

Knowledge, Attitude, Practices and Awareness Regarding HIV/AIDS among University Students of Islamabad and Rawalpindi, Pakistan

Muhammad Rehan¹, Usman Waheed², Mehwish Sarwar¹, Muhammad Arshad³,
Humayoon Shafique Satti⁴, Hasan Abbas Zaheer^{2,5}

Author's Affiliation

¹Federal Medical and Dental College, Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad

²Department of Pathology and Blood Bank, Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad

³Department of Bioinformatics and Biotechnology, International Islamic University, Islamabad

⁴Department of Biochemistry, Quaid-i-Azam University, Islamabad

⁵Safe Blood Transfusion Programme, Ministry of National Health Services, Government of Pakistan

Author's Contribution

^{1,2}planned the study; ^{1,4}literature search; ^{1,3,4} data collection; ^{1,5} data analysis; ^{2,5} supervised the study

Article Info

Received: April 13, 2016

Accepted: June 7, 2016

How to Cite this Manuscript

Rehan M, Waheed U, Sarwar M, Arshad M, Satti HS, Zaheer HA. Knowledge, Attitude, Practices and Awareness Regarding HIV/AIDS among University Students of Islamabad and Rawalpindi, Pakistan. *Ann. Pak. Inst. Med. Sci.* 2016; 12(2):86-89.

Funding Source: Nil

Conflict of Interest: Nil

Address of Correspondence

Usman Waheed
usman.waheed07@gmail.com

ABSTRACT

Objective: To determine the level of knowledge, attitude and awareness of university students towards HIV/AIDS.

Study Design: Cross-sectional descriptive study.

Place and Duration: The study was carried out in Islamabad and Rawalpindi at the Shaheed Zulfiqar Ali Bhutto Medical University (SZAMBU), Quaid-e-Azam University (QAU), International Islamic University (IIU), PMAS Arid Agriculture University, Fatima Jinnah Women University (FJWU) and Rawalpindi Medical College from November 2015 - February 2016.

Material and Methods: A questionnaire based study was performed among 1,031 respondents using random convenient sampling technique. Closed ended questions were used to evaluate knowledge, attitude, practices and awareness (KAPA) of HIV/AIDS. Guidance was given by the researcher to students about how to fill the questionnaire, whenever required so. Collected data were entered into SPSS version 20 (IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.) and analyzed.

Results: Of the 1,031 participants, 637 (61.7%) were females while 394 (38.3%) were males. Average knowledge according to correct knowledge score was 68.4%, which was high among medical students (71.9%). Knowledge among female respondents was higher than males (68.3% versus 61.8%). General awareness was inadequate. Social and electronic media were major sources identified for gaining knowledge. General awareness was found low.

Conclusion: Overall knowledge about HIV/AIDS was moderate among the university students with limited knowledge concerning spread of HIV. Misconceptions and social stigmas are still prevalent among students regarding AIDS. Medical students were better aware of AIDS. Awareness score for AIDS was below average. Screening was less frequent and participation of students in AIDS prevention initiatives was found to be negligible.

Key words: HIV/AIDS, KAP study, Practices, University students.

Introduction

As the world enters the fourth decade of Human Immunodeficiency Virus (HIV) epidemic, AIDS has emerged as one of the most serious public health complications and is considered to be the fourth deadliest infection worldwide. Globally, the status of the HIV pandemic is quite depressing, with a constant increase in the number of people living with HIV/AIDS. According to UNAIDS, 1.1 million individuals died due to HIV in 2015 and an estimated 36.7 million people are living with HIV by the end of 2015.¹ The alarming data presents a disappointing situation, particularly in the low Human Development Index (HDI) countries, where the magnitude of the epidemic is frighteningly significant. Pakistan has remained sheltered from the HIV, at least, during the first decade of the invasion of HIV/AIDS epidemic. However, the country has now entered into 'concentrated phase' of the epidemic as its prevalence in traditional risk groups exceeds 5%. Globally new HIV infections have dropped comparatively but Pakistan is facing a rise in new HIV infections. Pakistan is placed among 12 countries which account for more than 90% of individuals living with HIV and more than 90% of new HIV infections in Asia region.² The wide-ranging impact of HIV/AIDS on demographic trends and socio-economic development of Pakistan deserves renewed attention and additional research. According to National AIDS Control Programme (NACP) estimates, Pakistan harbors approximately 102,000 cases of HIV/AIDS while only 16,300 HIV infected patients are registered at various treatment centers across the country.³ The prevalence of HIV is relatively low and is attributed to the conventional cultural beliefs of traditional Muslim society. Since the start of millennium, international declarations and commitments (e.g. MDGs) related to HIV have multiplied. Many highlight the importance of focusing on young people in order to fight the pandemic and positive results are beginning to show.⁴ The stigmas and misconceptions about HIV/AIDS pathogenesis are largely due to lack of awareness among society, inadequate knowledge, negative attitudes towards AIDS infected individuals, poor publicity by media about means of HIV prevention and control. Due to little knowledge on HIV, cultural taboos in talking about certain issues and the existence of high risk groups are the elements that could potentially increase the incidence of HIV cases in the future.

Scarce knowledge, undesirable attitudes and risky practices are main obstacles to prevent the transmission of HIV. The current study was designed to evaluate the current levels of knowledge, attitudes and practices of university students about HIV/AIDS in twin cities of Islamabad and Rawalpindi.

Materials and Methods

It was a cross sectional, descriptive questionnaire-based study conducted in the twin cities of Islamabad and Rawalpindi from November 2015 - February 2016. Data were collected from six major universities from the these cities, namely Shaheed Zulfiqar Ali Bhutto Medical University (SZAMBU), Islamabad, Quaid-e-Azam University (QAU) Islamabad, International Islamic University (IIU), Islamabad, Arid Agriculture University, Rawalpindi, Fatima Jinnah Women University (FJWU), Rawalpindi and Rawalpindi Medical College, Rawalpindi. Ethical Review Board (ERB) approval was taken from SZAMBU. The technique of random convenient sampling was used and the sample size came out to be 1,149 using WHO sample size calculator. A 39 questions long self-structured closed ended questionnaire was developed for the study. Pre-testing was done with the questionnaire on 40 clients. Questionnaire was adopted after minor changes from the pre-testing. A total of 1,149 questionnaires were distributed among students of all above institutes after taking permission from the respective institutional heads and 1,031 questionnaires were filled and returned by the students. Guidance was given by the researcher to students about how to fill the questionnaire, whenever required so. The questionnaire had five sections. First section was about the socio-economic data like age, gender, institution, qualification and religion. Second section contained 17 questions regarding knowledge about HIV/AIDS. Third and fourth sections had questions about attitude and practices for prevention of HIV/AIDS with seven questions in each section. Final section included questions regarding the general awareness of students about HIV/AIDS and had 8 questions.

The options to questions were given as Yes and No. The scoring for right answer was 1 and for a wrong answer was 0. More than 12 right answers were considered as good knowledge. Data were collected from all academic institutes and analyzed using SPSS version 20.

Results

The total number of respondents was 1,031 with a mean age of 23 years (range 19-29 years). Of these 1,031 participants, 637 (61.7%) were females while 394 (38.3%) were males. Married students were 107 (10.3%). From the total 1,031 students, 597 (57.9%) were from institutes of Islamabad while the rest were from Rawalpindi institutes. Participants from non-medical institutes were 791 (76.7%).

Among the responders, 967 (93.8%) had heard of HIV/AIDS. Sexual contact was identified as a reason for HIV/AIDS spread by 939 (91.1%), while 866 (83.9%) answered that HIV/AIDS spreads from transfusion of infected blood. 719 (69.7%) attributed mass media programmes as source of their awareness for HIV/AIDS. A large proportion of about 654 (63.4%) individuals believed that HIV spreads from person-to-person contact. Hand shake was considered as a cause of HIV spread by 404 (39.2%). 791 (76.7%) did not have knowledge for preventive measures for AIDS and HIV transmission, while 589 (57.1%) thought that AIDS is not a preventable disease. A total of 768 (74.4%) respondents did not know of World AIDS Day while 795 (77.1%) had no information about the existence of National AIDS Control Programme (Table I). Overall average knowledge according to correct knowledge score was 68.4%, which was slightly high among medical students (71.9%). Knowledge among female respondents was high than males (68.3% versus 61.8%) (Figure 1).

Regarding attitude, 551 (53.4%) students believed that AIDS patients should be isolated within the community. 448 (43.4%) replied that they should be kept at specialized places/hospitals under special care. These patients should not be allowed to carry out community work was the answer by 449 (43.5%). A total of 751 (72.8%) professionals replied that they were ready to take care of AIDS patients.

Practices regarding HIV/AIDS were below satisfactory. Only 117 (11.3%) had attended seminars or symposiums on HIV/AIDS. 188 (18.2%) had taken part in World AIDS Day celebrations. Out of total study population, only 211 (20.4%) had screening for AIDS and 90% of it was due to screening during blood donations.

Regarding awareness (Figure 2) among medical professionals only 57 (23.7%) knew about the safety measures and standard operating procedures with the handling of syringes and needles. Of the total study population, 913 (88.6%) believed that blood should be

properly screened before transfusion. Use of condoms in the prevention of AIDS was only known by 396 (38.4%).

Table 1: Knowledge of HIV/AIDS among university students of twin cities

Heard of HIV/AIDS	967 (93.8%)
Mode of transmission	
Sexual contact	939 (91.1%)
IV drug use	808 (78.4%)
Syringes and needle prick injuries	789 (76.5%)
Blood transfusion	866 (83.9%)
From hand shake	504 (48.8%)
Person to person contact	654 (63.4%)
Sharing of clothing with AIDS patient	297 (28.8%)
Sharing food with HIV patients	497 (48.2%)
Source of knowledge	
Mass media	919 (89.2%)
Internet	628 (60.9%)
Health care professionals	243 (23.5%)
Books	476 (46.1%)

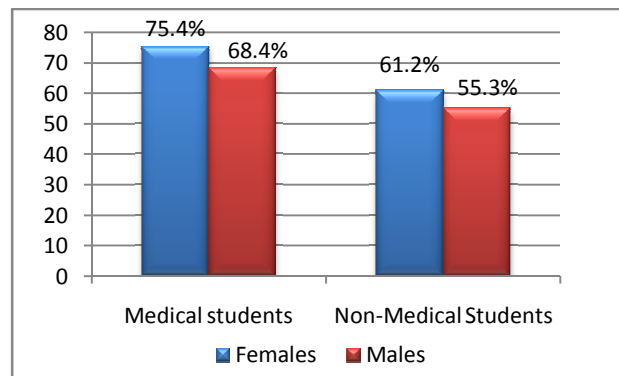


Figure 1. Comparison of knowledge regarding HIV/AIDS among medical and non-medical students of twin cities

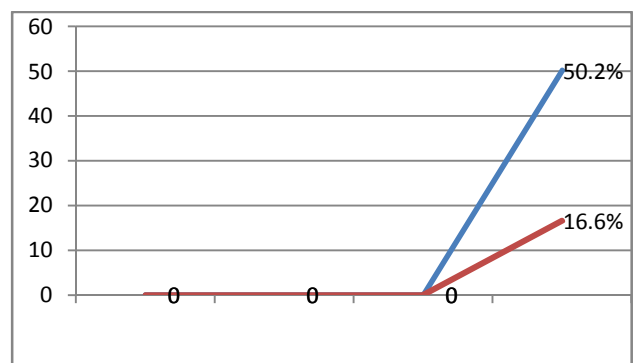


Figure 2. Comparison of average awareness versus average practices regarding HIV/AIDS among university students of twin cities

Discussion

This study was conducted to assess the degree of knowledge, awareness, attitude and preventive practices for HIV/AIDS among university students of Rawalpindi/Islamabad. Average knowledge score in our study was 62.7% which approximately matched a study on medical students by Kuruvila et al. , in India(64.9%).⁵ Studies from Iran and China showed moderate level of knowledge about HIV/AIDS among university students.^{6,7} Similar results were observed in a study conducted in Peshawar(57.5-94.6%).⁸ Knowledge of HIV/AIDS was directly associated with the field of study with medical professionals having better knowledge than non-medical students (71.9% vs 58.2%). Interestingly, female students had better knowledge than males in our study (68.3% versus 61.8%) and the finding is supported by a study from Iran.⁴ Electronic and social media were the major source of knowledge and awareness among the students (89.2% and 60.9% respectively). This was also the case in a survey carried out in Yemen⁹(52.2 %), Iran¹⁰(>70%)and Ethiopia¹¹ (> 40 %).The overall awareness among university students of twin cities was 50.2% and the practices' score was very low.

47.3% students had misconceptions and wrong knowledge regarding mode of transmission. Similar results were reported from Kuwait¹², Yemen¹³ and Laos.¹⁴ Practice of condom use in the past or willingness in the future was found in less than 50% of our study population. A comparable percentage was reported from Laos in 2013.¹⁴This is very critical as significant reduction in HIV/AIDS risk has been found with consistent use of condoms.¹⁵Participation in AIDS prevention programmes was negligible in our study group. A large group (57.1%)still considered AIDS a non-preventable disease.

Conclusion

Although sufficient knowledge was found about HIV/AIDS among the university students, misconceptions exists about means of transmission. Educational programmes and mass media campaigns with specific interventions should focus more on breaking the taboos and clearing the misconceptions around HIV/AIDS transmission and pathogenesis. By taking into

consideration all these measures, a break can be given to the chain of HIV transmission.

References

1. UNAIDS Fact Sheet 2016.Global Statistics 2015. Available at <http://www.unaids.org/en/resources/fact-sheet> accessed on Feb 20, 2016.
2. UNAIDS. HIV in Asia and the Pacific. UNAIDS Report 2013. Available at http://www.unaids.org/sites/default/files/media_asset/2013_HIV-Asia-Pacific_en_0.pdfaccessed on Feb 20, 2016.
3. National AIDS Control Programme. Minister of National Health Services, Regulation and Coordination. Government of Pakistan. Available at http://www.nacp.gov.pk/about_us/. Accessed on Mar 20, 2016
4. UNICEF Annual Report 2011. Available at http://www.unicef.org/nutrition/files/UNICEF_Annual_Report_2011_EN_060112.pdf accessed on Feb 18,2016
5. Kuruvila M, Venugopalan PP, Sridhar KS, Kumar P, Rao GS, Kotian S.KAP study on HIV / AIDS among first year MBBS students. Indian J DermatolVenereolLepr. 1997;63(4):225-8.
6. Tavoosi A, Zaferani A, Enzevaei A, Tajik P, Ahmadienezhad Z. Knowledge and attitude towards HIV/AIDS among Iranian students. BMC Public Health, 2004;4:17.
7. Jin H, Honghong W, Williams AB. The relationship between knowledge and attitude about HIV/AIDS among university students in Changsha. Practical Preventive Medicine 2003; 10(4):454-458
8. Khan H, Ishaq M, Khan H, Ishaq T. Knowledge and Attitude of Students regarding HIV/AIDS in Peshawar University. Rawal Medical Journal 2008; 33(1): 18-21.
9. Al-Rabeei NA, Dallak AM, Al-Awadi FG. Knowledge, attitude and beliefs towards HIV/AIDS among students of health institutes in Sana'a city. Eastern Mediterranean Health Journal 2012; 18(3):221-226.
10. Montazeri A. AIDS knowledge and attitudes in Iran: results from a population-based survey in Tehran. Patient Education and Counseling 2005;57:199-203.
11. Shiferaw Y, Alemu A, Girma A, Getahun A, Kassa A, Gashaw A, Alemu A, Teklu T, Gelaw B. Assessment of knowledge, attitude and risk behaviors towards HIV/AIDS and other sexual transmitted infection among preparatory students of Gondar town, north west Ethiopia. BMC research notes. 2011;4:505.
12. al-Owaish R, Moussa MA, Anwar S, al-Shoumer H, Sharma P. Knowledge, attitudes, beliefs and practice about HIV/AIDS in Kuwait. AIDS Education and Prevention, 1999;11(2):163-173.
13. Ashwaq M, et al. Knowledge and attitudes of HIV/AIDS among students of Sana'a University. Paper presented at the 18th Scientific Conference for Graduation Researches, Sana'a, Yemen, 13-14 October 2005.
14. Thanavanh B, Harun-Or-Rashid M, Kasuya H, Sakamoto J. Knowledge, attitudes and practices regarding HIV/AIDS among male high school students in Lao People's Democratic Republic. J Int AIDS Soc 2013;16:17387.
15. Crosby R, