes ☐ (b) No ☐
3. If yes, explain

   ……

   ……

   ……
4. How often do your teachers teach about HIV/AIDS?
   (a) Once a week ☐
   (b) Every day ☐
   (c) None ☐
   (d) Other ……

   ……

Thank you for participating in this study

APPENDIX III STANDARD ENGLISH QUESTIONNAIRE

QUESTIONNAIRE FOR YOUTHS WITH HEARING IMPAIRMENT (ZNAD)

Dear Respondent,

The purpose of this research is entirely educational. It is also to establish if the hearing impaired have awareness in HIV/AIDS. The questions will help the researcher gather information from the perspective of the awareness campaigns taking place. This will help to complement information to be gathered. Your cooperation is therefore of great importance in this regard, and every answer will strictly be confidential.

Below are instructions to guide you as you complete questionnaires

INSTRUCTIONS

Do not write your name on the questionnaire. Answer questions by ticking in the checkbox provided.

For those questions that require an explanation, write in the spaces provided.

1. Gender
   (b) Male ☐ (b) Female ☐
2. Age: ……..
3. Marital status
   (a) Married ☐ (b) Single ☐ (c) Divorced ☐ (d) Widowed ☐
4. Level of education
   (a) Primary ☐
   (b) Junior Secondary ☐
   (c) Senior secondary ☐
   (d) College/University ☐

SECTION A

Knowledge on HIV AND AIDS.

1. Have you ever heard of HIV/AIDS?
   (a) Yes ☐ (b) No ☐

Modes of Transmission

Example:

You are deaf ☑

You are not deaf ☐

1. Do you know how HIV is transmitted?
   (a) Yes ☐ No ☐
2. HIV is transmitted by the following
   (a) Sharing unclean razor blades ☐
   (b) Blood ☐
   (c) Breast milk ☐
   (d) Urine ☐
   (e) Semen ☐
   (f) Blood transfusion ☐
   (g) Tears ☐
   (h) Pregnancy ☐
   (i) Un protected Sex ☐
   (j) Birth ☐
   (k) Shared cups ☐
   (l) Shared needles ☐
   (m) Cutting practice of tattoos ☐
   (n) Other……
3. HIV can be transmitted by casual contact in any setting by respiratory route
   (a) Respiratory route ☐
   (b) Household ☐

(c) Social

(d) Work ☐

(e) Casual sex ☐

(f) School ☐

(g) Prison ☐

(h) Cell phone ☐

(i) Sharing food ☐

(j) Water ☐

(k) Sharing toilets ☐

(l) Drinking utensil (cup) ☐

(m) Second hand clothes ☐

Others……..

4. HIV is transmitted by insects and mosquitoes which have bitten an infected person

   (b) Yes ☐ (b) No ☐

5. HIV can be transmitted through someone suffering from TB

   (b) Yes ☐ (b) No ☐

SECTION B

Prevention of HIV/AIDS

1. How can HIV be prevented?

   (a) By not hugging HIV infected people ☐

   (b) By not shaking hands when greeting ☐

   (c) Condom use ☐

   (d) Abstinence ☐

   (e) Stay away from infected people ☐

   (f) Enjoying casual sex

   (g) Knowing your status ☐

   (h) Other……

2. HIV can be cured

   (a) Yes ☐ (b) No ☐

3. HIV can be treated by

   (a) Having sex with a baby Yes ☐ No ☐

(b) Having sex with a virgin Yes ☐ No ☐

(c) Taking ARVs Yes ☐ No ☐

(d) Visiting a witch doctor Yes ☐ No ☐

4. Stigma and denial both fuel the spread of HIV

(a) Yes ☐ No ☐

SECTION C

Voluntary Counselling (VCT)

5. Do you know what VCT is?

(b) Yes ☐ No ☐

6. If the answer is yes, are you aware that all results remain confidential?

(b) Yes ☐ (b) No ☐

7. VCT in an adult can determine one's HIV status

(b) Yes ☐ (b) No ☐

8. VCT helps with behavioural change

(b) Yes ☐ (b) No ☐

9. Do you know your HIV status?

(e) Do not want to know ☐

(f) Scared to know ☐

(g) Do want to know ☐

(h) Tested ☐

10. ARVs can cure AIDS

(b) Yes ☐ (b) No ☐

(11) Do you a have girlfriend or boyfriend. If you have, how many do you have?

