

SOCIO-ECONOMIC AND SOCIO-
CULTURAL
CORRELATES OF HIV/AIDS PREVALENCE
IN KENYA. *i*

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BY

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This project was presented in partial fulfilment for the
award of post graduate Diploma in Population Studies

(Population Studies and Research Institute)

University of Nairobi.

1998"

DECLARATION

This project is my original work and has not been presented for the same award in any other University.

OMBETA, CHRISTA MORAA

This project has been submitted for examination with our approval as the University supervisors

 4/6/98

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ABSTRACT

Acquired Immuno-Deficiency Syndrome (AIDS) has been identified as one of the most deadly diseases of our time and it has continued to increase unabated at alarming rates. In Kenya the situation has become very distressing where AIDS prevalence cases have nearly doubled between 1990 and 1994. The problem of HIV/AIDS has gone beyond epidemic proportions and now is worrisome social, health and economic problem. The objective of this study was to analyze the social, cultural and economic factors that influence sexual behaviour of individuals thus exposing them to the risk of HIV/AIDS infection. The factors that will be investigated include age, marital status, educational levels, occupation, number of unions and religion.

The data used in this study was from the Kenya Demographic and Health Survey (KDHS) 1993.

Cross-tabulation was the main statistical method used to analyze data in this study. Chi-square statistics were used to determine the level of significance of the association between selected cultural, social and economic variables and HIV/AIDS infection. It was hypothesized that: social factors such as age, marital status, education; economic factors, such as occupation; and cultural factors such as religion may expose an individual to the risk of HIV/AIDS infection.

The results of the analysis indicate that level of education, age, marital

status and occupation have significant association with condom use, number of sex partners and coital frequency. On the other hand, the number of unions and religion have no significant association with condom use. number of sex partners and coital frequency.

The study commends that condom use be promoted and that the young people be targeted. There also should be enhanced campaigns on HIV/AIDS information advocating for one sex partner and the continuous use of condoms.

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CHAPTER ONE

GENERAL INTRODUCTION

1.1 INTRODUCTION.

AIDS - The Acquired Immuno-Deficiency Syndrome - is now regarded to be the most deadly pandemic in the world. In some countries it has been observed to be the major killer of human population. Over one million AIDS cases worldwide had been reported to the Global Program on AIDS at the end of July 1995. The Global Program on AIDS estimates that the actual number of cases is about 4.5 million. In addition another 20 million people are estimated to be infected with HIV-Human Immuno Deficiency Virus, the virus that causes AIDS.

In the less developed countries particularly sub-Saharan Africa. AIDS has already exhibited visible demographic, social and economic impact on the entire population. Africa leads in the world both in absolute numbers and in the rate of the increase of infection. Sub-Saharan Africa accounts for 11 million cases which is over 50% of the world total. This is attributable to the dominant heterosexual transmission of the HIV, gender relation, poverty, socio-cultural and socio-economic factors in Africa (Mulimye 1996). In Africa, the epidemic is focused in the Central and Eastern part of the continent stretching from Uganda southward through Kenya, Rwanda and Tanzania and further to include Malawi, Zambia and Zimbabwe (Anar11 1994). East Africa is the worst hit with a third of all the world's infection (WHO 1995). It is documented that of the estimated 4.5 million women infected with HIV worldwide in 1992. 81 % (3.7 million) were in Africa (Macmillian & Ndegwa 1996). Despite several other means of transmission there are lots of certainty that a greater percentage of women in

Africa are infected through heterosexual relations either by their husbands or partners (Rwana, 1995).

The ratio of infected women to men in Sub-Sahara Africa is 1:1 compared to 9:1 in Europe and America where the transmission route remains mainly through homosexual intercourse and intravenous drug use (SWAA 1990).

In Kenya, AIDS has quickly become a very serious problem. The picture is quite discouraging with little or no difference from other worst hit places of the world in general and in Africa in particular AIDS in Kenya has gone beyond epidemic proportions and is now a worrisome social, health and economic problem,

AIDS was first reported in Kenya in 1984, but there was a general feeling that HIV/AIDS was not a serious problem for the country. In 1987 Kenya reported 1299 Aids cases. By 1990 Kenya had reported 16150 confirmed cases. In 1991, this had risen to 25702 and over 50,000 cases were confirmed by 1994. By September 1997, over 76,000 deaths resulting from Aids had been reported to Ministry of Health and according to the National AIDS/STL Control Program (NAS COP) there are over 1.32 million men women and children already infected by the HIV virus.

According to NAS COP a large number of pregnant women in the ante-natal clinics are testing HIV-positive. The Kenya Sentinel Surveillance System results show that there are several places within Kenya where the proportion of pregnant women who are infected with HIV is greater than 20%. Some of these places include Kisumu, Nairobi, Rusia among others.

In urban areas prevalence of HIV is estimated to be as high as 13% - 14%, about 315,000 HIV infected adults and 6% - 7% in rural areas about 715,000 HIV infected living in the rural areas, while the number of children infected with HIV is about 70,000 (Okeyo et

il 1996) In Kenya there are three significant modes of transmission of HIV/AIDS. The main mode of transmission is through heterosexual contact which comprises of 75% of all transmissions while perinatal and blood transfusion form only 25%.

The AIDS statistics indicate that roughly there are equal numbers of male and female infected. This equal ratio of men and women could be attributed to heterosexual contact.

Today, the biological transmission routes for HIV/AIDS infection are fairly well understood. We know that sexual contact between hetero- and homo-sexuals is the primary source of HIV/AIDS transmission. It has therefore become very necessary to identify social, economic and cultural factors that facilitate the spread of HIV/AIDS.

This paper will focus on examining how the social, economic, cultural and behavioral factors have created a conducive situation for the increase in the spread and in putting one at risk of HIV/AIDS infection in Kenya.

1.2 ItACKC.KOUNI) information

Kenya covers an area of 582,000 sq.km. It falls into two distinct regions; lowlands and highlands. These distinctions affect the climate, human settlement patterns, socio-economic and socio-cultural activities. The main climatic features are the long rains from March to May followed by a dry spell from May to October. Short rains are received between October and December, while in the Lake Victoria region rains are distributed throughout the year.

Agriculture is the mainstay of the economy accounting for about 25% of the Gross Domestic Product (GDP). Manufacturing accounts for 13% ; Coffee, Tea and tourism are the main foreign exchange earners for the country.

Kenya's population is estimated ;it 28.3 million and is projected to increase to 30

million by the year 20(H) (KI)HS, 1993). The Total Fertility Rate (TPR) is 5.4 children per woman. Population distribution in Kenya is influenced by a number of factors among them physical, historical, pattern of economic development and policies pertaining to land settlement.

High population densities are found in the arable land such as Central, Western and Nyanza Provinces with over 230 persons per sq. km. while in the dry North Eastern Province, the average density was only 3 persons per sq. km. in 1989 (Sessional Paper 1 of 1997).

The urban population had increased to 27% by 19X9. The increase in urban population could be to a large extent attributed to rural-urban migration. This is mainly due to increase in rural poverty, lack of employment opportunities, educational facilities and natural resources for exploitation.

The high population figures will continue to be sustained into the next century due to an interplay of factors such as the high proportion of under 13 years, increase in the infant mortality partly due to the deteriorating socio-economic conditions and the HIV/AIDS pandemic.

Kenya is still confronted with a variety of development challenges, the persistent ones being poverty and unemployment. Implementation of the Structural Adjustment Programmes (SAPs) has also posed additional problems, whereby absolute poverty has increased making it difficult for the disadvantaged to have access to basic needs.

Kenya is a multi-ethnic country with varying customs and cultural practises. Overtime, some of these have changed in order to accommodate modern lifestyles. Some have been retained despite clear evidence of their adverse effects on human reproduction. These include female genital mutilation, early and forced marriages, polygamy, frequent births, wife sharing, wife beating and food taboos.

According to the 1989 census report, 55% of females and 46% of males over 12 years were married. 46% of females were in monogamous unions and 9% were in polygamous unions. High proportion of women in polygamous unions were found in Kwale, Tana River, Siaya, South Nyanza, Husia, Bungoma among others.

There are 43 ethno-linguistic groups in Kenya. The major groups are Kikuyu, Luo, Luhya, Kamba, Kalenjin, Mijikenda, Meru, Embu and Kisii.

Religious belief is an important factor in national life. Christianity is the major organised religion in most parts of the country with Islam being dominant along the coast and in the eastern and northern regions.

1.3 PROBLEM STATEMENT

Despite the fact that knowledge of AIDS is over 90% in Kenya, according to the Kenya Demographic and health survey of 1993. AIDS cases and cases of people infected with the HIV virus have been increasing.

There have been many campaigns mounted to enlighten people about AIDS, but in spite of this, many people still engage in sexual behaviour which obviously puts them at the risk of HIV/AIDS. Increased sexual activity continue to persist in Kenya despite the dire consequences associated with such relationships - non use of condoms, multiple sex partners and casual and unprotected sex.

