

**A COMPARATIVE STUDY OF THE PERCEPTIONS OF  
LITERATE AND ILLITERATE ADULTS ABOUT HUMAN  
IMMUNODEFICIENCY VIRUS/ACQUIRED IMMUNE  
DEFICIENCY SYNDROME (HIV/AIDS) IN RURAL AREA**



**MUHAMMAD AZHAR**

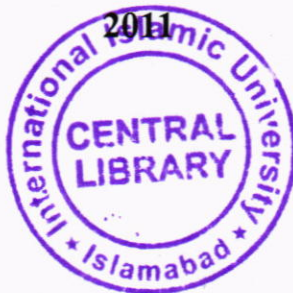
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DEPARTMENT OF EDUCATION

FACULTY OF SOCIAL SCIENCES

**INTERNATIONAL ISLAMIC UNIVERSITY,**

**ISLAMABAD**



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① HIV - positive persons -

Legal status, laws etc.

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FACULTY OF SOCIAL SCIENCES  
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**32-FSS/MSEDU/F08**

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FACULTY OF SOCIAL SCIENCES

INTERNATIONAL ISLAMIC UNIVERSITY,

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2011

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وَبِرَّ نَسِيتَعِين



# *Dedication*

*My research work is dedicated to*

*My loving stars*

*Hassan & Hussain*

## **CERTIFICATE**

It is certified that Mr Muhammad Azhar Reg # 32- FSS/MSEDU/F08 has completed his thesis titled “A Comparative Study of the Perceptions of Literate and Illiterate Adults about Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) in Rural Area” under my supervision. His thesis has been cleared from plagiarism and is ready for final evaluation. The thesis is, therefore, forwarded for further necessary action.

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Supervisor: Dr. Khalid Hassan Bokhar



APPROVAL SHEET

**“A Comparative Study of the Perceptions of Literate and Illiterate Adults about  
Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome  
(HIV/AIDS) in Rural Area”**

By

**Muhammad Azhar**

Accepted by the Department of Education, Faculty of Social Sciences, International  
Islamic University, Islamabad, for partial fulfilment of the degree of MS Education.

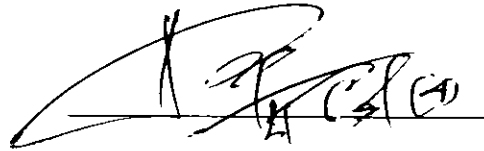


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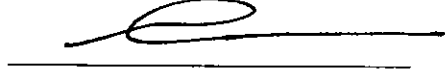


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## Abstract

The Human Immunodeficiency Virus (HIV) is causative agent of Acquired Immune Deficiency Syndrome (AIDS). HIV destroys the host immune system and leads to the death of host. HIV is spreading widely and rapidly. Cure is the only care for HIV/AIDS. The purpose of the current study was to compare the perceptions of literate and illiterate adults about HIV and AIDS in rural area. The research study was descriptive in its nature. The objectives of the study were to analyze perceptions of literate illiterate adults about HIV/AIDS and to compare perceptions of male and female literate adults and male and female illiterate adults about HIV/AIDS in rural areas. Population of the study consisted of all literate and illiterate adults age 18 ears and above of rural areas of district Rawalpindi. Three union councils, namely, Bunda, Thatta Khalil and Kuri Dolal from rural area of Tehsils Rawalpindi, Taxila and Gujar Khan respectively were selected for this study. From each union council, 50 literate and 50 illiterate adults aged 18 years and above, making a total of 150 literate and 150 illiterate were included in the sample of the study. Data were collected through a self-designed 40 item questionnaire based on five point scale. Knowledge about the HIV/AIDS, perception about mode of spread of HIV/AIDS, attitude towards HIV/AIDS and knowledge about prevention of HIV/AIDS were focus of this study. The data were tabulated, analyzed and interpreted. The mean scores of the responses of literate and illiterate respondents were calculated to compare the perceptions of literate and illiterate adults about Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome. Chi Square was applied to analyze the data to reveal the significance of difference. The results of the study revealed that literate adults had

better awareness regarding HIV/AIDS, means of its spread, preventive measures and had better attitude towards HIV/AIDS than illiterate adults. Male literate adults had better knowledge regarding disease of HIV/ AIDS and its mode of spread than female literate adults while female illiterate adults had better knowledge than male illiterate adults regarding disease in this regard. More male literate adults had positive attitudes towards PLWHA than female literate adults while more female illiterate adults had positive attitude than male illiterate adults. Male adults had better knowledge about prevention of disease than female adults.

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## Definitions of Key Terms

HIV: Human Immune Deficiency Virus. It is causative agent of AIDS.

AIDS: Acquired Immune Deficiency Syndrome .It is a disease caused due to transmission of HIV in blood

PLWHA: People Living with HIV/AIDS. It means the patient of AIDS.

Perception: Perception is the process by which organisms interpret and organize sensation to produce a meaningful experience of the world.

NACP: National AIDS Control Program. It is a governmental National organization working for awareness and research about HIV/AIDS.

Literate: One who can read and write with understanding in Urdu language and make simple calculation.

Ill-literate: Ill-literate includes the persons who do not even sign or read anything.

STI: Sexually transmitted infections.

# CHAPTER 1

## INTRODUCTION

The Human Immunodeficiency Virus (HIV) is causative agent of Acquired Immune Deficiency Syndrome (AIDS). HIV destroys the host immune system and leads to the death of host cells (Ahmed, 2001). A total of 1.9 to 2.4 million deaths were estimated worldwide in 2007 and 30.6 to 36.1 million people are estimated to be living with AIDS. HIV is spreading widely, rapidly and especially increasing in women. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. HIV infection in humans is now pandemic. As of January 2006, the Joint United Nations Program on HIV/AIDS (UNAIDS, 2008) and the World Health Organization (WHO) estimated that AIDS has killed more than 25 million people since it was first recognized on December 1, 1981, making it one of the most destructive pandemics in recorded history. It is estimated that about 0.6% of the world's living population is infected with HIV (Banki, 2004). Young people aged 15–24 account for an estimated 45% of new HIV infections worldwide (UNAIDS, 2008).

Similarly, Acquired Immunodeficiency Syndrome (AIDS). is spreading fast in Asia particularly in regions having less awareness about this disease (Yeni et al, 2000). In Pakistan, over the past few years there has been a steady increase in individuals having AIDS. According to National AIDS Control Programme (NACP) data, 97,400 people were affected with HIV/AIDS in Pakistan. Alarming

gaps in knowledge relating to the HIV/AIDS epidemic among young adults are frequently reported (Ganczak et al, 2007; McManus et al, 2008). According to UNAIDS's estimates, the prevalence of HIV/ AIDS among the population of men and women aged 15– 24 in Pakistan was about 0.1 per cent (UNIDS, 2008).

There is no cure for HIV/AIDS up till now and until a vaccine is found, provision of correct information will remain one of the key prevention strategies recommended against HIV/AIDS. Prevention strategies will need to continue even when vaccines are found because a vaccine will not replace other preventive methods but will be an additional tool. Consequently, school going children are expected to be educated on HIV and other diseases. The school teacher's knowledge about HIV/AIDS is very important so that they could impart accurate knowledge about the disease to the school children who ultimately serve as catalytic agent to propagate accurate information about the disease in the community in the long run. It is easy to establish protective behavior at young age that will last into adulthood. Worldwide, young people have been identified to be at special risk of HIV infection, with majority of the infection due to lack of knowledge about mode of transmission of diseases (Ahmed, 2001).

Awareness about health problems in general people could prevent the spread of disease in society. It is assumed that there is less awareness about HIV/AIDS in rural areas. It has been observed that awareness programmes about a disease like AIDS which have no cure, play an important role in improving socio-economic, political and cultural life of a country. As such, to embark on gauging the knowledge of people in rural area, this study was designed to ascertain general perceptions about AIDS in the areas of basic knowledge, attitude towards

HIV/AIDS, awareness about mode of transmission of the disease and its prevention.

## 1.1 Statement of the Problem

HIV/AIDS is becoming a serious issue day by day in Pakistan due to ignorance and stigma discrimination about HIV/AIDS patient in society. Awareness about HIV/AIDS is the first basic requirement in dealing with problem. Therefore the researcher studied perceptions of literate and illiterate adults about HIV/AIDS in rural area of district Rawalpindi. This study focused on basic knowledge of the disease, attitude towards HIV/AIDS, mode of its spread and preventive measures.

## 1.2 Objectives of the Study

The study was aimed at achieving the following objectives:

1. To assess knowledge of literate and illiterate adults about HIV/AIDS.
2. To measure perceptions of literate and illiterate adults about mode of spread of HIV/AIDS.
3. To examine attitude of literate and illiterate adults towards HIV/AIDS.
4. To find out perceptions of literate and illiterate adults about prevention of HIV/AIDS.
5. To compare perception of male and female literate adults and male and female illiterate adults on the above four aspects of HIV/AIDS.



### 1.3 Significance of the Study

As HIV/AIDS is increasing due to stigma and discrimination against HIV/AIDS education in Islamic society, therefore there was need to analyze general perception of community members about HIV/AIDS so that general public could be educated about this complicated disease, its mode of transmission and spread. Since awareness is the key to the prevention of HIV/AIDS, therefore there was an urgent need to increase the awareness about HIV/ AIDS, especially among literate and illiterate people of the community using all methods of communication like mass media communication, intensive information, teachers training , curriculum development, education and communication (IEC) activities. The results of this study would help to analyze the current situation about awareness of HIV/AIDS among rural society so that the strategies could be worked out to improve the health of common people and to provide them a safer environment.

1. This study results may provide basic information to policy makers to formulate general awareness programs about HIV/AIDS.
2. The results of study would help in health education related staff development programs.
3. The study findings might be useful to curriculum developers to improve curriculum development regarding health education.
4. The results of the study might generate further researches in this crucial area.

## 1.4 Methodology

The purpose of this study was to analyze the perceptions of literate and illiterate adults about HIV/AIDS in rural areas. The study was descriptive in nature.

### 1.4.1 Population of the Study

Population of the study consisted of 33931 male and female literate and illiterate adults of rural areas of district Rawalpindi aged 18 years and above. Three union councils of the district were selected for this study.

### 1.4.2 Sample of the Study

Three union councils Bunda, Thatta Khalil and Kuri Dolal from rural area of Tehsils Rawalpindi, Taxila and Gujar Khan were selected for this study.

From each union council, 50 literate and 50 illiterate adults, making a total of 150 literate and 150 illiterate were included in the sample of the study as was convenient to the researcher. As literate and illiterate categorized data and identification of literate and illiterate adults were not already available in field so researcher used convenient sampling technique to get representative data. The sample size was thus 300 adults.

### 1.4.3 Research Instrument

The data was collected by using questionnaire (Five point likert scale) given at appendix "A", which was filled in by the literate males & females included in the sample of study. The questionnaire included certain aspects related to measure the knowledge about the HIV/AIDS, perception about mode of spread of HIV/AIDS, attitude towards HIV/AIDS and knowledge about prevention of

HIV/AIDS, marital status, occupational status, education and age. It was close ended questionnaire. The same questionnaire was administered for illiterate males & females, the researcher filled in the answer of respondents after asking them the questions.

Questionnaire was comprised of following parts:

- Knowledge about HIV/AIDS
- Perception about mode of spread of disease.
- Attitude towards HIV/AIDS
- Perception about prevention of disease.

#### 1.4.4 Data Collection

Data was collected through a structured questionnaire from the sample. The researcher made personal visits to get the data from the literate and illiterate adult males. Researcher trained female data collectors to collect the data from females. Services of six trained females were utilized to collect the data from literate and illiterate adult females.

#### 1.4.5 Data Analysis

Data was analyzed in the light of objectives. Chi-Square formulas were applied for the interpretation of the data.

### 1.5 Delimitation of the Study

1. The study was delimited to the adults aged 18 years and above.

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

HIV/AIDS is spreading among Muslim countries slowly and gradually. Epidemic of HIV AIDS are reported in Jalal Pur Jatan and Skhhar in Pakistan. Surveillance data of Sindh provincial AIDS control programme predicts that the country has entered "concentrated epidemic" stage for HIV/AIDS. It indicates that the HIV prevalence is five percent or higher in subpopulations (Shah et al, 2004). These subpopulations are commercial sex networks and injecting drug user communities in large cities in Pakistan (Bokhari et al, 2007). This indicates a serious threat of a generalized epidemic, especially among the adults (Shah et al 2004; Surveillance Data Of Sindh Governament 2004).

Between 1981 and 2000, the mean age of marriage in Pakistan rose from 25.3 to 26.3 years for males and 20.4 to 22.1 years for females (Pakistan Demographic Survey, 1999). This shows a period during which adults are likely to engage in sexual behavior. The estimated population of adolescents (10–19 years of age) in Pakistan is over 30 million, which is approximately 23 per cent of the total population (Census report of Pakistan, 1998). In low-income countries, where males are given a better status than females, it is put on women's shoulders to protect themselves from any sexually transmitted infection and undesirable pregnancies but they often lack appropriate information about prevention and have poor access to services for treatment and prevention (Biddlecom et al, 2007. Meuwissen et al , 2006).

Access and introduction to appropriate HIV/AIDS information and discussing it with others has the potential positively to impact knowledge, attitudes, and beliefs (Bastien et al, 2008). Still, adult populations are poorly informed in Pakistan due to limited access to information about sexual and reproductive health matters, as both parents and the school system are unwilling to fulfill this responsibility due to the sensitivity of the subject (Afsar et al, 2006.Ali, 2004). On the other hand, adults obtain this information through the media, such as TV and the internet (Ali et al ,2006), but relying on such sources of information for the nation's adults is not advisable. Considering this, and the fact that the HIV/AIDS epidemic is on the increase in Pakistan, it is extremely important to assess perceptions of literate and illiterate adults about HIV/AIDS. It is necessary to assess knowledge and perceptions of adults about sexual and reproductive health matters and of the HIV/AIDS epidemic in particular to identify knowledge gaps for further preventive activities.

This disease is spreading day by day due to ignorance of people and due to negative attitude of Muslim toward HIV/AIDS. Generally Muslims and Ulama in particular adopt very negative attitude towards those suffering from HIV/AIDS thinking that it is the result of an immoral life. They always attribute it to sex outside marriage be it extra-marital or pre-marital. In other words, they think it is result of having many partners or result of incorrect sexual relations. In fact HIV/AIDS could be contacted in a variety of other ways. A HIV positive husband is infecting his wife who knows nothing about her husband's infection. If women becomes pregnant and becomes mother of a child, child is also likely to get infected. In such situation, mother and baby is blamed without thinking that how

mother and baby became victim of HIV. This situation is alarming due to several reasons like lack of appropriate educational programs and potential hindrances in educating young people about AIDS.

Commonly in a human society, and especially in Islamic society, teachers are considered as builders of society. School age is considered to be an important period in the development of character and forming of personal habits. So school age is an ideal period to prevent and control many habits before they start the same. Therefore, primordial prevention plays a pivotal role in school and colleges. Because pupils often regard their teachers and principals as most trustworthy and most likely candidates for them to express concerns and ask questions about sex and health. School teachers have a precious window of opportunity to transfer these life skills and should be more knowledgeable about HIV risks and prevention strategies. One study conducted in the year 2000 among a random sample of 160 teachers in rural Limpopo, South Africa, revealed that the teachers had very poor knowledge about HIV/AIDS (Jayadevan et al, 2004. Li-Wei et al, 2007).

Several studies carried out to evaluate the knowledge of adolescents mostly under school-based settings in the world have identified gaps in awareness, thus recommending the involvement of school-based programmes in the HIV awareness campaign (Harding et al., 1999. Nwokocha, 2002. Odusanya 2006).

## 2.1 Human Immunodeficiency Virus (HIV).

HIV is abbreviation of Human Immunodeficiency Virus. It is a virus that infects people and passes from one person to another. The virus attacks the body's immune system and at last destroys it completely. Infected body becomes

defenseless against infections and other diseases. HIV is RNA virus that is a member of family Retroviridae. These viruses possess an enzyme called Reverse Transcriptase (RT). Reverse Transcriptase enzyme makes a DNA copy of genomic RNA for virus replication in host cell (Alterfeld, 2007).

These pro-viral DNA get permanently integrated into host cell DNA. As a result, the host cells change into a virtual factory for production of new virus copies. There are two species of HIV infecting humans: HIV-1 and HIV-2. HIV-1 is considered to have originated in southern Cameroon after transferring from chimpanzees (*Pan Troglodytes*). to humans during the twentieth century. It is thought that HIV-2 may have transferred from the Sooty Mangabey, an Old World monkey of Gabon, Guinea-Bissau, and Cameroon. HIV-1 is more poisonous. It is easily transmitted and is causing majority of HIV infections worldwide. HIV-2 is less infectious and is largely restricted to West Africa. Various methods have been adopted to stop HIV-1 infection. Many new methods have yet to be discovered and tried to stop the replication of HIV and to protect the host immune system. Each of these preventive methods targets a specific check point in HIV-1 life cycle. These include Nucleoside reverse transcriptase, Non-Nucleoside Reverse Transcriptase, Nucleotide Reverse Transcriptase and Protease inhibitors. The most effective and operative of therapies using these drugs is the highly active antiretroviral therapy (HAART) which uses a combination of such drugs to stop viral infection, but each treatment has its limitation and side effects. HAART has emerged as useful for the treatment of HIV infection. It results in dramatic declines in HIV disease, mortality and prenatal transmission. The protective and preventive effect of HAART has also been revealed to result in a decreased

occurrence of HIV associated cancer. It improves the immune function by quality of reconstruction of the CD4 collection. But the clinical, immunologic, and virology benefits of treatment appear to be time-limited due to the persistent immune dysfunction. It fails to eradicate latent reservoirs of HIV, which leads to the development of drug resistance by HIV (Albrecht , 2003).

## 2.2 Acquired Immune Deficiency Syndrome (AIDS)

When a person is infected with HIV, his illness increases more and more as the time passes. A person is said to having AIDS (Acquired Immune Deficiency Syndrome). when few years after first infection with HIV, one or a number of severe infections are developed and immune system of a person is destroyed (Ahmed,2001).

## 2.3 Human Immunodeficiency Virus (HIV) Transmission

HIV of the infected people is present in their blood and sexual fluids. The breast milk of infected women is also contaminated with it. HIV transmission takes place when infected blood, semen, vaginal secretions or breast milk enters into another person's body. It could be said that HIV infection takes place after the virus penetration and makes its home inside the body. HIV may take 2-10 years to cause AIDS (Kottlil, 2003). A series of Blood test result into identification of the infection in the early stages. Antibodies are identified by the blood tests that are formed as a result of the infection. The defense mechanism of human body is weakened by these antibodies and the individual becomes prone to condition like:

- Persistent Diarrhea



- Severe weight loss.
- Fever
- Fatigue
- Cough
- Skin Rash
- Loss of appetite
- Enlarged Lymph glands

## 2.4 Stages of HIV Infection

HIV infection could be divided into three stages.

### 2.4.1 Stage 1: Window Period

In the first instance, the person does not immediately become “HIV Positive” once a person is infected with HIV. In other words, body takes time to produce measurable amount of antibodies after infection (the period is usually 2-12 weeks; in some cases it could even be longer). If an HIV antibody test is taken during the window period, it results in negative since antibodies are not yet at a detectable level. The infected person may, however, transmit HIV to others during this period (Wadood, 2006).

### 2.4.2 Stage 2: Asymptomatic Period

After the HIV infection is acquired, no apparent change occurs in the person's health for many years. Most people infected with HIV remains healthy and live with no signs of being sick and this period is called asymptomatic period. This period is 8-12 years. At times, a person may begin to show signs of infection

as early as 5 years after infection and sometime this period prolongs (Alterfeld, 2007).

### 2.4.3 Stage 3: Symptomatic Period

The infected person begins to feel fatigued and sick when the worsening of the immune system reaches a particular point. Successive attacks of illness e.g. Diarrhea, influenza etc. which normally can be cured through medicines, suffer the infected person. However these diseases are not cured through medicines in case of HIV infection and the defense system becomes so weak that opportunities become available to ordinary infections to establish themselves (Baqi, 1999).

## 2.5 Opportunistic Infections

These infections attack the individual repeatedly and now he is said to be a patient of from AIDS. HIV is the cause of AIDS and the opportunistic infections become incurable. Patient who have HIV may die during the period of eight to ten years or even sooner. An individual who is infected with HIV remains infected for whole life (CDC, 2008a).

## 2.6 Syndrome

Syndrome, a combination of symptoms and conditions, is a group of symptoms and illness. When these symptoms are taken together, makes possible the diagnosis of AIDS. The immunodeficiency syndrome constitutes the vital characteristics of AIDS. The syndrome could also appear in other diseases, such as tumors, Hepatitis, T.B, etc (Noursadeghi, 2009).

## 2.7 Transmission of HIV

Following are the main four ways of spread of HIV which leads to AIDS.

- Sexual relationship
- Parent to child transmission
- Use of contaminated syringes, needles, and other piercing equipment
- Transfusion of polluted blood products, tissues and organs

### 2.7.1 Sexual Relationship

Insecure sexual intercourse could transmit HIV. It could be said that unsafe sex is the main reason of HIV transmission. HIV spreads when body fluids (blood, semen). of HIV infected person enter into the body of a healthy person. An HIV infected person could pass on a disease to one or more sex partner particularly if the later is already infected with STI's (Sexually transmitted Infections). ulcer or injury. Individual having unprotected sex relations with many persons and particularly with sex mates are more likely infected with HIV/AIDS (Bhat, 2004).

### 2.7.2 Parent to Child Transmission

In infants, mother to child transmission is the cause of HIV. During labor, pregnancy, delivery and breast feeding, the virus may be transmitted to the baby. In our environment, the probabilities of infection are more due to limited sources of health care (National Guide lines, 2007).

