



SEXUALLY TRANSMITTED DISEASES

**KNOWLEDGE AND ATTITUDES OF YOUNG ADULTS IN
AN INSTITUTION OF HIGHER EDUCATION ABOUT
SEXUALLY TRANSMITTED DISEASES, FINLAND.**

Elizabeth Kamau & Diana Korit

**Bachelor's thesis
January, 2009**

School of Health and Social Studies



JYVÄSKYLÄ UNIVERSITY OF APPLIED SCIENCES

DATE _____

Authors: Elizabeth Kamau Diana Korit	Type of Publication: Bachelor's Thesis	
	Pages: 37 + 2	Language: English
	Confidential <input type="checkbox"/> Until _____	
Title: Sexually Transmitted Diseases; knowledge base and Attitudes of young adults in an institute of higher education about sexually transmitted diseases, Finland.		
Degree Programme: Degree Programme of Nursing.		
Tutors: RN. MSc. Irmeli Katainen RN. MSc. Anneli Yabal		
Assigned by		
Abstract The aim of the study was to find out the knowledge base of young adults from different cultural backgrounds on Sexually Transmitted Diseases (STD's) and also explore their attitudes towards STD's. The purpose of the study is to broaden views of healthcare professionals on knowledge base of young adults, their attitudes towards STD's and to understand their sexual attitudes. Qualitative and quantitative methods of research were used. Participants were made up of young adults from an institution of higher education in Finland. The data was collected on 21 st Jan, 2009 through questionnaires and essay writing. Content analysis and quantitative analysis were used in analysing the data. Results on knowledge indicated that the participants' knowledge was well-founded when it comes to the most common Sexually Transmitted Diseases and also knowledge was shown to be based from their countries of origin. Participants discussed more on negative attitudes as compared to the positive attitudes. Involvement in risky behaviours was discussed as the most influential form of the spread of STD's.		
Keywords: Sexually transmitted diseases, Knowledge, Attitudes, Prevention.		
Miscellaneous		

Tekijä(t) Elizabeth Kamau Diana Korit	Julkaisun laji Opinnäytetyö	
	Sivumäärä 33	Julkaisun kieli Englanti
	Luottamuksellisuus <input type="checkbox"/> Salainen _____ saakka	
Työn nimi SUKUPUOLITAUDIT Suomessa korkeakoulussa opiskelevien nuorten aikuisten tietämys ja asenteet sukupuolitauteja kohtaan.		
Koulutusohjelma Degree Programme in Nursing		
Työn ohjaaja(t) Irmeli Katainen Anneli Yabal		
Toimeksiantaja(t)		
Tiivistelmä Tämän tutkimuksen tavoitteena oli selvittää erilaisista kulttuuritaustoista tulevien nuorten aikuisten tietämystä sukupuolitaudeista sekä tutkia heidän asenteitaan sukupuolitauteja kohtaan. Tutkimuksen tarkoituksena on avartaa terveydenhoidon ammattilaisten näkemystä nuorten aikuisten tietämyksestä ja asenteista sukupuolitauteja kohtaan sekä auttaa heitä ymmärtämään näiden seksuaaliasenteita. Tutkimuksessa käytettiin sekä laadullisia että määrällisiä menetelmiä. Osallistujat koottiin Suomessa korkeakoulussa opiskelevista nuorista aikuisista. Aineisto kerättiin 21. tammikuuta 2009 kyselykaavaketta ja esseitä hyödyntäen. Aineiston analyysimenetelmänä käytettiin sisällön analyysia ja kvantitatiivista analyysia. Tulokset osoittivat, että osallistujien tiedot kaikkein yleisimmistä sukupuolitaudeista olivat hyvät. Tieto myös näytti olevan peräisin osallistujien kotimaasta. Osallistujat keskustelivat enemmän kielteisistä asenteista verrattuna myönteisiin asenteisiin. Riskikäyttäytymistä pidettiin merkittävimpana sukupuolitauteiden leviämistapana.		
Avainsanat (asiasanat) Sukupuolitaudit, tieto, asenteet, ennaltaehkäisy		
Muut tiedot		

CONTENTS

.....	1
CONTENTS.....	4
1. INTRODUCTION.....	5
2. SEXUALLY TRANSMITTED DISEASES (STD's).....	7
2.1 Chlamydia.....	9
2.2 Gonorrhoea.....	10
2.3 Syphilis.....	11
2.4 Genital herpes.....	12
2.5 Human papilloma virus	14
2.6 Trichomoniasis.....	15
2.7 Hiv/Aids.....	16
2.8 Hepatitis.....	18
3. PREVENTION OF SEXUALLY TRANSMITTED DISEASES.....	20
4. AIM AND PURPOSE OF STUDY.....	22
4.1 Research questions.....	23
5. IMPLEMENTATION OF THE RESEARCH.....	23
5.1 Method of data collection.....	23
5.2 Informant group.....	24
5.3 Data analysis.....	25
6. ETHICAL CONSIDERATIONS.....	26
7. RESULTS.....	27
7.1 Knowledge base on sexually transmitted diseases.....	27
7.2 Attitudes towards sexually transmitted diseases.....	29
8. DISCUSSION.....	32
APPENDICES.....	35
Appendix 1; Research questionnaire;.....	35
Appendix 2; Essay question.....	37
Appendix 3; introduction letter to participants	38

1. INTRODUCTION

Sexually transmitted diseases (STD's) are caused either by bacteria, viruses and protozoa. In most cases they are transmitted through sexual intercourse. They can also be spread through oral sex (sex through the mouth), transfer of blood during sexual activities and rarely through blood transfusions. Sexually transmitted diseases are also known as venereal diseases. (Blair, 2004, 467). According to the Merriam-Webster online dictionary, knowledge is described as a condition of knowing something with familiarity gained from experience or association, acquaintance or understanding of a science or the fact or condition of being aware of something. Attitudes on the other side are described as a mental position with regard to a fact or state or a feeling of emotion towards the fact (Merriam-Webster, 2009).

This research study is about sexually transmitted diseases. The researchers' main aims were find out what young adult students from different parts of the world know about STD's and at the same time find out their attitudes towards them. The researchers became interested in finding out different views about STDS due to the rapid increase of STD infections in young people. Statistics, as indicated in the United nations and Aids pages (UNAIDS) reports that millions of people get infected by STDS every year (UNAIDS, 2004).

The researchers' hoped on finding out why the spread of STD's is on the increase by finding out how much knowledge young adults have and their attitudes towards STDS. The gathered information on this study could be used by the school of health and social studies as a guide to what students need to be educated more about. The information could also be used by the health education providers because it broadens their views on the attitudes of young adults thus the healthcare providers will have an idea on how to advise young adults about STDS and also have some understanding on their sexual behaviors.

The data was collected by interviewing 12 students in an institute of higher education. According to Blair (2004), one of the reasons the spreading of sexually transmitted diseases is increasing is because people are becoming more sexually active at a younger age and are having more than one sexual partner at the same time (Blair,2004,467). This piqued the researchers in focusing on the young adults as the informant group. The research methodologies included both quantitative and qualitative analysis. In quantitative method, the students were given questionnaires that had 13

closed questions intending to gather information on the knowledge base on STD's while in qualitative method the same students were to write an essay on their attitudes towards the diseases. The data was analyzed by both quantitative analysis and content analysis methods.

2. SEXUALLY TRANSMITTED DISEASES (STD's)

Sexually transmitted diseases (STD's) are caused either by bacteria, viruses and protozoa. In most cases they are transmitted only through sexual intercourse (Ministry of Labour, Finland, 1997, 3). They can also be spread through oral sex (sex through the mouth), transfer of blood during sexual activities and rarely through blood transfusions. Sexually transmitted diseases are also known as venereal diseases (Blair, 2004, 467).