The spread of AIDS in Kenya has multiple causes. These include social, economic, cultural and behavioural. In Kenya, the heterosexual partners are involved in a wider variety of marriage forms including polygamy. There are some cultural practices that increase the risk of HIV/AIDS infection e.g leviratic marriages widow inheritance, wife sharing, long periods

of pre and postpartum sexual abstinence and religion. These practices and customs which are often abused has influenced the spread of HIV/AIDS.

Multiple sexual partners increase the size of network through which HIV/AIDS is spread. Polygamy is said to promote multiple sexual partners and extra-marital affairs as younger wives seek sexual satisfaction that their older husbands cannot provide (Ocholla-Ayayo,1991). Multiple sex partners practice in Kenya is common but condom use is not widespread. Having casual and unprotected sex has exposed many teenagers to pregnancy, STDs and now the risk of contracting HIV/AIDS. There are high chances of one being infected with HIV/AIDS due to casual and unprotected sex.

Our social environment in urban areas is conducive to casual sexual relationship resulting in the predicament of high prevalence of HIV/AIDS infection. The construction of many shelters in form of Boarding and Lodges, hotels guest-houses and youth hostels throughout the country has created opportunities for heterosexual unions. This implies a rise in coital frequency, as privacy is now more readily and cheaply available than before. Beer drinking places which also are on the increase now also provide rooms for sexual contact (Ocholla-Ayayo, 1991). *

With the increased modernization there has been a rise in divorce and separation case. There is also now more sexual freedom, with increasing social places of interaction, mainly due to the breakdown of traditional authority. More young people are engaging in sexual activity. This is shown by the high fertility and STI) rates in Kenya. This also indicates that the young generation is at a high risk of HIV/AIDS infection as they do not engage in safe sex practices to protect themselves against pregnancy or S TDs.

iii Kenya, (here has been a general economic decline during the last decades. The economic **difficulties** lack of jobs, high cost of living(housing and food) that follow have negative effects on sexual behaviour especially for young females who turn to prostitution as a means of survival due to these economic hardships. (Ocholla-Ayayol991)

Level of education, marital status, age, number of unions, religion, occupation, accessibility to condom factors may have a positive or negative effects on HIV/AIDS infection.

1.4 OBJECTIVES OF STUDY

The main objective of the study is to determine social, economic and cultural factors and their relation to the risk of HIV/AIDS infection in Kenya.

1.4.1 Specific Objectives

1. To examine the relationship between social factors (education, marital status, age) and **the** risk of HIV/AIDS infection.
2. To find out the relationship between economic factors (occupation) and the risk of HIV/AIDS infection*.
3. To determine the relationship between cultural factors (religion, number of unions) and **the** risk of HIV/AIDS infection.

1.5 JUSTIFICATION OF STUDY

The AIDS epidemic continues unabated with prevalence rates nearly doubling and the number of reported AIDS cases more than tripling between 1990 and 1994. In some parts of the country one in every three adults is infected with the virus that causes AIDS. The

increasing cases of **AIDS** in Kenya has become a tragedy of devastating proportions. The lives of **infected** individuals their families and communities, the companies they work for and the **whole country** have been affected by the HIV/AIDS epidemic.

Based on current trends 1.2 million Kenyans are already infected with **HIV** by the **month of** September 1997. This brings a lot of concern to policy makers planners, medical **officers and** population specialists and to the country as a whole.

It has therefore become imperative to study and understand the social, economic and cultural factors and sexual behaviour and practices of the general population and more especially women as they are at a higher risk of HIV/AIDS infection.

This study will help to promote awareness of the factors responsible for the spread of HIV/AIDS and to find solutions to these causes, and at the same time form guidelines to planners, population specialists and policy makers of devising strategies for reducing the spread of HIV/AIDS.

This study also aims at providing a base for further research in the area of HIV/AIDS infection among the women in Kenya.

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1.6 SCOPE AND LIMITATION

The study targeted females of ages 15-49. This is because different factors cultural, economic and social make women vulnerable to HIV/AIDS infection.

The locus of the study was based on national data and as such it is possible that some information will not be reflective of individual or grassroots situation.

Since not all districts were studied in the Kenya Demographic and Health Survey, it is possible that some important information from these areas was left out or that some of the

information **available** might not be reflective of these districts.

The **study** looked at the factors that might expose or predispose one to the risk of **HIV/AIDS infection** and not the actual factors.

CHAPTER TWO

LITERATURE REVIEW AND STUDY DESIGN

2.1 INTRODUCTION

Kenya is now ranked fifth globally among the countries with the highest number of HIV cases after India, South Africa, Uganda and Nigeria in that order. The HIV/AIDS pandemic has transcended the boundary of being a problem of the health sector, it now impacts on the economy, social life and cultural aspects of the country (Sessional Paper No.4 1997).

The high rates of HIV/AIDS infection in Kenya has caused great concern to most governments and organization that it was become very necessary to emphasize behaviour change and safer sexual practices.

In 1984, when the first cases of AIDS were identified in Kenya, AIDS was not seen as a serious problem. AIDS was described in the press and by policy makers as a " disease of westerners" especially among the homosexuals and drug users. Hut after the release of the 1993 surveillance data by the government this provoked interest into the AIDS epidemic.

Ocholla-Ayayo (19%) contends that the actual number of AIDS cases within the country remain unknown and there seems to be serious under-reporting of HIV/AIDS cases. I his could be because many of those infected don't seek medical care due to the stigma attached to the disease, lack of proper records by hospitals, many victims die of other causes related to AIDS before they are diagnosed of AIDS and lastly poor health facilities in the rural areas and as such it is not easy to determine HIV/AIDS status of the patients.

2.2 ECONOMIC FACTORS AND HIV/AIDS

According to Nzyuko (1991) one of the striking features of the Kenya announcements was the overwhelming number of cases were at international transportation centred. Coast province which includes Mombasa with its international port and airport and the starting point of Trans-Africa highway. To reach the high AIDS prevalence areas of Central Africa, on the highway and truck routes, it passes through Nairobi, Nyanza province through Kisumu, Western province through Kakamega and Busia. This therefore makes Kenya's major cities the world's getaway spots. According to Ocholla-Ayayo (1996) cross-border migration between Uganda, Tanzania and Kenya have contributed to the spread of AIDS from Urban to rural areas. Truck drivers from Rwanda and Burundi cross Tanzania and Uganda before they reach Mombasa. On this journey which takes several weeks and through several countries, they make many stops, spreading the virus as they go.

The implication of migration both internal and external, for the spread of HIV/AIDS is clearly revealed by the number of males migrating to urban areas for employment and those through their occupation e.g. truck drivers and sales move internally and externally throughout East and Central Africa. The urban centred are also centred for prostitutes who target such men who are far away from their wives. These same men visit their wives once or twice in an year. This creates the route of transmission of HIV/AIDS from urban to rural areas. In fact, there are more casual prostitutes today than at anytime in Kenyan history. In Kenya's major cities Nairobi, Kisumu. and Mombasa street prostitutes wait for motorists to pick them up (Ocholla-Ayayo. 1991).

^{1.1} a research carried by Nzyuko and others (1991), he reported that the target population both males and females (truck-drivers, barmaids and prostitutes) were aware of

IDS and its dangers and many also knew about condoms and had used them. But they did not seem to think AIDS was something requiring a change of behaviour on their part and they certainly did not relate condom use to AIDS prevention.

One overriding reason for the rapid spread of HIV/AIDS in Africa has been the high correlation that exists between poverty and vulnerability to the virus. In many African countries poor communities have less access to primary health care. Already in many societies in Kenya there are endemic levels of diseases that are disabling and kill far larger numbers of people than does AIDS. In addition, there are inadequate provisions for clean water and sewage; control of malaria, bilharzia, syphilis, gonorrhoea, sleeping sickness, meningitis and diarrhoea, and establishing, staffing and supplying health clinics.

The high incidence of sexually transmitted diseases (STDs) within Kenya have been found to be co-factors in the spread of HIV/AIDS and there is the possibility that some others may play similar roles. These myriad diseases may have the added toll of reducing the general resistance of the Kenyan population to HIV/AIDS. STDs make it easier for the virus to be transmitted during sexual intercourse with an infected. According to Oyekanmi (1989).

Poverty creates both the conditions which facilitate the spread of HIV/AIDS and prevent an effective response to the epidemic. This has been worsened by the demands of Structural Adjustment Programs (SAPs) which have led to cutting back on social services including health, education and social welfare. Sanders and Sambo (1991) quoted by Anarfi (1994) argue that "economic recession and SAPs further aggravate the transmission spread and control of HIV/AIDS in Africa in two ways: directly by increasing the population at risk through increased urban migration, poverty, women's powerlessness and prostitution and indirectly through a decrease in health care provision."

The current economic situation has created very many economic difficulties and hardships for many young Kenyans. Unemployment rates have tremendously worsened to a situation of hopelessness among the young school and college graduates in Kenya (Bwana, 1995).