……

……

……

……

……

……

……

(12) Give reason for having more than one girl or boyfriend.

……

……

……

……

……

……

……

……

SECTION D

SOURCE OF INFORMATION

13. If YES in 2 above, where did you hear of HIV/AIDS from?

(b) Television ☐ (b) Teacher ☐

(c) Books ☐ (d) Friends ☐

14. Does your school give you materials on HIV/AIDS?

(a) Yes ☐ (b) No ☐

15. If yes, explain

……

……

……

16. How often do your teachers teach about HIV/AIDS?

(a) Once a week ☐

(b) Every day ☐

(c) None ☐

(d) Other ……

……

Thank you for participating in this study

APPENDIX IV: INTERVIEW SCHEDULE FOR THE TEACHERS

1. Do you know what HIV/AIDS?
2. How much access do individuals with hearing impairment have to information on HIV and AIDS in school?
3. Are there any school activities that individuals with hearing impairments can participate in to ensure that they have access to information on HIV/AIDS?
4. Are there any factors that hinder learners with hearing impairments to access information on HIV/AIDS in school?
5. If yes to question 7, mention the factors that hinder access to information on HIV/AIDS in Schools
6. Are learners with hearing impairment involved in open discussion on HIV/AIDS?
7. Would the information of HIV/AIDS education peer groups for learners who are hearing impaired help to increase access to information on HIV/AIDS in schools?
8. Has the institution got the MESVTEE HIV and AIDS workplace policy?
9. Has the institution got the MESVTEE life skills framework?
10. Has the life skills framework been circulated to all educators?
11. Do you have access to the life skills framework?
12. Does the institution have the life skills materials for learners?
13. Do you integrate life skills in their lessons?
14. What would you like the government or HIV/AIDS advocates to do on the practices of disseminating HIV/AIDS information to the hearing impaired?

APPENDIX V: INTERVIEW SCHEDULE FOR PARENTS

1. Do you know anything about HIV/AIDS?
2. Do you communicate with your child about HIV/AIDS?
3. How often do you communicate about HIV/AIDS with your child?
4. Do other family members help communicate about HIV/AIDS to your children?
5. How sensitized is your child with hearing impairment?
6. As a parent to what extent have you reached out the hearing impaired in disseminating information about HIV/AIDS?
7. Do you know sign language?
8. If No how do you communicate with the hearing impaired?
9. As a parent do you think individuals who are hearing impaired can be infected with
10. Are you free to talk to your children about HIV/AIDS?
11. What would you like the government or HIV and AIDS advocates to do on the practices of disseminating HIV and AIDS to the hearing impaired?

APPENDIX VI: INTERVIEW SCHEDULE FOR MASS MEDIA INSTITUTION ON HIV/AIDS SENSITAZATION TO THE HEARING IMPAIRED

1. As a media, do you have any HIV/AIDS awareness programmes to the individuals with hearing impairments?
2. Do you think it necessary to sensitise HIV and AIDS programmes to the hearing impaired if the answer is yes, are there any challenges the media face to sensitise to them?
3. What mode of awareness creation do you use and explain if you face any challenges when disseminating information on HIV and AIDS to the hearing impaired.?
4. How much sensitization as a media, have you done or targeted towards persons with HIV/AIDS and explain if you have faced any challenges?
5. As a media you advocate for the hearing impaired on healthy related issues particularly on HIV and AIDS, if not what challenges does the media face?
6. Do you have trained sign language interpreters in HIV/AIDS, if not how cater for people who are hearing impaired?

APPENDIX VII: MODIFIED QUESTIONNAIRE FOR HEARING IMPAIRED PUPILS (SCHOOL)

Dear Deaf friends (Responds)

The reason why you help in this research is only for education. Also this research will help us know whether deaf they know about HIV/AIDS.