### 2.7.3 Use of Contaminated Syringes, Needles, and Other Piercing Equipment

Use of HIV-contaminated needles or other invasive tools could transmit HIV. HIV is spreading in the world due to sharing of contaminated needles and syringes among drug users.

Improper sterilized instruments are a risk factor in transmission of HIV. Procedures like tattooing on body, making holes in ear and nose, acupuncture, and circumcision could result in HIV transmission (Ahmed, 2003). Sharp instruments like blades, razors, and knives used by barbers could be a source of HIV/AIDS.

### 2.7.4 Transfusion of Polluted Blood Products, Tissues and Organs

Blood transfusion of an infected person is a direct source of transmission of HIV to a healthy person. Transplantation of infected organs and tissues could transmit HIV/AIDS (Stebbing, 2006).

## 2.8 How HIV is not transmitted

HIV/AIDS does not affect any individual through food, air, handshaking, water, or every day contact with AIDS patient. Body fluids like urine, sweat, and saliva are not causes of infection (Hall, 2008).

HIV transmission does not take place in the following cases;

- Using common toilets or shower
- Sharing food and utensils

- Sharing the same residence
- Shaking hands, or kissing
- Eating food cooked by AIDS patient
- Sharing the same swimming pool
- Looking after of an infected person
- Coughing or sneezing
- Mosquito bite
- Using a common phone booth

## 2.9 Treatment of HIV/AIDS

No treatment is successful for restoration of the AIDS free status of patient. HIV/AIDS infected persons remain infected for whole life. Viral activity could be suppressed through Highly Active Anti-retroviral Therapy (HAART), which lengthens the time for the patient to live. The virus could be suppressed for some time but not eliminated. Treatment through HAART is not an absolute cure (Richard, 2003).

## 2.10 AIDS and Work

The work place of the AIDS patient is not a risk factor of acquiring HIV infection. However exceptions are there for health care workers, laboratory workers, and persons dealing with hospital waste products, emergency medical response personnel. The threats to which these persons may be exposed are skin piercing accidents, needle-prick wounds and other blood splashing into the eyes while they are treating or otherwise accomplishing their duties (Wadood, 2006).

A bleeding person requires immediate attention. Measures should be taken to prevent blood contact with mouth, eyes, and any broken skin. Before providing first aid, exposed cuts and injuries should be covered. As soon as possible, hands should be washed with soap and water after providing first aid.

## 2.11 AIDS and Sports

No case is documented of HIV transmission during involvement in sports activity. Direct body contact may be very low risk of transmission of AIDS during participation in sports in which blood flow might be likely to happen.

It is probably possible for the virus to be transmitted if the blood of an HIV infected athlete had a contact with another athlete's skin, cut, lesion or exposed mucous membrane. The danger of transmission is very low even in such events. However, in sports that have direct body contact or combative sports where are chances of bleeding, it is necessary to clean it and cure it securely (Sompayrac, 2003).

## 2.12 Stigma and Discrimination

Collective denial, stigma discrimination, and blame make it very problematic to handle the epidemic. Stigma and discrimination related to HIV/AIDS is main hurdle of epidemic. Discrimination includes any omission or act including a law, policy, practice, tradition, situation which directly or indirectly imposes liabilities, burdens, disabilities or compels the adoption of a particular course of action by any person, based on a person's HIV status. The greatest barriers in prevention of further infections of HIV/AIDS are stigma and

discrimination associated to it .Discrimination and stigma related to HIV/AIDS are universal, occurring in every part of the world (Mudassir, 2010).

Stigma is described as a quality that discredits a person in the eyes of other individuals. AIDS patients are believed to be immoral and deserving of it. They are linked to sex or to undesirable and socially disliked activities such as injecting drugs.

Patients are seen as bisexual, homosexual, or having sexual relation with prostitutes. The HIV & AIDS Prevention and Treatment ACT, 2006 states that no person shall be discriminated on the basis of their HIV status in any form in respect to any activity in the public or private sectors (National Guidelines, 2007).

## 2.13 Reasons for Stigma and Discrimination

People are unaware that HIV/AIDS cannot be transmitted through normal contact. People have less information and education that infection may be avoided due to simple precautionary measures. It makes people to discriminate and stigmatize against infected persons or supposed to be infected with HIV/AIDS.

### 2.13.1 Reasons for Stigma

- Fear about unlawful drugs use
- Fear of injecting drugs
- Reporting irresponsible media
- Fear about sexuality
- Fear of illness and death
- Lack of treatment

- Lack of knowledge of disease
- Incurability of HIV/AIDS
- HIV transmission myth

## 2.14 Places where stigma and discrimination could occur

Following are the places where stigma and discrimination occur.

### 2.14.1 Place of work

Employers hesitate to work with HIV positive individuals in many countries of the world including Pakistan, although they may not be a threat to the others (Whiteside, 2006).

### 2.14.2. Education Institutes

HIV positive children are compelled to leave school if found infected or belong to an infected person's family (Syed et al, 2009).

### 2.14.3 Health Care Center

Health care employees are known to have excused services to AIDS patients. The medical staff and doctors having sufficient know how about the disease, in certain occasions, have refused to attend AIDS patients (WHO, 07-08).

### 2.14.4 Society

Non availability of a viable medication for HIV/AIDS may cause the death of infected individual leaving behind family members to further suffer from stigma and discrimination of the society and community. Not only the individual living with HIV/AIDS but his wife and the children also suffer from



discrimination and stigma at the hands of neighbors, friends and the colleagues. The infected person is compelled to lose employment whereas his children are expelled from their schools. The rejection by the society and friends leads to isolation and causes emotional disorders. The infected person is greatly disheartened due to absence of a cure and fear of fast upcoming death. The household economy is disturbed completely. Such adverse conditions severely affect the family life (Van, et al, 2008).

## 2.15 HIV & AIDS Prevention and Treatment Act, 2007

An Act has been approved to prevent HIV infection amongst the overall population, mainly in most-at-risk and vulnerable residents and to provide care, support and cure of patients living with HIV/AIDS. This act prevents discrimination on the basis of HIV status.

The main purpose of the Act was to diminish risk of HIV among vulnerable inhabitants. This includes preventing HIV transmission into the people. The first chapter of the Act deals with definitions of AIDS, Blood bank, discrimination, health care facility, health workers, HIV, HIV-positive, HIV screening, HIV test, HIV transmission , HIV and AIDS prevention, harm reduction services, involuntary HIV Testing , Most at Risk Populations, people living with HIV/AIDS, post-test counseling, pre-test counseling, voluntary HIV testing prevalence and incidence (National Guidelines, 2007).

## 2.16 Global Summary of the AIDS Epidemic

AIDS is a major global health priority. Although important developments have been achieved in preventing new HIV infections and in lowering the annual

number of AIDS related deaths, the number of people living with HIV is still increasing. An AIDS-related illness is one of the leading causes of death globally and is projected to continue as a significant global cause of premature mortality in the coming decades (World Health Organization, 2008).

There is geographic variation between countries and regions. There are often large variations in HIV prevalence and epidemiological patterns within countries. The substantial diversity of national epidemics underscores not only the need to tailor prevention strategies to local needs but also importance of decentralizing AIDS responses.

The epidemic is evolving. Epidemic patterns could change with the passage of time. As regional profiles in this report highlight, national epidemics in the world are experiencing important transitions. In Central Asia and Eastern Europe, epidemics that were once characterized primarily by transmission among injecting drug users are now increasingly characterized by significant sexual transmission. In parts of Asia, epidemics are becoming increasingly characterized by significant transmission among heterosexual couples (World Bank, 2006).

There is evidence of successes in HIV prevention. There is evidence of HIV prevention successes in diverse settings. In five countries where two recent national surveys were conducted, HIV incidence is on the decline, with the drop in new infections being statistically significant in two countries United Republic of Tanzania and Dominican Republic (Maswanya, 1999).

## 2.17 HIV and AIDS Estimates

Number of people living with HIV in 2008:

Total:	33.4 million [31.1 million–35.8 million]
Adults:	31.3 million [29.2 million–33.7 million]
Women:	15.7 million [14.2 million–17.2 million]
Children under 15 years <sup>a</sup>	2.1 million [1.2 million–2.9 million]

People newly infected with HIV in 2008

Total:	.7 million [2.4 million–3.0 million]
Adults:	2.3 million [2.0 million–2.5 million]
Children under 15 years:	430 000 [240 000–610 000]

AIDS-related deaths in 2008

Total:	2.0 million [1.7 million–2.4 million]
Adults:	1.7 million [1.4 million–2.1 million]
Children under 15 years:	280 000 [150 000–410 000]

Source: UNAIDS/WHO, 2009

The estimates and data provided in the following tables relate to 2001 and 2007.

These estimates have been produced and compiled by UNAIDS/WHO.

Table: 2.1 HIV/AIDS Estimate

HIV/AIDS Estimate	2001	2007
Adults (15+). and children	51 000	96 000
Low estimate	37 000	69 000
High estimate	79 000	150 000
Adults (15+).	50 000	94 000
Low estimate	36 000	68 000
High estimate	77 000	150 000
Women (15+).	13 000	27 000
Low estimate	9 100	19 000
High estimate	21 000	42 000

Source:UNAIDS 2008

Figure 2.1 Estimated Adults HIV Prevalence % 1990-2007 (UNAIDS 2008).