Poverty also affects attitudes of risk-taking. To people struggling to meet their immediate needs for food and shelter, avoiding a disease which might not materialize for years can be low on their list of priorities. The long incubation period makes people think of AIDS as a problem of tomorrow, not today. For many people the only means of escape from the harsh economic situation is alcohol, drugs and sex, with the entry of AIDS into the scene the vicious circle has been intensified. In many slums in urban centres men resort to heavy drinking of the local brew as a way of forgetting the poverty and depression unleashed on them by the harsh economic realities, end up sleeping with women who combine beer brewing and sex as some means of survival. These women pass the disease to their wives leading to sickness and death which is the main cause of their depression. As a result many men are trapped in a vicious circle of poverty, booze and AIDS.

There has been a heavy concentration of young people in the Kenya Urban centres due to the increase in migration triggered by massive poverty and pathetic situation in the rural settings. In the urban areas, virtually all aspects of life depend on money many of these young people in an attempt to survive the hardship end up in sexual activities that put them at risk of HIV/AIDS infection. In Kenya, economic necessity demands that a high proportion of women in the rural areas go to cities to look for work. The men as well as their wives left behind in the countryside, may develop new sexual relationships outside union. The longer the husbands stay away, the more tempting it is to establish sexual relationships, these may

end up as a second union (Ocholla-Ayayo). The migrant husbands also tend to have other sexual partners in the city.

2.3 SOCIAL FACTORS AND HIV/AIDS

The major mode of transmission of HIV in Kenya is through heterosexual relations. The epidemic primarily affects young, working age, sexually active adult people between the ages of 15 to 40. Both women and men become infected in similar numbers but women tend to become infected at a younger age than men. This reflects the biological and social vulnerability of teenage women. The peak ages for AIDS are 20-29 for females and 30 to 39 for males. Several explanations can be offered to this type of situation but the most overriding factors in this set-up are Social, economic and cultural. According to Magadi (1996) the mean age for first sexual intercourse is low in Kenya at 13 and 14 for girls and boys respectively and by age 19 more than 80% of teenagers have initiated sex. In a study carried out on female adolescents' sexuality in Kenya Secondary Schools reveals that 34% of the teenagers in the study were sexually experienced (Magadi 1996). Adolescents engage in free, casual and unprotected sex. This is evident by the high cases of teenage STDs, pregnancy and now HIV/AIDS in Kenya.

The higher female to male seropositive ratios in Kenya in ages 15-49 could mainly be because of the differential rates of transmission or susceptibility to infection. In many African societies, there is greater external control over women's sexuality than over men's. While women are obligated to remain faithful to their sexual partners both within and outside marriage, men are permitted to have more than one wife or semi-permanent sexual liaison.

This is insofar as the fundamental asymmetry in the control of sexuality makes it difficult for

women to ^{injection} their husbands about their sexual activities or to exert any control over these activities ^{the transmission of STDs (including AIDS) from husband to wives may be}

t (Anarfi 1994)- It's therefore likely that the majority of seropositive women have been infected by their husbands or boyfriends. For the adolescents, girls are more likely to have relations with high risk, and usually with older members of the opposite sex. According to Tuju (1996) ^{the main reason} why so many girls go to bed with an older and often married men is the financial rewards they get from such men. According to Acquah (1958), school girls in West Africa have sexual relations to pay their school fees and female employees find in sexual relationships another source of income. Kenya is not immune to this practice e.g. Ocholla-Ayayo and Muganzi (1987), found that non-elite Kenyan women have sexual relations outside their marriage to meet their specific needs. In the last few years a certain trend has developed among young employed women, who due to the economic hardships have also turned to having sexual relations as a means of income. Many young women are giving sexual favours in return for furnished apartments in a posh suburban area, cars and expensive clothing.

According to Brown and Xenos (1994), single youth make a high proportion of the tide of migrants to the cities for work and education. This increase in single youth has been accompanied by decrease in the average age at first intercourse and the rising levels of pre-marital sex. These factors put the unmarried population at risk of HIV/AIDS. Changes in life has shown several sexually mature boys and girls remain unmarried for a long time as they attend Colleges. There are millions of other young adults looking for jobs and are not economically in a position to have commitments like marriage. The temptation therefore to engage in casual sex before marriage is high. An environment like the university hall of

residence with young men and women sharing various facilities provides the opportunities. The issue of non-commitment creates a sense of casual and multiple sex partnering. The social environment in urban areas makes it conducive to casual sexual relationship, resulting in the high rates of HIV/AIDS infection in urban areas. Mass media and commercial advertisement of body products gives the impression that they are supposed to make you look sexy and can secure an instant date. For example message that a toothpaste makes you get a date as opposed to the message that toothpaste is good for dental health.

Latest dance moves - "kwasa kwasa" "mutwash" imitate sexual movements or are sexually explicit. Dance moves have changed from being movements of the feet to moves confined to the waist and hips. This "pop culture" enhances the kind of social environment that exposes one to casual sexual activity and the HIV/AIDS infection (Tuju 1996).

2.4 CULTURAL FACTORS AND HIV/AIDS

Traditional customs including polygamy, long periods of postpartum sexual abstinence and a system of accepting relationships between females and their husbands relative* is described in various cultures across Africa. In many traditional societies, a man asserted his manhood by having many sexual partners. According to Ekanem (1996) there are other traditional practices which exposed one to the risk of HIV/AIDS. Widow inheritance within African cultures was one of those social security nets put in place so that no child became destitute just because the father had died. A widow inheritor was traditionally a close relative whose main duty was to shoulder responsibility of the deceased; wife sharing among brothers or agemates; sexual hospitality whereby a husband offers a visitor or friend sexual services of his wife or daughter; ritualistic cleansing whereby a spouse of the dead has sex with a

family member in order to be cleansed or freed of the evil spirit of the deceased and the breaking of girls' virginity as a pre-requisite of breast development. These customs are prone to abuse and expose one to the risk of HIV/AIDS infection.

Men had power over their wives' reproductive health and economic well-being, like property ownership etc. In many African communities people have come to accept the status quo and often respond to the risky sexual behaviour of men rather apologetically.

In some parts of Northern Nigeria it is reported that within the compound the women were common to all men except their own sons. (Konde-Lule, 1989). These kinds of sexual practices have a positive effect on the spread of HIV/AIDS infection.

According to Konde-Lule (1991) the need for sexual abstinence during most of pregnancy and the post-partum period meant that women were unavailable for marital sex for a certain period of time. In these circumstances society recognized the right of men to seek other sexual outlets. This was promoted by the insecure position of women with older husbands in polygynous marriages. Society accepted such networking if done discreetly and this conspiracy of silence was wide-spread in many African cultures.

Infertility in many cultures has led to the vulnerability of barren women to abuse by healers and sexual adventurers. This places the woman at greater risk of exposure to HIV/AIDS infection. In many cases the barren woman was returned to her parents. In cases where the infertile women failed to remarry or to secure jobs end up in prostitution as a means of survival thereby getting trapped in dangerous sexual networks. With the advent of HIV/AIDS the sexual networks are ready vehicles for the HIV/AIDS virus.

According to Ocholla-Ayayo (1991) in cases where fertility of the man was in question, a sexual network was secretly arranged by elders or relatives. These kind of sexual networks put **women and** her husband at risk of HIV/AIDS infection.

A research carried out on serial marriages and HIV/AIDS in Masaka District in Uganda by Adekun and Nalwadda (1996) reveals that serial marriage or multiple marriage is a category **of multi** -partnership with links with the HIV/AIDS epidemic.

Non circumcision of males has increasingly become associated with the spread HIV/AIDS. In the mid 1980s researchers in Nairobi became aware that the uncircumcised men from Western Kenya mainly the Luo were more likely to be seropositive than the circumcised men from Central and Eastern Kenya (Plumber et al quoted by Anarfi, 1994).

Caldwell (1993) also quoted by Anarfi (1994) concluded that "Heterosexual AIDS epidemic can be sustained most easily where a significant proportion of men are uncircumcised." Ocholla-Ayayo (1991) clai

ms that with modernization, there has been an increase in the cases of divorce and separation. There have also been an increase in sexual freedom due to the breakdown of traditional authority. Rules of conduct that used to surround sex and reproduction have been eroded. Control over the young people has ~~decrease~~ resulting in high rates of premarital pregnancy, abortion and high rates of HIV positive rates among secondary students in some parts of Kenya.

Polygamy in Africa today is a corruption of what otherwise was a respectable custom. Several marriages of convenience are forged, whereby a man in an urban area stays with a woman lie calls his wife and he has a woman almost in all towns. These are sexual relationships of convenience within the context of African culture (Tuju 1996).

The churches are a grassroots integral part of community life. They promote beliefs that guide behaviour with an explicit or implicit system of accountability. The churches believe and preach that sexual union should be within a marriage and as such have advocated for fidelity for those married and abstinence for the unmarried. This is a measure that would reduce the spread of HIV/AIDS. But despite this, there is multiple sex partnering or marital infidelity and many of the youths don't wait for marriage to have sex. Some Religions have expressed strong statements against promotion of condoms among the youths while such opposition may reduce sexual relation before marriage, there is concern by those outside the Religion that such opposition to condoms may condemn the youths who are sexually active to suffer unwanted pregnancies, STDs and especially HIV/AIDS. According to the Ministry of Education about 10,000 girls drop out of school every year due to pregnancies. How many of them are exposed to the risk of HIV/AIDS due to casual and unprotected sex. Forsythe (1996) claims that one in twenty girls in Africa is HIV positive in the 10-14 age group and that two thirds of HIV/AIDS infections occur in the youth age 24 and younger.