All questions will help the researcher to gather information more from it awareness campaigns now taking place. Also it will make good information gathered. Please your help is important and all answers yours will be keep secret (confidential)

Below simple instructions guide you answer questions

INSTRUCTIONS

Name your no write on paper

(Question) put ✓ in box ☐

Also write on space explain on space (……..) or explain answer

1. Gender
   (c) Male ☐ (b) Female ☐
2. Age: ……..
3. Education level
   (e) Primary ☐
   (f) Junior Secondary ☐
   (g) Secondary education ☐
   (h) Senior secondary ☐
   (i) College/University ☐

SECTION A (KNOW YOU HIV)

1. Know HIV and AIDS?
   (a) Yes ☐ (b) No ☐

SECTION B

Tick answer you think correct

Example:

You deaf ☐ ✓

You deaf not ☐

1. You know HIV get how?

   (b) Yes ☐ (b) No ☐

2. HIV person give other people by

   Share not clean razor blades ☐

   (a) Blood ☐

   (b) Breast milk ☐

   (d) Urine ☐

   (e) Semen ☐

   (f) Share blood ☐

   (g) Tears ☐

   (h) Pregnancy ☐

   (i) Sex ☐

   (j)Birth ☐

   (k) Share cups ☐

   (l) Share needles ☐

   (m)Make tutoo, cut on body ☐

   (n) Other……

3. Can get HIV by sex in different place how or HIV transmitted by careless contact how?

   (a) Breathing ☐

   (b) Household ☐

   (C) Social ☐

   (d) Work ☐

   (e) Sex friend ☐

   (f) School ☐

(g) Prison
(h) Cell phone ☐
(I) Share food ☐
(j) Water ☐
(k) Share toilets ☐
(l) Cup or spoon ☐
(m) Second hand clothes ☐
(n) Others……

4. Insect/mosquito bite person with HIV, after mosquito can give HIV
   (a) Yes ☐ (b) No ☐
5. HIV can get from person who have TB
   (c) Yes ☐ (b) No ☐

SECTION C

Stop HIV/AIDS

1. Stop HIV how?
   (a) HIV infected people hugging ☐
   (b) Not when greeting, shake hands not ☐
   (c) Condom use ☐
   (d) Abstinence ☐
   (e) Stay away from infected people ☐
   (f) Enjoying casual sex ☐
   (g) Knowing your status ☐
   (i) Other……
2. Can HIV be cured?
   Yes ☐ No ☐
3. HIV treat or stop by
   (f) Have sex with a baby Yes ☐ No ☐
   (g) Have sex with a virgin Yes ☐ No ☐
   (h) Take drink ARVs Yes ☐ No ☐
   (i) Meet visit doctor Yes ☐ No ☐

(j) Other……

4. True stop HIV can

   (b) Yes ☐ (b) No ☐

5. Stigma and denial bring HIV

   (b) Yes ☐ (b) No ☐

6. You know condom use?

   (a)Yes ☐ (b) No ☐

SECTION D

Voluntary Counselling (VCT)

1. You know VCT?

   (a)Yes ☐ No ☐

2. If yes, all results keep secret you know?

   (a)Yes ☐ (b) No ☐

3. VCT help people know status

   (a)Yes ☐ (b) No ☐

4. VCT help change behaviour

   (a)Yes ☐ (b) No ☐

5. Your HIV status you know?

   (i) Want know not ☐

   (j) Afraid to know ☐

   (k) Want to know ☐

   (l) Tested ☐

6. ARVs cure AIDS true?

   (c) Yes ☐ (b) No ☐

7. Boyfriend and girlfriend many?

   Yes ☐ No ☐

Boyfriend and girlfriend many you why?

……

……

……

……

……

……

……

……

……..

SECTION E

Source of information

1. If Yes you know HIV/AIDS, heard HIV/AIDS where?

   (c) Television ☐ (b) Teacher ☐

   (c) Books ☐ (d) Friends ☐

2. HIV/AIDS, school give you books for HIV/AIDS

   (a) Yes ☐ (b) No ☐

3. If yes, explain

   ……

   ……

   ……

4. Teacher, teach HIV/AIDS how many times?

   (a) Once a week ☐

   (b) Every day ☐

   (c) None ☐

   (d) Other……

   ……

Thank you for participating in this study!!!

APPENDIX VIII: MODIFIED QUESTIONNAIRE FOR THE HEARING IMPAIRED YOUTHS (ZNAD

Dear Deaf friends (Responds)

The reason why you help in this research is only for education. Also this research will help us know whether deaf they know about HIV/AIDS.