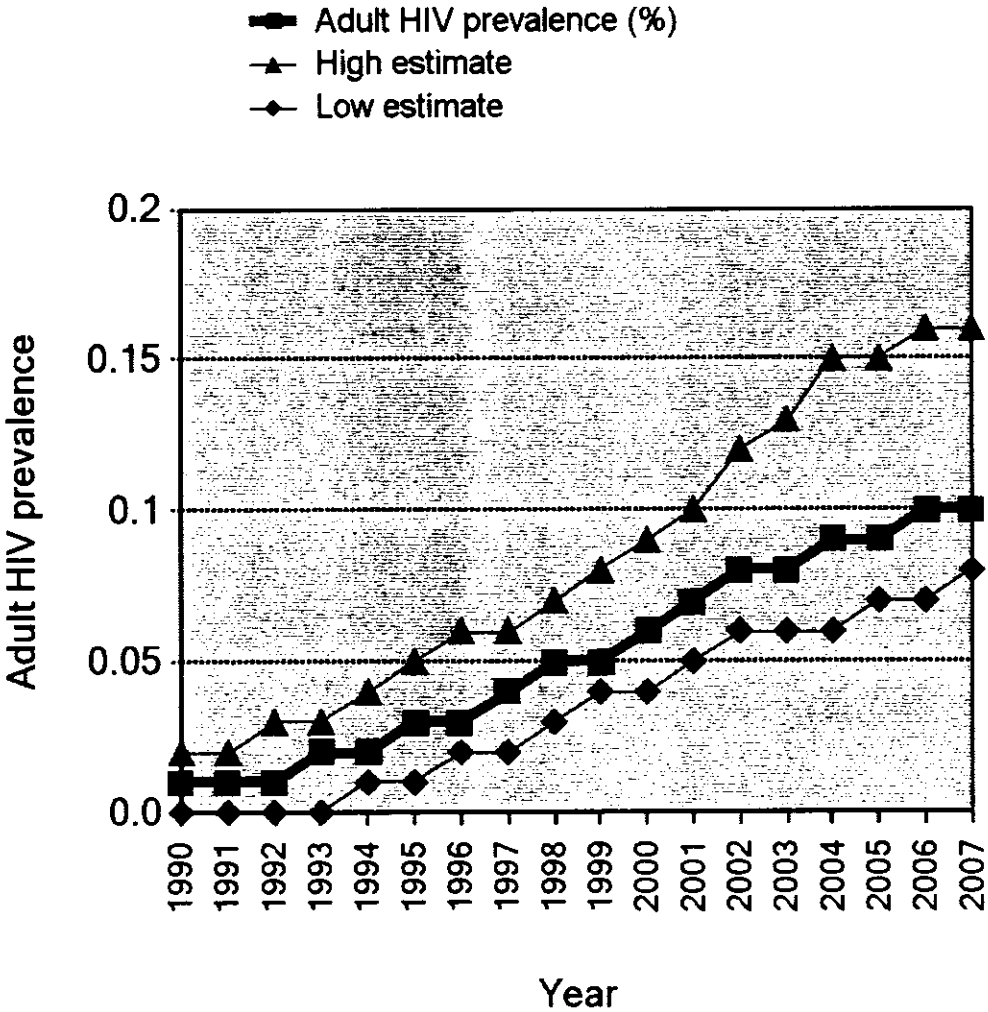


Table: 2.2 HIV/AIDS Prevalence among Young people, 2007 (UNAIDS 2008).

HIV/AIDS Prevalence	Male	Female
Prevalence among 15–24 year olds	0.1	0.1
Low estimate	<0.1	<0.1
High estimate	0.2	0.2

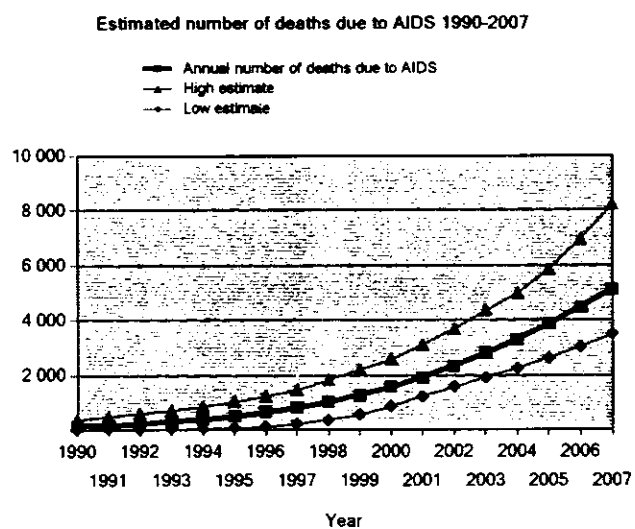
Source: UNAIDS/WHO, 2008

## Estimated number of deaths due to AIDS

Table: 2.3 Estimated numbers of adults and children who died of AIDS (UNAIDS 2008).

Estimated number of deaths	2001	2007
Adults and children	1 900	5 100
Low estimate	1 200	3 500
High estimate	3 100	8 200

Figure: 2.2 Estimated Numbers of death due to HIV/AIDS 1990-2007



(UNAIDS 2008)

## 2.18 Literate

Being able to read means that you could follow word across a page, getting generally what is superficially there. Being literate means you could bring your knowledge and your experience to bear on what passes before you (Sharma, 2006).

## 2.19 Literacy

A key feature of broadened definition of literacy is a more explicit focus on the knowledge, understanding, and skills required for effective functioning in everyday life (Krugly, 2000).

The United Nations Educational Scientific and Cultural Organization (UNESCO) define literacy as the "ability to classify, understand, deduce, create, interconnect, compute and use printed and written materials related with varying contexts. Literacy involves a variety of learning in enabling individuals to attain their goals, to develop their knowledge, potential and to share fully in their community and broader society" ([en.wikipedia.org](http://en.wikipedia.org)).

The reading and writing ability definition is one of the earliest definitions of literacy stating that persons are considered literate if they could read and write their name. The United States Census Bureau has considered individuals to be literate if they reply affirmatively to a question about their ability to read and write a simple sentence. The requirement of literacy, under this definition is modest; extensive skills are not required. This definition gives us little direction in programme planning (Heathington, 1987).

## 2.20 Adult literacy

Adult literacy is concern that affects all of us, understanding this improves all aspects of life for the learner, his family and society at large. Knowing how to read, write and function in the language (Britini, 2010).

Rural Population of Pakistan is (million). 110.46 According to the latest Pakistan Social and Living Standards Measurement (PSLM). Survey 2008 09, the overall literacy rate (age 10 years and above). is 57% (69% for male and 45% for female). compared to 56% (69% for male and 44% for female). for 2007 08. The data shows that literacy remains higher in urban areas (74%). than in rural areas (48%). Literacy rate in Punjab stood at 59% (Census Report, 2010).

## 2.21 Perception

Perception has sometimes been defined as “the consciousness of particular material things present to sense”. Perception is, as a matter of fact, always a large thing than this definition would immediately imply; because we are always aware in the “fringe” in the background of consciousness of sense activation other than those we speak of as being perceived, especially those collected with the internal operations of our own organism (Angell, 2006).

The meaning of perception is the process of achieving cognizance or considerate of sensory information. The word "perception" is derived from the Latin words *perception*, *perception*, and means collecting, action of taking ownership, apprehension with the mind or senses.



## 2.22 Attitude

An attitude is a theoretical concept that signifies an individual's degree of liking or disliking for an item. Attitudes are generally positive or negative views of a person, thing, place, or event. It is referred to as the attitude object (Delia, 2004).

## 2.23 Related Studies

HIV infection in humans is now pandemic. As of January 2006, the Joint United Nations Program on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) estimate that AIDS has killed more than 25 million people since it was first recognized on December 1, 1981. It is estimated that about 0.6% of the world's living population is infected with HIV (UNAIDS, 2008).

Infection with human immunodeficiency virus type 1 (HIV-1) was first recorded in Pakistan during 1986. Pakistan currently has very low levels of human immunodeficiency virus (HIV) infection; the overall HIV prevalence rate is less than 0.1 percent in the general population (World Bank, 2006).

However, the country is considered to be at high potential risk for an HIV epidemic for a number of reasons. In particular, in the major cities, there are large concentrations of individuals with behaviors that make them extremely vulnerable to the rapid spread of HIV and of classical sexually transmitted infections (STIs), such as chlamydia, syphilis and gonorrhea (Ahmed, 2003; Baqi, 1999).

Over half of all new infections worldwide are among young people between the ages of 15 and 24. Every day, 6,000 young people become infected

with HIV– more than five every minute (Wang, 2009). In the United States alone, half of all new infections are estimated to be among people under age 25 years and the majority of young people are infected sexually. Study results indicated that the majority of undergraduates had a moderate level of HIV and AIDS knowledge, acceptance and attitudes towards people with HIV and AIDS. Boys had more acceptance and positive attitudes towards people with HIV and AIDS than girls. Students majoring in medicine performed better (more knowledgeable and accepting) than non-medical students (Xiao, 2007).

Adolescence is a critical period during which dramatic physical physiological emotional and behavioral changes take place quite suddenly. These changes coupled with the absence of authentic information to know understand and appreciate them, cause anxiety among adolescents who may be pushed into courses of actions without having a chance to think fully consequences (Jessor, 2000).

HIV/AIDS is spreading in world very rapidly especially in young age people. Young people aged 15–24 account for an estimated 45% of new HIV infections worldwide. According to a report, only 24% students in Karachi had perception about HIV mode of transmission and its spread (Syed, et al, 2009). Access and exposure to appropriate HIV/AIDS information and discussing it with others has the potential positively to impact knowledge, attitudes, beliefs and sexual practices (Bastie, 2008). Still, youth populations are poorly informed in Pakistan due to limited access to information about sexual and reproductive health matters, as both parents and the school system are reluctant to fulfill this obligation due to the sensitivity of the subject (Afsar, 2006; Ali, 2004).

The focus on HIV brought the need to assess the awareness levels of the adult population and the society's perception towards HIV/AIDS. Earlier most of the studies taken up had concentrated on high-risk group or some single-key population such as school children/adolescents, (Sodhi, 1997). rural or urban population, (Bhatia, 2004). prisoners, (Rajkumar, 2004). health care workers, (Bianchini, 1992). women, (Choi & Alice, 2003; Shrotri et al, 2003). drivers, (Abdelmoneim, 2002)., medical entrants (Chatterjee, 2001).

In Pakistan, young people in the age group 15 - 24 years comprise almost 50% of the country's population (NACP,2006).; however, they account for 0.1 % prevalence of HIV AIDS (UNAIDS, 2008). Well known factors such as peer pressure, increasing levels of social interaction with the opposite sex, and even household factors like broken homes and poverty, contribute to increased sexual activity and promiscuity (Jessor, 2000). According to an evaluation, it has been projected that an estimated 96,000 HIV-infected people live in Pakistan (UNAIDS, 2008).

This emerging pandemic in the young, who comprise the most productive age group, will certainly have an adverse impact on the country's economy. Various studies report differing findings about the youth's knowledge with regard to the existence of HIV/AIDS. According to the Survey in 2009, 24 % of youth surveyed did not hear about either HIV or AIDS, or both (Syed, et al, 2009). Same situations are reported in the South Asian countries. The Behaviors Surveillance Survey in India included 25 sampling units covering a total of 97 240 respondents, with equal representation given to urban and rural participants. However, according to the National Family Health Survey 2005- 2006 reports, only 36% of

male youths and 20% of females had a 'comprehensive knowledge about HIV/AIDS', which includes knowledge about condoms as a preventive measure, knowing that an AIDS-afflicted person could still look healthy, and rejecting to AIDS-related misconceptions. . Students had a lot of misconception about STIs. Many students do not even know that AIDS is incurable (Burchell, 2008; Shao, 2006).

Studies indicate that for world youth, the mass media, especially television, constitutes a major source of information about HIV/AIDS (Sodhi & Mehta, 1997). Other studies have shown that the majority of youth have received knowledge from their teachers and peers). For those residing in rural areas, textbooks constitute a major source of information (Aggarwal & Kumar, 1996).

Attitudes may also be determined by educational background and medium of educational instruction. Thus it was observed that students pursuing science held a fairly positive attitude towards people with AIDS compared with the arts and commerce students and a significantly higher number of female students from English-medium schools seemed to hold a favorable attitude when compared with males from Hindi medium schools. An appreciable change in attitude has been documented in the latest youth behavioral surveillance study performed in 2006 in India. According to the survey, 67.5% of youth were of the opinion that PLWHA should be allowed to stay in the community/village while 60.5% said that they were willing to share their food with PLHWA (Syed et al, 2009).

According to the latest figures released by the National AIDS Control Program of Pakistan, HIV/AIDS prevalence among IDUs has jumped from 0.4% in December 2003 to 7.6% in 2004 (Mohammad A Rai 2007). However, in

Larkana, where Pakistan's first HIV outbreak among IDU was reported, the number approached an astounding, twenty-seven percent (Shah, 2004). After the Larkana episode, HIV has been documented among IDU all over Pakistan. Currently, IDU do not comprise the bulk of drug users in Pakistan. The number of IDU is bound to increase in the near future, and as this happens, the relative cases of HIV/AIDS will also rise. Many HIV prevention efforts rely on providing general information about HIV transmission (Mahon, 1996).

Previous research, also demonstrated that in spite of widespread knowledge and appreciation of inherent risks, individuals from high risk groups continue to use IV drugs and to practice unprotected anal intercourse with partners of unknown HIV status (Stahl et al, 2004; Rosser et al, 1993; Kelly et al, 1995). Future projection of HIV epidemic and conduct of HIV intervention programs require continuous evaluation of heterogeneous mixing and other risky behaviors. Awareness about HIV/AIDS in general is extremely limited. The severity of the situation could be deduced from a survey conducted among school teachers in the capital city, Islamabad.

An outstanding sixty percent of the teachers responded by saying that 'they thought HIV was irrelevant in our cultural setting (Ali et al, 2004). In spite of efforts over the past two decades in STI prevention, this epidemic still presents a serious challenge to societies around the world, including Pakistan. Every year, increasing numbers of young people are infected with HIV and other STIs. The correspondence analysis showed that within the age range of 26 to 30 years, students are not too comfortable with having roommates who are HIV/AIDS

infected while the older students(those who are 30 years and above). feel very comfortable with sharing hostel room with them (Rasheed, 1995).

The present strategy of STIs education in Pakistan is simply not effective. Among the various groups, the college environment was found to provide great opportunity for HIV high-risk behaviors, including unsafe sex and multiple partnerships (Adefuye et al, 2009). To buttress this point, Durojaiye (2009). explained that the pandemic of HIV remains on the increase with young people at increased risk of infection. He observed that though knowledge of some aspects of the disease was quite high in the study group, yet, low risk-perception hindered the commitment to behavior change. Earlier study by Okunbor (2007). assessed strategies for reducing HIV/AIDS scourge among students of five Tertiary Institutions in Edo State, Nigeria, it was observed that some respondents perceived themselves as not vulnerable to AIDS.

The situation concerning Pakistan and HIV is indeed very precarious. The country lies at a very crucial junction. HIV has as yet not exploded. Most of the populace remains safe, as for now. However, concentrated epidemics have emerged, which means that very little time is left before a steep rise in infections occurs. The battle against HIV/AIDS in Pakistan has to be fought on a number of fronts: not just the afflicted population, but also on changing peoples' perspectives and ushering in the proper government policies and response measures. Neighboring China serves as a good example to follow as regards formulation of a national policy about HIV/AIDS (Wang, 2009). . The Government has to come forward and face the truth about HIV in Pakistan. Embarking not only upon national-level mass awareness programs, practical steps including widespread

screening for the high-risk populations has also to be instituted. Stigma and discrimination about HIV/AIDS in society could only be removed when prominent figures including politicians and sport stars start discussing about HIV/AIDS in public. As soon as these stigmatization barriers overcome, a major chunk of the battle against HIV in Pakistan would be conquered. What has to be reiterated again is that the time to act is now. Timely steps taken at the present could go a long way in preventing a wide-spread HIV epidemic in Pakistan (Ali et al, 2006).

Schools provide an efficient chance to teach young people both the life skills and essentials information needed for HIV preventions. So long as a young person remains in school, he or she may obtain this information in the reliable manners through class room materials and teachings. The Life Skill Basic Education is a strong initiative which enables both teachers and students to obtain needed information about HIV prevention and remains the best and most effective action for schools to help prevent HIV infection in youth. A basic education is improved by improving school infrastructure, teachers' competencies, student's nutrition and student's teacher ratio and teachers' capacity buildings (NACP, 2006).

It is probably because mass media education was not thorough enough and the coverage of such content remains low. The government should focus on ensuring adequate knowledge among educational workers and youth. Broader understanding of HIV policies among general community might encourage more students to seek HIV testing as they would understand the penalties for

discrimination and realize that they would have access to free treatment when needed.

One major step in preventing a widespread HIV-infection and AIDS epidemic in Pakistan is to make certain that teachers are prepared to recognize and treat HIV infected persons politely and to counsel patients about risks that might lead to infection. Valid knowledge about HIV transmission routes and the HIV epidemiology is important in light of the increasing epidemic and since students are in a process of developing into their subsequent role in nation building.

Students in Pakistan must be trained in the epidemiology and precaution and prevention of HIV during their basic studies by their teachers. Information about behavior, attitudes, and knowledge through regular surveys is essential to better understand the dynamics of the STI epidemic. This information is also important in assessing changes over time as a result of prevention efforts.

Some public health intervention to reduce HIV/AIDS risk associated with these practices could be formulated and implemented. To be effective, HIV/AIDS education must lead to changes in behavior that eliminate or substantially reduce the risk of HIV transmission. In conclusion, HIV/AIDS prevention program based on the ingredients including accurate perception of HIV/AIDS as dreadful disease, appreciation of behavior change is a sole means to stemming further HIV spread, firm knowledge of HIV transmission and preventive measures may prove effective in prevention of this disease.

We are Muslims and we have true knowledge of Quran and Sunnah .By leading a clean and simple life, we could avoid ourselves from this disease.



## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Nature of the research

The purpose of this study was to analyze the perceptions of literate and illiterate adults about HIV/ AIDS in rural areas. The study was descriptive in nature.

#### 3.2 Population of the Study

Population of the study consisted of 33934 male and female literate and illiterate adults of rural areas of district Rawalpindi aged 18 years and above as it stood on three union councils of the district were selected for this study.

Table 3.4 Population

S.#	Tehsil	U.C	Total Population	Male Adult	Female Adult	Total Adults
1	Rawalpindi	Bunda	16492	5994	5257	11251
2	Taxtila	Thatta Khalil	17022	5794	5307	11101
3	Gujar Khan	Kuri Dolal	17339	6063	5519	11582
Total						33934

Source: Govt. of Punjab (2007).

### 3.3 Sample of the Study

Three union councils Bunda, Thatta Khalil and Kuri Dolal from rural area of Tehsils Rawalpindi, Taxila and Gujar Khan were selected for this study respectively. From each union council 50 literate and 50 illiterate adults, making a total of 150 literate and 150 illiterate were included in the sample of the study as was convenient to the researcher. As literate and illiterate categorized data and identification of literate and illiterate adults were not already available in field so researcher used convenient sampling technique to get representative data. The sample size thus constituted 300 adults, 150 males and 150 females. Further breakdown of the sample is given in table 3.5. Table 3.5 Sample

S.#	Detail of Population			Sample
1	Name of U.C	Nature/ Characteristics	Total	
	BUNDA	Male Literate	4424	25
	Tehsil	Female Literate	3355	25
	Rawalpindi	Male illiterate	1555	25
		Female illiterate	1917	25
2	THATTA KHALIL	Male Literate	3065	25
	Tehsil Taxila	Female Literate	1920	25
		Male illiterate	3375	25
		Female illiterate	2741	25
3	KORI DOLAL	Male Literate	4154	25
	Tehsil GUJAR KHAN	Female Literate	3747	25
		Male illiterate	536	25
		Female illiterate	2487	25
TOTAL SAMPLE				300

Source: Govt. of Punjab (2007).

### 3.4 Research Instrument

The data were collected by using a self-designed questionnaire (Five point likert scale) which was filled in by the literate males & females included in the sample of study. The questionnaire included such aspects as the knowledge about the HIV/AIDS, perception about mode of spread of HIV/AIDS, attitude towards HIV/AIDS and knowledge about prevention of HIV/AIDS, marital status, occupational status, education and age. It was close ended questionnaire. Questionnaire was comprised of following parts:

- Knowledge about HIV/AIDS (8 Items).
- Perception about mode of spread of disease. (12 Items).
- Attitude towards HIV/AIDS (10 Items).
- Perception about prevention of disease. (10 Items).

The questionnaire thus consisted of 40 items about above mentioned four areas. The questionnaire was structured close ended and each item was to be responded on five – point Likert scale; Strongly agree (SA), Agree (A), Undecided (UD), Disagree (DA), Strongly Disagree (SDA). The questionnaire contained the same questions for all respondents literate and illiterate. These questionnaires were distributed among the literate and illiterate adults and were physically collected (See Appendix A).

#### 3.4.1 Pilot Testing of the Questionnaire

A draft questionnaire was tried out for pilot testing to identify its ambiguities and inadequacies. This was distributed to fellow students and other

research professionals of faculty of Social Sciences of International Islamic University Islamabad. This was done to ensure that instrument would obtain the desired data from the inputs of the fellow students and research professional to ensure language comprehension, reliability, and validity of the questionnaire.

### 3.5 Data Collection

Data was collected through structured questionnaire from the sample. The data were collected from illiterate adults by asking them orally about each item of the questionnaire. Researcher made personal visits to get the data from the literate and illiterate adult males. Researcher trained female data collectors to collect the data from females. Services of six trained females were utilized to collect the data from literate and illiterate adult females.

### 3.6 Data Analysis

For analysis of data responses of strongly agree and agree were added together because both categories were showing agreement towards statements and in similar way responses of disagree and strongly disagree were added together. In this way five – point Likert scale data was converted into three – point Likert scale. Data was analyzed by using the following chi-Square formula

$$\chi^2 = \sum (f_o - f_e)^2 / f_e$$

Where the responses of literate and illiterates were analyzed separately and findings were drawn accordingly.

## CHAPTER 4

### PRESENTATION AND ANALYSIS OF DATA

This chapter deals with analysis of information obtained the study sample. The objectives of the study were to analyze and compare perceptions of literate and illiterate adults about Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome in rural areas. A self-designed questionnaire based on five-point Likert scale ; Strongly agree (SA), Agree (A), Undecided (UD) , Disagree (DA), Strongly Disagree (SDA) was used to collect data. Researcher administered 300 questionnaires personally and received all of these back. The respondents were the literate and illiterate adults of rural area. The statistical technique Chi Square ( $\chi^2$ ) was used. The analysis and interpretation of data were regarding difference.

Chi Square value was calculated in order to check the divergence of observed frequencies from expected frequencies at 0.05 level of significance.

The analysis of data has been presented in the form of tables. The chapter contains the tables according to the various parts of the questionnaire (Appendix-A).

**Table 4.6 HIV/AIDS is a noncontagious disease.**

Category	Agree	Undecided	Disagree	Total	Chi	P
<b>Literate</b>	45	24	81	150	33.24	<.01
	M29	M9	M37	M75		
	F16	F15	F44	F75		
<b>Illiterate</b>	8	52	90	150	67.36	<.01
	M7	M29	M39	M75		
	F1	F23	F51	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.6 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to disagree with the statement that HIV/AIDS is a noncontagious disease.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also disagree that HIV/AIDS is a noncontagious disease but the illiterates, particularly females agree less with the statement than literates.