Sexually transmitted diseases in young adults are associated with lots of risk factors, the most common risk factors being; unprotected sex and multiple sexual partners. The use of condoms protect one from contracting a sexually transmitted disease, after ejaculation, semen is contained in the condom and does not leak to the vagina or anus, if the semen possibly contained bacterium/ viruses that cause std's, it cannot be transmitted since the other partner did not come into contact with it. It is easier to be sure of STD status, when one has one sexual partner. With different partners it would be difficult to tell who is infected and who isn't. In young women with smaller bodies, the greater risk of acquiring STD's is because they are more likely to tear during sexual activity. Use of alcohol and drugs also puts young adults at a high risk; this is because when under the influence they are most likely to engage in risky sexual behaviors. Prostitution, exchange of sex for money or drugs, is also another risk factor. Young adults who exchange sex for money are unlikely to be empowered to negotiate about safe sex. They are also likely to have different partners most of the time and this creates a high risk of contracting a sexually transmitted disease (Blair, 2004, 468; Boskey, 2008).

Young adults who live in a community with a high prevalence of sexually transmitted diseases are also at a high risk of contracting an STD; if most people are infected with STD's in an area and are engaging in risky sexual behaviors, then it is easier to acquire STD's. Having an STD makes one susceptible to contracting other STDs because irritated and broken skin is easier to be infected compared to healthy and intact skin. Lastly, most young women's fear of having sex according to Boskey (2008) is not contracting STD's but getting pregnant. The use of contraceptives increases

their risk of contracting an STD since they are more reluctant to use protection because their biggest fear of getting pregnant has been dealt with by the contraceptives (Boskey, 2008).

Mostly, sexually transmitted diseases are found in gynecological examinations due to the existence of specific symptoms that are common with infected persons. Blood tests are taken in order to confirm results. Samples taken by cotton buds can also be cultured in the laboratory. Samples from women are taken from the urethra, orifice of the urethra, vagina and the rectum while samples from men are taken from the urethra and rectum (Ministry of Labour, Finland. 1997, 3).

A study done in Tanzania (2005), about knowledge and its impacts in the practice of risky sexual behaviors indicated that young adults had very little knowledge about sexually transmitted diseases. 38% of the interviewed participants had heard about STD's and knew that having multiple sexual partners can cause them. The participants named Genital discharge as the main STD symptom; they knew nothing or less of any other symptoms. They named the use of condoms and abstaining from sex as the most effective preventive measures in practice (Mmbaga, 2005, 224-226).

Another study done in Makerere University in Uganda (1998) indicated that most students were aware of the most common STD's though the symptoms to specific diseases were confusing to them. Male's participants appeared to have more knowledge than the females. The participants named education in schools, peer groups and the media as the main sources of information. Participants admitted that shyness and lack of confidence in medical personnel presented negative attitudes to approaching STD clinics for treatment or advice. The participants had knowledge on the modes of contraction and prevention but their sexual practice patterns lagged behind their knowledge as most of them still engaged in unsafe sex. Behavior changes and access to more information were recommended as they would greatly help in prevention of STDS in Uganda (Kigongo, 1998).

A study in Albania (2002), about the knowledge and attitudes of undergraduate students towards sexually transmitted diseases indicated that men had poorer attitudes and a lower level of knowledge on sexually transmitted diseases than the women. Students that were from the Islamic religion were reported to have poorer knowledge compared to their counterparts from the Christian religion. This was because the Islamic religion has tight rules on sexual practices before marriage and it is a taboo to talk about sexual related matters. This negatively affected the knowledge and attitudes on the Islamic religious students. Rural born students reported lower levels of knowledge and more negative attitudes compared to city residents. Higher parental education was highly

associated with the positive attitude and better knowledge among the participants. Lower incomes were associated with the lower level of knowledge and attitudes compared higher income (Burazeri, 2002, 88)

The most common STD's affecting people in different parts of the world are; Chlamydia, Herpes, Human Papilloma Virus, Trichomonas, Hepatitis, Syphilis, Gonorrhoea, HIV/AIDS (Ministry of Labour, Finland, 1997, 3)

2.1 Chlamydia

Chlamydia is a common STD that is caused by the bacterium *Chlamydia trachomatis*. The bacterium can also cause damage to the female reproductive organs. Chlamydia is transmitted through oral, anal and vaginal sexual intercourse. Newborn babies can also acquire Chlamydia from their mothers during vaginal child birth (Houry, 2007). Chlamydia symptoms usually occur 5-12 days after intercourse but sometimes they go unnoticed. Most infected females and males show no symptoms (Ministry of Labour, Finland, 1997, 11).

Females usually have abnormal vaginal discharge, burning sensation during urination, low abdominal pains, low back pains, nausea, fever, pain during intercourse and bleeding between menstrual periods. Infected males have discharge from the penis or a burning sensation while urinating. Infected people who practice anal sex may experience rectal pain, discharge or bleeding (Kernaghan, 2007, 35). Chlamydia can be tested by cultivating bacteria in a laboratory. Samples are taken with swabs from the urethra, vaginal parts of the cervix. They can also be taken from the throat since they can also be found on throats of men and women having oral sex with an infected partner (Blair, 2004, 468).

An article published by the American medical association (2003), with the aim to understand young adults knowledge about Chlamydia, attitudes towards testing and their beliefs about barriers towards seeking treatment indicated; even though Chlamydia is among the most common STD's in the United States, the young adults had some knowledge about Chlamydia. Interviews were conducted in 8 groups and in each group at least 1 member expressed lack of knowledge about the effects of Chlamydia infection. Some participants correctly identified symptoms of Chlamydia, but most described inaccurate symptoms. A few of them thought it was possible to die from a Chlamydia infection (Blake, 2003, 525).

Most of the young adult participants had negative attitudes towards Chlamydia as a disease and towards getting tested. They felt that there was lack of privacy at the testing sites and that other people would get to know about their results. They admitted that it would be embarrassing for others to know that one has contracted an STD. Fear of finding out that one had an STD led to many not taking the test, others were worried that their relationships would break leave if their partners discovered they had an STD. Some of the participants were in denial, they had a feeling they were infected but didn't want to believe it. Most of them agreed that the testing experience was embarrassing and talking about their sex life was uncomfortable. The association encouraged the young adults to get learn more about Chlamydia infection, go for testing and treatment. Motivating young adults to be tested was found to be important in changing their attitudes towards Chlamydia. The following were listed as positive approaches towards motivation; a positive focus on testing, providing monetary or other incentives for testing, providing support for people who were getting tested, more privacy at testing sites and low costs or free testing (Blake, 2003, 525).

2.2 Gonorrhea

Gonorrhea is caused by the bacterium neisseria gonorrhoea. It mostly affects the young adults between the ages of 15-25years (Rutherford, 2005). The bacterium is also known as gonococcus. The incubation period is about 3-8 days (Blair, 2004, 469). Gonorrhea is transmitted through oral sex, sexual intercourse, hands to eyes causing inflammation of eyes and also during childbirth from the mother to baby (Ministry of Finland, 1997, 14).

Practice of anal sex can cause Gonorrhea in rectum and having oral sex can also cause gonorrhoea to occur in the throat. The symptoms of throat gonorrhoea symptoms are quite similar to tonsillitis symptoms. Infected young adults can be without any symptoms (Rutherford, 2005). Infected females may have a heavy greenish-yellow vaginal discharge, fever and lower stomach pains while males usually experience, a burning sensation while urinating and a yellowish discharge from the urethra (Houry, 2007). Testing samples can be taken from the vagina, cervix, urethra, throat or rectum and are sent to the lab for cultivation to see if it grows the gonorrhoea bacteria. Untreated gonorrhoea can lead to inflammation of sexual organs in women especially the fallopian tubes causing infertility whilst in men there's inflammation of the epididymis. Untreated gonorrhoea can result to a secondary disease called Peritonitis which in very rare cases could spread through the

veins in body resulting into painful joints, rashes and high temperatures arising into cerebral spinal meningitis and heart inflammations (Rutherford, 2005.)

According to a study by Devonshire (1999) in London, United Kingdom, there was less knowledge about the implications of gonorrhoea. 90 young adults aged between 20-35yrs old were interviewed, 77% of the males compared to 60% of the females had heard about gonorrhoea. Only 48% of the group named genital discharge as a symptom. There was also a misconception that gonorrhoea causes eye disease. Most participants just knew gonorrhoea as a disease, three quarters of them did not know simple details about the disease. Participants were unaware that gonorrhoea may be asymptomatic and that it could cause infertility (Devonshire, 1999, 410).