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2.5 CONDOMS, MULTIPLE SEX PARTNERS AND HIV/AIDS.

When HIV/AIDS epidemic struck condom use emerged as one of the protective measures of combating it. Unfortunately condom use has acquired a negative reputation especially by the religious bodies against its promotion. Condom use may not be 100% effective but it is a way of reducing the spread of HIV/AIDS. Having one faithful sex partner reduces the risk of HIV/AIDS. Sexual activity without protective measures exposes one to HIV/AIDS infection.

Whenever people engage in sexual activity without any protection (condoms) they are at a high probability of getting HIV/AIDS. Many men believe that they can contract HIV/AIDS if they have sex with commercial sex workers and then end up having sex with many other partners because they don't pass by the label prostitute. HIV/AIDS is linked with many sex partners and such people expose themselves to high chances of HIV/AIDS. One's chances of HIV/AIDS increase geometrically each time one has sex with a different partner (Tuju 1996).

2.6 WOMEN AND HIV/AIDS

Women are more vulnerable to HIV/AIDS infection first because of their biological set up as they are easily bruised during sexual intercourse. Secondly because of their low social status and economic dependence they are unable to challenge their husbands sexual activity let alone insist on condom use even if they know they are at risk of HIV/AIDS infection.

Thirdly, women are not in position to make family decisions. She has no rights even over her own sexuality or reproductive health. She is not expected to say no to any sexual advances or even show sexual aggressiveness. They are expected to give in at any time even if the man is exposing her to the danger of contracting HIV/AIDS unless she is economically stable or educated which might increase her opportunities.

VARIABLES USED IN THE STUDY

Independent variables: This is a variable upon which any prediction is based.

The independent variables in this study are grouped into :

«jtk,jal • education, age and marital status.

Economic : occupation.

Cultural : number of unions and religion.

Dependent variable: This is a variable which is to predicted in any given study and the dependent variable in this study is the possible risk of HIV/AIDS infection.

2.8 DEFINITION OF KEY CONCEPTS

EDUCATION Refers to one's final educational level reached- none, primary, secondary or post-secondary.

OCCUPATION : What one does to earn a living.

MARITAL STATUS : Married, single .divorced or separated.

NUMBER OF UNIONS : Married once or married more than once.

FREQUENCY OF INTERCOURSE : Number of times the respondents engage in activity.

HIV/AIDS INFECTION : Infection could either be HIV-negative or HIV-positive
r i.e. infected with the virus that causes AIDS.

AIDS : Acquired Immuno-Deficiency Syndrome.

AGE The complete number of years one has lived

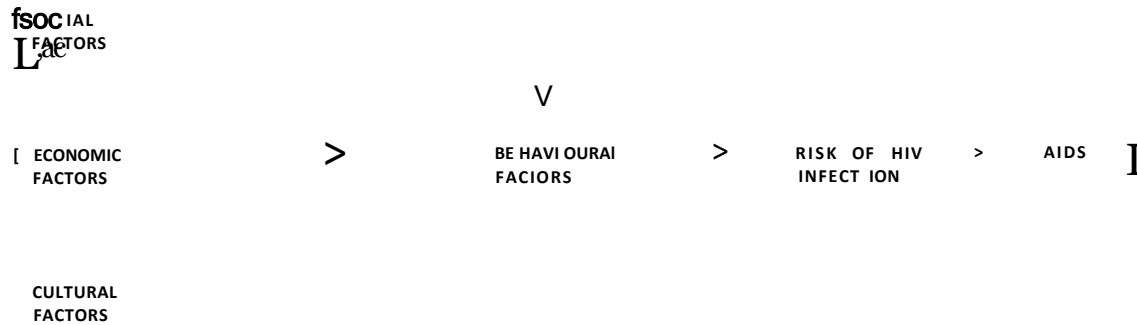
RELIGION Religious affiliation of the respondents- Catholics, Protestants or Muslims

CONDOM USE Protective measure against HIV/AIDS infection

2.9 CONCEPTUAL STATEMENT

Social, cultural and economic situations of the individuals are likely to influence their sexual behaviour and expose them to the risk of HIV/AIDS infection.

2.9.1 CONCEPTUAL MODEL



Adopted from Prof. A. B. C model of HIV/AIDS (1995)

2.10 OPERATIONAL STATEMENT

To operationalise the conceptual hypotheses they have been broken down into measurable variables as shown below:

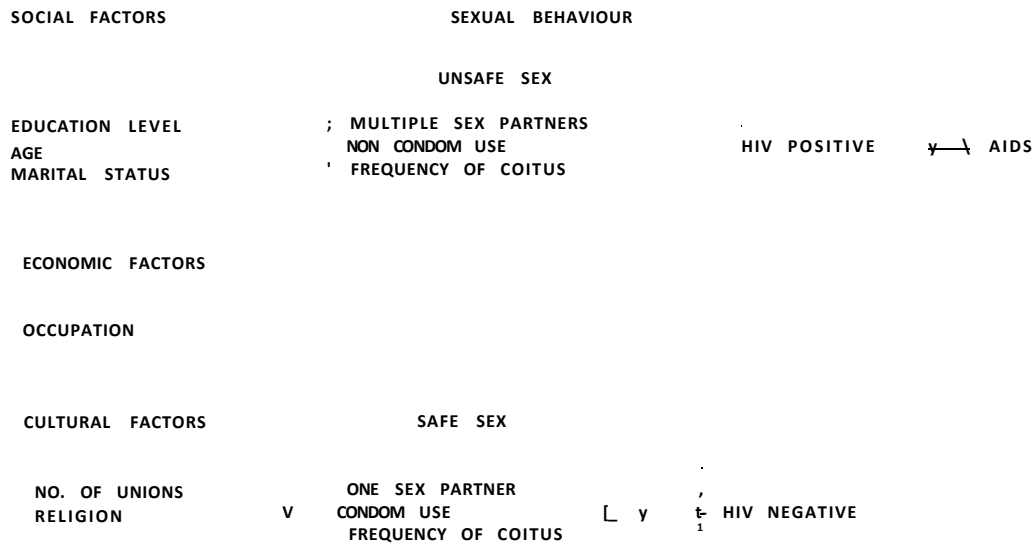
Social factors include, education, marital status, age.

Cultural factors include number of unions, religion.

Economic factors include occupation

Behavioural factors include condom use, number of sex partners, frequency of intercourse.

2.10.1 OPERATIONAL MODEL



Adopted from Prof A.B.C. model of HIV/AIDS (1995)

2.10.2 OPERATIONAL HYPOTHESES

1. Low age and high sexual activity puts one at risk of HIV/AIDS infection.
2. Single, separated and divorced people are at a high risk of HIV/AIDS infection.
3. Higher the educational attainment levels lowers the risk of HIV/AIDS infection.
4. Ones' type of occupation is likely to influence ones' chances of HIV/AIDS infection.

Religion puts one at a lower risk of HIV/AIDS infection.

The number of unions is likely to increase ones' risk of HIV/AIDS infection.

The use of condoms is likely to lower ones' chances of HIV/AIDS infection.

A high number of sex partners is likely to put one at risk of HIV/AIDS infection.

High coital frequency without condom use is likely to increase ones' chances of HIV/AIDS infection.

CHAPTER THREE

DATA AND METHODOLOGY

3.1 SOURCES OF DATA

The study used secondary data from the Kenya Demographic and Health Survey (KDHS), 1993 which was conducted by the National Council of Population Development (NCPD) and the Central Bureau of Statistics (CBS). The KDHS was a countrywide survey where data was collected from 7,950 households. 7,540 women of ages 15-49 and 2,336 men aged 20-54 were interviewed.

The survey was to provide information on the levels and trends of fertility; infant and child mortality; knowledge and use of family planning; maternal and child health; and the knowledge of HIV/AIDS. One of the objectives of the KDHS. 1993 was to examine background factors which influence changes in fertility and the use of contraceptives.

The information from the KDHS in this study will be used to examine how the background factors (social, economic and cultural) influence and expose one to the risk of HIV/AIDS infection.

3.2 QUALITY OF DATA

The KDHS was a sample survey and sample surveys are affected by non-sampling errors and sampling bias. These kinds of errors are usually hard to avoid and as such, they reduce the quality of the data.

Secondly, it is impossible to sample the entire population. The coverage of the KDHS did not extend to certain sub-groups, and at the same time, the survey dealt with a small sample. As such, some information could not be applicable to certain groups. The survey excluded the North-Eastern province and certain districts in the Rift Valley and Eastern provinces, creating a deficiency in the data.

There are several sensitive questions that got doubtful responses, for example issues on number of sex partners and on coital frequency, it is therefore important to keep in mind that data on the number of sex partners and coital frequency should be treated with caution.

3.3 METHODS OF DATA ANALYSIS

Descriptive and quantitative data analysis methods were used in this study for presentation of the information from the KDHS, 1993.

