A STUDY TO DETERMINE FACTORS CONTRIBUTING TO HIGH INCIDENCES OF SEXUALLY TRANSMITTED INFECTIONS AMONG ADOLESCENTS OF LUSAKA URBAN DISTRICT

By:

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THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

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LIST OF ABBREVIATIONS

AIDS	-	Acquired Immunodeficiency Syndrome
ADB	-	African Development Bank
CBoH	-	Central Board of Health
CHAZ	-	Christian Health Association of Zambia
CHH	-	Chainama Hills Hospital
CSO	-	Central Statistical Office
DRC	-	Democratic Republic of Congo
FGD	-	Focus Group Discussion
HIV	-	Human Immuno Virus
HMIS	-	Health Management Information System
IEC	-	Information Education and Communication
LUDHMT	-	Lusaka Urban District Health Management Team
MMD	-	Movement for Multiparty Democracy
MOE	-	Ministry of Education
MOH	-	Ministry of Health
NASTL	-	National AIDS/STIs/Leprosy
NGO	-	Non Governmental Organisation
SAP	-	Structural Adjustment Programme
SRH	-	Sexual Reproductive Health
STIs	-	Sexually Transmitted Infections
SWAAZ	-	Society of Women Against HIV/AIDS in Zambia
UNAIDS	-	United Nations and AIDS
UNFPA	-	United Nations Family Planning Agency
UNICEF	-	United Nations Children Emergency Fund
USA	-	United States of America
UTH	-	University Teaching Hospital
VCT	-	Voluntary Counselling Testing
WHO	-	World Health Organisation
YFS	-	Youth Friendly Services
ZNBC	-	Zambia National Broadcasting Corporation.

DECLARATION

I, hereby declare that the work presented in this study for a Bachelor of Science degree in nursing has not been presented either wholly or in part, for any other degree and is not being currently submitted to any other degree.

Signed: ..... **Date:** 1st APRIL 2005

(Candidate)

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Approved: ..... **Date:** 1st April 2005

(Supervising Lecturer)

STATEMENT

I hereby certify that this study is entirely the result of my own independent investigations. The various sources to which I am indebted are clearly indicated in the text and reference.

Signed: ..... **Date:** 1st APRIL 2005

DEDICATION

This research is specially dedicated to my baby son *Mbuyoti* meaning "Blessing" born on 23rd October, 2004, who missed my care at such a tender age. I love you Sweetie.

My darling husband *C.S Imasiku* and our children for their tireless baby sitting which gave me encouragement to forge ahead;

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My late father Rogers, brothers (3), sisters (5) who longed to see me excel May their Souls Rest in Peace!;

My greatest dedication goes to my father almighty God who restored my health to be able to reach this far throughout of my training period.

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ABSTRACT

Sexually transmitted infections (STDs) refer to infections contracted through sexual contact. The common ones are syphilis, chancroid, gonorrhoea, Chlamydia and the deadly incurable Human Immuno Virus /Acquired Immuno Deficiency Syndrome (HIV/AIDS). Anyone can contract STIs regardless of age, sex, social economic status. However, adolescents are more at risk due to their being sexually active. Another factor is that adolescence is a period of irresponsible behaviour due to the unstable developmental stage.

Adolescence exposes the youths to sexual behaviours of engaging in unprotected sex, hence the risk of STI contraction and early pregnancy.

Adolescents need to be safeguarded against risky health behaviors, such as engaging in illicit, unprotected sex, which predisposes them to higher risk of contracting STI/HIV/AIDS. Therefore, long term interventions to curtail STIs among adolescents would not only benefit the nation, but the world over since they constitute a higher proportion of the overall world population. It has been said "healthy people make a healthy nation".

The study aimed at determining factors contributing to high incidences of sexually transmitted infections among adolescents of Lusaka urban district. Literature reviewed on STI was from various sources globally, regionally and nationally.

The literature focused on incidences, health seeking behaviours of STI patients, adolescent sexual behaviour and common STIs contracted. However no study was found on factors contributing to high incidences of STI among adolescents of Lusaka district.

A non experimental, explanatory qualitative research design was used. A pilot study was carried out at Kalingalinga Health Centre and the actual study was done at Mtendere Health Centre. The research subjects were selected using the simple random sampling.

A sample consisted of fifty (50) respondents who were both male and female adolescents. Two (2) focus group discussions were done, one with parents of adolescents and another consisting of adolescents only. Data collection was done using a semi-structured questionnaire and a focus guide.

The data was analysed manually using a data master sheet and calculator. Frequency tables, pie chart, graphs and cross tabulations were used to present data. These were all used to determine special relationships between variables.

Findings revealed that (96%) had heard of STI/HIV/AIDS, with majority (56%) being very knowledgeable on STI. Common sources for their information was (20%) NGOs, (18%) peers, (18%) schools (14%) media.

Sixty two percent (62%) of adolescents did not communicate with parents on sexuality issues despite (70%) having parents as their guardians. Main reason cited for no communication with parents on sexuality issues was traditional/taboo barriers. This reason was supported by both focus group discussion conducted. Responsible sexual behaviour was described by majority (72%) as abstaining from sex. Abstaining was also described as the best preventive measure.

However, (42%) had sex before, with majority (34%) with reasons given for engaging in sex being as due to peer pressure influence. Fifty two (52%) found it not easy to access sexual reproductive health services due to stigmatization by health staff.

In view of above findings major recommendations include the following:

- The Ministry of Health in collaboration with all stakeholders facilitating adolescent SRH services such as NGOs, churches, media need to intensify or strengthen the National Health programmes on sex education for young people.

- Ministry of Health should find out interventions used by provinces with low statistics of STIs especially among adolescents.

- The health centre youth-friendly services coordinator to incorporate parents, teachers and church leaders in the development of action plans for adolescents including communication and counselling techniques.
- Peer educators to be more vigilant in influencing adolescents in responsible sexual behaviours.
- There is need to conduct more frequent refresher courses on peer sex education.
- The youth-friendly services develop a deliberate policy on diversification of SRH programmes with other activities such as recreational facilities to lessen stigma and also attract other adolescents not yet sexually active.
- Staff manning adolescents programmes to be more user-friendly.
- Source more funds to meet demand/needs for the of youth reproductive health services.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

Zambia is a developing country situated in the Sub-Saharan Africa. It is a vast country covering an area of 752,612 square Kilometers (about 2.5% of Africa). Zambia is completely landlocked and shares borders with the Democratic Republic of Congo (DRC) and Tanzania in the North; Malawi and Mozambique in the East; Zimbabwe and Botswana in the South; Namibia in the Southwest and Angola in the West. The country administratively is divided into nine provinces and 72 districts. Out of the nine provinces, two are predominantly urban, namely Lusaka and Copperbelt Provinces. The remaining provinces are; Central, Eastern, Northern, Luapula, Northwestern, Western and Southern which are predominantly rural provinces (Central Statistical Office /Central Board of Health, 2003).

Zambia's economic status since independence in 1964 depended on Copper export earnings, but the drastic fall in the world copper prices among other things lead to the decline of the country's economy. However, in 1991, the movement for Multiparty Democracy (MMD) government, introduced a liberalised market –oriented economy, the parastals were privatized and in some cases liquidated leading to unemployment.

At the same time, the MMD government introduced measures such as Structural Adjustment Programme (SAP), so as to revamp the country's ailing economy, but the consequences led to increased cost of essential commodities leading to increased poverty levels among the majority of Zambians. Currently around 73% of Zambians are classified poor. Poverty is prevalent in rural areas than urban areas (83% and 56% respectively) (CSO/CboH, 2003).

The issue of unemployment and poverty levels has left most adolescents to be out of School and roam the streets, due to failure of their parents/guardians to fend for their needs, like meeting their school cost-sharing schemes. Culturally some parents have forced their adolescent children into early marriages, consequently early sexual activity for economic reasons, more especially in the rural areas where poverty levels are higher than the urban areas.

Other adolescents have opted to engage in risky health behaviours such as prostitution's for economic reasons, with the risk of acquiring sexually transmitted infections (STIs). Others have been influenced by peers to take alcohol or abuse drugs inorder to feel high, leading them to have irrational thinking and be exposed to unprotected sex and risk contracting STIs, which also include Human Immuno Virus (HIV) infection. This will bring about the incidences of STI/HIV to prevail among adolescents.

It is worrying to see adolescents being exposed to more risky sexual behaviours as they are a primary element in the long term development of any country, especially that they constitute a higher proportion of the overall population worldwide.

The 2000 census on population and housing, preliminary report, estimated Zambia's population at 10, 285, 631 of which 49.3% are males and 50.7% are females. The same census report states what Zambia's population is young with two third of Zambians being below 25 years of age, while only 3% are over the age of 65 years. Lusaka Province has a population of 2,021,568, of which 705,778 are males, 685,551 are females and 630,279 are children under 19 years (CSO/WHO, 1997). Out of this Lusaka district population is 1,558,616 with a total of 763,721 males of all ages and that of females being 794,894 (CBoH, 1997).

Based on the above statistics, there is enough evidence that, adolescents represent an important group in the growth of the nation as it is a typical population with high fertility and high mortality rate among overall population.

The term 'adolescent' according to the World Health Organisation (WHO), comprises those aged 10 and 19; 'youth' are those between 15 and 24; and 'young people' as those aged between 10 and 24.(Population Council,1998) For the purpose of consistency, the definitions employed in this study will be that of an adolescent being a young person between 10 and 24. The terms adolescents, young people and youths will be used interchangeably.

During adolescence, the following changes take place; biological development from the onset of puberty to full sexual and reproductive maturity; psychological development from the cognitive and emotional patterns of childhood to those of adulthood, and emergence from the childhood state of total socio-economic dependence to one of relative independence (Senanayake, P., and Ladjali, M., 1994).

Its during this same stage of adolescence that they take risks and tests limits. The adolescents notice changes in their bodies and experience sexual feelings or desires. They are often attracted to the opposite sex and they make friendships. Adolescents all over the world are prone to irresponsible behavior due to the unstable period of development, (Fetters,S. T. and Munkoze, F., 1999).

The physical, psychological and social attributes of adolescence, makes young people to be sexually vulnerable with a high risk of contracting and transmitting STIs. This in turn can be a contributing factor to high incidences of STIs among adolescents as STIs are transmitted through sexual intercourse. The common STIs which are curable are gonorrhea, syphilis, chancroid, trichomoniasis, genital

warts and herpes simplex. HIV is another STI, which causes Acquired Immuno Deficiency Syndrome (AIDS) which is deadly and currently has no cure.

The rate of STIs is determined by three important factors;

- The rate at which susceptible individuals expose themselves to people who are infected with STIs.
- The efficiency of transmission of the STI pathogen from the infected individual to the susceptible individual.
- The average time that a newly infected person remains infectious and thus be able to infect others in the community. (CBoH/MoH, 1997)

Unfortunately, adolescents often are not able to fully comprehend the extent of their exposure to risks especially pertaining to sexuality issues, Societies often compound young people's risk by making difficult for them to learn about sexual and reproductive health which can empower them to gain knowledge on some of the factors which contribute to STIs. This is for example to know that having sex with multiple partners without using a barrier like a latex condom risks them more to contracting STIs.

The risk is more for a vast majority of adolescents, whose sexual relations begin in adolescence, with unprotected sexual relations. This increases their risk of unwanted pregnancy, early childbirth, abortions as well as STIs (WHO, 1998). At the same time sexual activity at a younger age is often associated with greater likelihood of unprotected intercourse and multiple sexual partners, which can leave the adolescent at a greater risk of contracting STIs (Chile L.K., 1994).

According to a research done by UNICEF (2001), it was found that majority of Zambian youths including adolescents are sexually active by the age of 19 years. Many have sex by the age of 14. Another research done by CARE International, by Fetters, S.T. and Munkoze, F., 1999) also indicates that 17% of adolescents have sex by the age of 10 in the urban compounds of Lusaka. In the same

study it was also revealed that many youths had multiple sexual partners of which 55% of males and 40% of females reported more than one (1) partner in the last three months. Another study conducted by Mwansa, D, (1995), showed that 25% of Zambian youths abstain from sex, 71% of the sexually active reported not to have used a condom during their last sexual act.
Failure by many countries to diagnose and treat STIs at an early age , has led to the incidences of acute STIs to be high, resulting in serious complications and sequele such as infertility. (WHO, 2000).

In recent years the strategy of preventing and controlling STI incidence has been accepted as a major component of the global response against the HIV/AIDS pandemic. This has been necessitated with studies that have shown that both ulcerative and non-ulcerative STIs enhance HIV transmission, progressing to AIDS, which is deadly. The findings further reveal that lesions caused by STIs can increase the risk of HIV infection by more than 30% (CBoH, 2001).

The Zambian government has therefore taken great interest to prevent and treat STIs more effectively, especially among adolescents, as adolescent – health is a primary element for the long term development of any country, as they are the future leaders (UNICEF, 1996).

Health care in Zambia is provided by the Ministry of Health (MoH) through CBoH, non governmental organisations (NGOs), Christian Health Association of Zambia (CHAZ), Private practitioners and defense forces.

By 1995, there were 86 hospitals and 1, 345 health centres in the country. In Lusaka province, the main providers of health services are: University Teaching Hospital Board of Management (UTH), which is a 3rd level referral hospital for the whole Country, Chainama Hills Hospital (CHH) that is a specialist hospital. We also have Maina Soko Millitary Hospital, Lusaka Urban District Health

Management Board (LUDHMB) with 23 Health centres. Lusaka also has several private hospitals and clinics.

The MoH undertook numerous programmes vigorously when HIV/AIDS was diagnosed in the mid eighties as a major public health problem in Zambia. HIV being more of a sexually transmitted infection, the measures taken to prevent its spread were equally to assist to prevent other STI incidences due to their synergism.

The programmes put in place were aimed at sensitizing the adolescents about factors contributing to incidences of STIs. The MoH, CBoH and its co-operating partners are still running adverts on the Zambia National Broadcasting Corporation (ZNBC), on both Television and Radio 'Your Health Matters' programme. The programme has been a helpful tool to disseminate information on abstinence, condom use and being faithful and responsible in matters relating to sex, especially that adolescents are sexually active. Youth friendly Services (YFS) is another initiative adopted by MoH/CBoH and other NGOs dealing with adolescent programmes. Lusaka Urban District for example has set up YFS corners in almost all its 23 health centres. A lot of young people visit these corners for various sexuality issues.

For example a total number of young people attending the Lusaka Urban District YFS with STIs were 3,549 in year 2003. This was from a total of 9,882 youths aged 10-19 years of which total males being 5,058 and females were 4,829 (Lusaka District Annual Youth friendly report, 2003). The YFS give adolescents an opportunity to have the right to get information on issues concerning sexual and reproductive health, which includes STI/HIV/AIDS prevention, issues of teenage pregnancy prevention as well as any other issues likely to contribute to STI incidences.

Voluntary Counselling and Testing (VCT) is another component of youth friendly service, provided to adolescents in order to empower them to make an informed choice to or not be tested to determine their HIV status. Youth friendly services have trained peer educators, who share information to their fellow peers/adolescents in a friendly manner, and avoid stigmatization. These peer educators are trained to reach out to the community to both those in and out of school youths, with the same sexual and reproductive health messages. Condom promotion and distribution is another activity they spearhead in the bars, Schools and market places.

In a study by Kiragu, K., (2001), its stated that "peer education if effectively utilised, the information is more appropriate for the age group at a level the adolescent can understand and appreciate as there is ownership of information". It is probably for this reason that the Ministry of Education (MoE) became one of MoHs intersectroral partner, so as to integrate sexual and reproductive content in the school curriculum. The Anti-Aids club were introduced so that School children can freely discuss on STI/HIV causes and prevention.