According to study about perceived barriers on gonorrhoea screening by Donovan & Knight (2001), in Northeastern Sydney, Australia, most young adults had negative attitudes towards having a screening to test for gonorrhoea. Most of them expressed that it was an embarrassing situation to collect specimen for testing, others said they would not go for testing to avoid notification and others for fear of knowing one has contracted an STD. The participants had a common opinion that education about testing and screening of gonorrhoea, free testing or cheaper costs and high standards of privacy in clinics would contribute to positive change of attitudes towards gonorrhoea screening (Donovan, 2001, 412).

2.3 Syphilis

Syphilis is a sexually transmitted disease caused by the bacterium *Treponema Pallidum*. Untreated syphilis could progress to different stages leading to death. It can be spread through having vaginal, anal and oral sex with an infected person, with syphilis sores. The syphilis sores can be found on external genitals, vagina, anus, rectum, lips and mouth. Transmission can also occur from an infected pregnant woman to her unborn child (Schoenstadt, 2008; Mcgregory, 2006).

Syphilis is an STD that progresses into stages and could take many years to get to the final stage. The first stage, known as primary syphilis, portrays symptoms usually after 3weeks of infection. Most common symptom in this stage is having small and painless sores that go by unnoticed and usually disappear 3 to 6weeks with or without treatment. The Second stage of syphilis develops due to untreated primary syphilis and is characterised by a rash on the palms and feet. This could

progress to the latent stage of syphilis which begins when the symptoms of secondary syphilis end. This stage starts from 2 to 30 years of the initial infection (Swan, 2005).

The last stage of syphilis, tertiary stage, is the most serious stage of syphilis because the bacteria can damage any part of the body including the heart, eyes, brain, nervous system, bones, liver and joints. Only a few of the infected people develop complications of tertiary syphilis and the damage happens many years after the primary stage of syphilis (Liu, 2006). Symptoms in this stage include; deafness, tumours on organs, mental illness, memory loss, blindness, dementia, paralysis, heart disease, numbness, arthritis and death (Schoenstadt, 2007)

It's reported that in the 1990's there was a global decrease in the number of people infected with syphilis but recently there has been a steady increase in cases of syphilis especially in young adults that have sexual male partners (Hirsch,2007). According to a research on the knowledge, perception and attitudes of adolescent girls in India about STD's, safer sex and sex education; it was found that most of the participants had not heard about syphilis. This was reported to be because of poor conditions in the Indian community, lack of access to the internet and lack of media coverage on sexually transmitted diseases (McManus, 2008, 7).

A study done by Panchaud (2000) on sexually transmitted diseases among young adults in developing countries indicated that the occurrence of syphilis was low in the most developed countries. Canada, Finland, Wales, Denmark, Norway and Sweden were reported to have higher rates. Germany, Netherlands and Switzerland were reported to have a relatively medium and low rate. The United States had the highest preference especially in young adult females compared to males. Russian federation which has had previous epidemics on sexually transmitted diseases had an extreme high rate of syphilis infections. The most developed countries had a lower rate than the rest because there was sufficient knowledge on STD's; however, attitudes towards risky sexual behaviours and use of alcohol influenced the spread of syphilis. Education on prevention measures was high in these countries but young adults never seemed bothered to search for it (Panchaud, 2000).

2.4 Genital herpes

Genital herpes is an STD caused by herpes simplex virus (HSV). The virus is mostly found in nerve roots and could spread through the nerves to mucus membranes, genitals, skin and also lips

(Ministry of Labour, Finland, 1997). There are two types of the herpes simplex virus. Herpes simplex virus 1, which generally causes oral lesions while the herpes simplex virus 2, causes genital lesions although either could cause any of the two. Herpes is very contagious; one can contract the disease through engaging in unprotected sexual behaviors, kissing, and sharing utensils. Herpes and genital herpes could also be asymptomatic (Blair, 2004, 470).

Genital herpes symptoms are mostly characterized by itchy patches followed by small sores that look like fluid filled blisters. The sores form on the tip of the penis, vagina, and anus. They can also form on the lips if herpes was contracted through kissing or oral sex. The blisters which are painful, itchy and tender burst after a few days. These infections may re occur but the first episode is the most painful. Other possible symptoms include; fever, muscle aches, headaches, vaginal discharge and painful urination. Swollen and tender lymph glands in the groin are noticed in some cases (Houry, 2007; Blair, 2004, 470)

According to a study on patient's knowledge and attitudes towards genital herpes in an STD clinic in the UK by Narouz (2002), Most of the participants interviewed had knowledge about herpes being a sexually transmitted disease and that it is caused by a virus. Half of them had the knowledge that the virus that causes cold sores could also cause genital herpes. They recognized that herpes could occur without symptoms. The participants were counseled after filling in the questionnaire and had quite a positive attitude towards testing for the herpes simplex virus (Narouz, 2002, 336-340).

In another study done about STD/HIV knowledge, attitudes and perception in young female adults in India by McManus (2008), results indicated that 71% of those interviewed had no knowledge on genital herpes other than just knowing it was an STD. More than half of those interviewed had no related information about its signs and symptoms. The participants interviewed had very negative attitudes towards getting tested for the herpes simplex virus and felt that it was a taboo to have a sexually transmitted disease. The Indian cultural background does not allow sexual practices outside marriage, however most young adults admitted to have been engaging in sex. It was the fear of being found out as having an STD that kept them from being tested. Lack of enough education and media services contributed to lack of knowledge in young female adults in this community about STDs in general (McManus, 2008).

2.5 Human papilloma virus

The human papilloma virus (HPV) is one of the most common sexually transmitted infections. There are many types of this virus and it can infect the genital areas in both men and women. It affects the reproductive organs and rectum. Most young adults with the HPV do not have symptoms or any health problems. There are certain types of HPV that causes cervical cancers or other less common cancers e.g. cancer of the vulva, vagina, anus and penis. Other types of the HPV cause genital warts which is also another sexually transmitted disease in both men and women (Ministry of Labour, Finland, 1997, 7).

According to the Centre for Disease Control (CDC) fact sheet (2007), a vaccine is available, mostly against the four types of HPV that causes cervical cancer and genital warts. The vaccine is highly recommended for young adult females especially adolescents and young adults. HPV can be referred to as low risk, warts causing, or high risk depending on whether they put someone at risk with cancer. In most cases, the body's immune system clears the HPV infection naturally within two years (CDC, 2007).

In Finland, the strategies of introducing the HPV vaccination depended on the optimum age and the sex specific pattern. In a study by French (2006), about the introduction of the HPV virus in Finland, indicated that vaccinating adolescents at the age of 11 compared with 15yr olds delays the impact of immunization on HPV16 associated with cervical cancers. Sexual practice before the age on 16 was only in a small population. Infection before vaccination lead to change of attitudes towards vaccination and high number was noted to be vaccinated. The government encouraged young adults to get vaccinated and not to wait till infected to get a vaccination. It is discussed that vaccination before sexual debut maximized long term impact of the vaccination. Access and availability of information on the vaccine speeded up the impact and decreased number of cases. Vaccinating male prevented additional cases although the proportion vaccinated was less than that of females. (French, 2006, 516-518).

The HPV also causes genital warts. This type of virus has a two week to three months incubation period. The warts can be felt or seen on the external genitalia. The main symptoms are painless warts and genital discharge. Bleeding can also occur if the lesions become confluent and irritated by clothing. Warts in males can be found on the urethra, anus and beneath the foreskin however, it is difficult to find the warts in women especially if they are in the mucous areas. A microscopic

examination may be needed though pink or white spots may appear on the mucous membranes. In women, genital warts are often found during gynecological examination (CDC, 2007; Blair 2004, 471).

A study by Pitts (2007), on the knowledge and awareness of human papilloma virus and attitudes towards HPV vaccination among women in Australia indicated there was lot knowledge about HPV. Half of the participants in the study had heard of the HPV, most had learnt about it from the media. Positive attitudes were noted as most of the participants said they would trust a health specialist, gynecologist or health services for information on HPV. Few participants had sought information on HPV and very few had discussed it with friends or health officials. There was significant support for the HPV vaccine (Pitts, 2007, 178-179).

In Florida, United States, a study by Gerend (2007), on awareness, knowledge and beliefs of the HPV in young adults, indicated that three quarters of those interviewed knew the HPV as a sexually transmitted infection though misunderstandings were observed on its signs, symptoms and nature of manifestations. Females were reported to have more knowledge than the males. Negative attitudes towards the virus were highly observed in both males and females as many admitted to having multiple sexual partners. Most males indicated they would feel more ashamed if diagnosed with HPV. Great interest in HPV vaccine was noted especially in women, who felt Vulnerable to HPV infection (Gerend, 2007, 239-240).

2.6 Trichomoniasis

Trichomoniasis is a common sexually transmitted disease caused by the bacterium *Trichomonas vaginalis* that is usually found in the vagina in females and urethra tract in males. It affects both sexes but symptoms occur more in women thus its usually treated in females more than in males who rarely get the symptoms. Trichomoniasis is transmitted through unprotected vaginal, anal or oral sex with an infected person. It can also be passed from a mother to her baby at the time of birth (Chang, 2008)

Trichomoniasis can be without symptoms. Trichomoniasis symptoms include vaginal discharge, vaginal itching, smelly and foamy discharge, yellow or greyish discharge, pain while urinating and discomfort during sex (Perlman, 2007). Most of the infected males rarely show any symptoms;

however they could experience urethral discharge, pain when urinating and a swelling of the scrotum. Laboratory tests are needed for a diagnosis. A trichomoniasis test usually prompts tests for other sexually transmitted diseases. (Chang, 2008).

Globally, there is less knowledge on trichomoniasis. A study on knowledge of sexually transmitted diseases by Kigongo (1998) in Kampala, Uganda, indicated that participants mentioned more of other sexually transmitted diseases compared to trichomoniasis. It was noted that female participants knew more about trichomoniasis compared to men in Kampala. Most of the participants had no knowledge on the signs and symptoms specifically for trichomoniasis; they just mentioned general STD symptoms. There was positive attitude towards the prevention of trichomoniasis. Shyness was given as one of the main reasons why participants had never taken tests before (Kigongo, 1998). Another study conducted in India by McManus (2008) indicated that participants had no knowledge on trichomoniasis. Participants knew very little about other STDS but there was no mention of trichomoniasis (McManus, 2008)

2.7 Hiv/Aids

AIDS is an abbreviation for Acquired Immune Deficiency Syndrome. It's a disease caused by a virus called Human Immunodeficiency Virus (HIV) which infects and damages the body's immune system (lymphocytes) thus AIDS makes it difficult for the body to fight off infectious diseases. HIV is transmitted through direct contact with blood or body fluid of someone who is infected with the virus. Contact with body fluids of an infected person is usually through sharing needles and unprotected sexual intercourse. HIV is passed to an infant from an infected mother through the development of the foetus in the mother's uterus, at time of birth and during breastfeeding. HIV and AIDS are incurable and rarely transferred through blood transfusions (Dipentima, 2007).

There are no immediate symptoms of HIV at birth but they could appear 2 to 3 months after a child is born. Babies born with HIV have a weakened immune systems thus they easily get infected with different kind of infections. Often, HIV infected infants have poor weigh gain, always appear to look sick, have fungal mouth infections, enlarged lymph nodes, neurological problems, enlarged liver and spleen and different opportunist infections. Adults infected with HIV often don't show any symptoms at the time of infection. It could take up to 10years before the symptoms begin to show. Infected adults may experience rapid weight loss, persistent diarrhoea, pneumonia, swollen lymph

nodes, intense fatigue, night sweats and susceptibility to other life threatening opportunistic infections (Trann, 2008).

AIDS is diagnosed by blood tests that show the presence of HIV in the body. Though HIV is incurable and there are no vaccines to protect against HIV, there have been two advances in the treatment of HIV. One of the advances is the development of drugs called antiretroviral that inhibit growth of the HIV virus thus delaying the onset of AIDS and letting people with HIV to remain free of symptoms for a longer time. The other advance is development of drugs that reduce transmission of HIV from infected mother to a child. Children with HIV are at a higher risk of cancer because of their weakened immune systems. It is difficult for people with HIV to maintain body weight because they usually have no appetite. HIV infects the brain, making it swollen and thus damaging brain tissue and this leads to what is known as AIDS dementia (Dipentima, 2007).

A study by Manchester (2002), in china, indicated that knowledge of HIV/Aids was high among both men and women, over 93% of city residents and over 83% of small town residents had heard of HIV/AIDS. 73% of city residents compared to 62% of small town residents had knowledge about the 3 main transmission channels; blood, sex and bodily fluids. However, only 31% of city residents and 23% of small town residents believed that condoms can protect them from HIV/AIDS. Men had a more positive attitude towards using a condom for protection compared to women, 27% compared to 19%. Increased education and higher monthly salaries indicated an increase in awareness of HIV/AIDS. Participants showed a positive attitude towards searching for information or buying materials that contained information in order to acquire more knowledge on HIV/AIDS. Despite higher awareness, town residents with higher monthly salaries are actually less knowledgeable about the preventive methods than their less well-off counterparts. Attitudes towards change of risky behaviour were low. Most participants admitted to having sex without use of condoms and having multiple sex partners, despite their much awareness of presence of AIDS in china. Most participants believed that keeping one sexual partner was safer than using a condom to protect them from AIDS; they had a very positive attitude about having just one sex partner. Higher educated participants were very comfortable discussing about sex and condoms during the interviews compared to lowly educated participants (Manchester, 2002).

Another study was conducted by the faculty of clinical sciences in a Nigerian university, Africa by Odu (2007). They sought to find out the knowledge, attitudes towards HIV/AIDS and sexual behaviour of students in a tertiary institution in south west Nigeria. Results indicated that most respondents (84%) were aware of the existence of HIV/AIDS, had knowledge about the routes of

transmission, signs and symptoms and preventive measures against the disease. Attitudes towards infected people differed among the participants, 51% revealed that they could hug and share things with infected people, while 27% stated that the infected people should be isolated from the community. Male respondents admitted to have most likely used condoms compared to their female counterparts. More than half of the respondents admitted to being sexually active, and also admitted on having more than one sexual partner. Most respondents had fear of acquiring HIV/AIDS and 75% of them admitted to always using a condom as a preventive measure. However, only 22% of the students felt that they were vulnerable in acquiring HIV/AIDS (Odu, 2007)

2.8 Hepatitis

There are different types of hepatitis, these include A, B, C, D and E, however D and E are less common. Hepatitis A is an acute liver disease caused by the hepatitis A virus (HAV). The virus could be spread through sex, fecal-oral and rarely through food outbreaks. Symptoms include fever and jaundice which last up to two months. Laboratory tests are needed to diagnose hepatitis A. Prevention can be ensured through sanitation, safe sex, and vaccination especially if one is travelling to another country. Complications include a prolonged or relapsing course of illness lasting many months, chronic liver disease which can lead to death or having a liver transplant (Brundage, 2006, 2163-2164).

Hepatitis B is also a liver disease caused by hepatitis B virus (HBV) which is an infectious virus. It is believed to be a 100 times more infectious than HIV. The virus can also be present in saliva, vaginal secretions or other bodily fluids. It can range from a mild disease to chronic illness that can lead to liver disease or liver cancer. HBV is transmitted through blood contact and unprotected sex. The virus has an incubation period of about 6 weeks -6 months. The symptoms include fever, headaches, abdominal pains, diarrhea, and jaundice and vomiting. Jaundice occurs in hepatitis because the liver is unable to remove bilirubin from blood (Hicks, 2007).

Hepatitis C is caused by the hepatitis C virus (HCV). Most patients with this virus develop persistent infection because the virus can cause an immune response to sites on the virus to which specific antibodies can bind. The incubation period of the HCV virus is 2 weeks- 6 months. The virus is transmitted through blood and sexual contact. Symptoms of hepatitis C include jaundice,

abdominal pain, fatigue and loss of appetite. Serious complications that can mount from hepatitis C include chronic liver disease or even death (Moyer, 1999).

A study on health care students between the ages of 20-30years in Australia by Van De (2002) on their knowledge on hepatitis and their attitudes towards infected patients indicated that most health care students who had come across a hepatitis patient recently had higher levels of knowledge compared to those who hadn't. Only 21% of those interviewed were aware of the risk factors associated with hepatitis, about 48% had knowledge about the causes and transmission of hepatitis, 79% of the participants were aware that one can be vaccinated against hepatitis and only 12% were aware of the complications of hepatitis. However medical students had more knowledge compared to registered nursing students while practical nursing students had the least knowledge about hepatitis. These medical students showed a positive attitude towards taking care of patients with hepatitis. A few of them were worried that they could contract hepatitis from their patients. Most that had associated with infected patients admitted to have observed willingness of the patients to discuss hepatitis. However, very few of their patients had the correct knowledge on the basics of hepatitis and had quite a negative attitude on their sexual behaviors that had led to them acquiring hepatitis. Attitudes seemed to change in patients and health care students after discussions during the interviews (Van de, 2002, 1-2)

3. PREVENTION OF SEXUALLY TRANSMITTED DISEASES.

Contracting of STD's can be prevented and its better to prevent acquiring an STD than to get treatment after because not all STD's are curable and some treatments have complications.

Educating young adults is the most important step in the hope for reducing sexually transmitted diseases. Knowledge changes the attitudes of a community towards sexually transmitted diseases.

The centre for disease control and prevention (CDC), in their May 2003 article on updates of prevention and treatment of STDS, quoted that;

“Despite various attempts by health care workers to reduce the morbidity and mortality of sexually transmitted diseases, more than 15 million persons acquire STD’s in the United States every year” (CDC, 2003)

There are different strategies to the prevention and control of sexually transmitted diseases. Healthcare providers and also teachers in school can teach and counsel especially the youth on safer sexual behaviors and the risks of STDS. The young should also be encouraged to go for testing and screening do the identification of asymptomatic as well as symptomatic persons who are unlikely to go for treatment can be identified. Health care providers should be up to date with effective diagnosis and treatments of people with STDS, this can help in prevention on reoccurrence of the disease (Boskey, 2008).

Partners of people who have been infected by STD’s should under go proper evaluation, counseling and treatment. There should be accessible treatment and immunization/ Vaccination against STD’s are ways through which STD’s can be prevented. One has to be careful about a partner and avoiding multiple partners and in case you suspect a partner of having an STD, consult a healthcare provider for testing, counseling and treatment. Condoms should always be used during sexual contact. Sex toys should not be shared. One must be careful about the alcohol or drugs one takes because they weaken good judgment and control and could cause risky sex. People should get HEPATITIS B vaccination because it is a serious and sometimes fatal STD; the vaccine is safe and effective. Use of foam, cream or jelly with spermicidal is an advantage because the chemicals in them kill most STD organisms (Pendegrass, 2000).

In one conference in America on Gender issues, Beavogui presented results of a research study done in 2000, on traditional culture and STD/AIDS prevention with women prostitutes: Case of Guinea-Conakry, results showed that the traditional culture in Guinea prepares the man to play the role of master and the woman to be dominated by her master. The married woman and prostitute have the same obligations which are to give her master her day’s earnings and to provide sexual intercourse whenever he wants and at his conditions including the non utilisation of condoms. This research does prove that women in Guinea have no or little say when it comes to the use of condoms to protect against STD’s. So due to the culture in Guinea, for the prevention of STD’s to

be successful, its solely up to the man to decide on whether he wants to use protective methods during sexual intercourse or even having one sexual partner (Beavogui, 2000).

In another fact sheet from a Publication of the Rural Centre for AIDS/STD Prevention (2003), about attitudes of young adults indicated that they do play a big part in the contracting or prevention of STD's. The fact sheet stated that feelings of invulnerability, hopelessness, and low self esteem and inadequate self efficacy in young adults do encourage risky behaviours. These troubled young adults have negative attitudes which interfere with the sexual communication and prevention acts (Rural Centre for AIDS/STD prevention, 2003).

Since the prevention of STD's is a worldwide ongoing program, young adults get access to the information needed on how to prevent acquiring STD's but the problem seems to be that the acquired knowledge is not put into practice. Barriers to prevention methods to work seem to be culture and attitudes of individuals. Every community has its won culture and it's quite difficult to convince young adults who have a certain tradition to change their tradition for example if a man is unfaithful then he should be willing to use condom during sexual intercourse with his wife. Attitude is another important factor in the prevention program that should be considered. If a young adult feels hopeless then they also think they have nothing to lose so they can involve in risky behaviours like unprotected sex whilst not being afraid of contracting an STD (CDC, 2003).

4. AIM AND PURPOSE OF STUDY.

The aim of this study was to find out the knowledge base of young adults from different cultural backgrounds, on sexually transmitted diseases and at the same time explore their attitudes towards sexually transmitted diseases.

The purpose of the study was to broaden the views of health care professionals on the knowledge base of young adults and their attitudes towards sexually transmitted diseases and to help the health care community understand young adult's sexual attitudes.

4.1 Research questions

1. What knowledge base do young adults from different cultural backgrounds have on sexually transmitted diseases?
2. What attitudes do young adults from different cultural background have towards sexually transmitted diseases?

5. IMPLEMENTATION OF THE RESEARCH

5.1 Method of data collection

The researchers used both quantitative and qualitative research methods in this study. In quantitative research, to understand the informant group is based on the emphasis placed on the measurement and quantification of the observable data. Quantitative research uses a systematic process of gathering and using numerical data to obtain information (Cormack, 2002, 165-169). Quantitative research method also helped the researchers in easier analyzing of the data collected.

Quantitative research was done through questionnaires (Appendix 1). The main purpose of the questionnaire is to collect specific information that will provide answers to the research questions. Questionnaires provide privacy thus increases the chances of participants to give more honest answers. This makes it easier to categorize and analyze the data (Cormack, 2002, 301-304). The questionnaires contained 13 closed questions. They were presented during a class session at the institute of higher education on the 21st January 2009. Anonymity of the participants was ensured by not having any names on the questionnaires, however participants had to fill in their age, sex and continent of origin so that the researchers could be sure they fitted in the criteria used to choose the informant group. The questionnaires were in English which is the language of instruction at the institute. The questionnaires collected data on the knowledge base part of the research and were destroyed after the results were summarized.

Qualitative research is descriptive. Qualitative research focuses mainly on the views of the people involved and their perceptions, meanings and interpretations under the same natural settings. The researcher's role is to gain holistic overview of the context under the study. Qualitative data is a direct source of data and the research is the key instrument (Bryman, 2001, 45-47). The main aim of the researchers to using qualitative research was to be able to understand the individuality and also the informant group as a whole, by exploring their attitudes on the topic of study. There was one essay question to guide the participants; they were allowed to describe in their own words what attitudes they had towards STD's. The advantage with using essay writing to collect data on attitudes was that the participants were not limited to certain answers but instead they had freedom to express themselves. The essays were written in the same class session after the participants had filled in the questionnaires.

5.2 Informant group

The Informant group was made up of 12 students from an institute of higher education. The researcher chose the informant group following specific criteria. The participants had to be young adults between the ages of 19-30, have a good command in the English language and originate from different cultural background. The researcher chose that institute of high education because it had a lot of foreign young students.

12 Participants participated in the study, 4 of them were male and 8 female. The participants were from different continents and had different cultural backgrounds; thus they were best suited to

represent since the researchers aimed at finding out the knowledge base and explore attitudes of young adults from different cultural backgrounds. They also fulfilled the age preference chosen by the researchers based on their on study. The participants filled in the questionnaires which contained closed questions on the knowledge base of STD's and thereafter wrote an essay, describing in their own words, their attitudes towards STD's. This was done in English. They all had good English language skills and English was the language of instruction in their class group. The researchers were confident of the participant's language skills because they had all passed the English test recommended to join that specific institute of higher education. Each participant received a letter of introduction through electronic mail explaining the aims and purpose of study (Appendix 3). Participation was voluntary. This was done during the spring semester, 2009.