**Table 4.7 HIV/AIDS is incurable disease.**

Category	Agree	Undecided	Disagree	Total	Chi	p
	M44	M5	M26	M75		
Illiterate	61	47	42	150	3.88	<.01
	F32	F29	F14	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.7 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that HIV/AIDS is incurable disease.

The  $\chi^2$  value of illiterate's responses is not significant. They tend to disagree with the statement that HIV/AIDS is incurable.

**Table 4.8 HIV/AIDS patient has weak immune system.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M61	M8	M6	M75		
Illiterate	66	65	19	150	28.84	<.01
	F39	F27	F9	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.8 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS patient has weak immune system.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/AIDS patient has weak immune system but the illiterates particularly males agree less with the statement than literates.



**Table 4.9 Vaccine against HIV/AIDS is not successful.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M50	M11	M14	M75		
Illiterate	34	79	37	150	25.32	<.01
	F15	F40	F20	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.9 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that vaccine against HIV/AIDS is not successful.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. Illiterates, particularly females disagreed with the statement.

**Table 4.10 HIV/ AIDS is a sexually transmitted disease.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M63	M4	M8	M75		
<b>Illiterate</b>	93	43	14	150	63.88	<.01
	F49	F20	F6	F75		

df=2

$\chi^2$  at .05=5.99

4.10 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/ AIDS is a sexually transmitted disease.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/ AIDS is a sexually transmitted disease but the illiterates, particularly males agree less with the statement than literates.

**Table 4.11 HIV virus is the cause of AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M54	M20	M1	M75		
<b>Illiterate</b>	72	68	10	150	48.16	<.01
	F40	F30	F5	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.11 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV virus is the cause of AIDS.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV virus is the cause of AIDS but the illiterates, particularly males agree less with the statement than literates.

**Table 4.12 It is possible for a healthy looking person to be infected with HIV/AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M62	M9	M4	M75		
Illiterate	82	51	17	150	42.28	<.01
	F42	F28	F5	F75		

df=2  $\chi^2$  at.05=5.99

Table 4.12 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that it is possible for a healthy looking person to be infected with HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that it is possible for a healthy looking person to be infected with HIV/AIDS but the illiterates, particularly males agree less with the statement than literate

**Table 4.13 HIV/AIDS is a viral infection.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M62	M6	M7	M75		
Illiterate	80	62	8	150	56.16	<.01
	F43	F25	F7	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.13 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS is a viral infection.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/AIDS is a viral infection but the illiterates, particularly males agree less with the statement than literates.

**Table 4.14 People coming from overseas are a source of transmission of HIV/AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M38	M31	M6	M75		
Illiterate	80	62	8	150	56.16	<.01
	F43	F25	F7	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.14 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that people coming from overseas are a source of transmission of HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that people coming from overseas are a source of transmission of HIV/AIDS but the illiterates, particularly males agree less with the statement than literates.

**Table 4.15 HIV / AIDS can be spread by using “Phatkari.” of infected person.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M48	M20	M7	M75		
<b>Illiterate</b>	86	45	19	150	45.64	<.01
	F42	F27	F6	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.15 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that HIV/AIDS can be spread by using “Phatkari.” of infected person.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that HIV/AIDS can be spread by using “Phatkari.” of infected person but the illiterates, particularly females agree less with the statement than literates

**Table 4.16 HIV/AIDS spread by infected Blood Transfusion.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M75	M0	M0	M75		
<b>Illiterate</b>	105	34	11	150	96.04	<.01
	F56	F12	F7	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.16 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS spread by infected Blood Transfusion.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/AIDS spread by infected Blood Transfusion but the illiterates, particularly males agree less with the statement than literates.



**Table 4.17 HIV/AIDS can be transmitted to infants during pregnancy.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M50	M19	M6	M75		
<b>Illiterate</b>	95	43	12	150	70.36	<.01
	F49	F20	F6	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.17 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that HIV/AIDS can be transmitted to infants during pregnancy.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/AIDS can be transmitted to infants during pregnancy but the illiterates, particularly males agree less with the statement than literates.

**Table 4.18 HIV/AIDS cannot be spread by sharing foods with HIV patients.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M66	M3	M6	M75		
Illiterate	40	44	66	150	7.84	<.01
	F25	F21	F29	F75		

df=2  $\chi^2$  at.05=5.99

Table 4.18 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS cannot be spread by sharing foods with HIV patients.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They disagreed that HIV/AIDS cannot be spread by sharing foods with HIV patients but the illiterates, particularly males agree less with the statement than literates.

**Table 4.19 HIV/AIDS spread by sharing of shaving blades.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M68	M4	M3	M75		
Illiterate	103	33	14	150	87.88	<.01
	F54	F14	F7	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.19 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS spread by sharing of shaving blades.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that HIV/AIDS spread by sharing of shaving blades but the illiterates, particularly males agree less with the statement than literates.

**Table 4.20 HIV/AIDS is not spread by sharing utensils.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M65	M5	M5	M75		
Illiterate	33	39	78	150	23.88	<.01
	F22	F25	F28	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.20 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS is not spread by sharing utensils.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They disagreed that HIV/AIDS is not spread by sharing utensils but the illiterates, particularly males agree less with the statement than literates.

**Table 4.21 HIV/AIDS is not spread by Mosquito bite.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M56		M11	M75		
	M8					
<b>Illiterate</b>	49	51	50	150	0.04	<.01
	F26	F23	F26	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.21 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS is not spread by mosquito bite.

The  $\chi^2$  value of illiterate's responses is not significant. They tend to disagree with the statement that HIV/AIDS is not spread by the mosquito bite.

**Table 4.22 A baby can get HIV by breastfeeding from an HIV-positive mother.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M43	M20	M12	M75		
<b>Illiterate</b>	81	47	22	150	35.08	<.01
	F41	F24	F7	F75		
df=2					$\chi^2$ at .05=5.99	

Table 4.22 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that a baby can get HIV by breastfeeding from an HIV-positive mother.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that a baby can get HIV by breastfeeding from an HIV-positive mother but the illiterates, particularly males agree less with the statement than literates.

**Table 4.23 Sharing of needles and syringes among drug users is a risk factor in spread of HIV/AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M69	M4	M2	M75		
Illiterate	114	31	5	150	129.64	<.01
	F62	F12	F1	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.23 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that sharing of needles and syringes among drug users is a risk factor in spread of HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that sharing of needles and syringes among drug users is a risk factor in spread of HIV/AIDS but the illiterates, particularly males agree less with the statement than literates.

**Table 4.24 Engraving tattoo on body can lead to AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M59	M13	M3	M75		
<b>Illiterate</b>	88	47	15	150	53.56	<.01
	F43	F26	F6	F75		

df=2  $\chi^2$  at.05=5.99

Table 4.24 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that engraving tattoo on body can lead to AIDS.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that engraving tattoo on body can lead to AIDS but the illiterates, particularly females agree less with the statement than literates.



**Table 4.25 HIV/AIDS can be spread by reuse of syringe.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M68	M4	M3	M75		
<b>Illiterate</b>	115	23	12	150	127.96	<.01
	F58	F8	F9	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.25 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS can be spread by reuse of syringe.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/AIDS can be spread by reuse of syringe but the illiterates, particularly males agree less with the statement than literates.

**Table 4.26 Liking to live in shared room with HIV/AIDS positive individuals.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M33	M11	M31	M75		
Illiterate	54	27	69	150	18.12	<.01
	F25	F15	F35	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.26 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to disagree with the statement that they liked to live in a shared room with HIV/AIDS positive individuals.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also disagree that that they liked to live in a shared room with HIV/AIDS positive individuals but the illiterates, particularly females disagree more with the statement than literates.

**Table 4.27 Shaking hands with someone, who has HIV/AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M62	M7	M6	M75		
<b>Illiterate</b>	95	23	32	150	61.56	<.01
	F48	F10	F17	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.27 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that it is safe to shake hands with someone, who has HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that it is safe to shake hands with someone, who has HIV/AIDS but the illiterates, particularly males agree less with the statement than literates.

**Table 4.28 Provision of job to HIV/AIDS positive people on equal basis.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M62	M5	M8	M75		
<b>Illiterate</b>	84	42	24	150	37.92	<.01
	F45	F22	F8	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.28 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS positive people should be placed at job equally.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/AIDS positive people should be placed at job equally but the illiterates, particularly males agree less with the statement than literates.

**Table 4.29 Provision of extra rights to HIV/AIDS positive people.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M57	M7	M11	M75		
<b>Illiterate</b>	69	47	34	150	12.52	<.01
	F44	F21	F10	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.29 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, both males and females tend to agree with the statement that HIV/AIDS positive people should be provided extra rights.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/AIDS positive people should be provided extra rights but the illiterates, particularly males agree less with the statement than literates.

**Table 4.30 HIV/AIDS prevention education, as a part of curriculum.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M67	M2	M6	M75		
Illiterate	93	47	10	150	69.16	<.01
	F49	F23	F3	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.30 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS prevention education should be a part of curriculum.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that HIV/AIDS prevention education should be a part of curriculum but the illiterates, particularly males agree less with the statement than literates.

**Table 4.31 Not allowing children to play with HIV positive children.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M28	M16	M31	M75		
<b>Illiterate</b>	33	50	67	150	11.56	<.01
	F15	F28	F32	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.31 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to disagree with the statement that we should not allow our children to play with HIV positive children.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also disagree that that we should not allow our children to play with HIV positive children but the illiterates, particularly males disagree more with the statement than literates.

**Table 4.32 Having compassion for an AIDS patient.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M69	M0	M6	M75		
<b>Illiterate</b>	112	21	17	150	115.84	<.01
	F58	F11	F6	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.32 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that we should have compassion for an AIDS patient.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that we should have compassion for an AIDS patient but the illiterates, particularly males agree less with the statement than literates.



**Table 4.33 Liking meeting with the patient of AIDS**

Category	Agree	Undecided	Disagree	Total	Chi	p
	149	38	27	214	8.32	<.01
	M57	M6	M12	M75		
	74	19	13	106		
Illiterate	54	34	62	150	8.32	<.01
	125	22	19	166		
	F29	F17	F29	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.33 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that we should like meeting with the patient of AIDS.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They disagreed that we should like meeting with the patient of AIDS but the illiterates, particularly males agree less with the statement than literates.

**Table 4.34 Liking to eat meal with HIV/AIDS positive individuals**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M34	M8	M33	M75		
Illiterate	38	32	80	150	27.36	<.01
	F18	F18	F39	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.34 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that we should like to eat meal with HIV/AIDS individuals.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They disagreed that we should like to eat meal with HIV/AIDS individuals but the illiterates, particularly females agree less with the statement than literates.