The MoE and CSO in the year 2000 carried out a survey to find out parents/guardians views on teaching sex and STI/HIV in primary schools. On average parents who responded indicated that primary schools should include topics of sexual and reproductive health in the curriculum and that the age of 13 was most appropriate for children to start learning about sexual matters, to appreciate and comprehend them, (CSO, MoE, MoH, 2002).
The Church has also been involved in reaching out to adolescents, by educating them on the dangers of engaging in sex before marriage by using biblical teachings.

In 1997 for example, youths from the Christian, Muslim and Bahai faiths came together to develop a sexual training manual for Zambian youths. In this meeting

issues of STI/HIV/AIDS prevention were addressed. One preventative measure to contracting STIs encouraged was youths maintaining their virginity.
The group apart from developing the manual, also wrote a book together entitled 'Lusaka inter-faith HIV/AIDS Networking Group'. The group has been involved in the School life programme on the promotion of abstinence, under the MoE, (Hobbs, S., 1999). The churches have also been teaching the adolescents to wait to have sex until they are married.

In Zambia, grandparents and other extended members of the family traditionally, take up the roles of providing instructions to adolescents especially females on reaching puberty in relation to sexual behaviour. The adolescents are also informed not to indulge into sex until the right man approaches their parents. This in a way has contributed to some adolescents abstaing and lessening their risk to early unprotected sex and hence not risk contracting STIs/HIV.

1.2 STATEMENT OF THE PROBLEM

There are measures that have been put in place by the Zambian government, through MoH/CBoH, in collaboration with cooperating partners and stakeholders. Despite these efforts, the incidences of STIs among adolescents continue escalating. Various studies undertaken have shown that young people "know the facts' on STI/HIV prevention, but their knowledge acquisition has not lead them to adopt responsible sexual behaviour to prevent STI/HIV.

According to Mudenda, S., (1992), young men and women find it difficult to refrain from sex. Females cited love of a boy and liking sex as the reasons for them to consent in form of fear of physical beatings or repeated requests. The male response was centred on the desire for sex and poor self control. Others are having sex in exchange for money, gifts and economic support, especially among the girls in their mid-teen years with older men. Boys were noted often to have had sex with different partners. Therefore the engagement of

unprotected sex, by the young people have increased the risk of contracting and transmitting STI/HIV. In turn the problem of high incidences of STIs among adolescents will continue escalating.

In 1999 the national incidence rate of STI in population older than 5 years who attended health centres was 101 per 10,000 (CBoH, 1999). In the year 2000 Lusaka Province recorded an increase of STI incidence for population above 5 years age group from 21.1% to 25.7%, which was the highest at 4.6% per 1000 incidence. Northern Province was the only province which recorded a decrease in incidence rate of 0.4 per 1000 people, (CBoH, 2001).

In the year 2002, the incidence of STIs for all provinces of Zambia was reported to be at 16 cases in every 1000 people above 5 years,with Western Province recording the highest incidence rate of about 30 cases per 1000, while Northern had an average of 6 cases per 1000 (CBoH, 2002). In the year 2003, Lusaka Urban District Health Centres, had a total number of 29,641 STI cases for the age group above 5 years. The incidence rate was 29.3 per 1000 people. STIs were ranked as the 12th disease burden for the district, (Lusaka Urban Annual Report, 2003).

The synergistic relationship between STIs and HIV infection is well documented.At the same time evidence is increasingly showing that STI facilitates HIV Transmission and also that HIV infection increase susceptibility to other STIs (Webb, D. et al, 1996).

The risk of exposure to STIs/HIV is also evidenced by unprotected sex by the increase in adolescent/teenage pregnancies, early child birth as well as abortions following unplanned pregnancies (WHO, 1998). Worldwide estimates are that more than 10% of all births among women 15 to 19 years age group, while adolescent abortions are also estimated between 1 million to 4.4 million a year,

most of which are unsafe because they are performed illegally and under harzardous circumstances by unskilled practitioners, (WHO, 1998).

Apart from that, untreated STIs/HIV can be transmitted to unborn babies through these pregnant adolescent. Gonorrhea can cause babies to develop opthalmia neonatorium, while the syphilis can cause a late abortion, between 20^{th} and 28^{th} week of pregnancy or the pregnancy may continue slightly longer and end up in preterm labour or even birth of a weak baby. In turn, this leads to an increase in infant mortality and morbidity rates. Therefore such rates are to increase among adolescent mothers, as the incidence rates of STIs is reported to be higher in their age group (CSO/MoH, 2003).

The STIs/HIV will continue to be high among adolescents due to their exposure to unprotected sex, while, child sexual abuse and incest are other factors increasing the incidence of STIs. At the same time, urbanisation and the gradual decline in traditional and cultural morals on behavior have greatly hastened on change in social morals. Most families have disintegrated due to deaths attributed by the HIV/AIDS pandemic. This has left most adolescents grow with minimal information on sexual and reproductive health from parents who may influence positive sexual behaviour. The adolescents have instead found alternative source of information, like television of which some has been in correct and influencing them to engage in risky sexual behaviour and contracting STIs.

The above shows the magnitude of the problem of STIs among adolescents in Zambia, and stresses the need to urgently addresses the problem of STIs, by determining factors contributing to the increasing incidence rate.

1.3 FACTORS CONTRIBUTING TO HIGH INCIDENCE OF SEXUALLY TRANSMITTED INFECTIONS AMONG ADOLESCENTS

Several factors may influence adolescents to or not to contract sexually transmitted infections and these are classified as follows.

1.3.1 SERVICE RELATED FACTORS

- Poor staff attitudes lead to poor reception, which can make adolescents shun the services availed for them. Health care providers are not youth friendly, few adolescents will seek treatment and other services like counselling, available in most health facilities.
- Working hours of a health facility are within the time that adolescents who go to school are still in school and makes it difficult to access the services. The situation is worsened by the long hours of waiting to be served which frustrates the adolescents.
- Long distance to health facilities also contributes to difficulties in accessing the services. Those who stay far from health centres will find it difficult to move long distances or meet the cost for transport services. This in turn limits the adolescents to receive treatment of STIs and with repeated unprotected sex with multiple partners exposes them to infections, and become vulnerable to HIV infection as well.
- Non availability of diagnostic equipment and drugs will lead to incorrect and inaccurate diagnosis of the clients, leading them to receiving wrong treatment unable to cure their STIs effectively.
- Lack of trained staff to provide quality services can frustrate youths as they may not know how to handle them. Adolescents are people who need privacy and confidentiality, and lack of these will make them shy away.
- Inadequate human resource at health facilities will mean increased specific and diverse needs for adolescents especially concerning sexual and

reproductive health, hence limit their knowledge on how to prevent risky sexual behaviours, exposing them to contracting STIs.

1.3.2 ECONOMIC RELATED FACTORS

- The poverty levels which are high in the nation, of 73% of the Zambian population living below the poverty dartum line, has made most parents fail to meet the basic needs of their children. This makes adolescents indulge in sex which is paid for in order to meet their needs. Studies conducted for example by Hanenburg, R., and Rojanapithiaykorn, w., (1996) in Bangkok, Thailand concerning sex workers, have shown that unprotected sex gain much higher payment, than sex using a condom.

- The country's poverty levels make it impossible for adolescent complete their education due to lack of funds to educate them. The low education levels hinder the acquisition of information on youth friendly services, as well as being able to participate in the school anti-AIDS club. Therefore, having no information to such services, limits their knowledge on issues of sexual and reproductive health which would empower them to make decision on positive sexual practices and prevent contracting or transmission of STIs thereby reducing their incidences.

1.3.3 SOCIO-CULTURAL FACTORS

- Adolescents are likely to face a lot of peer pressure which can make them indulge in sex. The adolescents are adventurous and very receptive to new ideas such as dressing styles, smoking and drinking alcohol. The alcohol consumption can lead adolescents to behave irrationally and maybe likely to have unprotected sexual intercourse with a stranger and risk contracting STIs, especially with multiple sexual partners.

- The Westernization of the Zambian culture has resulted in loss of morals among youths. They want to copy from what they see on television and movies. Adolescents no longer hold sex morals and girls no longer value virginity and engage in illicit sex risking contracting STIs/HIV.

- Lack of information, education and communication (IEC) may also lead to adolescents being susceptible to STIs. Information is an important tool for decision making. Many adolescents due to family disintegration following the HIV/AIDS pandemic, get some information on sexuality from peers, media and other services which is vaguely explained.

- Beliefs with certain myths like "mpoloto" where it is believed that sleeping with a virgin can cure any STI/HIV/AIDS contribute to sexual abuse of children including adolescents. This exposes the adolescents to contracting STIs if the sexual abuser is infected.

- Certain cultures consider parent/child communication on certain issues a taboo. They consider the only time an adolescent can be communicated to about sexual matters, is when the adolescent wants to get married. The adolescents who are sexually active and not ready for marriage, in turn seek information on sexual/reproductive health from various sources like peers. These peers may influence them either positively or negatively. As a result those negatively influenced may engage in risky sexual behaviour and contract STI/HIV.

- Religion is another socio-cultural factor which may contribute to high incidences of STIs among adolescents. This is by adolescents not being free to discuss about sexual issues for fear of stigmatization. Since sex discussion or talk is regarded as 'sinful' others may fail to seek for sexual/reproductive health knowledge from YFS, for example on use of a condom and risk

indulging in unprotected sex. This leads to the risk of contracting STIS/HIV and high incidences among adolescents.

1.3.4 DISEASE RELATED FACTORS

- Resistance to treatment is a factor contributing to the high incidence of STIs, as adolescents may not comply to treatment. This is because they may not want people to know that they are taking drugs (conceal the treatment), due to the stigma that is associated with STIs of being a loose and irresponsible person.

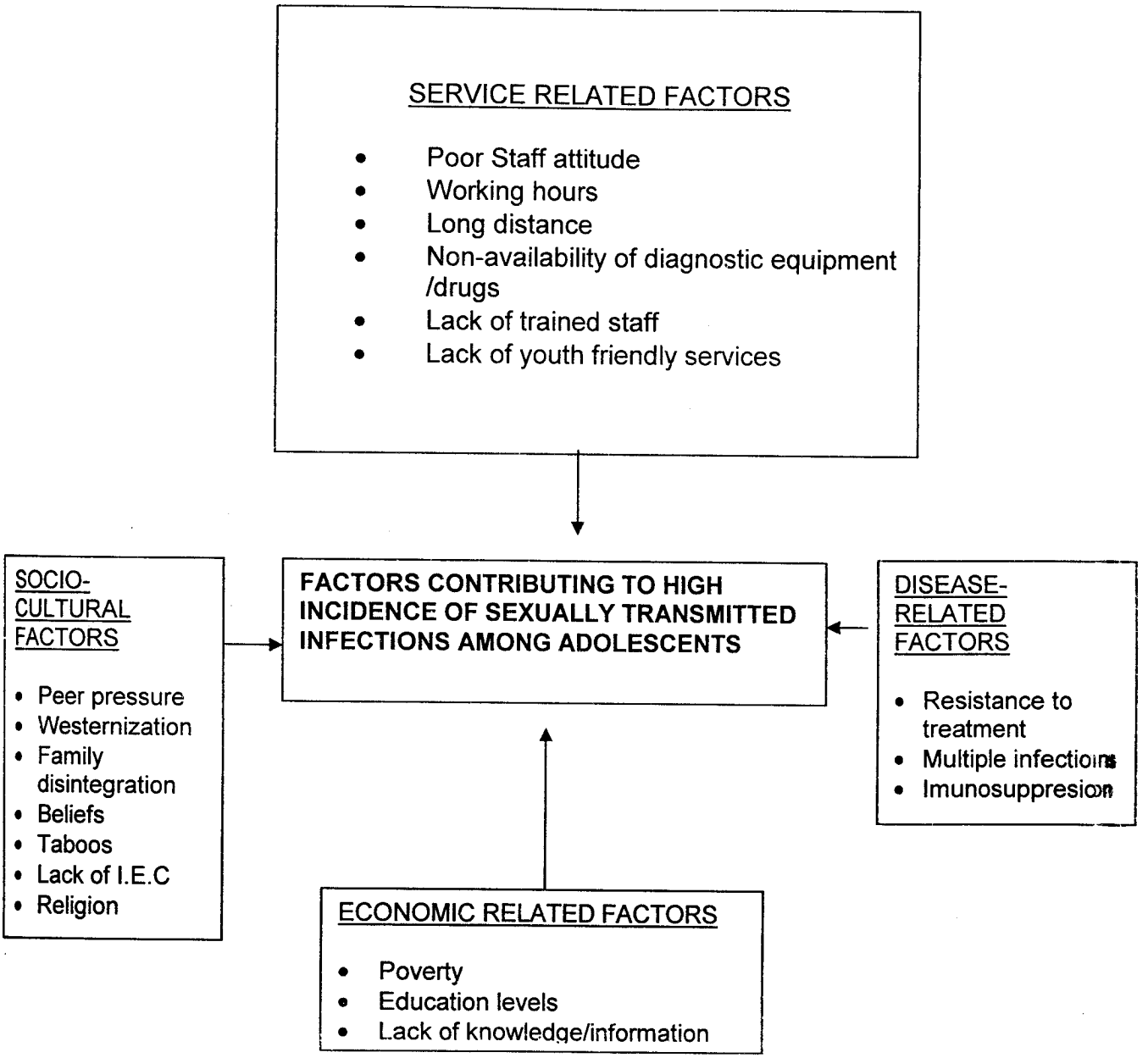
  Others may resist treatment due to being painful and sometimes lengthy. Therefore the treatment will be in adequate and lead to infections not being able to clear among adolescents and increase the incidence of STIs.

- The inadequate and failure of adolescents to get STI treatment, and their continued exposure to unprotected sex can lead to multiple infections. This may lead to more lengthy and complex treatment regimes. If no proper physical and diagnostic examination is done, some other STIs may be over looked and consequently the patient will not recover fully and hence may remain infectious and continue transmitting the infection to unsuspecting partners during unprotected sex.

- Immunosuppression can be a factor contributing to high incidence of STIs among adolescents. This is because the response to treatment is poor, even when accurate diagnosis and treatment is prescribed. Such clients will continue spreading the infection especially among the adolescents who are vulnerable due to being sexually active and also engaging in unprotected sex with multiple partners.

Figure 1

1.4 PROBLEM ANALYSIS DIAGRAM



1.5. JUSTIFICATION FOR THE STUDY

The purpose of this study was to determine factors contributing to high incidence of STIs among adolescents. It was hoped that this study would identify areas or gaps in factors contributing to incidence of STIs being high among adolescents. STIs are posing a major threat to human population. Our World is made up of adolescents making up to nearly 900 million of the total population is aged 10-19 years (Population Council, 1998).

Adolescents are a much valued age group for any country's economic growth for their being most energetic and productive beings. Unfortunately it's the same age group that is more at risk of contracting STIs/HIV, due to their being sexually active.

A study done in America by Sonenstein, F.L. et al, (1998) discovered that a significant fraction of teenagers, especially males continue to have unprotected sex, placing them at a risk of STIs including HIV infection. The fight against STIs is more necessitated as various studies like the one done by CBoH, (1997) having confirmed that, lesions caused by STIs can increase the risk of HIV infection by more than 30%. Therefore it is important to prevent and control or even treat the STIs which are curable, rather letting it to be a contributing factor to prevalence rates for HIV, which is currently deadly, incurable and tasking both human/financial resources. Reducing the incidence of STIs, would also reduce the transmission to other unsuspecting sexual partners and unborn babies from adolescent pregnancies. This would reduce on the complications of STIs like infertility and sick newborns.