5.3 Data analysis

The data was analyzed using both quantitative and content analysis. In quantitative analysis, data is broken down into simpler parts in order to gain understanding of the data as a whole. The collected data is then measured and quantified by statistics or numerical figures (Cormack, 2002, 170). The researchers agreed on a date and time to meet and analyze the data. Quantitative analysis was used for analyzing the questionnaire which carried the knowledge base section of the research. This also helped the researchers of this study to analyze the data collected from the questionnaires. The questionnaires contained 'yes' or 'no' answers and the researchers counted the number of participants that had chosen specific answers. The researchers created a table (Table 1), in the results section, indicating how many participants had answered to yes or no to specific questions. This made it easier to analyze the questionnaire part since the researchers could simply count the participants who had answered correctly and compare to those who answered incorrectly or did not answer.

Content analysis on the other hand was used to analyze the qualitative section of the study. Content analysis is described as a research technique focusing on objective, systematic and description of manifested content in communication. Content analysis is focused on the actual data and internal features of the data collected. It determines the presence of certain words, concepts, themes, phrases, characters or sentences within data or sets of data collected and bring out their presence in an objective manner (Sapford, 1992, 120-122). The purpose of using content analysis in this study was to help the researchers reveal certain themes discussed in the essays written by the participants which revealed their views related to attitudes towards STD's. The researchers read the essays

carefully; they discussed together and tried to understand the holistic view of the participants. Some of the themes were easily revealed in the essays but for others, the researchers discussed deeply to understand more in order reveal them. Most participants had discussed certain themes in a positive view, others viewed then negatively while others gave their views negatively and also positively. The researchers had to be keen on how the themes had been revealed to as to enhance concrete results. After the researchers had agreed on the themes to use, they summarized the contents of each theme as results.

6. ETHICAL CONDIDERATIONS.

The researchers in this study put into consideration the ethical issues. The anonymity and privacy of the participants was observed. No names were submitted in the question papers although the age, sex and continents were included. The participation was voluntary. An introduction letter was sent to the participants through electronic mail five days before the research was done to help them understand our aims and purpose of the research (Appendix 3). A form to seek permission to conduct the study was filled and submitted to the head of degree programme at the institute of higher Education. Permission sort had been granted during the time of the research. The participants remained anonymous during the whole process. The questionnaires and the essays were destroyed

after summarization of the results. The results were published in written form and everyone will be able to access them.

7. RESULTS

7.1 Knowledge base on sexually transmitted diseases

The table below (Table 1) shows the results summarized from the questionnaires. They reveal the knowledge base of the participants on sexually transmitted diseases and show the number of participants who had a good knowledge base compared to those who did not have the right answers or did not know the answers.

Table 1; Results on the knowledge base of the participants.

	Number of participants with right answer	Number of participants with different answer	Number of participants who did not answer

Chlamydia	8	4	
Gonorrhoea	8	3	1
Trichonomiasis	8	2	2
Syphilis	10	2	
Herpes	8	4	
Hepatitis	8	4	
Papilloma Virus	8	4	

All participants agreed that Sexually Transmitted Diseases can be transmitted through child birth. Practising unprotected sex was seen as a more influential risk factor in the transmission of STD's as compared to having multiple sex partners and that HIV/AIDS is incurable. On the best way to prevent from acquiring STD's, the participants had different opinions: 6 said use of condoms are the best way to prevent from acquiring STD's, 4 participants said abstinence from sex is best preventive method, another participant stated having blood test before sex is best way of prevention and the last participant thinks not having sex with a person you don't know is the best preventive method.

11 of the participants believed education is the best way to gain information on STD's as compared to media or through friends. Only one of the participants said that media coverage is the best way to gather information on STD's. From this, it shows that all the different people with their different cultural backgrounds think being educated about STD's is the best way to learn.

It was clear that the participants' knowledge was based on their country of origin, for example when participants were asked for the most common STD; 8 of the participants said HIV is the most common and of these 6 were African while 2 participants from Europe said it was Chlamydia. Also from the answers, it showed that the participants irrespective of their country of origin did not have sufficient knowledge on less common STD's like gonorrhoea and Trichonomiasis. One participant from Europe asked,

'What is this'

of gonorrhoea.

7.2 Attitudes towards sexually transmitted diseases

The participants discussed in the essays various attitudes towards sexually transmitted diseases. Attitudes viewed negatively outweighed the positively viewed attitudes as proved by these results. Some participants discussed some themes both negatively and positively while others discussed them either way. 7 out of the 12 participants discussed protection as the main preventive measure that young people could use to curb STD's. All participants represented Africans, Europeans and Asians. They all discussed the use of condoms as a cheap and easy way to protect one from the diseases, compared to 3 participants, from the African culture, who discussed practicing unprotected sex as a negative attitude towards these diseases.

'Use condoms, be protected'

5 participants discussed risky ways as the most common ways contributing to the rapid increase of STD's in young adults. These ways included indulgence in alcohol, drugs and having multiple sexual partners. Participant from the Asian culture pointed out that alcohol causes young adults not to make concrete decisions. Europeans discussed the occurrence of one night stands (convenient sex for a night) while Africans discussed more of prostitution. However, 4 participants had a more positive view towards risky ways and encouraged the young adults to avoid them in order to curb STD's. These participants were from the African and European cultures.

'If you really want to be protected from getting STD's, do not have more than one sexual partner.'

'Young people should quit drinking and ending up having one night stands with different people. Sometimes they don't know these people and have no idea what kind of diseases they have'

Lack of interest in education was discussed by 6 participants as another reason leading to increase of STD's. However, the participants from African culture blamed it on lack of education in schools and health centre's while European and Asian participants pointed out that the information is always available in the media and internet but the young adults do not want to find more information. This portrayed negative attitudes compared to 2 participants from the Asian and African cultures that discussed education positively and encouraged young adults to get more information on these diseases.

'I think there is information especially on the internet and media, young people just don't have interest in checking it out'.

'Education is the most important way of prevention. U read more, u know more, u sees how real it is and takes precautions'.

Fear of Medical care, also discussed as negatively influencing the spread of STD's, 3 participants from the African culture discussed seeking medical care as an embarrassing situation. However, 1 African participant emphasized on young adults to seek medical care and also go for screening to prevent spreading the disease to uninfected people.

'promiscuity and lack of medical care also contribute to increase of STD's because most of the young people infected are ashamed of going to seek medical care for such complaint'

'It is important for young adults to seek medical care one infected .this protects others from getting infected.'

Ignorance was discussed by 3 participants from the African culture as negatively influencing the spread of STD'. A participant from the European culture also discussed naivety as another negative influence the diseases. They discussed that young adults have chosen to believe that those infected with STD's cannot be around them. The participant from the European culture encouraged young people to abstain from sexual practices to be sure of preventing the transmission of STD's.

'We, the young, just don't want to think. We know so much yet we ignore it and don't want to do what we are told .I think focus should be put more on the ignorant side, it may go deeper, maybe psychologically'.

'Abstinence is the only way one can be 100% sure not to get STD's, other ways of prevention have at least 0.1% risk. Young people should abstain from sexual behaviors.'

The table below (Table 2) shows the different themes on results on attitudes as discussed from the essays written by the participants. It shows the number of participants who discussed the themes

Theme	Positive (No. of participants)	Negative (No. of participants)
Protection	7	3
Risky ways.	4	5
Education	2	6
Medical care	1	3
Ignorance	0	3
Naivety	0	1
Abstinence	1	0

positively and those who discussed them negatively. This also helps to compare the results and determine which ones are common and how they affect the young adults; positively or negatively.

Table 2; Results on attitudes towards STD's.

8. DISCUSSION.

Sexually transmitted diseases are rapidly increasing in young adults (UNAIDS, 2004), and the first reason one would think of is it's because of lack of knowledge. But, according to our results, young

adults do have sufficient knowledge on STD's that they could use in the prevention of acquiring STD's. This study has yielded quite different results on the knowledge base as compared to the study that was done on young adult's knowledge in Tanzania, Africa about knowledge and its impacts in the practice of risky sexual behaviors. In that research, it was found that the participants had very little knowledge about STD's whereas in this research it was found that the participants had quite sufficient knowledge about STD's especially the most common STD's (Mmbaga, 2005, 225). But also similar results were yielded in both researchers; the participants of both researches mentioned use of condoms and abstinence as the best ways to prevent from acquiring STD's.

