

Knowledge about AIDS/HIV infection among women attending obstetrics and gynaecology clinic at a university hospital

Gulfareen Haider, Nishat Zohra, Nusrat Nisar, Aftab Afroz Munir
Department of Obstetric & Gynaecology, Isra University Hospital, Sindh, Hyderabad.

Abstract

Objective: To determine the level of awareness about Human Immuno-deficiency Virus Infection and Auto Immuno Deficiency Syndrome (HIV/AIDS) among women attending obstetrics and gynaecology clinic.

Methods: A descriptive cross-sectional study was conducted in the obstetric and gynaecology clinic at Isra University Hospital Hyderabad Pakistan from April to June 2007. A total of 189 women attending the obstetric and gynaecology clinic between ages 20 and 50 years were included. Informed consent was taken and information was collected by a pre-designed questionnaire to assess the level of awareness about HIV/AIDS. Data analysis was done by computer software, SPSS version 11.

Results: Out of the total, 86.8% women had heard about HIV/AIDS. A large majority of women knew that it is transmitted by close sexual relationship, through infected blood, can be transmitted from mother to baby and knew that it is transmitted by reuse of infected needles while only 40.7% knew that it can be transmitted during delivery. The respondents had the knowledge that multiple sexual partners (79.4%), prostitutes and homosexual males (49.7%), drug addicts (49.7%) were high risk groups. Regarding prevention of AIDS, 70.9% mentioned avoiding homosexuality, 58.7% knew the use of condoms and 74.7% women knew that screening of blood in laboratories before transfusion can prevent AIDS.

Conclusion: The level of awareness regarding HIV/AIDS transmission and prevention was satisfactory among women attending the out-patient department of a gynaecology and obstetrics department. However, number of misconceptions needs to be corrected (JPMA 59:95; 2009).

Introduction

The Human Immunodeficiency Virus/Acquired Immuno Deficiency Syndrome (HIV/AIDS) pandemic continues its deadly assault in different parts of the world and over 20 million people have died since the first case of AIDS was identified in 1981.¹ HIV/AIDS also poses serious threats to Pakistan. Till recently, Pakistan was categorized as low prevalence high-risk country for HIV infection and an estimated 85,000 persons or 0.1% of the adult population in this country are infected with HIV.^{2,3} Heterosexual transmission (52.55%) and contaminated blood or blood products (11.73%) are the most commonly reported modes of transmission for HIV/AIDS in Pakistan. Other modes of transmission include injecting drug use (2.02%), male-to-male or bisexual relationship (4.55%), and mother to child transmission (2.2%) while mode of transmission in 26.9% of the reported HIV/AIDS cases could not be established due to incomplete data.⁴ The male-to-female ratio is 42:6 and 7:1 (per100, 000) in reported HIV-positive and AIDS cases, respectively. By the end of 2005, Pakistan had officially reported a cumulative total of 3073 HIV/AIDS cases.³ However, a large number of cases go unreported. Social taboos and lack of knowledge among general population as well as health care providers

prevent patients from reporting their affliction.

There is low literacy rate among general public especially among women. A significant section of Pakistani society is still largely unaware of the presence of HIV/AIDS which increases the calamity many fold.⁵ Due to these factors, Pakistan had to take rigorous and sustained action in order to prevent HIV/AIDS epidemic. In the absence of preventive vaccine and curative drugs, which are unlikely to be available in the near future, prevention is the most important global strategy.⁶

In Pakistan, very few studies have been conducted regarding the knowledge of AIDS among women. A study conducted by Mirza⁷ among male college students in Islamabad in 1997, showed that the majority of the students knew about the existence of AIDS, its causative factors and modes of transmission. However, misconception about modes of transmission of AIDS was present as the majority wrongly believed that razor, ear and nose piercing, tattooing are not responsible for spread of HIV.⁷ Since literature review revealed that in Pakistan very few studies regarding knowledge of HIV/AIDS among women have been conducted, the present study was carried out to assess knowledge, beliefs and misconceptions regarding the cause, transmission and prevention of HIV/AIDS among women.

Subjects and Methods

This descriptive study was conducted from 5th April 2007 to 8th June 2007 on women who had attended obstetrics and gynaecology out-patient department of a private-sector Isra university hospital situated in Hyderabad Sindh, Pakistan. This university hospital caters to patients from Hyderabad city and the nearby villages. Daily, nearly 30 to 35 patients visit the out-patient department. Among these, 189 women aged 20 to 50 years were included in the study by convenience sampling. Information was collected on pre-designed questionnaire containing questions regarding basic knowledge of disease, its causative organism, high risk group, route of transmission and its prevention. Informed consent was taken from each participant. All of the data was entered and analyzed by computer software programme, SPSS version 11.0.

Results

A total of 189 women were included in the study. The mean age of women was 36 ± 7.7 years. The majority of women (86.8%) had heard about HIV/AIDS. One hundred and sixty five (85.7%) women were educated and 24 (12.7%) were illiterate.

As in Table 1, a total of 20 questions were asked

Table 1: Knowledge of women regarding HIV / AIDS and its mode of transmission from an infected person

Questions asked from women	Correct Answer	Incorrec Answer
What is AIDS?	84.7%	15.3%
What is HIV?	84.7%	15.3%
How infected person will present?	72.0%	28.0%
Where patients should be kept after diagnosis?	83.1%	16.9%
Is AIDS present in Pakistan?	86.2%	13.8%
Mode of transmission from an infected person		
Coughing / Sneezing	68.3%	31.7%
Close sexual contact	83.1%	16.9%
Hand shaking	81.5%	18.5%
Infected blood	83.6%	16.4%
Kissing	72.5%	27.5%
From mother to baby	84.7%	15.3%
During delivery	40.7%	59.3%
Reuse of infected needles	78.3%	21.7%
Mosquito bites	77.2%	22.8%
Ear / nose pricking by infected needles	47.1%	52.9%
Sharing under clothing	78.8%	21.2%
Sharing water / plates	71.4%	28.6%
Working with person with AIDS	74.1%	25.9%
Tears	72.5%	27.5%
Breast Feeding	48.1%	51.9%

about knowledge of HIV/AIDS. A total of 160 (84.7%) correctly stated the difference in HIV/AIDS. One hundred and thirty six (72.0%) women knew how infected person with HIV/AIDS will present and 157 (83.1%) women knew

Table 2: Knowledge of women regarding high-risk groups for acquiring HIV infection.

At high-risk	Correct Answer	Incorrec Answer
Person with multiple sexual partners	79.4%	20.6%
Homosexual males	49.7%	50.3%
Prostitutes	49.7%	50.3%
Females as compare to males	37.0%	63.0%
Hospital staff	22.9%	77.8%
Muslims	65.6%	34.4%
Hindus	37.6%	62.4%
Christians	36.5%	63.5%
Smokers	64.6%	35.4%
Drug addicts	49.7%	50.3%
Alcohol users	48.7%	51.3%

Table 3: Knowledge of women regarding prevention of HIV/AIDS.

	Correct Answer	Incorrec Answer
Is AIDS preventable?	44.4%	55.6%
Use of medicines	61.4%	38.6%
By vaccination	60.3%	39.7%
By avoiding abnormal sexual behaviour	41.3%	58.7%
Using condoms	58.7%	41.3%
Avoiding Homosexuality	70.9%	29.1%
Avoiding using needles of injection	64.0%	36.0%
Screening of blood before transfusion	74.1%	25.9%

where patients should be kept after the diagnosis of HIV/AIDS. The majority of women (86.2%) correctly agreed that AIDS is present in Pakistan.

Regarding the knowledge for the transmission of HIV/AIDS, 83 % women knew that HIV/AIDS is transmitted through close sexual contact while transmission from mother to baby and through pricking of ear and nose by infected needles was known by 84.7% and 47.1% women respectively and only a small number of women knew that HIV/AIDS can be transmitted during delivery. A cumulative analysis of all questions for knowledge about mode of transmission showed that only 11.1% women correctly responded to all the questions.