Therefore putting strategies in place to prevent STIs for example by limiting some of contributing factors to high incidences among adolescents, would be

accepted as a major components to the global response to the fight against the pandemic HIV/AIDS, due to their synergistic relationship.

Thus having less attendance of hospital clients of STIs and their complications is a positive step considering that most health institutions are chronically under funded, thus judicious use of resources is necessary in order to provide quality care. It is hence imperative that the study be conducted, so that from the study findings, recommendations to relevant authorities can be made for measures to prevent high incidences if STI's among adolescents of Lusaka who are Zambia's future leaders.

1.6 STUDY OBJECTIVES

1.6.1 GENERAL OBJECTIVES

To determine factors contributing to the high incidences of sexually transmitted infections among adolescents.

1.6.2 SPECIFIC OBJECTIVES

- Assess whether peer pressure contributes to the incidence of sexually transmitted infections.
- Determine whether lack of parent/child communication on sexuality contributes to risky sexual behaviour.
- Determine whether lack of knowledge contributes to the incidence of sexually transmitted infections.
- Make recommendations to relevant authorities.
- Identify areas that need further research.

1.7 STUDY HYPOTHESES

- Peer pressure contributes positively or negatively to influence sexual behaviour.

- Multiple sexual partners contribute to higher risk of contracting STIs among adolescents.

1.8 OPERATIONAL DEFINATIONS

- Adolescent – Youths aged 10-24 years.
- Sexually Transmitted Infection – refers to diseases such as Gonorrhea, syphillis, chancroid, Trichomoniasis, Lymporgranuloma venerum, vaginal warts including, HIV/AIDS.
- Factors contributing to – its something that is associated to or influences a certain direction of behaviour or outcome, example engaging in sex.
- High incidence – this refers to an increase in new cases.
- Case – it is any young person attending the health institution with a sexually transmitted infection during the research period.
- Sexually Active – Refers to the adolescents' capability of having sexual relations.
- Unprotected Sex – having coitus with maximum contact between male and female genitals without any barrier.
- Risky Sexual Behavior – activities in relation to sex that may lead to contracting STIs/HIV/AIDS, as well as conception of unplanned pregnancy.
- Peer Pressure – Engaging into activities just because friends are doing so in order to conform to their expectations.
  - Amount of influence exerted on friends, schoolmates, age mates towards indulging in sexual relations, drug and alcohol abuse which is negative or positive.
- Knowledge – Refers to the ability to state the causative organism, mode of spread, factors contributing to high incidence of STIs and preventative measures of STIs/HIV.
- Counselling –The process of giving advice or providing information on STI/HIV/AIDS, or any sexual reproductive health issues.

1.9 VARIABLES

The main study variables are the independent and dependent variables. An independent variable is a variable that influences the dependent variable, where as the dependent variable is a variable that is influenced by the independent variable (Polit, D.F, and Hungler, B.P., 1997)

1.9.1 DEPENDENT VARIABLE

- High incidences of sexually transmitted infections among adolescents.

1.9.2 INDEPENDENT VARIABLES

- Peer pressure.
- Level of knowledge on sexually transmitted infections.
- Parent/child communication

Table 1: Variables and Cut Off Points

VARIABLES	INDICATOR	CUT OFF POINT
Peer Pressure	• Most decisions • Decisions not influenced by friends	• Decisions made by friends when taking action. • Decidés actions without friends influence.
Knowledge	• Very Knowledgeable • Medium knowledge • Not knowledgeable	• Answers 75% and above of questions set. • Answers 50-74% of questions set. • Answers 49% and below
Parental Education	• High Parental Education • Low Parental Education.	• Parents/child Communicate freely on any sexuality matters including STI/HIV • No single parents /child communication on any sexuality issues.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1. INTRODUCTION

"Literature review provides the researcher with the opportunity to determine how much pertinent material is available concerning the potential study and helps to put the problem in the context of what has already been done." (Dempsy, P.A. and Dempsy, A.D., 2000).

The purpose of Literature review in this study is to determine what is already known, about factors contributing to the high incidence of STIs among adolescents, so that a comprehensive picture of the state of knowledge on this topic be obtained. The literature presented and discussed in this chapter is from works of different scholars from all over the world, which reflect that STIs incidence if not intervened are likely to continue escalating among adolescents who are more sexually active.

Adolescents' sexuality is characterized by a lot of risks such as STI, HIV/AIDS and unwanted pregnancies. Experimentation is a normal part of adolescent development, which exposes them to health risks. Young people's sexual relations are often unplanned, sporadic and sometimes the result of pressure or force (WHO, 1999). Therefore literature review will help the researcher form a basis for comparison when interpreting the findings from the study.

2.2 GLOBAL PERSPECTIVE

Adolescents who are being sexually active and engage into irresponsible sexual behaviour stand a higher chance of contracting STIS world wide. This is supported by research by WHO, (1999) which states that most people's initiation into sexual relatives occurs in adolescence stage.

While according to studies by Meekers, D and Ahmed, G. (2000) findings revealed that, sexual relations typically occur before adolescents have gained experience and skills on how to prevent contracting STIs, and before they can get health services and supplies, such as condoms.

Therefore it is important that sexuality issues especially in relation to information on prevention of STIs is disseminated to adolescents at an earlier age, and given according to their level of understanding on how to prevent increase of incidences of STI. As illustrated by estimates from various studies conducted by WHO, (1990), it was estimated that 250 million new case of STIS were reported gradually in 1995, worldwide estimates of annual cases for curable STIs was about 340 million (Trichomoniasis 50%, Gonorrhoea 18%, Chlamydia 26% syphillis 4% and chancroid 2%).

WHO, (1996) also states that, annual incidences of curable STIs, (which excludes AIDS) has 333 millions cases and the most common ones being Trichomonasis, Gonorrhea, Chlamydia, syphillis and chanchroid. While Guttmacher, A, (1998) study revealed that, worldwide 7,000 young people aged 15-24 years get infected with HIV each day and 300 millions cases of curable STIs that were estimated to occur annually, mostly were adolescents. These estimates of incidences of STIs HIV indicate that adolescents who are mostly sexually active are engaging in unprotected sex, hence contracting the STIs/HIV.

Studies for example that were conducted by Senderowitz, E., (1997) showed that, the consistent and correct use of condoms do reduce the sexual transmission of some STIs for a period of time. The study results showed that 90% HIV transmission risk reduction, and STI of gonorrhea by 40% to 60%.
Despite people having adequate knowledge of risks, consequences of complications from STI/HIV, condom use is not being fully utilised by all adolescents when having sex.

For example in America, a national study on sexual behaviour and condom use among teenage males demonstrated that a significant fraction of teenagers continue to have unprotected sexual intercourse, placing them at risk of STIs including HIV/infection (Sonenstein, F. L. et al, 1998). Thus it shows that unprotected sex causes higher risk of contracting STIs/HIV. Therefore Adolescents regardless of their age range, need to be equipped with adequate knowledge and condom use so that they can make informed choices.

For example the female condom has been recommended if male condoms cannot be used to prevent STI/HIV. Studies however, have found that, women find female condoms cumbersome, hence can rarely be used without a male partner's knowledge. Therefore current recommendations do not provide with a method of prevention that can be used without their Partners assets or cooperation, (Elias, C. and Heise L, 1994).

As long as women still remain having limited options to protect themselves against STI through sexual intercourse, as they have less power to negotiate for condoms use with partners, hence the incidences of STI among adolescents especially females will continue to escalate.

This is supported by a study done amongst Cambodians by joint United Nations Programmes on STI/HIV/AIDS, (1999) which found that younger sex workers are at higher risk of acquiring STIs than elder prostitutes, because they had less power to negotiate condom use with partners, showing that nearly one third of sex workers aged 13years to 19years were infected with STIs / HIV.

Condoms have been distributed mostly free for sex use, especially since the advent of the incurably HIV/AIDS in order to help curb the disease. However, despite condoms being mostly free, its use has not been done consistently, this

partly contribute to the transmission of the STI/HIV/AIDS due to their synergism between STI and HIV. For example from a study conducted by Alba, M., (1999) from a year randomised cross-sectional sample of 425 Hispanic high school youths interviewed. Finding were that from the 41% sexually active and from their once sexual relationship, 30% always used condoms during intercourse the other 70% used it inconsistently.

Failure by adolescents to freely access SRH, may contribute to them not understanding sexual issues, like use of condoms. For example study by Bhargava. P. et al, (1998) revealed that, most adolescents find it difficult to seek health services due to stigmatization by health staff.

These findings came from a study conducted in India to assess social and behavioural factors predisposing individuals suffering from STIs to seek treatment and the role of the health providers. From a total of a pretested 100 patients aged 13-45 years (which included adolescents) questioned, they gave the following reasons for not visiting the hospital; 49% was due to inhibition, 19% ignorance abut the availability of the health facilities, 19% shortage of time, 17% distance. This entails that health workers who are supposed to be the best source of more accurate health information in STI are denying this service to those who need it. Therefore this predisposes adolescents to seek other sources of information on STIs/HIV which may be inaccurate and risk them contracting STIs /HIV and increase the incidences among adolescents.

On the other hand, the lack of accessing health services, deny adolescents and their sexual partners a chance to receive proper STI management and treatment. This predisposes failure to limit its spread through sexual contacts of infected adolescents with both their new and old and unsuspecting sexual partners, which will lead to the increase of incidences of STIs/HIV.

Adolescents need all the support from all stakeholders to help them in all ways to equip them with skills and knowledge especially against peer pressure so as not to engage in risk sex. Studies show that non virgin boys and girls are more likely to drink alcohol, take drugs and smoke cigarettes than their virgin counterparts. In fact approximately 25% of teens report that due to peer pressure they have had influence of alcohol or drugs when they last engaged in sexual intercourse (Orr, D. P. et al, 1991).

Information, Education and Communication is an important skill, which can be used to empower many adolescents on knowledge of STIs. Parents who are the adolescents' first role models need to be close to their children so that during their children's adolescence stages they can be able to freely communicate to them on sexuality issues, hence empowering them to make responsible choices concerning responsible sexual behaviour even under peer pressure.

A comprehensive study done about American adolescents showed that young people who avoided risk behaviours usually had similar positive influences in their lives primarily strong sexuality, communication with their parents. (Resnick, M.D. et al, 1997).

The above global literature review, shows that the whole world is affected by the problem of STIs/HIV. It also shows that adolescents are practising risky sexual behaviours predisposing themselves to STI/HIV and thus the STI incidences to continue escalating, despite the free distribution of condoms during sexual intercourse.

2.3 REGIONAL PERSPECTIVE

It has been observed that five (5) out of ten (10) most commonly reported infectious diseases are transmitted sexually, and that sexually active adolescents are at a particularly higher risk of contracting and transmitting STI (Rosenthal, S.L. (1998).

This could be attributed to any sexual intercourse. Studies done by Guttmacher, A., (1998), in most of the Sub-Saharan African countries, it has been reported that more than 70% of the young African women start sexual activity during adolescence. Therefore early sexual activities contribute to contracting STIs/HIV. In many parts of Africa, traditional forms of sex education in initiation ceremonies have, lost importance due to westernisation and disintegration of families. Open discussions on sexual matters are sanctioned, by various stakeholders like NGOs concerned with adolescent sexual and reproductive health. Hence the young people learn about sex from peers and media. This information is not always accurate. This leads to adolescents lacking information on STI/HIV transmission and its danger (UNAIDS, 1999). This trend of lack of knowledge is likely to predispose some of the adolescents to be exposed to risky sexual behaviour and contract STIs and cause the incidences to be high.

Another study was conducted by Mutembi I.B, and Mwesiya M.W., (1999) on obstacles in HIV/AIDS prevention among school youths in Tanzania, 1,700 youths of 12-18 years were studied through interviews to establish the fact that cultural/social values prohibit many parents from free discussion on matters related to sex with their children and to find means of breaking such taboos. Results showed 85% parents having adequate knowledge on HIV transmission and dangers, but only 3% shared this knowledge with their children. 97% parents had difficulties discussing such issues with their children. 80% of the youths had inadequate knowledge on HIV and safer sex. Social taboos here

were a major barrier in parent to child sex education, increasing the chances of STI/HIV infections and transmission among youths.

Education should start at household level; but most parents and children in many different cultures commonly have problems communicating to their children on sexuality. This makes many adolescents find it more comfortable discussing sexual reproductive matters with their peers. Although a majority have heard of AIDS, many do not know how STI/HIV is spread and do not believe they are at risk (UNICEF, 2003).

Another study for example conducted in South Africa Soweto showed that young men don't like to go into their first sexual relationship inexperienced and may get initiated by sex workers. Sex workers describe, the young men refusing to use condoms because they are not used to them, and are terrified that using condoms will prevent them from performing (SAFAIDS, 2003).

Therefore it is important that adolescents are imparted with accurate information to help them make informed choices when faced with issues of sexuality especially in relation to prevention of STIs/HIV. The sources of information should therefore be reliable as adolescents are risk even by being sexually abused.

A study conducted by WHO/ UNFPA / UNICEF, (1997) revealed that, female adolescents have no negotiating power to ask for safer sex from their exploiters. Results were that it lead to 70% who are adolescents of sex workers in Abidjan, Cote d'Ivoire to be HIV positive, while 10% adolescents girls in Kwa Zulu, South Africa reported their first sexual experience as being forced or raped. The sexual abusers are unlikely to use a condom, and the cuts and tears from forced sex increases the like hood of STIs and HIV transmission.

Abusers have often targeted younger adolescents because they believe that children do not carry HIV. In turn innocent adolescents acquire STIs, and increase the incidences among their age group.

2.4. NATIONAL PERSPECTIVE

STIS are a major problem in a developing country like Zambia. They contribute up to 10% of out patients' adult attendances. Some STIs have serious complications. The presence of STIs facilitates the acquisition and transmission of HIV by over 30% (CBOH, 2001). STIs are most frequent in young people. It has also been stated that half of HIV infections and STIs are among young people aged 15 to 24 years. Young people have greater risk of contracting STIs because they become sexually active early and are therefore more likely to change partners (Bernette, B. and Schueller, J., 2000).

One study showed that adolescents would like to know more about Sexuality and STI/HIV/AIDS. However, communication about STI/HIV/AIDS among family members is lacking due to various socio-cultural factors (Macwan' gi, M., 1993). In the same above study, Macwan'gi, M., (1993), states that, knowledge about STI among adolescent is very high. However the level of knowledge is not accompanied with behavioural change. Condom use among young people is also cited to be very low.

Reasons for engaging in sexual activity among adolescents included adventure, peer pressure and pleasure. This was relevance to STIs (NASTL, 1995).

Many adolescents perceive the period of early adulthood with much curiosity. At this stage, the youth tend to try out something new in search of an identity. Many engage in risky behaviours such as substance and alcohol abuse and illicit sex, which usually have various implications on the individual (NASTL 1995). According to one research study, which was done in some health facilities of

Sesheke District in 1998, on knowledge of adolescents on reproductive health services, it was found that over 50% of adolescents complained of lack of youth friendly services on reproductive health facilities. There is a significant *association between service utilization and friendliness of the services provided* (Banda, A.M., 1998).

Adolescent need to be shown friendliness when attending to them so that they are able to fully open up on their difficulties especially sexuality issues. In Lusaka, a study conducted in relation to STI treatment found that there was preference for traditional healers as opposed to health staff. The major reasons for this was to reduce stigmatization on the part of the user; for example traditional healers would not request the patient to undress for physical examination before providing treatment or insist that the partner be brought for treatment (Msiska, R., et al, 1990). With some traditional healers not having adequate accurate information on STIs, adolescents will remain not fully being properly managed and STIs/HIV incidences amongst them increase due to transmission to other sexual partners.