**Table 4.35 HIV/AIDS positive people should not be bounded at home.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M68	M2	M5	M75		
	62	44	44	150	4.32	<.01
	F38	F27	F10	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.35 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that HIV/AIDS positive people should not be bounded at home.

The  $\chi^2$  value of illiterate's responses is not significant. They tend to disagree with the statement that HIV/AIDS positive people should not be bounded at home.

**Table 4.36 Limited safe relationship with opposite sex partner prevents the spread of HIV/AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M61	M4	M10	M75		
Illiterate	79	55	16	150	40.44	<.01
	F43	F24	F8	F75		
df=2					$\chi^2$ at.05=5.99	

Table 4.36 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, both males and females tend to agree with the statement that limited safe relationship with opposite sex partner prevented the spread of HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that limited safe relationship with opposite sex partner prevented the spread of HIV/AIDS but the illiterates, particularly males agree less with the statement than literates.

**Table 4.37 Use of disposable syringe each time can prevent HIV/AIDS spread.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M69	M2	M4	M75		
Illiterate	124	21	5	150	166.84	<.01
	F65	F9	F1	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.37 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that use of disposable syringe each time can prevent HIV/AIDS spread.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that use of disposable syringe each time can prevent HIV/AIDS spread but the illiterates; particularly males agree less with the statement than literates.

**Table 4.38 Proper screen blood transfusion can limit the HIV/AIDS spread.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M75	M0	M0	M75		
<b>Illiterate</b>	106	36	8	150	101.92	<.01
	F52	F19	F4	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.38 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that proper screen blood transfusion could limit the HIV/AIDS spread.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that proper screen blood transfusion could limit the HIV/AIDS spread but the illiterates, particularly females agree less with the statement than literates.

**Table 4.39 Injection safety is basic need to prevent HIV/AIDS spread.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M63	M4	M8	M75		
Illiterate	103	36	11	150	90.52	<.01
	F53	F19	F3	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.39 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that injection safety was basic need to prevent HIV/AIDS spread.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that injection safety was basic need to prevent HIV/AIDS spread but the illiterates; particularly males agree less with the statement than literates.

**Table 4.40 Proper counseling can help in better care of HIV/AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M62	M6	M7	M75		
<b>Illiterate</b>	93	45	12	150	66.36	<.01
	F54	F18	F3	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.40 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that proper counseling could help in better care of HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that proper counseling could help in better care of HIV/AIDS but the illiterates, particularly males agree less with the statement than literates.



**Table 4.41 New needles must be used to make hole in ears.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M64	M9	M2	M75		
Illiterate	112	31	7	150	121.08	<.01
	F60	F13	F2	F75		

df=2

$\chi^2$  at .05=5.99

Table 4.41 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that new needle must be used to make hole in ears.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that new needle must be used to make hole in ears but the illiterates, particularly males agree less with the statement than literates.

**Table 4.42 New blade must be used for child circumcision.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M75	M0	M0	M75		
Illiterate	119	24	7	150	145.72	<.01
	F63	F12	F0	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.42 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that new blade must be used for child circumcision.

Likewise, the  $\chi^2$  value of illiterate's responses is also highly significant. They also agree that new blade must be used for child circumcision but the illiterates, particularly males agree less with the statement than literates.

**Table 4.43 Proper role health departments in prevention of HIV/AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M46	M10	M19	M75		
Illiterate	61	57	32	150	9.88	<.01
	F40	F25	F10	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.43 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially females tend to agree with the statement that health departments are playing their proper role in prevention of HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate's responses is also significant. They also agree that health departments are playing their proper role in prevention of HIV/AIDS but the illiterates, particularly males agree less with the statement than literates.

**Table 4.44 Media’s effective role in creating awareness about prevention of HIV/AIDS.**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M64	M1	M10	M75		
Illiterate	87	43	20	150	46.36	<.01
	F44	F20	F11	F75		

df=2

$\chi^2$  at.05=5.99

Table 4.44 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that media was playing effective role to create awareness about prevention of HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that media was playing effective role to create awareness about prevention of HIV/AIDS but the illiterates, particularly males agree less with the statement than literates.

**Table 4.45 Effective role of religious scholars in creating awareness about prevention of HIV/AIDS**

Category	Agree	Undecided	Disagree	Total	Chi	P
	M69	M3	M3	M75		
Illiterate	97	37	16	150	70.68	<.01
	F52	F19	F4	F75		

df=2  $\chi^2$  at.05=5.99

Table 4.45 above shows that the  $\chi^2$  value is highly significant even at .01 level of confidence. Therefore literate adults, especially males tend to agree with the statement that religious scholars should play effective role in creating awareness about prevention of HIV/AIDS.

Likewise, the  $\chi^2$  value of illiterate’s responses is also highly significant. They also agree that religious scholars should play effective role in creating awareness about prevention of HIV/AIDS but the illiterates, particularly males agree less with the statement than literates.

### 4.3 Discussion

The Human Immunodeficiency Virus (HIV) is vital element of Acquired Immune Deficiency Syndrome (AIDS) HIV terminates the crowd immune system and leads to the death of host cells. A total of 1.9 to 2.4 million deaths were estimated worldwide in 2007 and 30.6 to 36.1 million people are estimated to be living with AIDS. HIV is spreading widely, rapidly and especially increasing in women. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. HIV infection in humans is now pandemic. According to UNAIDS's estimates, the prevalence of HIV/ AIDS among the population of men and women aged 15– 24 in Pakistan was about 0.1 per cent (UNIDS, 2008). The purpose of this study was to compare the perceptions of literate and illiterate adults about HIV/AIDS in rural area. The research study was descriptive in its nature. A total of 300 adults, 150 literate and 150 illiterate adults were included in the sample of the study. Data were collected through a questionnaire. Chi Square technique was applied to analyze. The following conclusions are drawn. Literate adults, especially females had knowledge about incurability of HIV/AIDS. Literate and illiterate adults both were unaware about non contagiousness of HIV/AIDS. Illiterate adults, particularly females were unaware about vaccine failure against HIV/AIDS. This was supported by the findings of Jessor, 2000.

Literate adults, especially males had knowledge about transmission of HIV/AIDS through infected blood transfusion, sharing shaving blades, breast feeding, injection drug users, engraving tattoo, reuse of syringe and no transmission by sharing food, utensils and by mosquito bite. This was favored by Literate adults, especially males had preventive knowledge regarding limited safe

sex relationship, use of disposable syringe, proper screened blood transfusion, use of new blade for child circumcision, role of media and religious scholar in prevention of HIV/AIDS. Literate adults, especially females had preventive knowledge regarding injection safety, proper counseling, use of new needle to make hole in ear and role of health department in prevention of HIV/AIDS. Illiterate adults, particularly males had less preventive knowledge regarding limited safe sex relationship, use of disposable syringe, injection safety, proper counseling, use of new needle to make hole in ear, use of new blade for child circumcision, role of health department, media, and religious scholar in prevention of HIV/AIDS. Illiterate adults, particularly males had less preventive knowledge regarding proper screened blood transfusion. (Syed, et al, 2009; Bastie, 2008; Afsar, 2006; Ali, 2004). Therefore, it is a time to inform the people about this vital disease so that they can live happy life.

As in current study convenient sampling technique was used, so researchers suggests for future researchers to replicate this study by using any random sampling technique.

## CHAPTER 5

### SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary

The HIV is causative agent of Acquired Immune Deficiency Syndrome AIDS. HIV destroys the host immune system and leads to the death of host. HIV is spreading widely and rapidly. Cure is the only care for HIV/AIDS. The purpose of this study was to compare the perceptions of literate and illiterate adults about HIV/AIDS in rural area. The research study was descriptive in its nature. The objectives of the study were to analyze and to compare perceptions of literate and illiterate adults about HIV/AIDS in rural areas. Three villages Bunda, Thatta Khalil and Kuri Dolal from rural area of Tehsils Rawalpindi, Taxila and Gujar Khan were selected for this study respectively. From each union council 75 literate and 75 illiterate adults aged 18 years and above, making a total of 300 adults, 150 literate and 150 illiterate adults were included in the sample of the study as was convenient to the researcher. Data were collected through a 40-item questionnaire to be responded on five point scale. Knowledge about HIV/AIDS, Perception about mode of spread of HIV/AIDS, Attitude towards HIV/AIDS and Knowledge about prevention of HIV/AIDS were focus of this study. The data was tabulated, analyzed and interpreted. Chi Square technique was applied to analyze and interpret the data.



## 5.2 Findings

The study yielded the following findings:

1. Literate adults, especially females tend to disagree that HIV/AIDS is a noncontagious disease. Likewise, illiterates also disagreed but they, particularly illiterate females, agree less with the statement (Table 4.6).
2. Literate adults, especially females tend to agree with the statement that HIV/AIDS is incurable disease. Contrary to it, illiterate males disagreed with the statement (Table 4.7).
3. Literate adults especially males, tend to agree that HIV/AIDS patient has weak immune system.. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement than literates (Table 4.8).
4. Literate adults, especially males tend to agree with the statement that vaccine against HIV/AIDS is not successful. Contrary to it, illiterates, particularly females disagreed with the statement (Table 4.9).
5. Literate adults, especially males tend to agree that HIV/ AIDS is a sexually transmitted disease. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.10).
6. Literate adults, especially males tend to agree that HIV virus is the cause of AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.11).
7. Literate adults, especially males tend to agree that it is possible for a healthy looking person to be infected with HIV/AIDS. Likewise, illiterates

- also agreed but they, particularly illiterate males agree less with the statement (Table 4.12).
8. Literate adults, especially males tend to agree that HIV/AIDS is a viral infection. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.13).
  9. Literate adults, especially females tend to agree that people coming from overseas are a source of transmission of HIV/AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.14).
  10. Literate adults, especially females tend to agree that HIV/AIDS can be spread by using “Phatkari.” of infected person. Likewise, illiterates also agreed but they, particularly illiterate females agree less with the statement (Table 4.15).
  11. Literate adults, especially males tend to agree that HIV/AIDS spread by infected Blood Transfusion. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.16).
  12. Literate adults, especially females tend to agree that HIV/AIDS can be transmitted to infants during pregnancy. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.17).
  13. Literate adults, especially males tend to agree that HIV/AIDS cannot be spread by sharing foods with HIV patients. Contrary to it, illiterates disagreed but they, particularly illiterate males agree less with the statement (Table 4.18).

14. Literate adults, especially males tend to agree that HIV/AIDS spread by sharing of shaving blades. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.19).
15. Literate adults, especially males tend to agree that HIV/AIDS is not spread by sharing utensils. Contrary to it, illiterates disagreed but they, particularly illiterate males agree less with the statement (Table 4.20).
16. Literate adults, especially males tend to agree with the statement that HIV/AIDS is not spread by mosquito bite. Contrary to it, illiterates disagreed but they, particularly illiterate males agree less with the statement (Table 4.21).
17. Literate adults, especially males tend to agree that a baby can get HIV by breastfeeding from an HIV-positive mother. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.22).
18. Literate adults, especially males tend to agree that sharing of needles and syringes among drug users is a risk factor in spread of HIV/AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.23).
19. Literate adults, especially males tend to agree that engraving tattoo on body can lead to AIDS. Likewise, illiterates also agreed but they, particularly illiterate females agree less with the statement (Table 4.24).
20. Literate adults, especially males tend to agree that HIV/AIDS can be spread by reuse of syringe. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.25).

21. Literate adults, especially females tend to disagree that that they liked to live in a shared room with HIV/AIDS positive individuals. Likewise, illiterates also disagreed but they, particularly illiterate females disagree more with the statement (Table 4.26).
22. Literate adults, especially males tend to agree that it is safe to shake hands with someone, who has HIV/AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.27).
23. Literate adults, especially males tend to agree that HIV/AIDS positive people should be placed at job equally. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.28).
24. Literate adults, both males and females tend to agree that HIV/AIDS positive people should be provided extra rights. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.29).
25. Literate adults, especially males tend to agree that HIV/AIDS prevention education should be a part of curriculum. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.30).
26. Literate adults, especially females tend to disagree that we should not allow our children to play with HIV positive children. Likewise, illiterates also disagreed but they, particularly illiterate males disagree more with the statement (Table 4.31).

27. Literate adults, especially males tend to agree that we should have compassion for an AIDS patient. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.32).
28. Literate adults, especially males tend to agree that we should like meeting with the patient of AIDS. Contrary to it, illiterates disagreed but they, particularly illiterate males agree less with the statement (Table 4.33).
29. Literate adults, especially females tend to agree that we should like to eat meal with HIV/AIDS individuals. Contrary to it, illiterates disagreed but they, particularly illiterate females agree less with the statement (Table 4.34).
30. Literate adults, especially males tend to agree with the statement that HIV/AIDS positive people should not be bounded at home. (Table 4.35).
31. Literate adults, both males and females tend to agree that limited safe relationship with opposite sex partner prevented the spread of HIV/AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.36).
32. Literate adults, especially males tend to agree that use of disposable syringe each time can prevent HIV/AIDS spread. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.37).
33. Literate adults, especially males tend to agree that proper screen blood transfusion could limit the HIV/AIDS spread. Likewise, illiterates also agreed but they, particularly illiterate females agree less with the statement (Table 4.38).

34. Literate adults, especially females tend to agree that injection safety was basic need to prevent HIV/AIDS spread. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.39).
35. Literate adults, especially females tend to agree that proper counseling could help in better care of HIV/AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.40).
36. Literate adults, especially females tend to agree that new needle must be used to make hole in ears. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.41).
37. Literate adults, especially males tend to agree that new blade must be used for child circumcision. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.42).
38. Literate adults, especially females tend to agree that health departments are playing their proper role in prevention of HIV/AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.43).
39. Literate adults, especially males tend to agree that media was playing effective role to create awareness about prevention of HIV/AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.44).
40. Literate adults, especially males tend to agree that religious scholars should play effective role in creating awareness about prevention of

HIV/AIDS. Likewise, illiterates also agreed but they, particularly illiterate males agree less with the statement (Table 4.45).

### 5.3 Conclusions

The following conclusions could be drawn from this study:

1. Literate adults, especially males had knowledge about HIV/AIDS. Illiterate adults, particularly males were less aware about HIV/AIDS.
2. Literate adults, especially males had knowledge about transmission of HIV/AIDS. Illiterate adults, particularly males were less aware about transmission of HIV/AIDS.
3. Literate adults, especially males had positive attitude towards HIV/AIDS. Illiterate adults, especially females had less positive attitude towards HIV/AIDS.
4. Literate adults, especially males had preventive knowledge regarding HIV/AIDS. Illiterate adults, particularly males had less preventive knowledge regarding HIV/AIDS.

### 5.4 Recommendations

The following recommendations for action and further researches based on the findings and conclusions are made:

1. Government may involve mass media communication to increase the knowledge of literate and illiterate people about HIV/AIDS.
2. Health related governmental organizations may initiate awareness programs for Illiterate adults, particularly males for enhancement of their information regarding transmission of HIV/AIDS.
3. Government and non-governmental organizations may focus to create positive attitude towards HIV/AIDS among illiterate adults, especially females.
4. Services of religious scholars may be utilized to create awareness among illiterate adults, particularly males regarding preventive knowledge about HIV/AIDS.
5. A few topics for further research are suggested below:
  - i. Perceptions of male and female secondary school students about HIV/AIDS.
  - ii. Perception of university students about viral diseases.
  - iii. Awareness about contagious diseases among school teachers.
  - iv. Assessment of interest of students regarding their role in community mobilization to decrease stigma discrimination in society.



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دیہاتی علاقے کے پڑھے لکھے اور ان پڑھ بالغوں میں ایڈز (HIV/AIDS) کی بیماری کے ادراک کا تقابلی مطالعہ  
آبادی کے متعلقہ معلومات

جنس: مرد ----- عورت -----  
عمر: ----- ازدواجی حیثیت: شادی شدہ ----- غیر شادی شدہ -----  
تعلیمی سطح: ----- DHQ ہسپتال سے فاصلہ: ----- علاقہ: -----  
معیاری سوال  
(۱) آپ نے کبھی ایڈز کی بیماری کے بارے میں سنا؟ ----- ہاں ----- نہیں -----  
اگر ہاں تو ایڈز کیا ہے؟ -----

سریل نمبر	سوالات	متفق کچھ پر نہیں غیر متفق
۱	ایچ آئی وی ایڈز ایک غیر متعدی بیماری ہے	
۲	ایچ آئی وی ایڈز ناقابل علاج مرض ہے	
۳	ایچ آئی وی ایڈز کے مریض کا قوت معدافت کا نظام کمزور ہوتا ہے	
۴	ایچ آئی وی ایڈز کے خلاف ویکسین ناکام ہے	
۵	ایچ آئی وی ایڈز ایک جنسی مرض ہے	
۶	ایچ آئی وی وائرس ایچ آئی وی ایڈز کا سبب ہے	
۷	بظاہر صحت مند نظر آنے والے شخص کو بھی ایچ آئی وی ایڈز ہو سکتا ہے۔	
۸	ایچ آئی وی ایڈز ایک وائرس کی بیماری ہے	
۹	ایچ آئی وی ایڈز بیرون ملک سے آنے والے لوگوں کی وجہ سے پھیل رہا ہے	
۱۰	ایچ آئی وی ایڈز شیو (After Shave) کے بعد خون آلودہ پھسکوی کے استعمال سے پھیلتا ہے	
۱۱	ایچ آئی وی ایڈز سے متاثرہ فرد کے خون کا کسی دوسرے فرد کو انتقال خون سے ایڈز پھیلتا ہے	
۱۲	ایچ آئی وی ایڈز دوران پیدائش متاثرہ ماں سے بچے کو منتقل ہو جاتا ہے	
۱۳	ایچ آئی وی ایڈز مریض کے ساتھ کھانا کھانے سے نہیں پھیلتا ہے	
۱۴	ایچ آئی وی ایڈز متاثرہ فرد کے خون آلودہ بلیڈ کے استعمال سے پھیلتا ہے	
۱۵	ایچ آئی وی ایڈز متاثرہ فرد کے استعمال شدہ برتنوں سے نہیں پھیلتا ہے	
۱۶	ایچ آئی وی ایڈز چھڑ کے کانٹے سے نہیں پھیلتا ہے	
۱۷	بچے کو ایچ آئی وی ایڈز سے متاثرہ ماں کا دودھ پلانے سے ایچ آئی وی ایڈز ہو سکتا ہے	
۱۸	منشیات کے عادی افراد میں سرنج اور سوئیوں کے تبادلہ بھی ایچ آئی وی ایڈز کے لاحق ہونے کا سبب بن سکتا ہے۔	
۱۹	جسم پر نقش و نگار بنانے سے ایچ آئی وی ایڈز کے پھیلنے کا خدشہ ہو سکتا ہے	
۲۰	استعمال شدہ سرنج کے دوبارہ استعمال سے ایچ آئی وی ایڈز پھیلتا ہے	

- ۲۱ آپ ایچ آئی وی ایڈز سے متاثرہ فرد کے ساتھ ایک کمرے میں رہنا پسند کریں گے
- ۲۲ ایچ آئی وی ایڈز سے متاثرہ فرد کے ساتھ باتھ ملانے سے بیماری نہیں ہوتی۔
- ۲۳ ایچ آئی وی ایڈز سے متاثرہ افراد ملازمت کے مساوی حقوق ملنے چاہیں
- ۲۴ ایچ آئی وی ایڈز کے مریضوں کو عام لوگوں کے مقابلے میں زیادہ حقوق ملنے چاہیں
- ۲۵ ایچ آئی وی ایڈز سے بچاؤ کے متعلق تعلیم نصاب کا حصہ ہونا چاہیے
- ۲۶ ہم اپنے بچوں کو ایچ آئی وی ایڈز سے متاثرہ بچوں کے ساتھ کھیلنے کی اجازت نہیں دیں گے
- ۲۷ ہمارے دل میں ایچ آئی وی ایڈز کے مریض کے لیے رحم دلی ہے
- ۲۸ ہم ایچ آئی وی ایڈز کے مریض سے ملنا پسند کرتے ہیں
- ۲۹ آپ کبھی ایچ آئی وی ایڈز سے متاثرہ فرد کے ساتھ کھانا کھانا پسند کریں گے
- ۳۰ ایچ آئی وی ایڈز کے مریضوں کو گھروں میں بند نہیں رکھنا چاہیے
- ۳۱ اپنی شریک حیات کے ساتھ مختلط تعلقات ایچ آئی وی ایڈز کے پھیلاؤ کو کم کرنے میں مدد دیتا ہے
- ۳۲ ہر دفعہ نئی حفاظتی سرنج کا استعمال ایچ آئی وی ایڈز کے پھیلاؤ کو روکنے کا بنیادی ذریعہ ہے
- ۳۳ صحیح طریقے سے ٹیسٹ شدہ خون کا انتقال ایچ آئی وی ایڈز کے پھیلاؤ کو کم کر سکتا ہے
- ۳۴ صاف اور نئی سرنج کا استعمال ہی ایچ آئی وی ایڈز سے بچاؤ کا بنیادی طریقہ ہے
- ۳۵ ایچ آئی وی ایڈز کے متعلق موزون مشورے احتیاط کا بہترین طریقہ ہے
- ۳۶ کان چھدوانے کیلئے ہمیشہ نئی سوئی کا استعمال کرنا چاہیے
- ۳۷ بچوں کے ختنے کے لیے ہمیشہ نئے بلیڈ کا استعمال کرنا چاہیے
- ۳۸ صحت سے متعلق ادارے بیماری کے بچاؤ کیلئے اپنا کردار ادا کر رہے ہیں
- ۳۹ ذرائع ابلاغ ایچ آئی وی ایڈز کے متعلق آگاہی پھیلا رہا ہے
- ۴۰ مولانا حضرات اور علماء کرام ایچ آئی وی ایڈز کے متعلق آگاہی کیلئے کردار ادا کر سکتے ہیں