As in Table 2, 11 questions were asked regarding the knowledge about high-risk groups for acquiring HIV infection. Only 70 (37.0%) women knew that females are at high risk of acquiring infection as compared to males. Nearly half of the women (49.7%) correctly responded that homosexual males and prostitutes are in high risk groups for acquiring infection. A cumulative analysis of all the questions regarding high risk groups showed that 39 (20.6%) women correctly responded to all the questions.

As in table 3, eight questions were asked related to the probable preventive measures against AIDS, 140 (74.1%) women correctly stated that screening of blood

before transfusion prevents HIV/AIDS. One hundred and twenty-one (64.0%) women stated that by avoiding used needles, HIV/AIDS can be prevented while 114 (60.3%) women stated that there is no vaccine available to prevent HIV/AIDS. A cumulative analysis of all the questions regarding knowledge about prevention showed that 38 (20.1%) women responded correctly. Women were also asked about the sources of information regarding HIV/AIDS, 109 (57.7%) identified knowledge through television, 69 (36.5%) knew through print media and radio while 11 (5.8%) received information through friends or relatives.

Discussion

Auto Immune Deficiency Syndrome (AIDS) is a preventable disease. The awareness for attitudes and behaviours of female population is one of the major determinants for the battle against HIV infection and AIDS. The results of this survey showed that the knowledge about AIDS among the study population was satisfactory on many issues of public health importance. Foremost among these is the realization of the fact that AIDS is a threat in Pakistan.

This study revealed important areas where women lacked awareness. Significant proportions of respondents had misconceptions that transmission of HIV is by kissing a patient or an infected person. Similarly, awareness on the role of condoms in prevention of the disease and about the impact of drugs on virus activity and infectivity was also limited.

AIDS continues to be a critical health threat for adolescents, especially females. The correct knowledge and beliefs among them might be the main driving force for preventing HIV/AIDS infection. In studies conducted in Pakistan, although females were found to have satisfactory knowledge about HIV/AIDS infection, they had a number of misbeliefs and misconceptions.^{8,9}

In this study a vast majority of the women knew that AIDS can be transmitted from person to person and were relatively well informed about routes of AIDS transmission. However, many were unaware that ear/nose piercing can cause AIDS. In a country like Pakistan where ear/nose piercing is a common practice at a very early age, this ignorance can lead to a rapid spread of HIV infection. These findings also concur with the study conducted by Mirza on male students in Islamabad.⁷

Pakistan being an Islamic state with its constitution based on Islamic principles, commercial sex or prostitution does not openly exist in our society. A substantial number of women in this study thought that a person is at an increase risk of acquiring infection from HIV/AIDS, if the person belongs to a religion other than Islam. The findings concur

with another study conducted by Radanovich which pointed out that Muslims take solace in the Islamic belief and that its cultural values provide a degree of protection against AIDS. However, this theory is not necessarily put into practice.¹⁰

There were several areas of misconceptions relating it to prevention in our study. Only 41.3% knew it can be prevented by avoiding promiscuous sex and 58.7% women knew that use of condoms can prevent AIDS while 61.4% knew that AIDS cannot be prevented by medicines and vaccines. Although the results are somewhat worse than another study conducted in Karachi among medical students,⁸ their knowledge can be considered remarkable keeping in view the fact that the women included in the present study were non-professionals with minimal access to health education and medical literature.

In this study, the majority of women knew about HIV/AIDS and television was the most common source of their knowledge. In the course of 21st century, audio visual media has become an effective means to communicate ideas and information about health and medicines to masses and its impact has clearly been demonstrated all over the world.