In this research too, all but one participant thought education is the best informative source of gathering knowledge on STD's. In another research done in Uganda's Makerere University (Kigongo, 1998), the participants also thought that education and media are best way to gather information on STD's. This shows that according to young adults, best way to learn about something is by being educated about it other than from peers or through any other means. From this study and the one that was done in Uganda, participants knew nothing or very little about Trichonomiasis. More focus/education/attention seems to be emphasized on more common STD's than less common ones. Health care providers, teachers and other counselors should consider giving more information on these less common diseases. The researchers predicted that if no one acts on them, then some day in the future, they will turn to be common and the goal of trying to prevent the increase STD's will have failed at that time.

According to the study done in China (Manchester,2002), it was found that knowledge of HIV/AIDS was high among both men and women and the participants thought having one sexual partner is a better way of prevention of acquiring an STD than use of condoms. From this research, most of the participants think that use of condoms is best way to prevent from acquiring STD's. General knowledge of STD's in different countries seems to be good, that leaves us to wonder why the number of people being infected with STD's is increasing (UNAIDS, 2004).

Attitudes on the other hand can determine and also change a lot in the prevention of sexually transmitted diseases. The data on attitudes was collected using qualitative method. As according to Bryman (2001, 45) the aim of the researcher is to gain holistic overview of the context of the study. The essays written had a lot of information. However, depending on how the participants had viewed the themes, the researchers had to argue to understand their meanings: whether they were positively or negatively viewed. Following up with the knowledge base results as indicated in (Table 1) which had been submitted before the essays were written, we see that the participants had

a good knowledge base but results on attitudes showed that negative attitudes outweighed the positive attitudes. This explained that young adults do not put what they know into practice, this is consistent with the centre for disease control fact sheet (2003) which also revealed the same thing. It was also revealed in the study done by Kigongo in Makerere University, Uganda (1998). The researchers' felt it would be important in the future for health care providers to conduct more studies on why young adults have negative attitudes on these diseases because most of the studies done have been on their attitudes towards the diseases and not why they indulge in ways leading to their transmission.

Educating young adults would be the first and most important preventive measure in the researchers' opinions, even if the participants thought that protection played a bigger role in this. According to Boskey (2008), health care providers, teachers and parents should teach and counsel the youth about the risky ways and also preventive measures of STD's. The researchers' agreed that it is through education that one can know about how to protect oneself from STD's and all about their symptoms and available treatment. The researchers' would suggest that in the future, more lessons on STD's should be included in the schools curriculum because most of what is taught does not seem to be enough especially because the contraction of STD's is continuing to increase. The media can also be a good way especially television and magazines which young adults seem to enjoy a lot. If it would be possible, the health providers should plan visits to the schools to counsel the young adults, because, although counselling is offered also in health centre's, it is difficult for young adults to just walk into a health centre for counselling, on the other hand if its planned in the school programmes they have no choice than to attend the lessons. This will reach out to a higher number of young adults.

Medical care as indicated in our results was a problem revealed mostly in the African culture. This was because young adults are shy and find this an embarrassing situation, more over treatment is expensive and many cannot afford it. The Researchers' in this study were from the African culture and from their own point of view; Suggestions for the future would be to provide free or cheaper treatments for the affected. The communities could also be educated more on STD's being common because they view one as an outcast or badly behaved hence the feeling of embarrassment in infected individuals. Change of attitudes from the Health care providers, would highly help into positively changing the attitudes of young adults towards seeking Treatment because they will have more confidence in the health care providers.

In regard to ignorance, as one participant stated, young adults should think deeply over consequences of these STD's. If they know as much as our knowledge results indicated, we can see that ignorance is greatly involved in contraction of STD's. Young adults should be encouraged to be more responsible. It would also be important if people infected would come out and counsel the young especially those affected and living with HIV/AIDs. If they talked to the young adults and told them about their experiences, they could inflict some reflection in young adults which could trigger them to positively changing their attitudes and prevent increase of STD's. Since prevention of STD's is a worldwide on growing programme as stated in CDC (2003) fact sheet. We, as the world, should co-operate as one, teach, counsel, obey and who knows, maybe we could really reduce the rate at which STD's are spread if we stand up and fight them as one.

APPENDICES

Appendix 1; Research questionnaire;

SEXUALLY TRANSMITTED DISEASES: KNOWLEDGE AND ATTITUDES OF YOUNG ADULTS IN AN INSTITUTE OF HIGHER EDUCATION, FINLAND.

PLEASE TICK THE APPROPRIATE ANSWER.

Male_____ Female_____

Age_____ Continent_____

1. Does Chlamydia trachomatis affect both men and women?
Yes
No
2. Does gonorrhoea cause inflammation of the eyes?
Yes
No
3. The bacterium Treponema Pallidum cause trichomoniasis
Yes
No
4. Visible sores are associated with syphilis
Yes
No
5. Can Herpes simplex Virus be transmitted through kissing
Yes
No
6. Hepatitis can be transmitted through sex
Yes
No
7. The papilloma Virus is associated with genital warts.
Yes
No

8. Sexually transmitted diseases can be transmitted during child birth.

Yes

No

9. Which is the most influencing risk factor?

Unprotected sex

Multiple sex Partners.

10. Is the use of condoms the best way to prevent STDS?

Yes

No

If the above is false, name the best way to prevent STDS

11. Is HIV/AIDS curable?

Yes

No

12. Which is the best way to gain information on STD's?

Education

Media

Friends

13. Which is the most common STD?

Appendix 2; Essay question

Young people are increasingly being infected with sexually transmitted diseases, their behaviours, lack of knowledge, lack of medical care and much more influence this. Discuss your own attitudes towards sexually transmitted diseases.

Appendix 3; introduction letter to participants

Diana Korit/ Elizabeth Kamau,
Jyvaskyla University of applied,
Sciences. School of health &
Social studies (SNP5S).
PO BOX 207, FL 40101,
Jyvaskyla, Finland.
4. 11. 2008.

Dear participant,

We Elizabeth & Diana are final year nursing students in the University of Applied Sciences, School of Health and Social Studies, SNP5 group.

For the final thesis, we have chosen the topic; Global knowledge and attitudes of young adults towards sexually transmitted diseases. Our aims are to collect information and at the same time find out the knowledge base of young adults on sexually transmitted diseases and their attitudes towards them.

We would be grateful if you would spend some time to answer our questionnaire and write some short essay. Participation will be voluntary. The results of this study will be published and everyone will be able to access them.