All questions will help the researcher to gather information more from it awareness campaigns now taking place. Also it will make good information gathered. Please your help is important and all answers yours will be keep secret (confidential)

Below simple instructions guide you answer questions

INSTRUCTIONS

Name your no write on paper

(Question) put ✓ in box ☐

Also write on space explain on space (……..)Or explain answer

1. Gender
   (d) Male ☐ (b) Female ☐
2. Age:
3. Education level
   (j) Primary ☐
   (k) Junior Secondary ☐
   (l) Secondary education ☐
   (m) Senior secondary ☐
   (n) College/University ☐

SECTION A

1. Know HIV and AIDS?
   (b) Yes ☐ (b) No ☐

SECTION B

Tick answer you think correct

Example:

You deaf ☐ ✓

You deaf not ☐

1. You know HIV get how?
   (c) Yes ☐ (b) No ☐
2. HIV person give other people by
   (o) Share not clean razor blades ☐
   (p) Blood ☐
   (q) Breast milk ☐
   (r) Urine ☐
   (s) Semen ☐
   (t) Share blood ☐
   (u) Tears ☐
   (v) Pregnancy ☐
   (w) Sex ☐
   (x) Birth ☐
   (y) Share cups ☐
   (z) Share needles ☐
   (aa) Make tutoo, cut on body ☐
   (bb) Other……

3. Can get HIV by sex in different place how?
   HIV transmitted by careless touch how?
   (b) Breathing ☐
   (c) Household ☐
   (d) Social ☐
   (e) Work ☐
   (f) Sex friend ☐

(g) School ☐
(h) Prison ☐
(i) Cell phone ☐
(j) Share food ☐
(k) Water ☐
(l) Share toilets ☐
(m) Cup or spoon ☐
(n) Second hand clothes ☐
(o) Others……

4. Insect/mosquito bite person with HIV, after mosquito can give HIV
   (c) Yes ☐ (b) No ☐
5. HIV can get from person who have TB
   (d) Yes ☐ (b) No ☐

SECTION C

Stop HIV/AIDS

1. Stop HIV how?
   (j) HIV infected people hugging ☐
   (k) Not when greeting, shake hands not ☐
   (l) Condom use ☐
   (m) Abstinence ☐
   (n) Stay away from infected people ☐
   (o) Enjoying casual sex ☐
   (p) Knowing your status ☐
   (q) Other……
2. Can HIV be cured?
   (b) Yes ☐ No ☐
3. HIV treat or stop by
   (k) Have sex with a baby Yes ☐ No ☐
   (l) Have sex with a virgin Yes ☐ No ☐
   (m) Take drink ARVs Yes ☐ No ☐

(n) Meet visit doctor Yes ☐ No ☐

(o) Other……

4. True stop HIV can

(c) Yes ☐ (b) No ☐

5. Stigma and denial bring HIV

(c) Yes ☐ (b) No ☐

6. You know condom use?

(b) Yes ☐ (b) No ☐

SECTION D

Voluntary Counselling (VCT)

1. You know VCT?

(c) Yes ☐ No ☐

2. If yes, all results keep secret you know?

(c) Yes ☐ (b) No ☐

3. VCT help people know status

(c) Yes ☐ (b) No ☐

4. VCT help change behaviour

(c) Yes ☐ (b) No ☐

5. Your HIV status you know?

(m) Want know not ☐

(n) Afraid to know ☐

(o) Want to know ☐

(p) Tested ☐

6. Problems learning HIV/AIDS what?

(a) Language problem ☐

(b) No problem ☐

(c) No of sign language programmes ☐

7. ARVs cure AIDS true?

(d) Yes ☐ (b) No ☐

8. Boyfriend and girlfriend many?

Yes ☐ No ☐

Boyfriend and girlfriend many you why?

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SECTION E

SOURCE OF INFORMATION

1. If Yes you know HIV/AIDS, heard HIV/AIDS where?
   (d) Television ☐ (b) Teacher ☐
   (c) Books ☐ (d) Friends ☐
2. HIV/AIDS, school give you books for HIV/AIDS
   (a) Yes ☐ (b) No ☐

3. If yes, explain

   ……

   ……

   ……

4. Teacher, teach HIV/AIDS how many times?
   (a) Once a week ☐
   (b) Every day ☐
   (c) None ☐
   (d) Other……

   ……

Thank you for participating in this study!!!