3.3.1 Frequency Distributions

Frequencies were used to summarize percentages of the background characteristics of respondents. These characteristics include educational level, occupation, marital status, number of unions, religion, age, condom use, frequency of intercourse, and number of sexual partners.

3.3.2 Cross-Tabulation

Cross-tabulation was used to determine the relationship among the variables. It was based on column and row percentages which gave an indication whether there is a relationship between the variables. The dependent variable which was the risk of HIV/AIDS infection (using sexual behaviour-number of sexual partners, condom use and coital frequency-associated with the HIV/AIDS) was cross-tabulated with the independent variables of marital status, age, educational level, occupation, number of unions and religion. This was to show which variable had a relationship with the dependent variable.

Chi-square was used to investigate the hypotheses. It was used to find out at what level of significance was there an association and to show whether there was a great statistically significant-relationship between the independent and dependent variables.

CHAPTER FOUR

CORRELATES OF HIV/AIDS PREVALENCE

Introduction

In this section we shall analyse the data by selected social, economic and cultural and in this case these include education, age, marital status, occupation number of unions and religion.

The study selected social, economic and cultural factors and their relationship with HI.V/AIDS infection. The analysis of this relationships will be done through the use of cross-tabulations to determine if a relationship exists and chi-square to determine the strength of the relationship.

4.1 Background Characteristics of Respondent

Table 4.0 Percentage distribution of the respondent by Background Characteristics

Age	Percentage	Frequencies
15 - 19	12.6	802
20 - 24	22.6	1438
25 - 29	18.7	1485
30 - 34	17.4	1102
35 - 39	11.6	738
40 - 44	10.2	647
45 - 49	6.9	437
Educational attainment		
No Education	19.8	1260
Primary Education	57.3	3641
Secondary Education	22.3	1419

Higher Education	0.5	29
Marital Status		
Single	18.0	1145
Married	67.9	4314
Living together	4.0	254
Widowed	3.7	233
Divorced	3.1	198
Separated	3.2	205
Occupation		
Prof/Tech	7.3	253
Clerical	3.4	118
Sales	29.2	1019
Agric-self employed	24.4	850
Agric-employee	21.1	737
Household/Domestic	3.9	135
Services	2.5	87
Skilled Manual	5.2	182
Unskilled manual	2.9	101
Don't know ^	0.2	6
Religion		
Catholic	31.0	1964
Protestant/other	60.5	3837
Muslim	4.5	286
No religion	3.0	192
Other	0.9	59
Number of Unions		
Once	92.6	4789
More than once	7.4	380

Condom Use		
No	94.1	4867
Yes	5.9	306
Number of Sex partners		
None	17.6	1120
1	77.9	4949
2	2.3	201
>2	1.2	79
Frequency of Intercourse		
0	41.8	2652
1 - 8 times	52.8	3347
9 - 16 times	4.0	254
> 16 times	1.4	90

4.2 Social Factors and HIV/AIDS

4.2.1 Education and HIV/AIDS

Situtrai and Brown (1994), based on a research carried out in Thailand, found out that in order for people to be aware and to take protective measures against HIV/AIDS they must be aware of what AIDS is. They also found out that knowledge of AIDS is high but misconceptions and misinformation were also high especially among those with low levels of education.

It is the expectation of this study that those with high levels of education stand less chances of contracting the HIV/AIDS virus. This is because the more educated are more informed and exhibit low levels of misconceptions or misinformation on AIDs. They^{vi}are, therefore, expected to take the prescribed measures against HIV/AIDS e.g. condom use, one sex partner and less coital frequency.

4.2.1 (a) Education and Condom Use

From table 4.1 below, it is clear that non-use of condoms is relatively high in all categories of educational levels. 97.8% of those with no education don't use condoms and this is the highest percentage of non-use of condoms. The level of non-use decreases with the increase in educational levels. For example, the least non-use of condoms is exhibited by those of high levels of education (78.6%). The highest percentage of condom use is, therefore, among those with higher levels of education (21.4%).

Condom use decreases with the decrease in the educational levels where only 2.2% of those with no education use condoms. The chi-square value obtained indicates that the observed association between education and condom use is statistically significant at all confidence levels.

Table 4.1 Percentage Distribution of Respondents by Level of Education and Condom Use

Level of Education	Condom Use		Totals	
	No	Yes	%	Numbers
No education	97.8	2.2	19.2	992
Primary Education	95.0	5.0	58.1	3003
Secondary Education	88.9	11.1	22.2	1150
Higher	78.6	21.4	0.5	28
Total %	94.1	5.9	100	-
N	4867	306	.	5173

Chi-square value 97.24647 Df. 3 Si^n. 0.0000

(h) Education and Number of Sex Partners

Table 4.2 Percentage Distribution of Respondents Educational Attainment levels by Number of Sex Partners

Level of Education	Number of sexual partners				Total	
	0	1	2	3	%	Numbers
No Education	20.3	76.3	2.4	1.0	19.8	1260
Primary Education	16.6	78.3	3.7	1.3	57.3	3641
Secondary	18.2	78.2	2.5	1.2	22.3	1419
Higher	3.4	93.1	3.4	0.0	0.5	291
Total %	17.6	77.8	2.2	1.2		–
N	1120	4949	201	79	–	6349

Chi square value 21.38906 Df. 6 Si.i>. 0.01103

From the data given, out of 1120 respondents who had no sex partners and those with no education formed the highest percentage of 20.3% in this category. Majority of the respondents had one sex partner and it is those with higher education that formed the largest proportion (93.1 %).

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Respondents with primary education formed the highest percentage in the category of 2 and 3 or more sex partners (3.7% and 1.3% respectively).

The chi-square test confirm that the observed association between the number of sex partners and education is statistically significant at 95% confidence level.

(c) Education and Coital Frequency

From the data given in table 4.3 it is noted that majority of the respondents engage in

sexual intercourse between 1-8 times a month with those in the primary category recording the highest (54.6%) followed by those with higher educational levels (53.6%).

There is no much variation in percentages of those who don't engage in sexual intercourse among those with no education, primary and secondary education. However, for those with reported coital frequency of 9 to 16 times a month, those with higher educational level form the highest proportion (21.4%). This could be attributed to better reporting on coital frequency among the highly educated when compared with the poorly educated.

The chi-square test results indicate that there is a strong relationship between education and coital frequency.

Table 4.3 Percentage Distributions of Respondent's Educational Level by Coital Frequency

Level of Education	Coital Frequency				Total	
	0	1-8	9-10		%	Numbers
No education	44.1	51.2	2.9	1.6	19.9	1260
Primary Education	40.2	54.6	3.8	1.4	57.3	3631
Secondary	51.1	49.6	5.0	1.3	22.1	1418
Higher	2.5	53.6	21.4	0.0	0.4	28
Total %	41.8	52.8	4.0	1.4	100	-
N	2652	3347	252	88	.	6343

Chi .square value 50.63173 Df. 12 Si}>. 0.0000

4.3.2 Age and HIV/AIDS

Young people constitute 20 to 25% of Kenya's population. According to Magadi (1996) the mean age for first sexual intercourse is very low at 13 for girls and 14 for boys and

it was also revealed that 34% of female adolescents interviewed in a survey among secondary school girls were sexually active. Young people engage in sex at very tender ages, and usually it is in casual and unprotected sex. This can be justified by the high cases of teenage pregnancy, sexually transmitted diseases and now on the increasing cases of adolescents testing HIV/AIDS positive. Ocholla-Ayayo (1991) reports that the prevalence of HIV among secondary school students in parts of western Kenya have a seropositive prevalence rate of between 14% and 16%. It is, therefore, the expectation of this study that those in lower ages of 15-29 are at a higher risk of HIV/AIDS infection than those of older ages. It is also expected that condom use in these ages will be higher as they are a sexually active group as compared to those of older ages.

(a) A^c and Condom Use

Table 4.4 Percentage Distributions of Respondents 5-Year Age Groups by Condom Use

Age-Group	Condom Use		Total	
	No	Yes	%	Numbers
15-19	91.1	8.9	11.5	594
20-24	91.2	8.8	22.3	1155
25-29	94.1	5.9	19.6	1013
30-34	94.9	5.1	18.7	967
35-39	96.7	3.3	11.6	599
40-44	97.5	2.5	10.1	525
45-49	97.2	2.8	6.2	320
Total	94.1 4867	5.9 306	100	— 5173

Chi-square value 52.3536 Df. 6 $S_i > n. 0.0000$

The data summarized from the table above shows that condom use is relatively low irrespective of the ages. Condom use falls less than 10% in all age categories. The highest percentage of condom use is among age groups 15-19 and 20-24 comprising 8.9% and 8.8% respectively. The least condom use is among those in age groups 40-44 and 46-49 (2.5% and 2.8% respectively).

The chi-square test show that the low condom use in all age groups is statistically significant at all confidence levels.