Your's sincerely
Diana & Elizabeth

REFERENCES

- Beavogui, N. 2000. Gender issues, traditional culture and STD/AIDS prevention with women prostitutes. International Conference on AIDS, 2000 Jul, 9-14; 13. Accessed 12 Oct 2008. <http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=102242153.html>
- Blair, M. 2004. Sexually Transmitted diseases. Urologic Nursing Journal, 24, 467. Accessed 8 Aug, 2008. <http://www.jamk.fi/library>, Nelli portal
- Blake, D., Kearney, M., Oak, M., Druker, S. & Bibace, R. 2003. Improving participation in Chlamydia screening programmes, Perspective of High Risk Youth. American Medical Association article, 157, 525
- Boskey, E. 2008. Top 10 Risks for Acquiring STD. Medical review board. Updated 12 Oct 2008. Accessed 10. Nov, 2008. <http://std.about.com/od/riskfactorsforstds/tp/topriskfactors.htm>.
- Brundage, C. & Fitzpatrick, N. 2006. Hepatitis A. American Family Physician Journal, 73(12), 2163-2164.
- Bryman, A. 2001. Quantity and Quality in Social Research, 45-47
- Burazeri, G., Roshi, E., Rrumbullaku, L. & Dasho, E. 2002. Knowledge and Attitude of Undergraduate Students towards Sexually Transmitted Infections in Tirana, Albania. Croatian Medical Journal, 44(1), 86-88. Accessed 9 Sep, 2008. [Http://www.cmj.hr](http://www.cmj.hr).
- Centre for disease control and prevention fact sheet.2007. Human Papilloma Virus. Updated 6 Feb, 2008. Accessed 21, Sep, 2008. [Http://www.cdc.gov/STD/HPV/](http://www.cdc.gov/STD/HPV/)
- Chang, k. & Einstein, A.2008. Trichomoniasis. Updated 16 Apr, 2008. Accessed 16 Aug, 2008. [Http://www.emedicinehealth.com/trichomoniasis/article_em.htm](http://www.emedicinehealth.com/trichomoniasis/article_em.htm).
- Cormack, D. 2000. The Research Process in Nursing, 141-142, 301-307.
- Devonshire, P., Hillman, R., Capewell, S. & Clark, B. 1999. Knowledge of Chlamydia trachomatis, genital infection and its consequences in people attending a genitourinary medicine clinic. British Medical Journal, 75, 410.
- Dipentima, C. 2007. Infections, HIV & AIDS. Updated Oct, 2007. Accessed 14 Aug, 2008. <http://kidshealth.org/parent/infections/std/hiv.html>.
- Donovan, B., Knight, V. McNulty, Wynne- Markham, A. & Kidd, M. 2001. Gonorrhoea screening in general practices; Perceived barriers and strategies to improve screening rates. Medical Journal of Australia, 175, 412-414.
- French, K., Barnabas, R., Lehtinen, M., Kontula, O., Pukkala, E., Dillner, J & Garnett, P. 2006. Strategies for the introduction of human papilloma virus vaccination: modelling the optimum age- and sex-specific pattern of vaccination in Finland. British Journal of Cancer, 96, 516-518.
- Gerend, M. & Maglore, B 2007. Awareness, Knowledge & Belief about papilloma Virus in a racially diverse sample of young adults, Florida, United States. Journal of Adolescent Health, 42(3), 239-241.

- Hicks, R. 2007. Hepatitis B. Updated Jan, 2007. Accessed 23 July. 2008.
[Http://www.bbc.co.uk/health/conditions/hepatitis_b1.shtml](http://www.bbc.co.uk/health/conditions/hepatitis_b1.shtml)
- Hirsch, L. 2007. Syphilis. Updated Mar, 2007. Accessed 19 Sep, 2008.
http://kidshealth.org/teen/sexual_health/stds/std_syphilis.html
- Houry, D. 2007. Article on Gonorrhoea. Updated 5 Mar, 2007. Accessed 21 Jul, 2008.
[Http://www.emedicinehealth.com/gonorrhea/page_12-em.htm](http://www.emedicinehealth.com/gonorrhea/page_12-em.htm)
- Kernaghan, K. 2006. Running a nurse led Chlamydia testing service. *Nursing Standard Journal*, 21, 35-38, 45. Accessed 8 Aug, 2008. [Http://www.jamk.fi/ library](http://www.jamk.fi/library), Nelli portal
- Kigongo, W., Tamale, J., Mmiro, F., Mangen, F., Bagenda, D. & Lure, J. 1998. Knowledge and Attitudes towards sexually transmitted diseases and their Prevention among non- medical Makerere University Students. *International conference on AIDS*, 1998, 12.
- Kodner, C. & Nasraty, S. 2004. Management of genital warts. *American family Physician Journal*, 73.
- Manchester, T. 2002. Attitudes towards HIV/AIDS in China; Research on public knowledge, attitudes & behaviour in cities & towns. *Futures Group- China*. 24.02 2002. Accessed 15 Sep, 2008.
http://www.kaisernetnetwork.org/health_cast/uploaded_files/Futures_Group_09.24.02.pdf
- Mcgregory, T. 2006. Syphilis. Updated 24 Apr, 2006. Accessed 2, Aug. 2008
<http://www.emedicine.com/emerg/Topic563.htm>.
- McManus, A. & Dhar, L. 2008. Study of knowledge, perception and attitude of adolescent girls towards STI's/HIV, safer sex and sex education. *Biomed Central Limited Journal*, 8, 12.
- Merriam-Webster. 2009. Accessed 24, Jan. 2009
<http://www.merriam-webster.com/> dictionary.
- Ministry of Labour, Finland. 1997. Sexually Transmitted diseases, Prevention and Care in Finland, 3, 7,11, 17.
- Mmbaga, J., Leyla, H., Munyika, K. & Kleep, K. 2005. Sexually Transmitted Diseases/ Infections; Knowledge and its impact in the practise of risky sexual behaviours, Kilimanjaro, Tanzania. *British Medical Journal*, 84, 224-226.
- Moyer, L., Mast, R. & Alter, M. 1999 Hepatitis C: Routine, serologic testing and diagnosis. Centre for disease control and prevention, Atlanta, Georgia. *American Family Physician*, Jan, 1999. Accessed 21, Jul. 2008. [Http://www.aafp.org/afp/990101ap/79.html](http://www.aafp.org/afp/990101ap/79.html).
- Narouz, N., Allan, P., Wade, A. & Wagstaffe, S. 2003. Genital Herpes Serotesting; A study on epidemiological and patient's knowledge and attitudes among sexually transmitted diseases clinic attenders in UK. *Pubmed Central Journal*, 79(1), 36-40.
- Odu, O., Asekun- Olarinmoye, E., Bamidele, J., Egbewale, B., Amusan, O. & Olowu, A. 2007. Knowledge, attitudes to HIV/AIDS and sexual behaviour of students in a tertiary institution in south-western Nigeria. *Journal of European Society of Contraception*, 13(1), 90- 96.

Panchaud, C., Singh, S., Feivelson, D. & Darroch, E. 2000. Sexually Transmitted Diseases among Adolescents in Developed Countries. *Family Planning Perspectives Journal*, 32(1).

Pendergrass, s., Howard, C. & Nosex, M. 2000. Reproductive Health Information: Sexually Transmitted Diseases. Updated June 2008. Accessed, 11, Jul. 2008. [Http://www.bcm.edu/crowd/?pmid=1471](http://www.bcm.edu/crowd/?pmid=1471).

Perlman, D. 2007. Trichomoniasis. Updated 24 Sep, 2007. Accessed 14, Aug.2008. [Http://www.webmd.com/sexual-conditions/trichomoniasis](http://www.webmd.com/sexual-conditions/trichomoniasis)

Pitts, K., Dason, S., Rosenthal, D. & Garland, S. 2007. Knowledge and Awareness of Human Papilloma Virus; Attitudes towards Hpv Vaccination among young women in Victoria, Australia. *Sexual Health Journal*, 4(3), 178-179.

Rutherford, D. 2006. Sex and Relationships, Gonorrhoea. Updated 2 Jun, 2005. Accessed 20, Jul. 2008. [Http://www.netdoctor.co.uk/diseases/facts/gonorrhoea.htm](http://www.netdoctor.co.uk/diseases/facts/gonorrhoea.htm)

Rural Centre For AIDS/STD Prevention. 2003. Feelings of Depression and Sexual Risk Behaviour in Rural Youth, fact sheet, 15, 1-2. Accessed 29 Nov, 2008. <http://www.indiana.edu/~aids/factsheets.html>

Sapsford, R., & Pamela, A. *Research Methods for Nurses And The Caring Professions*, 1992, 120-122.

Schoenstadt, A. 2008. Syphilis Updated 26 Jun, 2008. Syphyllis. Accessed 2 Aug. 2008. <http://syphilis.emedtv.com/syphilis/syphilis.html>, Syphilis.

Swan, M. Syphilis, 2005. Updated 10 Aug, 2005. Accessed 2 Aug, 2008. <http://www.emedicine.com/derm/topic413.htm>.

Tran, M & Nettleman, M. 2007. HIV/AIDS. Updated 21 Jul, 2008. Accessed 18 Aug, 2008. http://www.emedicinehealth.com/hivaids/page11_em.htm.

UNAIDS. 2004: Sexually Transmitted Diseases. Accessed 12, Jun. 2008. [Http://www.unaids.org/en/policyandpractise/sexualAndReproductivehealth/sexualtransmittedinfections/default.asp](http://www.unaids.org/en/policyandpractise/sexualAndReproductivehealth/sexualtransmittedinfections/default.asp).

Van De, M. Health Care. 2002. Students: Knowledge of Hepatitis & Attitudes towards patients with Hepatitis, Australia. *Contemporary Nursing Journal*, 16, 1-2.