There is a gap between the problems that adolescents face and those which advisory service aims to tackle. A study done on sexual education for adolescents in 1995 revealed that the main problem was the gap observed between sex education and the age at which adolescents actually initiate sex. Most girls do not receive sex education until they are over 16 years, by which time over 40% have already had babies (Chile, L.K., 1994). Thus showing they have already been exposed to unprotected sex and risking contracting STIs. Furthermore to Mudenda, S., (1992), it was found that there is minimal Parent Child Communication on measures to prevent STIs/HIV. Parent should realise that education has to be emphasized if STI among adolescent have to be reduced.

2.5. CONCLUSION

From the literature reviewed, globally, regionally and locally, one is able to deduce that STIs although preventable and treatable, are still on the increase among adolescents. The literature review has also shown that STIs are a factor which causes morbidity and mortality rates, because of its synergism with the pandemic HIV/AIDS disease. Strategic programmes need to be strongly strengthened by finding out contributing factors, which could lead to finding out root causes of adolescents' risky sexual behaviours. It would in turn help reduce on STI incidences among adolescents, who naturally are sexually active, and need to remain healthy as they are the most productive and energetic age group for any progressive nation.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

Research methodology refers to the steps, procedures and strategies for gathering and analyzing the data in a research investigation" (Polit, A. F., and Hungler, B. P., 1997).

The methodology therefore refers to the development, and testing of the evaluation of research investigation. The goal is to ensure reliability and validity in the data collection tool. This chapter thus covers development, testing and evaluation of research instruments and the methodology to be used.

3.1 RESEARCH DESIGN

Research design "refers to the researcher's overall plan for obtaining answers to the research questions or for testing a research hypothesis". (Polit, D.F., and Hungler, B.P., 1997).

In this study a descriptive cross sectional and non-experimental research was conducted. Qualitative and quantitative research method was also applied. Descriptive studies are research studies that have as their main objective the accurate portrayal of the characteristics of individuals, situations or groups and the frequency with which certain phenomena occur, (Polit, D.F., and Hungler, B.P., 1997). It was descriptive in that the researcher systematically collected and presented data giving a clear picture of the situation. The researcher was able to describe the respondent's demographic characteristics and factors contributing to the high incidences of STIs among adolescents from the findings of the study.

This study was also cross-sectional. A cross sectional study is based on observation of different age groups or development group, at a single time for the purpose of inferring time related changes, (Polit, D.F., and Hungler, B.P., 1997). The researcher systematically collected and presented the data of the contributing factors to the high incidence of the STIs among adolescents of different age groups to give a clear picture of the situation.

"Non-experimental research is where the researcher collects data and describes the phenomena as they exist. Unlike experimental research, variables are not manipulated because no interventions take place, there are no control measures, and there is no random assignment of subjects to group" (Dempsy, D.A., and Dempsy, A.D., 2000). "Quantitative research is a research method in which the study variables are pre-selected and defined by the investigator and the data are allocated and quantified" (Dempsey, D.A., and Dempsey, A.D., 2000). The variables for this study were pr-eselected and the responses from the subject were categorized and quantified in numerical form.

"Qualitative research is a research method in which the investigator seeks to identify the qualitative (non-numerical) aspect of the phenomena under study from the participants view point in order to interpret the meaning of the totality of the phenomena," (Dempsey, P.A., and Dempsey, A.D., 2000). It was qualitative as the respondents gave information on what they thought were contributing factors to STIs among adolescents to which could not be quantified in numerical form. These findings were presented in written rather than numerical forms only.

3.2. RESEARCH SETTING

"Research setting is the Physical location and condition in which data collection takes place in a study," (Polit, D.F., and Hungler, B.P., 1997).

The research was conducted in Lusaka Urban District which is situated in Lusaka Province. It has a total urban population of 1,391,329 (CSO, 2000).

The study was conducted at Mtendere Health Centre, which is within a high densely populated area although there are also low and medium densely populated areas that exist in Lusaka, Mtendere Health Centre was randomly selected from a total of 23 other urban health centres which had similar characteristics.

The study area had a population of both literate and illiterate people, rich and the poor, as well as both sexes of males and females, which gave a proper representation of the characteristics of the study area.

3.3 STUDY POPULATION

The term population refers to the entire number of units under study or the whole or the inhabitants, (Treece, E.W., and Treece, J.W., 1986). The study population were adolescents visiting the Mtendere Health Centre Youth friendly services. The respondents were both male and female youths, aged between 10-24 years.

3.4 SAMPLE SELECTION

"Sample selection is a process of selecting a portion of the population to represent the entire population, (Treece, E.W, and Treece, J.W., 1986). One zone, from a total of eight zones within Lusaka urban District Health Board, was selected using lottery method without replacement. The names of the eight zones were written on separate pieces of paper and randomly selected. The selected zone had three main health centres currently dealing with adolescent sexual and reproductive health.

The research subjects were selected by simple random sampling. "Simple random sampling is a probability sampling procedure in which the required number of sampling units are selected at random from the population in such a manner that each population element has an equal chance (probability) of being selected for the sample" (Dempsey, P.A., and Dempsey, A.D., 2000). The random sampling using the fish bowl technique was used to select the subject. This was a technique in which odd and even numbers were put in the bowl. The written numbers on piece of papers were ranging from one to hundred (1- 100). The fifty (50) subjects who picked odd numbers participated in the study. This method was selected as it helped avoid sampling bias.

3.5 SAMPLE SIZE

A sample is "a smaller part of the population selected in such a way that the individuals in the sample represent (as nearly as possible) the characteristics of the population" (Treece, E.W., and Treece, J.M., 1986). A sample of 50 respondents was selected from a total population of 65,778. This sample size, because it was manageable and met the required sample size for the study.

3.6 DATA COLLECTION TOOL

A data collection tool is an instrument that is used to measure variables and gather information on each concept of interest to the researcher. It is the formal written document used to collect and record information such as questionnaire, (Polit, D.F., and Hungler, B.P., 1997).

In this study, a semi-structured interview schedule and focus group discussion were used. An interview schedule is a questionnaire that is read to the respondents, whereas interview guide is one that provides ideas but allows the *interviewer, freedom to pursue relevant topics in depth", (Treece, E.W., and* Treece, J.W., 1986).

3.6.1 SEMI-STRUCTURED INTERVIEW

A semi-structured interview schedule is where, "interviewers may be required to ask a number of specific questions but beyond these, they are free to probe as they choose", (Treece, E.W., and Treece, J.W., 1986). To enhance data collection, a semi-structured questionnaire which contained study variables was used.

The questionnaire comprised of three sections, section A contained demographic information, Section B enquired on knowledge on STIs among adolescents, Section C determined factors contributing to STIs among adolescents. The questionnaire comprised of a series of questions that were both open and close ended, in order to obtain both qualitative and quantitative data. This method was chosen because it was effective for obtaining opinions, attitudes, and values and perceived ideas, in order to obtain quality data.

3.6.2 FOCUS GROUP DISCUSSION

Focus group discussion" is a method that allows the researcher to examine the points of views of a number of individuals in a group as they share their opinions/concerns about a topic" (Dempsy, P.A., and Dempsy, A.,D., 2000). The FGD consisting of 6-12 persons was guided by a facilitator, during which group members were expected to talk freely and spontaneously about a certain topic. A focus group guide was used to ask questions to respondents. The FGD allowed collection of information on factors contributing to high incidence of STIs among adolescents. The research assistants were trained to help with note taking and time keeping, while the researcher asks questions. The two FGD conducted involved separate groups of parents and adolescents. Both groups consisted of both male and female participants.

The method of FGD was chosen for this study, as it was fast, cheap and detailed information was collected. However, it allowed the researcher to probe, observe

participants and enabled respondents to express themselves freely in their local language. It had a disadvantage of being difficult to analyse data.

The methods of data collection, (semi-structured questionnaire and the focus group discussions), were preferred, because they accommodated both the literate and illiterate respondents. It accorded the opportunity to clarify any questions that were misunderstood. At the same time, these methods were faster compared to other methods considering the limited time, in which the study has to be undertaken.

3.6.3 VALIDITY AND RELIABILITY

"Validity in quantitative research is the ability of a data gathering instrument to measure what it purports to measure while in qualitative research is the extent to which research findings represent reality" (Morse, J.N., and Field, P., 1995 in Dempsey, P.A., and Dempsey A.D 2000). Validity is measured by ensuring that the same questions are asked to each respondent in the same sequence. Questions will be clearly constructed to avoid ambiguity.

"Reliability in quantitative research is the stability of a measuring instrument over time, while qualitative research is the measure of the extent to which random variation may have influence of stability and consistency of results, (Morse, J.M., and Field, P., 1995 in Dempsey P.A., and Dempsey, D.A., 2000).

Instrument reliability is ensured by standardizing the method of data collection instrument. This study ensured that the tools were tested before the main study using a pilot study in a similar environment on people with similar characteristics. This helped to ensure stability of the tool by examining similarities in their responses on high incidences of STIs among adolescents.

3.7 DATA COLLECTION TECHNIQUE

"Data collection is gathering of information needed to address a research problem," (Polit, D.F., and Hungler B.P., 1997). Data collection technique is the method the researcher used to collect accurate and relevant data.

In this study, a self report method was used. This is where subjects had to answer the questions about the study variable directly. Data was collected over a period of two weeks. Interviews were conducted between 08:30 hours and 12:00 hours. The interview lasted for 30 minutes for each interviewee. They were interviewed in a closed room to ensure privacy.

Two focus group discussions were also conducted, so as to be able to get more information on the study topic.

3.8 PILOT STUDY

"A pilot study is a small scale trial run of the main study" (Treece, W.E. and Treece, J.W., 1986). The pilot study was conducted at Kalingalinga Health Centre. The health centre, which was within Zone eight was purposely selected as it had similar characteristics with the main study sample. Five respondents were interviewed, and included both male and female adolescents visiting the youth friendly services of Kalingalinga Health Centre. Subjects were selected by simple random sampling. The subjects were 10% of the sample size of 50-.

The pilot study was done to:

- Test the validity and reliability of the data collection instrument in order to detect and solve unforeseen problems.
- Detect any errors in the questionnaire for the main study.
- Assess the duration of each interview schedule.
- Assess the appropriateness and clarity of the questions.

3.9 ETHICAL AND CULTURAL CONSIDERATIONS

Ethics can be defined as "Systems of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligations to the study participants," (Pilot, D.F., and Hungler, B.P., 1997).

Permission to carry out the study was obtained from the supervising lecturer at the Department of Post-Basic Nursing. Permission to carry out the study was also sought from the Lusaka Urban District Health Management Team and the in charges of the clinics for both the pilot and main study sites.

Sexuality being a very sensitive issue especially culturally, subjects/respondents were addressed carefully, respectfully, in order to attain better co-operation. Verbal informed consent was also obtained verbally from the respondents, with no names written on the questionnaires in order to maintain anonymity and confidentiality. Instead, serial numbers were allocated to all participants, and were indicated on their respective questionnaire forms. The respondents were in their natural setting and hence were not exposed to any physical and emotional danger or harm.

Privacy and confidentiality were maintained at all times. This was ensured by one person being interviewed at a time in an enclosed private room, where the researcher and respondent were on their own.

A focus group discussion guide was used. Each individual was given a chance to express his/her views freely to ensure maximum participation. Each FGD was allocated a specific time frame of about 30-45 minutes.

Anonymity and confidentiality were also maintained, throughout the discussions, by not requesting for their names, but just their participation. Each FGD was allocated a number, on the focus guide form.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

The purpose of this study was to determine factors contributing to high incidences of sexually transmitted infections among adolescents of Lusaka urban district.

The results of this study were based on the findings of responses and data was presented with the use of frequency tables, graphs and pie charts.

4.2 DATA ANALYSIS

Data analysis is the systematic organization and synthesis of research data, and the testing of research hypothesis using these data (Polit, D. G. and Hungler, B. P., 1997). Data was collected using a semi structured questionnaire from fifty (50) respondents, both males and females, aged between 10-24 years. The data was checked for completeness. It was coded, categorized and entered on a data master sheet. Data was analysed manually by aid of a calculator.

4.3 PRESENTATION OF FINDING

The data was presented in tabular forms as frequency tables, graphs and pie charts. It was found to be a more appropriate means of presenting findings, because they were easy to understand and interpret. At the same time accord one with a rough idea and picture about the findings. Cross tabulations were used to combine information on two variables in order to have a detailed meaning of the problem. Therefore making it a way of communicating results of a study and drawing meaningful inferences.

SECTION A: SOCIO- DEMOGRAPHIC DATA (n=50)

TABLE 2: SOCIO- DEMOGRAPHIC DATA

VARIABLE	FREQUENCY	RELATIVE FREQUENCY (%)
Sex		
Female	15	30
Male	35	70
Total	**50**	**100**
Age range (in years)		
10-14	17	34
15-19	22	44
20-24	11	22
Total	**50**	**100**
Marital status		
Single	46	92
Married	2	4
Divorced	1	2
Widowed	1	2
Total	**50**	**100**
Educational level		
Primary	22	44
Secondary	25	50
College	3	6
Total	**50**	**100**
Religion		
Roman Catholic	14	28
Seventh Day Adventist	2	4
United Church of Zambia	4	8
Watch Tower	5	10

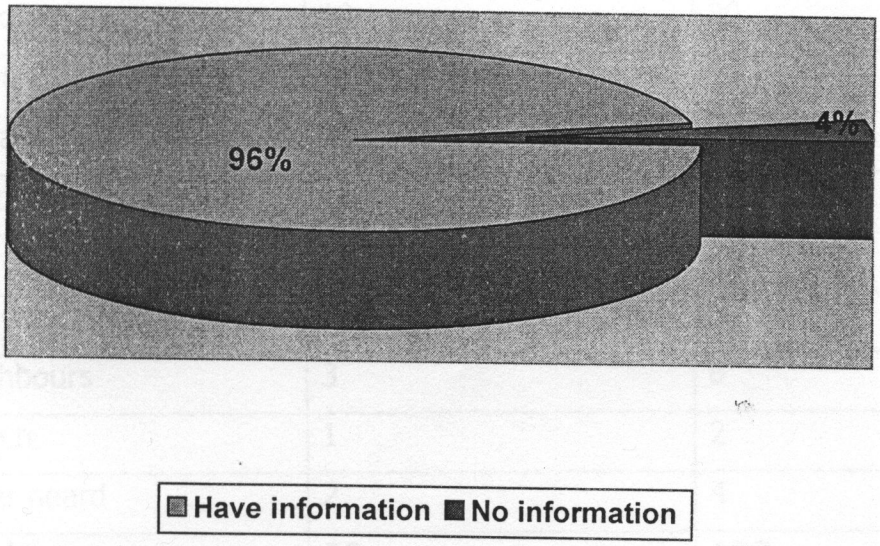
New Apostle	*6*	*12*
Pentecostal	8	16
Others	10	20
No religion	1	2
Total	**50**	**100**
Respondents' guardians		
Parents	35	70
Grandparents	3	6
Brother	1	2
Sister	3	6
Uncle	1	2
Auntie	2	4
Others	5	10
Total	**50**	**100**

The majority of respondents (70%) were males, and in the age range of 15-19 years at (44%), (92%) were single, (4%) married, (2%) widowed and (2%) divorced.

Majority (50%) had secondary education and only (6%) had reached college level and rest (44%) were at primary level. Majority of the respondents (28%) were from the Roman Catholic Church, followed by (20%) from other churches and (16%) from the Pentecostals, while (2%) belonged to no religious grouping. Majority of the respondents (70%) were living with parents. The other (30%) lived with either a spouse, grandparents, brothers, sister, uncle or auntie.