(h) Age and Number of Sex Partners

Table 4.5 Percentage Distributions of Respondents 5-Year Age (Jroups by Number of Sex Partners

Age-Group	Number of Sex partners				Total	
	0	1	2	3	%	Numbers
15-19	25.1	64.1	8.5	2.4	12.6	802
20-24	18.8	75.1	4.0	1.0	22.6	1438
25-29	13.5	82.9	2.4	1.2	18.7	1185
30-34	11.5	85.4	1.7	1.4	17.4	1102
35-39	17.3	79.5	1.8	1.4	11.6	738
40-44	18.2	80.4	1.1	0.3	10.2	647
45-49	26.3	71.2	1.6	0.9	6.9	437
Total	17.6	77.9	3.2	1.2	100	-
	1120	4949	201	79	.	6349

Chi square value 229.85614 Of. 18 Sig>. 0.0000

The information from the tables suggests that the majority of the respondents have one sex partner ranging from 64.1% among those in age group 15-19 to 85.1% in age group 30-34. It has been noted that the highest proportion of respondents with no sex partners is

among those in ages 15-19 (25.1%). The same age group has the highest percentage of respondents with 2 and 3 more sex partners (8.5% and 2.4% respectively).

The data suggests that low age is characterized by a high number of sex partners, that is, that the percentage of sex partners decreases with the increase in age.

The chi-square test confirms that there is an association between age and the number of sex partners.

(c) Age and Coital Frequency

The data in table 4.6 shows that majority (56.8%) of the respondents in age group 15-19 don't engage in sexual intercourse, and only 39.7% have intercourse 1-8 times a month. The same can also be said of the age group 45-49 where 48.7% don't engage in intercourse while 46.7% have it 1-8 times a month. In the category of those having intercourse 1-8 times a month, the majority of the respondents were in the age group 30-34 (60.3%) followed by those in age group 25-29 (59.2). The highest percentage of respondents who engage in sex 9-16 times a month is among ages 25-29 (5.2%). Only a small proportion of respondents engage in sex over 16 times a month.

Table 4.6 Percentages Distributions of Respondents by Age and Coital Frequency

Age-Group	Coital Frequency				Total	
	00	1-8	9-16	> 16	%	Number
15-19	56.8	39.7	2.6	0.9	12.7	803
20-24	44.2	50.4	3.6	1.8	22.6	1436
25-29	34.7	59.2	5.2	0.9	18.7	1 183
30-34	33.1	60.3	4.7	1.9	17.3	1 100
35-39	41.9	51.9	4.9	1.2	11.6	738
40-44	41.2	54.8	2.9	1.1	10.2	648
45-49	48.7	46.7	2.8	1.6	6.9	435
Total	41.8	52.8	4.0	1.4	100	–
	2652	3347	254	88	.	6343

Chi square value 16V.45347 Df. 24 Si,t>. O.(XXX)

The chi-square test indicates that there is an association between age and coital frequency and it is statistically significant at all confidence levels.

4.3.3 Marital Status and HIV/AIDS

It has been established from the literature review that single people are at a higher risk of HIV/AIDS infection. In a study carried out by Brown and Xenos (1994) it was revealed that there is an increase in the levels of pre-marital sex and a decrease in the average age at first sexual intercourse. These factors taken together increase the risk of HIV/AIDS infections among the single population. According to Konde-I. ulc (IW), the divorced, separated and single women provided sex for men during post partum and period of pregnancy.

It is, therefore, the expectation of this-study that those who are single, divorced or separated are at a higher risk of HIV/AIDS infection as they are exposed to multiple sex partners.

(a) Marital Status and Condom Use

Table 4.7 Percentage Distributions of Marital Status of Respondents by Condom Use

Marital Status	Condom Use		Totals	
	No	Yes	%	Numbers
Single	85.6	14.4	13.5	699
Married	95.8	4.2	7.6	3933
Living together	96.6	3.4	4.6	236
Widowed	94.7	5.3	1.5	76
Divorced	89.0	11.0	1.9	100
Separated	86.0	14.0	2.5	129
Total	94.1 4867	5.9 306	100 .	– 5173

Chi-square value 135.38396 Df. 5 Sig. 0.0000

From the data summarized in table 4.7, the highest percentage of condom use is found among those single (14.4%) and the separated (14%). The highest proportion of non-use of condoms is among those living together and the married (96.6% and 95.8% respectively).

It is clear from the information in the table that condom use is relatively low irrespective of one's marital status. The chi-square value observed indicates that the observed association between marital status and condom use is statistically significant at all confidence levels.

(h) Marital Status and Number of Sex Partners

Table 4.8 Percentage Distributions of Respondents Marital Status by Number of Sex Partners

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Marital Status	Number of Sex partners				Total	
	0	1	2	= > 3	%	Numbers
Single	37.8	49.7	9.5	3.0	18.0	1145
Married	8.1	90.2	1.1	0.6	67.9	4314
Living together	6.3	89.822	2.8	1.2	4.0	254
Widowed	67.0	7.5	3.4	2.1	3.7	233
Divorced	48.0	42.9	7.6	1.5	3.1	198
Separated	35.1	54.1	6.3	4.4	3.2	205
Total	17.6	71.9	3.2	1.2	100	-
	1 120	4949	201	79		6349

Chi-squarc value 1575.95206 Of. 15 Si'j>. 0.00000

Table 4.8 above shows that the highest proportion of respondents with one sex partner is reported by the married (90.2%) while the least is among the widowed (27.5%). This same group (widowed) of respondents contribute to the highest percentage of respondents with no sex partner (67%).

The table also shows that a high percentage of respondents with two sex partners is reported by the single (9.5%), the divorced (7.6%) and the separated (6.3%).

Those separated reported the highest percentage with 3 or more sex partners (4.4%). Separation seems to create a situation of multiple sex partners.

The chi-square test conducted indicates that there is a strong relationship between marital status and number of sex partners.

(c) Marital Status and Coital Frequency

Table 4.9 Percentage Distribution of Respondents' Marital Status by Coital Frequency

Marital Status	Coital Frequency				Total	
	00	1-8	9-16	= > 16	%	Numbers
Single	72.8	26.5	0.7	0.1	18.1	1045
Married	29.1	63.4	5.5	1.9	67.9	4310
Living together	25.3	71.0	1.2	2.0	4.0	252
Widowed	86.3	13.3	0.4	0.0	3.7	233
Divorced	75.3	22.7	1.5	0.5	3.1	198
Separated	72.2	27.3	0.5	0.0	3.2	205
Total	41.8 2652	52.8 3347	4.0 252	1.4 88	100 .	- 6343

Chi square value 1145.94312 Df20 Sig>. 0.00000

The data summarized from the table indicates that the highest percentage of respondents who don't have sexual intercourse is among the widowed (*86.3%). However, majority of the respondents have sexual intercourse 1-8 times a month and the highest proportion is reported by those living together (71%) followed by the married (63.4%).

The married form th£ highest percentage among those with sexual intercourse 9-16 times a month (5.5%) while those living together form the highest proportion of respondents who have intercourse over 16 times a month (2%).

The observed pattern of association between marital status and coital frequency was found to be statistically significant using chi-square test.

4.4 Economic Factors and HIV/AIDS

4.4.1 Occupation and HIV/AIDS

From the literature review, it is clear that there are certain types of jobs which expose one to the risk of HIV/AIDS infection. According to Tuju (1996), farmers who get yearly bonuses from their products like sugar, tea or wheat tend to engage in high risk sexual activity with prostitutes in urban centers (where they get their pay) exposing them to HIV/AIDS infection.

The same was noted by Nzyuko (1991) that long distance truck drivers are believed to be at high risk of contracting or transmitting AIDS.

It is, therefore, expected that certain types of jobs pre-dispose one to the risk of HIV/AIDS infection. It is also the expectation of this study that high occupational status is associated with high condom use, few sexual partners and less coital frequency.

(i) Occupation and Condom Use

From the data in table 4.10, it is clear that condom use is relatively low. The percentages of non-use of condoms range from 86.2% among those in household and domestic to 97.1 % among those in services, the other occupations fall in between.

The chi-square test shows that there is a statistically significant relationship between occupation and condom use.

Table 4.10 Percentage Distribution of Respondents' Occupation by Condom Use

Occupation	Condom Use		Total	
	No	Yes	%	Numbers
Prof./technical	94.1	5.6	7.5	215
Clerical	87.7	12.3	3.7	106
Sales	94.6	5.4	29.8	853
Agric-Self employed	95.7	4.3	24.4	696
Agric-employee	94.6	5.4	20.9	596
House-hold domestic services	86.2	13.2	3.0	87
Skilled manual	97.1	2.9	2.4	70
Unskilled Manual	89.2	10.8	5.2	148
Don't know	92.8	7.2	2.9	83
	50.0	50.0	0.1	4
Total	94.0 2687	6.0 171	100	- 2858

Chi-S/narc value 42.67368 Df. 9 Sii>n. 0.00000

b) Occupation and number of sex partners

Table 4.11 Percentage distribution of respondents occupation by number of sex partners.