Although resource mobilization for HIV/AIDS in Pakistan is difficult, political commitment to HIV/AIDS has greatly increased in recent years.¹¹ The level of political commitment and management attention, status of infra-structures, resource availability and community involvement has a direct bearing on the spread or prevention of HIV/AIDS. As yet, no effective treatment is available nor a vaccine breakthrough has been made possible for HIV/AIDS. Advocacy, general awareness, safer sexual procedures, proper screening of blood before transfusion, safe surgical, dental and invasive practices, and special awareness activities like peer education among high risk groups are known intervention tools and currently these are recommended as best practices. Furthermore, in the presence of a susceptible population that promotes high-risk behaviours for the spread of disease, policies and programmes addressing HIV/AIDS needs to be developed. These policies should be based on better epidemiological information (enhanced surveillance and research) about HIV/AIDS within the country.

Over the years, surveys have highlighted areas of low awareness in various population groups and have emphasized the increase involvement of media, educational institutions, government and international agencies in the propagation of AIDS awareness.¹²⁻¹⁴ A study on a group of female students investigated the impact of various sources of information on awareness of AIDS and pointed out its underutilization.⁹

AIDS education has emerged as one of the practical measures to limit spread of its epidemic. Initially, when this disease was seen as a sexually transmitted disease, the focuses of health education were homosexuals, drug and alcohol abusers, and blood donors and no emphasis was given on educating the general population. Development of proactive and socially appropriate prevention and treatment measures through public private partnerships involving civil societies and organizations are required to address the impending threat of HIV/AIDS spread in Pakistan.

Conclusions

Women demonstrated a high level of knowledge concerning AIDS and HIV, but had considerable misconceptions on certain aspects of the disease. There is a need to correct the misconceptions and to increase the level of awareness by health education using electronic media especially television, radio and newspapers.

References

1. UNAIDS/WHO AIDS epidemic update. December 2005. Geneva: UNAIDS/

- WHO; 2006.
2. The World Bank. Preventing HIV/AIDS in Pakistan: June 2005. Geneva: The Bank; 2006.
 3. Pakistan. UNAIDS: The Joint United Nations Programme on HIV/AIDS. AIDS. Online 2006 (Cited July 2006). Available from URL: http://www.unaids.org/en/Regions_Countries/Countries/Pakistan.asp.
 4. USAIDS HIV/AIDS Program in Pakistan, April 2005. Geneva: USAIDS; 2006.
 5. Jamal N, Khushkh IA, Naeem Z. Knowledge and attitudes regarding AIDS among female commercial sex workers at Hyderabad City, Pakistan. *J Coll Physicians Surg Pak* 2006; 16: 91-3.
 6. Quinn TC. Global burden of the HIV pandemic. *Lancet* 1996; 348:99-106.
 7. Mirza F. To asses acquired immunodeficiency syndrome (AIDS). Awareness among students of degree colleges for boys, Islamabad. [Dissertation] Lahore: Institute of Public Health; 1997.
 8. Ali G, Khanani R, Mubhashir MA, Memon AR, Naqvi HN. Knowledge and attitudes of medical students to people with HIV and AIDS. *J Coll Physicians Surg Pak* 1996; 6:58-61.
 9. Farid R, Choudhry AJ. Knowledge about AIDS/HIV infection among female college students. *J Coll Physicians Surg Pak* 2003; 13:135-7.
 10. Rodanovic Z. AIDS and Islam. *Med Arch* 1997; 51:45-46.
 11. Khan OA, Hyder AA. Responses to an emerging threat: HIV/AIDS policy in Pakistan. *Health Policy Plan* 2001; 16:214-8.
 12. Player MI, Frank DI. Families as a source of AIDS information for school. *Clin Nurs Spec* 1994; 8: 321-7.
 13. Pitts M, Jackson H. No joking matter: formal and informal sources of information about AIDS in Zimbabwe. *AIDS Educ Prev* 1993; 5: 212-9.
 14. Ndlovu RJ, Sihlangu R. Preferred sources of information on AIDS among high school students from selected schools in Zimbabwe. *J Adv Nurs* 1992; 17:507-13.