SECTION B: KNOWLEDGE ON SEXUALLY TRANSMITTED INFECTIONS (STIs)

Figure 2: FREQUENCY DISTRIBUTION OF RESPONDENTS' INFORMATION ON STI



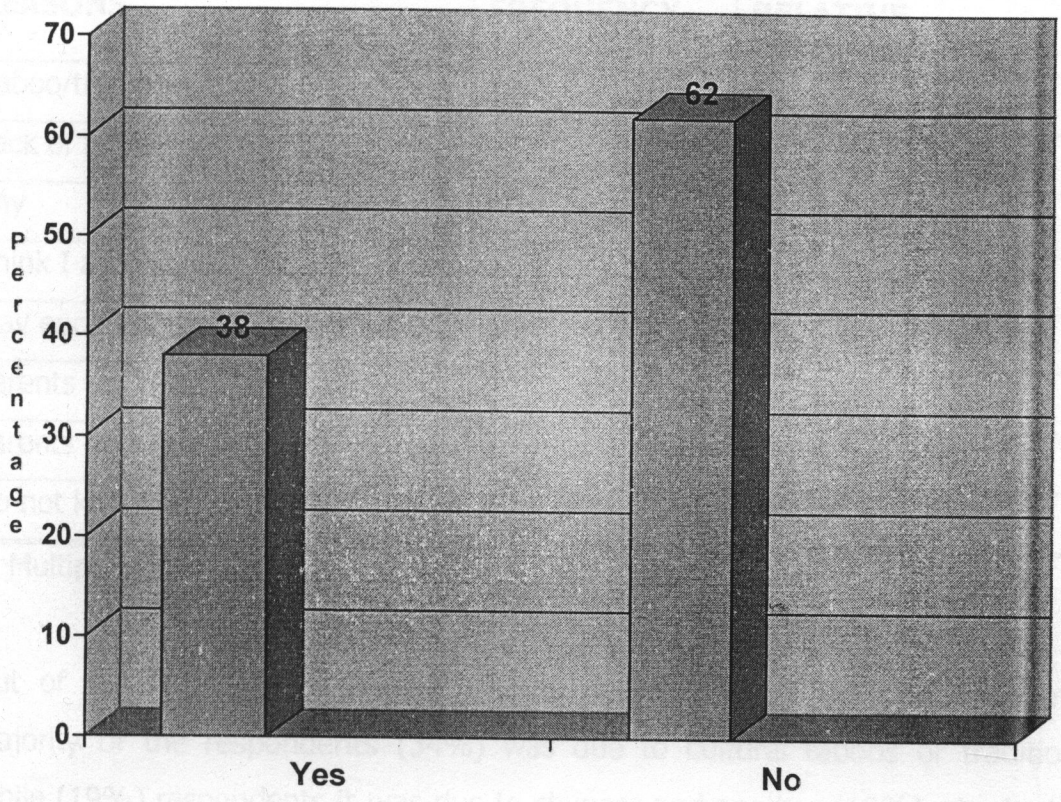
The majority of the respondents (96%) have had information on sexually transmitted infections, while 4% had not.

Table 3: FREQUENCY DISTRIBUTION WHERE RESPONDENTS FIRST GOT INFORMATION ON STI

VARIABLE	FREQUENCY	RELATIVE FREQUENCY (%)
Parents	2	4
Grandparents	-	-
School	10	20
Friends	9	18
Media	7	14
Health institution staff	-	-
NGO	13	26
Peer educators	3	6
Neighbours	3	6
Church	1	2
Never heard	2	4
Total	**50**	**100**

Majority of respondents (26%) first heard about STI from non-Governmental Organizations (NGOs) followed by (20%) from school (18%) from friends, and (14%) from media.

Figure 3: FREQUENCY DISTRIBUITON OF RESPONDENTS WHO COMMUNICATED SEXUALITY ISSUES WITH GUARDIANS/PARENTS



Majority of the respondents (62%) did not discuss sexuality issues with their parents/guardians, while 38% did communicate.

Table 4: FREQUENCY DISTRIBUTION OF RESPONDENTS' REASONS FOR NOT COMMUNICATING SEXUALITY ISSUES WITH THEIR PARENTS/GUARDIANS (n=31)

REASONS	FREQUENCY	RELATIVE FREQUENCY (%)
Taboo/traditional	12	39
Lack of knowledge on STI	-	-
Shy	6	19
Think I am young	4	13
May encourage me to early sex	3	10
Parents too busy	2	6
Parents no interest	2	6
Do not know	6	19

* Multiple responses

Out of the (62%) who did not discuss sexuality issues with their parents, majority of the respondents (34%) was due to cultural taboos or traditions. While (19%) respondents it was due to shyness and another (19%) who had no reasons for not communicating sexuality issues with parents or guardians.

Table 5: FREQUENCY DISTRIBUTION OF RESPONDENTS' KNOWLEDGE ON HOW ONE CAN CONTRACT STIs

MODE OF CONTRACTING STI	FREQUENCY	RELATIVE FREQUENCY (%)
Mosquito bite	1	2
Blood transfusion with infected blood	34	68
Witchcraft	2	4
Mother to child through pregnancy	36	72
Unprotected sex	49	98

* Multiple responses

Majority of the respondents (98%) knew that the mode of contracting STIs was through unprotected sex, (72%) mother to child through pregnancy and (68%) through blood transfusion with infected blood.

Table 6: FREQUENCY DISTRIBUTION OF RESPONDENTS KNOWLEDGE ON TYPES OF STIs

TYPE OF STI	FREQUENCY	RELATIVE FREQUENCY (%)
Syphilis	40	80
Chanroid	15	30
HIV/AIDS	44	88
Gonorrhoea	35	70
Bola bola	37	74
Others (candida, thrush warts, kaposis)	15	30

* Multiple responses

Majority of the respondents (88%) had types on HIV/AIDS, (80%) indicated syphilis (74%) bola bola and 970%) gonorrhoea.

Table 7: FREQUENCY DISTRIBUTION OF RESPONDENTS' KNOWLEDGE ON THE SIGNS AND SYMPTOMS OF STI

SIGNS AND SYMPTOMS OF STIS	FREQUENCY	RELATIVE FREQUENCY (%)
Genital sores/rash	25	50
Genital/urethral discharge	12	24
Dysuria	11	22
Candidiasis	-	-
Oral thrush	-	-
Generally sickly	48	96
Body weight loss	16	32
Mouth sores/herpes simplex	4	8
Insanity	2	4
Blindness in babies	1	2
Insects in the body	1	2
Death	1	2
No idea	7	14

*Multiple responses

Majority of respondents (96%) on knowledge and signs and symptoms of STI was to be generally sickly (50%) to have genital sores and rash, (32%) to have loss of body weight, and (24%) to have genital or urethral discharge.

Table 8: FREQUENCY DISTRIBUTION OF RESPONDENTS' KNOWLEDGE ON PREVENTION OF STI

KNOWLEDGE ON PREVENTION OF STI	FREQUENCY	RELATIVE FREQUENCY (%)
Abstinence	41	82
Use of condoms	37	74
Use of traditional medicine	2	4
Faithful to one sexual partner	5	10
To visit a health centre	1	2
To masturbate	1	2

*Multiple responses

Majority of respondents (82%) had knowledge on prevention of STI to be abstinence, (74%) indicated the use of condoms, while (10%) said being faithful to one sexual partner.

Table 9: FREQUENCY DISTRIBUTION OF RESPONDENTS' DESCRIPTION OF RESPONSIBLE SEXUAL BEHAVIOUR

DESCRIPTION OF RESPONSIBLE SEXUAL BEHAVIOUR	FREQUENCY	RELATIVE FREQUENCY (%)
Abstinence	36	72
Use of condoms	17	34
Never use condoms	-	-
Do not know	2	4

*Multiple responses

Majority of the respondents (72%) described responsible sexual behaviour as abstaining always (34%) was to use condoms always, while (4%) did not know.

Table 10: FREQUENCY DISTRIBUTION OF RESPONDENTS' LEVEL OF KNOWLEDGE ON STIs

LEVEL OF KNOWLEDGE ON STIS	FREQUENCY	RELATIVE FREQUENCY (%)
Very knowledgeable	28	56
Medium knowledge	17	34
Not knowledgeable	5	10
Total	**50**	**100**

Majority of the respondents (56%) were very knowledgeable, while (34%) had medium knowledge and (10%) were not knowledgeable on issues of STIs.

SECTION C: FACTORS CONTRIBUTING TO HIGH INCIDENCE OF STI

Table 11: FREQUENCY DISTRIBUTION OF RESPONDENTS WHO HAVE HAD SEX BEFORE

HAVE HAD SEX BEFORE	*FREQUENCY*	*RELATIVE FREQUENCY (%)*
Yes	21	42
No	29	58
Total	**50**	**100**

Majority of the respondents (58%) had not had sex before, while (42%) had

Table 12: FREQUENCY DISTRIBUTION OF RESPONDENTS' AGE RANGE OF FIRST SEXUAL CONTACT (n=21)

AGE RANGE OF FIRST SEXUAL CONTACT	FREQUENCY	RELATIVE FREQUENCY (%)
Below 10 years	2	10
10-14 years	8	38
15-19 years	8	38
20-24 years	3	14
Total	**21**	**100**

From the total (42%) of those who had first sexual contact (38%) were from the age range 10-14 years, while another (38%) were from age range 15-19 years (14%) were aged 20-24 years and (10%) below 10 years.

Table 13: FREQUENCY DISTRIBUTION OF RESPONDENTS' REASONS FOR ENGAGING IN SEX THE FIRST TIME (n=21)

REASONS FOR SEX THE FIRST TIME	FREQUENCY	RELATIVE FREQUENCY (%)
Marriage	1	5
Peer pressure	7	34
Economic reasons for money	1	5
Sexually tempted	3	14
Sexually abused	4	18
Curiosity	5	24
Total	**21**	**100**

Of those who had sexual contact majority of the respondents (34%) gave peer pressure as the reason for engaging in their first sex, while (34%) was due to curiosity, while (18%) was from being sexually abused.

Table 14: FREQUENCY DISTRIBUTION OF RESPONDENTS ON WHY ADOLESCENTS GENERALLY ENGAGE IN ILICIT SEX (n=50)

REASONS WHY ADOLESCENTS GENERALLY ENGAGE IN ILLICIT SEX	FREQUENCY	RELATIVE FREQUENCY (%)
Economic reasons for money	12	24
Lack of parental guidance	8	16
Peer pressure	22	44
Curiosity	1	2
Media influence	12	24
Lack of knowledge of consequences	2	4
Sign to express real love	3	6
Alcohol influence	1	2
To gain experience	2	4
For recreation	5	10
No idea	5	10

*Multiple reasons

Majority of respondents (44%) gave peer pressure as the reason for most adolescents engaging in illicit sex. (24%) was for economic reasons (to get money) while another (24%) was due to media influence and (16%) was due to lack of parental guidance.

Table 15: FREQUENCY DISTRIBUTION OF RESPONDENTS INFLUENCED TO HAVE SEX

INFLUENCED TO HAVE SEX	FREQUENCY	RELATIVE FREQUENCY (%)
Yes	25	50
No	25	50
Total	**50**	**100**

(50%) of the respondents had influence to engage into sex while (50%) were not.

Table 16: FREQUENCY DISTRIBUTION OF RESPONDENTS' INFLUENCE TO HAVE ALCOCHOL

INFLUENCED TO HAVE ALCOHOL	FREQUENCY	RELATIVE FREQUENCY (%)
Yes	22	44
No	28	56
Total	**50**	**100**

Majority of the respondents (56%) were not influenced to have alcohol, while (44%) were.

Table 17: FREQUENCY DISTRIBUTION OF RESPONDENTS WHO HAVE CONTINUED TO TAKE ALCOHOL (n=22)

RESPONDENTS CONTINUED TO TAKE ALCOHOL	FREQUENCY	RELATIVE FREQUENCY (%)
Yes	3	13.6
No	19	86.4
Total	**22**	**100**

Out of the (44%) influenced to take alcohol, majority (86.4%) have not continued to take alcohol while (13.6%) have continued.

Table 18: FREQUENCY DISTRIBUTION OF RESPONDENTS' NUMBER OF SEXUAL PARTNERS

NUMBER OF SEXUAL PARTNERS	FREQUENCY	RELATIVE FREQUENCY (%)
Nil	41	82
1	-	-
2	3	6
3	2	4
4	2	4
5	1	2
6	-	-
7	1	2
Total	**50**	**100**

Majority of the respondents (82%) had no sexual partners (6%) had 2 (4%) had 3.

Table 19: FREQUENCY DISTRIBUTION OF RESPONDENTS WHO HAVE HAD SEXUALLY TRANSMITTED INFECTIONS

HAD STI	FREQUENCY	RELATIVE FREQUENCY (%)
Yes	2	4
No	48	96
Total	**50**	**100**

Majority (96%) of respondents have not had STIs, while 94%) had had STIs.

Table 20: FREQUENCY DISTRIBUTION OF RESPONDENTS' NUMBER OF RE-INFECTIONS TO STIs

NUMBER OF STI RE-INFECTION	FREQUENCY	RELATIVE FREQUENCY (%)
Nil	-	-
1	2	100
Total	**2**	**100**

Out of a total of (4%) of the respondents who had been infected with STI (100%) of them had an STI re-infection once.

Table 21: FREQUENCY DISTRIBUTION OF RESPONDENTS' TYPE OF STI ACQUIRED

TYPE	FREQUENCY	RELATIVE FREQUENCY (%)
Syphilis	2	100
Other types of STI-	-	-
Total	**2**	**100**

Out of the total of 2 respondents who had been infected with STI (100%) had syphilis infection.

Table 22: FREQUENCY DISTRIBUTION OF RESPONDENTS WHO WERE TREATED FOR STI

IF TREATED FOR STI	FREQUENCY	RELATIVE FREQUENCY (%)
Yes	2	100
No	-	-
Total	**2**	**100**

All the respondents (100%) who were infected with STI received treatment.

Table 23: FREQUENCY DISTRIBUTION OF RESPONDENTS WITH STI HAD THEIR SEXUAL PARTNERS TREATED

RESPONDENTS WITH STI HAD THEIR SEXUAL PARTNERS TREATED	FREQUENCY	RELATIVE FREQUENCY (%)
Yes	2	100
No	-	-
Total	**2**	**100**

All the respondents (100%) who were infected with STI had their sexual partners treated.

Table 24: FREQUENCY DISTRIBUTION OF RESPONDENTS' ACCESS TO SEXUAL AND REPRODUCTIVE HEALTH SERVICES (SRHS)

ACCESS TO SRHS	FREQUENCY	RELATIVE FREQUENCY (%)
Easy to access	24	48
Not easy to access	26	52
Total	**50**	**100**

Majority of the respondents (52%) found access to SRHS not easy while (48%) found it easy.

Table 25: FREQUENCY DISTRIBUTION OF RESPONDENTS' DIFFICULTY TO ACCESS SRHS (n=26)

RESPONDENTS REASONS FOR DIFFICULTIES TO ACCESS SRHS	FREQUENCY	RELATIVE FREQUENCY (%)
Lack of knowledge of their availability	8	30
Fear of staff stigma	8	30
No attractive programmes in place	1	4
No need to due to age factor	6	23
No drug availability	1	4
No answer	5	19
Total	**26**	**100**

*Multiple responses

(30.7%) respondents found it difficult to access SRH due to no knowledge of their availability, while another (30.7%) gave the reason of fear of stigma by staff. 23% gave the reason that there was no need to access SRH as they were still young for the services while (19.2%) gave no reason for their difficulty to access SRH.

Table 26: FREQUENCY DISTRIBUTION OF RESPONDENTS' PEER PRESSURE INFLUENCE INTO HAVING SEX IN RELATION TO SEX

SEX	PEER PRESSURE/INFLUENCE		TOTAL
	Yes	No	
Male	17 (68%)	18 (72%)	35 (70%)
Female	8 (32%)	7 (28%)	15 (30%)
Total	**25 (50%)**	**25 (50%)**	**50 (100%)**

The majority (68%) males were influenced by peer pressure into having sex as compared to (32%) females, while majority (72%) males were not influenced by peer pressure into having sex as compared to (28%) females.

Table 27: FREQUENCY DISTRIBUTION OF RESPONDENTS' PEER PRESSURE INFLUENCE INTO HAVING SEX IN RELATION TO AGE RANGE

AGE RANGE	PEER PRESSURE/INFLUENCE INTO SEX		TOTAL
	Yes	No	
10-14 years	5 (20%)	12 (48%)	17 (34%)
15-19 years	11 (44%)	11 (44%)	22 (44%)
20-24 years	9 (36%)	2 (8%)	11 (22%)
Total	**25 (50%)**	**25 (50%)**	**50% (100%)**

Majority of the respondents (44%) in age range 15-19 years were influenced into having sex, as compared to (36%) in age range 20-24 years and (20%) in age range 10-14 years. Majority of those not influenced (48%) were in age range 10-14 years.

Table 28: FREQUENCY DISTRIBUTION OF RESPONDENTS' PEER PRESSURE INTO HAVING SEX IN RELATION TO MARITAL STATUS

MARITAL STATUS	PEER PRESSURE/INFLUENCE INTO SEX		TOTAL
	Yes	No	
Married	1 (4%)	1 (4%)	2 (4%)
Single	22 (88%)	24 (96%)	46 (92%)
Divorced	1 (4%)	-	1 (2%)
Widow	1 (4%)	-	1 (2%)
Total	**25 (50%)**	**25 (50%)**	**50 (100%)**

Majority of respondents (88%) influenced into having sex were single, as compared to (4%) married, (4%) divorced and another (4%) widowed. Majority of respondents (96%) not influenced into having sex by peer pressure were single as compared to (4%) married.

Table 29: FREQUENCY DISTRIBUTION OF RESPONDENTS' PEER PRESSURE INFLUENCE INTO HAVING SEX IN RELATION TO LEVEL OF EDUCATION

LEVEL OF EDUCATION	PEER PRESSURE/INFLUENCE INTO SEX		TOTAL
	Yes	No	
Primary	8 (32%)	14 (56%)	22 (44%)
Secondary	15 (60%)	10 (40%)	25 (50%)
College	2 (8%)	1 (4%)	3 (6%)
Total	**25 (50%)**	**25 (50%)**	**50%)**

Majority of the respondents (60%) who were influenced by peer pressure into having sex were from secondary educational level, as compared to (32%) from primary and 98%) from college. Majority (56%) not influenced into sex were

from primary as compared to (40%) from secondary and (4%) from college levels.

Table 30: FREQUENCY DISTRIBUTION OF RESPONDENTS PEER PRESSURE INFLUENCE INTO HAVING SEX IN RELATION RELIGION

RELIGION	PEER PRESSURE/INFLUENCE INTO SEX		TOTAL
	Yes	No	
Roman Catholic	2 (8%)	12 (48%)	14 (28%)
Seventh Day Adventist	2 (8%)	-	2 (4%)
United Church of Zambia	3 (12%)	1 (4%)	4 (8%)
Jehovah's Witness	4 (16%)	1 (4%)	5 (10%)
New Apostle	2 (8%)	4 (16%)	6 (12%)
Pentecostal	7 (28%)	2 (8%)	9 (18%)
Others	5 (20%)	4 (16%)	9 (18%)
No religion	-	1 (4%)	1 (2%)
Total	**25 (50%)**	**25 (50%)**	**50 (100%)**

Majority (28%) of the respondents influenced by peer pressure into having sex were Pentecostals, followed by (20%) from other churches and (16%) from Jehovah's Witness. Those not influenced into having sex through peer pressure majority (48%) were from the Roman Catholic Church, followed by (16%) from New Apostle and another (16%) from other churches.

Table 31: FREQUENCY DISTRIBUTION OF RESPONDENTS' PEER PRESSURE INFLUENCE INTO HAVING SEX IN RELATION TO LEVEL OF KNOWLEDGE

LEVEL OF KNOWLEDGE	PEER PRESSURE/INFLUENCE INTO SEX		TOTAL
	Yes	**No**	
Very knowledgeable	18 (72%)	10 (40%)	28 (56%)
Medium knowledgeable	5 (20%)	12 (48%)	17 (34%)
Not knowledgeable	2 (8%)	3 (12%)	5 (10%)
Total	**25 (50%)**	**25 (50%)**	**50 (100%)**

Majority of the respondents (72%) influenced by peer pressure into having sex were very knowledgeable, while (20%) had medium knowledgeable. Majority (48%) of respondents not influenced into having sex had medium knowledge, while (40%) were very knowledgeable.

Table 32: FREQUENCY DISTRIBUTION OF RESPONDENTS' PEER PRESSURE INFLUENCE INTO HAVING SEX IN RELATION TO CONTRACTING OF STI

CONTRACTING OF STI	PEER PRESSURE/INFLUENCE INTO SEX		TOTAL
	Yes	No	
Yes	2 (8%)	-	2 (4%)
No	23 (92%)	25 (100%)	48 (96%)
Total	**25 (50%)**	**25 (50%)**	**50 (100%)**

Majority of the respondents (92%) influenced by peer pressure into having sex did not contract STIs while (8%) did, while (100%) of those not influenced did not contract STIs.

Table 33: FREQUENCY DISTRIBUTION OF RESPONDENTS' INCIDENCE OF STI IN REALTION TO SEX

SEX	INCIDENCE OF STI		TOTAL
	Yes	No	
Male	-	35 (91.6%)	35 (70%)
Female	2 (100%)	13 (28.4%)	15 (30%)
Total	**2 (4%)**	**48 (96%)**	**50 (100%)**

Majority of the respondents (91.6%) who did not contract STIs were males, compared to (28.4%) females. (48%) of the respondents who contracted STIs were females.

Table 34: FREQUENCY DISTRIBUTION OF RESPONDENTS' LEVEL OF KNOWELDGE ON STIs IN RELATION TO SEX

SEX	LEVEL OF KNOWLEDGE ON STI			TOTAL
	Very knowledgeable	Medium knowledgeable	Not knowledgeable	
Male	18 (64%)	12 (70.5%)	4 (80%)	34 (68%)
Female	10 (36%)	5 (29.5%)	1 (20%)	16 (32%)
Total	**28 (56%)**	**17 (34%)**	**5 (10%)**	**50 (100%)**

Majority of the males (64%) were very knowledgeable in STI compared to (36%) female respondents while those not knowledgeable on STI, majority (80%) were males compared to (20%) females.

Table 35: FREQUENCY DISTRIBUTION OF RESPONDENTS' LEVEL OF KNOWELDGE ON STIs IN RELATION TO AGE

AGE RANGE	LEVEL OF KNOWLEDGE ON STI			TOTAL
	Very knowledgeable	Medium knowledgeable	Not knowledgeable	
10-14 years	3 (11%)	9 (53%)	5 (100%)	17 (34%)
15-19 years	16 (57%)	6 (55%)	-	22 (44%)
20-24 years	9 (32%)	2 (12%)	-	11 (22%)
Total	**28 (56%)**	**17 (34%)**	**5 (100%)**	**50 (100%)**

Majority of the respondents (57%) very knowledgeable were in the age range 15-19 years, as compared to those not knowledgeable on STIs (100%) all being in the age range 10-14 years.

Table 36: FREQUENCY DISTRIBUTION OF RESPONDENTS LEVEL OF KNOWELDGE ON STIs IN RELATION MARITAL STATUS

MARITAL STATUS	LEVEL OF KNOWLEDGE ON STI			TOTAL
	Very knowledgeable	Medium knowledgeable	Not knowledgeable	
Married	1 (4%)	1 (6%)	-	2 (4%)
Single	25 (88%)	16 (94%)	5 (100%)	46 (92%)
Divorced	1 (4%)	-	-	1 (2%)
Widow	1 (4%)	-	-	1 (2%)
Total	**28 (56%)**	**17 (34%)**	**5 (10%)**	**50 (100%)**

Majority of the respondents (88%) who were very knowledgeable were single, while (100%) of those not knowledgeable were also single even the medium majority (94%) were single.

Table 37: FREQUENCY DISTRIBUTION OF RESPONDENTS LEVEL OF KNOWELDGE ON STIs IN RELATION EDUCATIONAL LEVEL

EDUCATIONAL LEVEL	LEVEL OF KNOWLEDGE ON STI			TOTAL
	Very knowledgeable	Medium knowledgeable	Not knowledgeable	
Primary	7 (25%)	10 (59%)	5 (100%)	22 (44%)
Secondary	18 (64%)	6 (35%)	-	15 (30%)
College	3 (11%)	1 (6%)	-	10 (20%)
Total	**28 (56%)**	**17 (34%)**	**5 (10%)**	**50 (100%)**

Majority of the respondents (64%) who were very knowledgeable were in secondary as compared to those not knowledgeable (100%) who were from primary educational level.

Table 38: FREQUENCY DISTRIBUTION OF RESPONDENTS LEVEL OF KNOWELDGE ON STIs IN RELATION RELIGION

SEX	LEVEL OF KNOWLEDGE ON STI			TOTAL
	Very knowledgeable	Medium knowledgeable	Not knowledgeable	
Roman Catholic	8 (29%)	6 (35%)	-	14 (28%)
Seventh Day Adventist	1 (4%)	1 (6%)	-	2 (4%)
Pentecostals	8 (29%)	1 (6%)	-	9 (18%)
United Church of Zambia	3 (11%)	1 (6%)	-	4 (8%)
Jehovah's Witness	3 (11%)	1 (6%)	1 (20%)	5 (10%)
New Apostle	1 (4%)	3 (17.5%)	2 (40%)	6 (12%)
Others	4 (14%)	3 (17.5%)	2 (40%)	9 (18%)
No religion	-	1 (6%)	-	1 (2%)
Total	**28 (56%)**	**17 (34%)**	**5 (10%)**	**50 (100%)**

Majority of the respondents (29%) from the Roman Catholic and another (29%) from the Pentecostal religion were very knowledgeable as compared to (40%) from New Apostle and (40%) from other churches who were not knowledgeable.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 INTRODUCTION

The discussion of findings is based on the data collected from the questionnaires and two focus group discussions, one with a group of parents and the other with the adolescents.

5.1 SAMPLE CHARACTERISTICS

The sample consisted of 50 respondents who were (70%) males and (30%) females.

There were more males than females due to their curiosity to seek new information, unlike their female counterparts who may be reserved and passive due to cultural influences for example initiation ceremonies, where they are instructed not to discuss openly sexuality issues. Majority of respondents (44%) were aged 15-19 years, (34%) aged between 11-14 years and rest (22%) aged 20-24 years.

The age group 15-19 years is the most sexually active and correlates with results in (table 12, page 50) that show first sex engagement, majority (38%) to be age group 15-19 years and another (38%) being 10-14 years and rest (24%) being 20-24 years. This is consistent with findings from by UNICEF (2001) which found out that majority of the Zambian youths are sexually active by the age of 19 years while another research by Fetters, S. T., and Munkoze, F., (1999) also indicated that 17% of adolescents had sex by the age of 10 in the urban compounds of Lusaka.

Majority of the respondents (92%) were single, (4%) married (2%) divorced and another (2%) widowed. Majority (50%) had secondary school educational level (44%) primary and (6%) college. Regardless of their marital status all adolescents are still pursuing their educational careers. Those who are still in school are able to find source for more information on STI/HIV/AIDS through the Anti-AIDS programmes and be able to make informed choices on sexual behaviour.

This is supported by a study by Mupeta, R. M., (1998) which states that school education in whatever form has been accepted to be the basic institutional means through which one attains knowledge to make choices for personal or societal goals. Therefore, the adolescents in school will be able to acquire information and knowledge from Anti-AIDS clubs to help them in decision making concerning STI/HIV.

Majority (98%) of respondents were all Christians. The religious denominations majority (28%) were Roman Catholics, (16%) Pentecostals, (12%) New Apostles, (10%) Jehovah's Witness (8%) United Church of Zambia (4%) Seventh Day Adventist Church and (10%) other Christian churches. Majority of the respondents (70%) had parents as their guardians (10%) spouses or friends, while (6%) grandparents, (6%) sisters and (4%) aunties.

The findings signify the disintegration of extended families, while the reason for living with other relatives could be due to the loss of parents.

5.2 DICUSSION OF VARIABLES

5.2.1 LEVEL OF KNOWLEDGE ON STIs

Knowledge is critical to adolescents because it enables them to have good decision making roles in relation to their sexual behaviour. About (56%) of the respondents were very knowledgeable, (34%) had medium knowledge and (10%) had no knowledge (Table 10, page 49). In general, terms this study

revealed that a high percentage of the adolescents had some knowledge on STIs. For example when asked on how one contracts an STI, (98%) mentioned unprotected sex, (72%) mentioned that it was from mother to child, 68% through infected blood transfusion, 4% witchcraft and (2%) said it was through a mosquito bite (Table 5, page 46).

Findings revealed that majority of the respondents (96%) had information on SITs while (4%) had no information (Figure 2, page 42). On sources of information most respondents (26%) got information from NGOs (20%) from *schools, (18%) friends, (14%) from media (6%) from neighbours.* Those who got from schools got their information through school anti-AIDS clubs while NGOs included SWAAZ and Africa Directions. The media has also actively been involved in publicizing information on especially HIV/AIDS prevention on both television and radio where some adolescents have managed to use it as their source of information. Therefore that shows that majority of the respondents acquired information on STI through NGOs, schools, media and friends.

The findings have shown that despite majority (70%) of the respondents having parents as their guardians and (98%) being Christians, the two have played little roles on providing information to their adolescents on STI/HIV/AIDS. This could be attributed to the fact that education systems that existed in traditional African set up are no longer effective. Similarly, most churches find it difficult to communicate with adolescents on issues of sexuality as it is considered sin unless if one is preparing for marriage. As the study shows in (Table 3, page 43) only (2%) of the respondents got information on STI/HIV/AIDS from churches. This is supported also by study by Hobbs, S., (1999), which states that churches teach adolescents not to have sex until they are married.

The findings showed that majority (62%) of the respondents did not communicate with their parents and only 38% communicated (Figure 3, page 44). There were various reasons why adolescents did not communicate with

parents or guardians on sexuality issues. Some of the reasons for failure to communicate given were taboos and cultural factors (39%), shyness (19%). Twelve percent (12%) felt that parents were too busy or had no interest and (10%) thought that talking about such issues contribute to early sexual actively (Table 4, page 45).

The above findings were supported by both FGD in which parents stated that they find it difficulty to discuss sexuality issues due to cultural or traditional norms. According to parents discussing sexuality issues with their children was like exposing their nakedness to them and considered it as an insult.

The views of adolescents from the focus group discussion were that, parents did not want to discuss sexuality issues for example on condom use or STI/HIV/AIDS as it was considered to encourage adolescents into early illicit sex.

These findings are also supported by a study done by Macwan'gi, M. (1993) which stated that adolescents would like to know more about sexuality, STI/HIV/AIDS, however communication about such issues among family members is lacking due to various socio cultural factors. Families need to be encouraged in that sexual education needs to start at household levels so as to build a strong foundation for children in order to prevent them from acquiring wrong information on STIs from other sources, which may risk them to contracting STI/HIV/AIDS.

Findings on how one can contract STIs majority (98%) indicated through unprotected sex, (72%) from mother to child through pregnancy, (68%) through infected blood transfusion, (4%) witchcraft, (2%) mosquito bite (Table 5, page 46).

In relation to knowledge on STI/HIV/AIDS, majority (72%) of the respondents described responsible behaviour as always abstaining (72%) while (34%) described it as using condoms (Table 9, page 48).

From the FGD with adolescents, agreed that they need to have responsible behaviour about STIs, but found it difficult to abstain always due to being sexually active and failed how to overcome such feelings but to engage in sex. Findings on who had sex before majority (58%) had never had sex and (42%) had. The age at first sex for those engaged in sex (42%) of the respondents was (38%) 10-14 years, (38%) 15-19 years, (14%) 20-24 years and (10%) below 10 years.

Therefore equipping adolescents with knowledge on sexuality should be done early so that they are able to make informed choices before engaging in sex knowing very well the consequences that may arise such as contracting STI/HIV/AIDS and unplanned pregnancies.

5.2.2 CONTRIBUTING FACTORS TO STI

5.2.2.1 PEER PRESSURE INFLUENCE

Adolescents in general often meet and discuss to exchange information on various topics of interests among which are sexuality issues. Similarly, findings on reasons for engaging into sex were majority (34%) was due to peer pressure, (24%) due to curiosity, (18%) sexually abused, (14%) sexually tempted, (5%) economic reasons another (5%) for marriage (Table 13, page 51).

These findings were supported by parent's FGD who stated that adolescents engage in sex due to envying friends who had good things like dresses, phones and shoes, therefore for guardians/parents who could not afford such, found their children engaging in illicit sex for money or gifts. These findings are consistent with a study by Hanenburg, R. and Rojanapithiayakorn, W. (1996) in

Bangkok concerning adolescent sex workers, which stated that they engaged in unprotected sex to gain higher payment, especially if without the use of a condom.

The practice therefore if unchecked is likely to risk most adolescent who cannot abstain, to risk contracting STI/HIV/AIDS or even unplanned pregnancies if not using other methods of contraceptive other than condoms. The adolescents FGD also highlighted that many of them had peer pressure influence for their main reason for engaging in sex. Some stated that in order to continue maintaining friendship they pretended they engaged in sex, but just shared information on sex sourced from media and books. Others cited the reason for curiosity as their reasons for engaging in sex.

The FGD are consistent with the NASTL (1995) study which states that many adolescents perceive the period of early adulthood with much curiosity. At this stage, the youths tend to try out something new in search of identity. Many engage in risky behaviours such as substances and alcohol abuse and illicit sex, which usually have various implications on the individual.

The study finding revealed that (50%) of the respondents had sex unintentionally due to influence while (50%) had no influence from peers to engage in sex (Table 15, page 53). The influence to have sex especially if unprotected risks one to contract STIs/HIV/AIDS. Therefore the hypothesis is that peer pressure either contributes positively or negatively to influence sexual behaviour is accepted.

Another form of peer pressure adolescents have is concerning alcohol. Findings on respondents influence to have alcohol were majority (56%) not influenced and (44%) were of these (44%) who were not influenced. Majority, (86.4%) have not continued to take alcohol and (13.6%) have continued (Table 17, page 54). Alcohol consumption is known to affect someone's rational thinking in

making one failing making rational decisions. Therefore adolescents under alcohol influence are likely to risky sexual behaviour and contract STI/HIV/AIDS.

Majority (68%) of those peer pressured into having sex were males, while (32%) were females (Table 256, page 59), because males are more curious to try out new things. The age group mostly influenced by peer pressure majority (44%) were 15-19 years, (36%) 20-24 years (20%) 10-14 years (Table 27, page 59) probably because 15-19 years this is the age group which is more sexually active as compared to those in age group 10-14 years.

Peer pressure in relation to level of education findings were that majority (60%) were in secondary (32%) in primary and (8%) in college (Table 29, page 60). This explains that peer pressure can occur at any level of one's education but that is occurs mostly during secondary school education.

Findings on peer pressure into sex in relation to level of knowledge majority (72%) were very knowledgeable, (20%) medium knowledge and (8%) not knowledgeable (Table 31, page 62). This shows that the more knowledgeable adolescents are the more they share in terms of information which can influence their friends into avoiding unprotected sex. Peer pressure influence into sex in relation to contracting STIs showed that majority (92%) had no STI (8%) had STI while all those non influenced (50%) never contracted STI (Table 32, page 63). Therefore peer pressure contributes to either contracting or not contracting STI.

Another interesting finding from the study was the incidence of STI in relation to sex. Only (4%) of the respondents interviewed had STI and were all females, (Table 33, page 63). Probably the females found with STI were as a result that they usually have no negotiating power to use condoms when married. This is consistent with the study done by WHO/UNFPA/UNICEF (1997) revealed that

female adolescents have no negotiating power to ask for safer sex from their sexual exploiters.

Findings on accessibility of SR health services were that the majority (52%) found it not easy, while (48%) found if easy to access SRH (Table 24, page 57). Reasons given by the (52%) who did not find it easy the reasons were (30.7%) lack of knowledge of the available services, (30.7%) fear of staff stigma, (19.2%) found no need due to their age factor, (19.2%) gave no reason while (3.7%) found no attractive programmes and another (3.7%) found no drugs (Table 25, page 58).

The findings were the same with those from the adolescent FGD which cited that stigmatization and poor or non attractive adolescent programmes being in place made them shun the services. Others thought the SRH services were more biased for older adolescents (above 20 years) than the younger adolescents especially below 14 years. This made them be viewed as promiscuous if they decided to seek the services hence avoided them and preferred NGOs like SWAAZ and Africa Directions which were more accommodative.

The study done by Chile, L. K., (1994) revealed that a gap exists between sex education and the age at which adolescents actually initiate sex, most girls do not receive sex education until they are 16 years by which time over 40% have already had babies. It is thus important for SRH services to be user-friendly especially to adolescents.

This is consistent with the study by Kiragu, K. (2001) stated that, "peer education if effectively utilized, the information is more appropriate for the age group at a level the adolescent can understand and appreciate as there is ownership of information".

Other findings revealed that majority of respondents (82%) had no sexual partners while (6%) had 2, the rest (12%) had 3, 4, 5 or 7 sexual partners (Table 18, page 54). Findings show that majority (96%) having heard about STI and (4%) not having heard undertook more responsible sexual behaviour of minimizing number of sexual partners who can risk them for contracting STIs as compared to those who had no sexual partner at all. The results conforming these findings correlate with results of those who had STI (4%) as opposed to (96%) who did not contract STI.

Adolescents therefore at whatever stage of their age group need to be made to feel free to access SRH in order to help them informed choices against the prevention of contracting STI/HIV/AIDS and indeed having unplanned pregnancies which come with their own consequences.

5.3 IMPLICATIONS OF THE STUDY FINDINGS TO HEALTH CARE SYSTEM

Adolescents all over the world (including Zambia) are prone to irresponsible behaviour due to the unstable period of physical development, therefore is important that they are well equipped with accurate SRH information from all relevant stake holders like youth-friendly services, schools, NGOs, media and parents which is very accurate for them to make informed choices. Adolescents with information and knowledge on STI/HIV/AIDS are more likely to engage in responsible sexual behaviour as compared to those with no knowledge.

Apart from accessing information from various sources, parents need to be close to their children, so they overcome cultural/traditional barriers and discussing freely on sexuality issues. Adolescents who do not have a good family communication foundation on information on STI/HIV/AIDS are more likely to be under negative peer pressure into sex or alcohol consumption. These can predispose their children to contract STI/HIV/AIDS.

The high incidence of STI/HIV/AIDS is likely to increase the health system expenditure. In turn this affects the country's economy in that the government will have to spend money on drugs, staff providers in health and equipment. Thus safeguarding the health of the adolescents will make a healthy nation as they constitute the higher proportion of the population at national and global levels.

5.4 CONCLUSION

The study conducted was to determine factors that contribute to high incidences of sexually transmitted infections among adolescents of Lusaka urban district.

Adolescents were found to have information on STI with their sources mainly being NGOs, schools, peer, and media despite the majority of them living with parents. Reasons given why information on STI was not from parents were socio cultural taboos that were cited as the main barrier of communication. Despite both adolescents /parents desired to freely communicate on sexuality issues. Churches equally did very little on dissemination of SRH information. However majority were very knowledgeable on STIs with majority describing responsible sexual behaviour as abstaining and use of condoms always.

Regardless of being very knowledgeable some adolescents engaged in sex at all age ranges with more due to peer pressure or curiosity. It confirms other study findings that adolescence is a period of being sexually active, and risk engaging in illicit sex and contracting STI/HIV/AIDS especially if with multiple sexual partners who are infected with STIs.

Health staff need to be more friendly so that adolescents are more liberal to assess SRH services. In turn it empowers them against irresponsible sexual behavriours due to peer pressure which can contribute to risk of contracting STI/HIV/AIDS consequently make incidences high among their age group.

5.5 RECOMMENDATIONS

1. The Ministry in collaboration with all stake holders facilitating adolescent SRH services like NGOs, churches, media need to intensify or strengthen the National Health programme on sex education for young people.

2. The health centre youth-friendly services coordinator to incorporate parents, teachers and church leaders in development of action plans for adolescents including communication and counselling techniques.

3. Peer educators to be more vibrant in influencing adolescents in responsible sexual behaviours.

4. The need to conduct more frequent refresher courses on peer sex education.

5. The government to develop a deliberate policy on diversification of SRH programmes with other activities such as recreational facilities to lessen stigma and also attract other adolescents not yet sexually active.

6. Staff manning adolescents programmes to be more user friendly.

7. The government should source for funds to meet the demands/needs on reproductive health services for youths.

8. Make use of the initiation ceremonies to disseminate accurate SRH information not only for female but also male adolescents by inviting a qualified or trained SRH resource person during period of incubation.

9. Families to improve communication on sexuality especially with adolescent children by becoming close when they are still young.

10. Adolescents to form support groups to provide positive peer pressure influence.

5.6 DISSEMINATION OF FINDINGS

The investigator intends to disseminate the findings of the study by submitting written research report to the medical library, Department of Post Basic Nursing and Ministry of Health library. Executive summaries will be given to the youth-friendly services coordinator of Lusaka Urban District Health Board.

5.6.1 Non-Government Organizations youth coordinators with the research site dealing in adolescents SRH programmes.

5.6.2 Mini workshops will also be arranged for all stakeholders such as parents, church leaders, mass media, traditional healers and peer educators in order to disseminate the research findings.

5.7 LIMITATIONS OF THE STUDY

The sample was small compared to the actual population and the findings could not be generalized. The research funds were also not adequate to meet most of the study requirements.

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APPENDIX 1

Semi - Structured Questionnaire

A study to determine factors contributing to high incidences of sexually transmitted infections among adolescents of Lusaka Urban District.

Name of Health Centre : ----------

Name of Interviewer : ----------

Date of Interview : ----------

Respondents serial Number: ----------

Instructions to the Research assistant (interviewer)

1. Introduce yourself to the respondent (s)
2. Confidentiality will be ensured: no names or address of respondents will be asked.
3. Ensure respondents are free when answering questions throughout the interview.
4. Tick in the spaces provided and fill in the space provided according to respondent's given answer.
5. Please encourage the respondent to answer all questions asked.
6. If the respondent is not clear with the question, let them clarify with you.
7. Thank the respondent in advance for their expected co-operation after the interview.

Section A : Socio-Demographic Data

For Official use only

1. Sex
   a) Female ( )
   b) Male ( ) ☐

2. Age at last birthday ---------- ☐

3. What is your marital status? a) Married ( )
   b) Single ( )
   c) Others, specify
   ---------- ☐

4. What is your level of education?
   a) Primary ( )
   b) Secondary ( ) ☐
   c) College ( )
   d) University ( )

5. What is your religious denomination?
   a) Roman Catholic ( )
   b) Seventh Day Adventist ( )
   c) United Church of Zambia ( )
   d) Watchtower ( )
   e) New Apostolic ( )
   f) Others, specify ( )
   ---------- ☐

8. Who do you live with?
a) Parents
b) Grandparents
c) Brother
d) Sister
e) Uncle
f) Auntie
g) Others, specify

Section B: Knowledge on Sexually Transmitted Infections

For Official Use only

9. Have you ever heard of the term sexually transmitted infections?
   a) Yes ( )
   b) No ( )

10. If the answer to question 9 is yes, where did you first hear about sexually transmitted infections? ----------

11. Do your parents discuss sexuality issues with you?
   a) Yes ( )
   b) No ( )

12. If the answer to question 11 is no, what is the reason? Please explain ----------

13. How can one contract a sexually transmitted infection? (Tick all correct answers)
   a) By mosquito bite ( )
   b) By blood transfusion with infected unscreened blood ( )
   c) By witchcraft ( )
   d) From mother to child during pregnancy ( )
   e) By unprotected sex ( )

14. Can you mention five (5) type of sexually transmitted infections that you can know? (Tick all correct answers)
   a. Syphilis ( )
   b. Chancroid ( )
   c. HIV/AIDS ( )
   d. Gonorrhea ( )
   e. Bola bola ( )
   f. Others, specify ----------

For Official use only

15. Can you mention five (5) signs and symptoms of sexually Transmitted infections that you know?

---

16. How can sexually transmitted infection be Prevented? (Tick all correct answers)

a) Abstinence ( )

b) Using condoms ( )

c) Using traditional medicines ( )

d) Others, specify ----------

17. How do you describe responsible sexual behaviour?

a) Abstain always ( )

b) Uses condoms always ( )

d) Never uses condoms ( )

Section C - Factors contributing to high/Incidence of STIs

18. Have you ever had sexual intercourse?

a) Yes ( )

b) No ( )

19. If the answer to question 18 is yes, at what age did you first have sex? Please explain----------

---

For official use only

20. In your opinion, why do adolescents start to have sex at an early age? ----------
---------- ☐

21. Have you ever been influenced by your friends to have Sexual intercourse?
a) Yes ( )
b) No ( ) ☐

22. If your answer to question 18 is yes, please explain why did you actually have sexual intercourse?

---------- ☐

23. Have you ever been influenced by friends to have alcohol?
a) Yes ( )
b) No ( ) ☐

24. If the answer to question 23 is yes, have you continued to take alcohol?
a) Yes ( )
b) No ( ) ☐

25. Have you ever had multiple sexual partners?
a) Yes ( )
b) No ( ) ☐

For official use only

26. How many sexual partners do you currently have?

27. Have you ever had a sexually transmitted infection?

a) Yes ( )

b) No ( )

29. If the answer to question 27 is yes, how many times?

30. If answer to question 27 is yes, what type(s)? Please specify

---

31. Was it treated?

a) Yes ( )

b) No ( )

32. Was your partner treated?

a) Yes ( )

b) No ( )

33. Are you able to easily access sexual and reproductive facilities whenever you need the services?

a) Yes ( )

b) No ( )

34. If the answer to question 33 is no, what makes it difficult for you to easily access the facility? Please explain.

---

35. How is the reception of the health personnel when you visit a health facility

a. Good ( )

b. Fair ( )

c. Bad ( )

36. Give reasons for your answer in question 35

---

37. Were you satisfied with the drugs and diagnosis done on you when you were sick?

a. Yes ( )

b. No ( )

38. Is there a place at your clinic where you discuss issues of sexuality with the members of staff

a) Yes ( )

b) No ( )

39. Make recommendations on how sexual and reproductive health services for adolescents can be provided. ----------

---

--- END ---

THANK YOU FOR YOUR PARTICIPATION. GOD BLESS

APPENDIX 2

Focus Group discussion for parents of adolescents on factors contributing to high incidence of STIs among Adolescents

Focus Group discussion Number: ----------

Date of Discussion : ----------

Place of Discussion : ----------

Number of people : **Male** ☐ **Female** ☐

Topics For Discussion

1. Sexually Transmitted Infections
   - What they are ?
   - How they are transmitted ?
   - How they are treated ?
   - How they are prevented?
   - What are some of the complications following STIs?
   - How are STIs recognized in the community ?
2. Communication on issues of sexuality between parents and their children.
   - Who initiates the discussion?
   - How are problems in communication on sexuality dealt with if encountered?
   - What taboos are there concerning communication of sexuality issues?
   - What morals do you think can be achieved if children had free discussions between parent and child?
   - What suggestions do parents have to health personnel + NGOs concerning condom promotion on television, radio or school places/bars by fellow peers.

APPENDIX 3

Focus Group discussion Guide for adolescents on factors contributing to high incidence of STIs among Adolescents

Focus Group discussion Number: ----------

Date of Discussion : ----------

Place of Discussion : ----------

Number of people : **Male** ☐ **Female** ☐

Topics For Discussion

1. Sexually Transmitted Infections (STIs)
   - What they are?
   - How adolescents recognise them?
   - How they can be acquire them?
   - How they are treated?
   - How they can be prevented?
2. Peer Pressure
   - Types of peer pressures experienced
   - Whether same peer pressures for male and females
3. Communication between adolescents and their parents on sexuality
   - Who initiates the discussion?
   - How are problems on communication on sexuality overcome?
4. Health service Delivery
   - Health service delivery in relation to sexual and reproductive services.
   - Perception of youths on services offered to them.
5. Church's role on issues of sexuality.
   - What programmes are in place to tackle sexuality matters?
   - Who initiates these programmes for adolescents?

APPENDIX 4

RESEARCH WORK SCHEDULE

TASK TO BE PERFORMED	DATE	PERSONNEL	DAYS REQUIRED
Literature review	16th April 2004	Researcher and Supervisor	Continuous
Finalising research proposal	13th April to 8th August 2004	Researcher and supervisor	118 days
Clearance from school and the Lusaka urban District Health Board/Team, and Health Centre incharges	13th April to 16th August 2004	Researcher	125 days
Training of Research Assistants	16th August, 2004	Researcher	1 day
Pilot study	19th to 20th August 2004	Researcher and Research Assistants	2 days
Amendment of Data tool Collection	21st to 28th August 2004	Research Assistants	7 days
Data collection	1st to 20th September 2004	Researcher and Assistants	19 days
Data Analysis	21st September - 1st October, 2004	Researcher and Assistants + supervisor	11 days
Report Writing	6th to 24th October 2004	Researcher	18 days
Draft Report Writing to Post Basic Nursing for correction	7th to 14th November, 2004	Supervisor and Researcher	7 days
Finalising Report	15th to 29th November, 2004	Researcher	14 days
Dissemination of Research findings	13th to 24th December, 2004	Researcher	12 days

Appendix 5

The Gantt Chart showing various tasks to be performed and time required for each Task

MONTHS		APRIL				MAY				JUNE				JULY				AUGUST				SEPT				OCT				NOV				DEC			
Task to be Performed	Weeks	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Literature Review	Supervisor & Researcher																																				
Finalise Research Proposal	Researcher Supervisor																																				
Clearance From PBN & Lusaka DHMT	Researcher																																				
Training Research Assistants	Researcher																																				
Pilot study	Researcher & Research Assistants																																				
Amendment of data tool Collection	Researcher & Assistants																																				

MONTHS		APRIL				MAY				JUNE				JULY				AUGUST				SEPT				OCT				NOV				DEC			
Task to be performed	Weeks	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Report Writing	Researcher																									←	—	—	→								
Draft Report to PBN	Supervisor & Researcher																													←	—	→					
Finalising Report	Researcher																															←	—	—	→		
Dissemination of findings	Researcher																																	←	—	—	→

APPENDIX 6

RESEARCH BUDGET

BUDGET CATEGORY	UNIT COST (K)	QUANTITY	TOTAL
Stationery			
a) Bond Paper	27, 000.00	3	81, 000.00
b) Pens	500.00	10	5,000.00
c) Pencils	500.00	10	5,000.00
d) Rubbers	500.00	2	1,000.00
e) Note Books	500.00	4	2,000.00
f) Tipex	8,000.00	2	16,000.00
g) Stapler	20,000.00	1	20,000.00
h) Staples	5,000.00	2 boxes	10,000.00
i) Files	5,000.00	2	10,000.00
j) Scientific calculator	11,000.00	2	22,000.00
k) Flip chart	20,000.00	2	40,000.00
l) Markers	3,000.00	4	12,000.00
m) Recorders &	230,000.00	1 recorder	230,000.00
n) Blank Tapes	10,000.00	2 Tapes	20,000.00
Sub Total			**474,000.00**
Personnel			
a) Lunch Allowance			
i) Researcher	50,000.00	10 days	500,000.00
ii) Researcher Assistants	50,000.00	10 days x 2 assistant	1,000,000.00
b) Transport			
i) Researcher	10,000.00	10 days	100,000.00
ii) Research Asst	10,000.00	10 days x2 assistants	200,000.00
c) Statistician	100,000.00	2 days	200,000.00

Sub total			**2,000,000.00**
Secretarial Services			
a) Diskettes	3,000.00	2	6,000.00
b) Bag for stationery	25,000.00	2	50,000.00
c)questionnaire photocopying	200.00	6	12,000.00
d) questionnaire typing	2,000.00	420 pages	72,000.00
e) Research Typing	2,000.00	100 pages	200,000.00
f) Research Report Photocopying	200.00	500 pages	100,000.00
g) typing/binding proposal	80,000.00	1	80,000.00
h) Binding Report	20,000.00	5	100,000.00
Sub total			**620,000.00**
Total			3,094,000.00
Contingency fund 10%			309,400.00
GRAND TOTAL			**3,403,400.00**

BUDGET JUSTIFICATION

1. Stationery

Stationery was required for the development of the proposal and the final research report, as well as typing and printing the report. In addition the researcher needed the paper for the production of the questionnaires. The note books were needed for taking notes of all important points during data collection, especially during the FGD and analysis. The scientific calculator was required for data analysis. Stapler and staples

were needed to put together papers and maintain their proper arrangement. Tipex was used to erase errors. Files and bags were used for storing questionnaires during data collection and analysis period.

The flip charts were used as data master sheets to analysis data from the research findings. At the same time it was used during dissemination of findings. The tape recorder and tapes were used to record the FGD proceedings.

2. Secretarial Services

The researcher needed money to pay for all the typing and photocopying services. Diskettes were required for safe data storage. The researcher needed money also to bind the research proposal and report.

3. **Personnel**

The researcher and her research assistants needed transport money to move to and from the data collection sites. Lunch allowances were required throughout the data collection period for nutrition's sustainability.

4. **Contingency**

Contingency is the ten (10) percent of the total amount of the budget. It was required for any unforeseen expenses to be incurred during the research process.

THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF POST BASIC NURSING

Telephone: 252453
Telegrams: UNZA. LUSAKA
Telex: UNZALUZA 44370
Fax: 1260-1-250753

P.O. Box 50110
Lusaka, Zambia

THE DIRECTOR
LUDHMT - LUSAKA
10/6/04

Dear Sir/Madam,

Re: **PERMISSION TO COLLECT RESEARCH DATA**

The bearer MRS MONDE M C IMASIKU is a forth year student at the Department of Post Basic Nursing, School of Medicine, University of Zambia. She/he is pursuing a Bachelor of Science in Nursing Degree. She/he is expected to carry out a research study in partial fulfilment of the requirements of the programme. Her/~~his~~ research topic is TO DETERMINE FACTORS CONTRIBUTING TO THE INCREASE OF SEXUALLY TRANSMITTED INFECTIONS AMONG ADOLESCENTS OF LUSAKA URBAN DISTRICT

I am requesting your good office to avail her with the information she needs for her/his project. For any further clarifications you could contact the undersigned. Your continued support is highly appreciated.

Thank you,
Mweemba
Mweemba Prudencia (Ms).
COURSE CO-ORDINATOR.

Box 50827
235553
236479

In reply please quote
No.....

MINISTRY OF HEALTH
LUSAKA DISTRICT HEALTH MANAGEMENT BOARD

18th June, 2004

The Health Centre In-Charge

Kalingalinga

LUSAKA.

Dear Madam,

RE: PERMISSION TO COLLECT RESEARCH DATA - Pilot Study 19-20 Aug

This serves to introduce you Mrs. Monde M.C. Imasiku a forth year student at the Department of Post Basic Nursing School of Medicine, University of Zambia.

She has come there with a view to collect data for her research study. This office has no objection.

Your usual cooperation will be highly appreciated.

Yours faithfully,

DR. M. KABASO
CLINICAL CAREEXPERT

Box 50827
235551
236429

In reply please quote
No .....

MINISTRY OF HEALTH
LUSAKA DISTRICT HEALTH MANAGEMENT BOARD

18th June, 2004

The Health Centre In-Charge

Mtendere

LUSAKA.

Dear Madam,

RE: PERMISSION TO COLLECT RESEARCH DATA -Main Study 1st-20th Sep

This serves to introduce you Mrs. Monde M.C. Imasiku a forth year student at the Department of Post Basic Nursing School of Medicine, University of Zambia.

She has come there with a view to collect data for her research study. This office has no objection.

Your usual cooperation will be highly appreciated.

Yours faithfully,

DR. M. KABASO
CLINICAL CAREEXPERT

University of Zambia,
School of Medicine,
Department of Post Basic Nursing,
P.O. Box 50110,
LUSAKA.

17th August 2004.

Approved

LUSAKA URBAN DISTRICT HEALTH MANAGEMENT BOARD
18 AUG 2004
DIAGNOSTIC AND CLINICAL CARE MANAGER
P.O BOX 50827,
LUSAKA, ZAMBIA.

The District Director of Health,
Lusaka Urban District Health Team,
Box 50827,
LUSAKA.

UFS: The Head of Department,
School of Medicine,
Department of Post Basic Nursing,
P. O. Box 50110,
LUSAKA.

Dear Sir/Madam,

Re: Permission to Conduct a Research Study

I am a fourth year student, currently pursing a Bachelor of Science (BSc.) degree in nursing at the above mentioned institution.

In partial fulfillment for the Bachelor of Science in Nursing, I am required to carryout a research study. My research topic is on "factors contributing to an increase in sexually transmitted infections among adolescents in Lusaka Urban District".

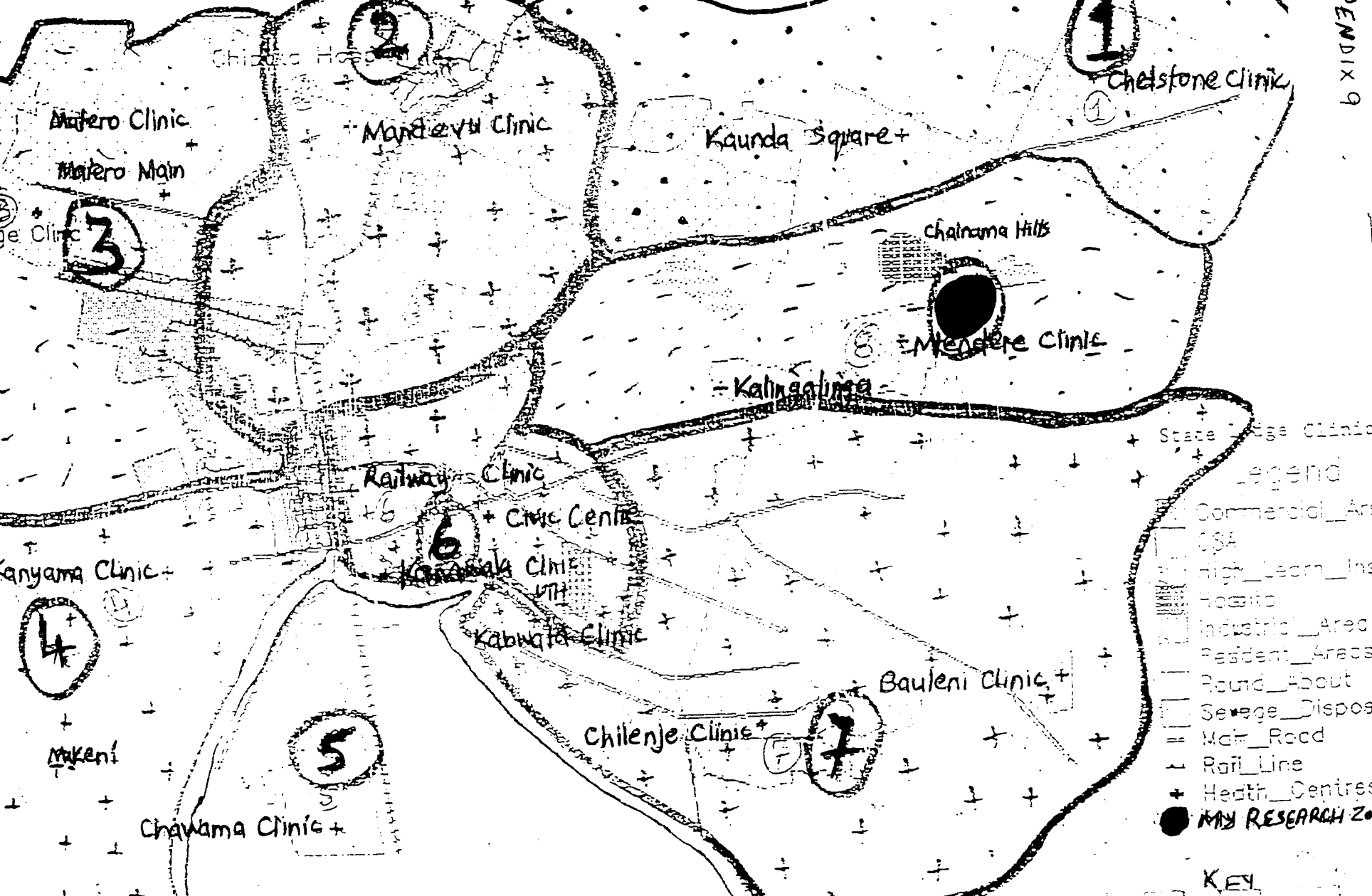
I therefore request for permission to carryout the pilot study and the actual study by collecting data from adolescents from your health centres - Kalingalinga on 19th - 2 August 2004, and Mtendere from 1st - 21st September 2004 respectively.

Consideration of my application will be highly appreciated.

Yours Faithfully,

MONDE MUKELABAI CHRISTINE IMASIKU

CC: Youth Friendly Services Coordinator - LUDHMT
In-charges - Kalingalinga and Mtendere


Matero Clinic
Matero Main
Mandevu Clinic
Kaunda Square
Chelstone Clinic
Chainama Hills
Mtendere Clinic
Kalingalinga
Railway Clinic
Civic Centre
Kanyama Clinic
Kabwata Clinic
Bauleni Clinic
Chilenje Clinic
Makeni
Chawama Clinic
1
2
3
4
5
6
7
Legend
Commercial_Area
CBA
High_Learn_Inst
Hospital
Industrial_Area
Resident_Areas
Round_About
Sewage_Disposal
Main_Road
Rail_Line
Health_Centres
MY RESEARCH ZONE
KEY