Occupation	Number of Sex Partners				Total	
	A)	1	0	= >3	%	Numbers
Prof./technical	14.2	85.4	0.4	0.0	7.3	253
Clerical	10.2	83.9	4.2	1.7	3.4	118
Sales	15.7	79.0	3.7	1.6	29.2	1019
Agric-Self employed	17.41	80.5	1.6	0.6	24.4	850
Agric-employee	8.2	77.9	3.0	0.9	21.1	737
House-hold domestic services	35.6	59.1	7.4	3.0	3.9	135
Skilled manual	17.2	66.7	9.2	6.9	2.5	87
Unskilled Manual	16.5	75.8	6.6	1.1	5.2	182
Don't know	16.8	76.2	4.0	3.0	2.9	101
	33.3	50.0	16.7	0.0	0.2	6
Total	94.0 2687	6.0 171	3.2 201	1.2 79	100	3488

Chi-square value 124.74562 Df. 27 Si^A. 0.00000

The highest percentage of respondents who had one sex partner is reported among the professional group - 85.4%. The same group reports less 1 % having 2 or more sex partners.

Those in the household category form the least percentage of respondents with one sex partner (59.1%) and at the same time form the highest proportion with no sex partner (35.6%).

The group with the highest percentage of respondents with 3 or more sex partners is separated among those in services. The chi-square test results reflect that there is a statistically significant association between occupation and the number of sex partners,

(c) Occupation and Coital Frequency

Table 4.12 reflects that majority of the respondents who don't engage in intercourse is among those in services (51.7%) followed by skilled manual and agricultural employees (42.9% and 42.2%) respectively).

Majority of respondents have sexual intercourse 1-8 times and the professional and those unskilled manual constitute the highest proportions (57.9% and 57.1% respectively).

The unskilled manual form the majority with having sexual intercourse 9-16 times a month (3%).

Those in clerical have the highest percentage of respondents with intercourse 9-16 times a month (6.8%).

The chi-square test indicates that there is a statistically significant association between occupation and coital frequency.

Table 4.12 Percentage Distribution of Respondents' Occupation by Coital Frequency

Occupation	Coital Frequency				Total	
	00 times	1-8 times	9-16 times	= > 16 times	%	Number
Prof./technical	34.1	57.9	6.0	2.0	7.2	252
Clerical	36.1	56.8	6.8	0.0	3.4	118
Sales	38.0	56.8	3.8	1.4	29.3	1020
Agric-Self employed	39.0	55.8	3.7	1.3	24.3	847
Agric-employee	42.2	51.7	4.5	1.6	21.2	737
House-hold domestic services	64.2	35.1	0.0	0.7	3.8	134
Skilled manual	51.7	48.0	4.1	1.1	2.5	87
Unskilled Manual	42.9	52.2	2.7	2.2	5.2	182
Don't know	37.8	57.4	2.0	3.0	2.9	101
	33.3	33.3	33.3	0.0	0.2	8
Total	40.4	54.2	3.9	1.5	100	-
	1407	1888	138	51		3484

Chi square value 51.0754/ Df. 36 Sig. 0.00003

4.5 Cultural Factors and HIV/AIDS

4.5.1 Number of Unions and HIV/AIDS

It has been established from the literature review that multiple marriages expose one *r* to the risk of HIV/AIDS. According to Ocholla-Ayayo (1991) modern day divorce and separation have created sexual freedom and remarriages pre-disposing one to HIV/AIDS infections as this promotes multiple sex partners. And in a research carried out by Adeokun and Nalwadda (1992) reveals that serial marriages or multiple marriages are a category of multi-partnership with links with the HIV/AIDS epidemic.

It is, therefore, the expectation of this study that those married more than once are at a higher risk of HIV/AIDS infection than those married once

(a) Number of Unions and Condom Use

Table 4.13 Percentage Distributions of Respondents' Number of Unions by Condom Use

Number of Unions	Condom Use		Total	
	No	Yes	%	Number
Once	95.1	4.6	92.7	4114
More than once	95.7	4.2	7.3	326
Total	95.4 4237	4.6 203	100	4440

Chi-square value 0.06214 Df. 1 Sig>n.0.80315

The data in the table reflects that condom use is relatively low in both one or more than one unions with 95.4% and 59.7% not using.

However, the chi-square test conducted indicates that the relationship between the number of unions and condom use is not statistically significant,

(b) Number of Unions and Number of Sex Partners

Table 4.14 shows that an almost equal percentage of respondents who had once and those who had married more than once regarding not having sex partners.

Highest proportion of respondents with one sex partner is recorded among those who had married once (84.4%). Those who were reported to have married more than once have the highest percentage in having 2 and 3 or more sex partners (3.7% and 2.4% respectively).

The chi-square test conducted indicates a very strong relationship between the number of unions and the number of sex partners.

Table 4.14 Percentage Distributions of Respondents' Number of Unions by Number of Sex Partners

Number of Unions	Number of Sex partners				Total	
	0	1	2	= >3	%	Numbers
Once	13.3	84.4	1.6	0.8	92.6	4789
More than once	13.4	80.5	3.7	2.4	7.4	380
Total	13.3 686	84.1 4347	1.8 91	0.9 45	100	– 5169

Chi-square value 19.82057 Df. 3 Si,j». 0.00019

(c) Number of Unions and Coital Frequency

Table 4.15 Percentage Distributions of Respondents' Number of Unions by Coital Frequency

Number of Unions	Coital frequency				Total	
	0	1-8	9-16	= >16	%	Numbers
Once	35.4	58.4	4.7	1.5	92.7	4785 «
More than once	32.0	59.3	5.6	3.2	7.3	378
Total	35.1 * 1813	58.5 3018	4.7 244	1.7 86	100	5163

Chi square value 19.82057 Ijf. 3 Si,a. 0.00019

From table 4.15, the data shows that the highest proportion of respondents who don't engage in sexual intercourse are those who had only one marriage (35.1 %).

Out of 3,018 respondents who have sexual intercourse 1-8 times a month, majority of the respondents were those in more than once category (59.3%). The table also shows that

the same group form the highest percentage of respondents who have intercourse 9-16 and over 16 times a month (5.6% and 3.2% respectively). However, the chi-square test conducted reflects that there is no statistically significant association between number of unions and coital frequency.

4.5.2 Religion and HIV/AIDS

(a) Religion and Condom Use

Table 4.16 Percentage Distributions of Respondents' Religion by Condom Use

Religion	Condom Use		Total	
	No	Use	%	Numbers
Catholic	94.0	6.0	30.5	1575
Protestant/other Christian	93.8	6.3	60.9	3145
Muslim	94.2	5.8	4.6	240
No religion	99.4	0.6	3.1	158
Other	93.3	6.7	0.9	45
Total	94.1	5.9	100	—
	4857	306	.	5163

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Chi-square value 8.32422 Df. 4 Si i>n(). 0H040

Table 4.16 shows that condom use is low even among those with no religion. Over 93% of the respondents irrespective of the religion don't use condoms. In fact 99.4% of those with no religion don't use condoms.

The highest proportion of condom use is found among those in other religious category (6.7% and protestants (6.2%).

This association was found not to be statistically significant using a chi-square test.

(h) Religion and Number of Sex Partners

The data from the table below shows that majority of the respondents have one sex partner ranging from 76.6% among the Catholics to 80.7% among those with no religion; the other religious groups fall in between.

The table also indicates that the Catholics have the highest percentage of respondents with 110 sex partners (28.9%). Those in other religions reported to have the highest proportion of respondents with 2 sex partners (5.1%).

However, the chi-square test conducted show that there is no relationship between religion and number of sex partners.

Table 4.17 Percentage Distributions of Respondents' by Religion and Number of Sex Partners

Religion	Number of sex partners				Total	
	0	1	2	= >3	%	Number s
Catholic	18.9	76.6	3.5	1.1	31.0	1964
Protestant/other (Christian	17.3	78.3	3.0	1.4	60.5	3837
Muslim *	15.0	80.4	3.1	1.4	4.0	286
No religion	16.7	80.7	2.1	0.5	3.0	192
Other	16.9	78.0	5.7	0.0	0/9	59
Total	17.7	77.9	3.2	1.2	100	
	1119	4939	201	79	.	6338

Chi-square value 8.94054 Df. 12 Sig. 0.70800

(c) Religion and Coital Frequency

The information from the table reflects that 42.6% of Catholics and 42% of Protestants don't engage in sexual activity. Majority of the respondents report to have intercourse 1-8 times a month with those in other religions contributing to the highest (60.3%).

For those who have sexual intercourse 16 times a month, the Muslim had the highest proportion (6%) followed by those with no religion (5.2%). Those with no religion also form the highest percentage of respondents who engage in sex over 16 times a month (4.7%). The chi-square test conducted confirmed that there is a statistically significant association between religion and coital frequency.

Table 4.18 Percentage Distributions of Respondents' Religion by Coital Frequency

Religion	Coital frequency				Total	
	00 times	1-8 times	9-16 times	= > 16 times	%	
Catholic	42.6	52.2	4.0	1.1	31.0	1963
Protestant/other	42.0	52.7	3.8	1.4	60.5	3834
Muslim	39.3	54.0	6.0	0.7	4.5	285
No religion	34.4	55.7	5.2	4.2	3.0	192
Other	36.2	60.3	3.4	0.0	0.9	58
Total	41.8	52.8	4.0	1.4	100	-
	2647	3341	254	88		6332

Chi square value 27.05053 Df. 16 Si<>.0.04092

4.6 Sexu^rl Behaviour and HIV/AIDS

4.6.1 Condom Use, Coital Frequency, Number of Sex Partners and HIV/AIDS

Multiple sex partners, high levels of coital frequency without the use of condoms has been associated with HIV/AIDS infection.

It is, therefore, the expectation of this study that condom use will be high with high coital frequency and multiple sex partners.

(a) Number of Sex Partners and Condom Use

The data summarized from the table shows that the highest proportion of condom use is among those with 3 or more sex partners (22.4%).

Majority of the respondents with one sex partner (94.6) make the least use of condoms (5.4%).

The chi-square test indicates that there is a statistically significant association between number of sex partners and condom use.

Table 4.19 Percentage Distribution of Respondents' Number of Sex Partners and Condom Use

Number of sex partners	Condom Use		Totals	
	No	Yes	%	Numbers
1	94.6	5.4	94.7	4897
2	86.5	13.5	3.9	200
≥ 3	77.6	22.4	1.5	76
Total	94.1 4867	5.9 306	100	5173

Chi-square value 60.44981 Df\ 2 Sif>n. (.)()()()

(b) Coital Frequency tmd Condom Use

The data from table 4.20 shows that condom use is very low irrespective of the high percentages of coital frequency. Majority of the respondents have intercourse 1-8 times a month (3307) but of these only 5.6% use condoms.

The chi-square test conducted, however, indicates that there is no association between coital frequency and condom use.

Table 4.20 Percentage Distribution of Respondents' Frequency of Intercourse by Condom Use

Coital frequency	Condom use		Total	
	No	Yes	%	Numbers
00	93.6	6.4	29.5	1524
1-8 times	94.4	5.6	63.9	3307
9-15 times	92.8	7.4	4.5	231
>= 16 times	92.8	7.2	2.1	111
Total	94.1 4857	5.9 306	100 -	- 5173

Chi-square value 2.48521 $O_j \setminus 3$ $S_{i,j} > n$. 0.47797

(c) Coital Frequency and Number of Sex Partners

Table 4.21 Percentage Distributions of Respondents' Frequency of Sexual Intercourse by Number of Sex Partners

Coital frequency	Number of sex partners				Total	
	0	1	> =3	%	Number	
0	41.3	65.4	2.5	0.9	4.6	2652
1-8 times	0.6	94.1	3.6	1.7	52.6	3347
9-15 times	0.4	95.1	3.8	0.8	3.7	238
> = 16 times	3.8	78.6	4.6	13.0	2.1	181
Total	2.6	77.9	3.2	1.5	100	
	120	4949	201	98		6368

Chi-square value 1870.25200 Df. 9 Si[^]. 0.0000

Table 4.21 shows that majority of the respondents engaging in sexual intercourse 1-8 times (94.1 %) and 9-15 times (95.1 %) a month have one sex partner.

The highest proportion of respondents who have 3 or more sex partners have intercourse over 16 times a month (13%).

The chi-square test shows that there is a strong relationship between coital frequency and the number of sex partners and is statistically significant.

CHAFFER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The main objective of this study was to find out how social, economic and cultural factors influence sexual behaviour and expose individuals to the risk of HIV/AIDS infection.

The risk-factors associated with HIV/AIDS considered in the study included multiple sex partners, non-use of condoms and high levels of coital frequency (without the use of condoms). The data used in this study is from the Kenya Demographic and Health Survey (K.D.H.S.) 1993. The main statistical Method of data analysis used in the study were cross-tabulation to assess the existence of association between the dependent and independent variables and the chi-square to test the nature of this association.

5.2 SUMMARY OF FINDINGS AND CONCLUSIONS ON SOCIAL RISK FACTORS

The first objective of this study was to examine the relationship between social factors (education, age, marital status) and the risk of HIV/AIDS. In achieving this objective it was hypothesised that :

- i) Low age and high sexual activity puts one at risk of HIV/AIDS infection
- ii) Single, separated and divorced people are at a high risk of HIV/AIDS infection.
- iii) Higher the educational attainment levels lowers the risk of HIV/AIDS infection.

The cross-tabulation and chi-square analysis of the data shows that:-

(i) Condom use is relatively low in all levels of education, age groups and categories of marital status. A high percentage of condom use was found among those with higher

education. It can, therefore, be concluded that those with low levels of education, all age groups and those single, separated and divorced are at higher risk of HIV/AIDS infection. This is because HIV/AIDS is associated with unprotected sex (non-use of condoms). Low condom use can be attributed to the negative publicity it has been given by religious groups.

(ii) Majority of the respondents have one sex partner. But it has been shown that those of ages 15-19, those single and separated, had a higher proportion of respondents with 2 and 3 more sex partners. This is an indication of multiple sex-partnering associated with risk of HIV/AIDS infection. It can, therefore be concluded that those in ages 15-19, those single and separated are at a high risk of HIV/AIDS infection because of multiple sex partnering and also due to low age at sexual activity.

(iii) Majority of the respondents have sexual intercourse between one to eight times a month and a high percentage especially among those single, separated or divorced don't engage in sexual activity. This is an indication that sexual activity is low among non married respondents, status.

But those with 3 or more sex partners reported a high coital frequency of over sixteen
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times a month. The conclusion drawn from this is that those multiple sex partners with high levels of coital frequency are at a higher risk of HIV/AIDS infections.

5.3 SUMMARY OF FINDINGS AND CONCLUSIONS ON ECONOMIC RISK FACTORS

The second objective of this study was to find out the association between economic factors (occupation) and the risk of HIV/AIDS infections. In achieving this objective of the study it was hypothesised that:

(i) One's type of occupation is likely to influence one's chances of HIV/AIDS infection.

The cross tabulation and chi-square analysis of the data shows that:-

(i) Condom use is very low irrespective of occupation. It can, therefore, be considered that all types of occupation are at risk of HIV/AIDS infection especially those who engage in high risk sexual behaviours.

(ii) Majority of the respondents in all occupations have one sexual partner and a high percentage do not have any. The conclusion drawn here is that there is no occupation that could be associated with multiple sex partners which is high risk sexual behaviour.

(iii) Majority of the respondents in all occupations have sexual intercourse one to eight times a month while a high percentage do not engage in sexual activity. It can be concluded that coital frequency is low and therefore, there is no type of occupation that is at a higher risk of HIV/AIDS infection than the other.

5.4 SUMMARY OF FINDINGS AND CONCLUSIONS ON CULTURAL RISK FACTORS

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The third objective of this study was to examine the relationship between cultural factors (number of unions and religion) and the risk of HIV/AIDS infection. In achieving this objective it was hypothesised that:

(i) Religion puts one at a lower risk of HIV/AIDS infection.

(ii) The number of unions is likely to increase ones' risk of HIV/AIDS infection.

The cross tabulation and chi-square analysis of the data reflected that:-

(i) There was no relationship between condom use and cultural factors.

(ii) There is no relationship between the number of sex partners and religion. But the findings on the number of sex partners and number of unions show that those married once and those married more than once had one sex partner. It can be concluded that despite having been married more than once, there is a practice of having one sex partner. It can also be concluded that those at higher risk of HIV/AIDS infection are those married more than once as they have a higher percentage of multiple sex partners.

(iii) Majority of the respondents in all religious groups have sexual intercourse one to eight times a month, and a higher percentage do not engage in sexual activity. It can therefore be concluded that there is no religion that is at a higher risk of HIV/AIDS infection.

(iv) The results of the analysis of the data also show that there is no relationship between coital frequency and number of unions.

5.5 RECOMMENDATIONS

5.5.1 Recommendations for Policy Makers

(i) The study found out that those with low levels of education are at a higher risk of HIV/AIDS infection. There is need for widespread education, especially Information Education and Communication (IEC) to target those with low levels of education so as to equip them with correct information on HIV/AIDS and how to handle their sexual behaviour.

(ii) The study also found out that those in low ages (especially adolescents) are at higher risk of HIV/AIDS. Sex education should be encouraged to target the youth towards responsible adulthood.

(iii) The single, separated and divorced were found to be at higher risk of HIV/AIDS. There is need therefore, to intensify messages on abstinence, condom use and one sexual partner as a measure against the spread of HIV/AIDS infection

(iv) Condom use was found to be relatively low, and for there to be an increase in the use of condoms as a protective measure against HIV/AIDS, there is need to intensify and promote widespread distributions and use of condoms.

5.5.2 Recommendations for Further Research

(i) There is need for further research in the areas of co-factors of HIV/AIDS. Research into the social, economic, and cultural factors and sexual behaviour of the Kenyan population in the spread of HIV/AIDS.

(ii) There is need for primary data especially at grassroot level so as to get the true picture on the spread of HIV/AIDS, factors associated with HIV/AIDS and to determine the changes in sexual behaviour of the Kenyan population, especially with the increase in HIV/AIDS infection.

(iii) Research should also be done on factors that influence the use and the non-use of condoms in the Kenyan population.

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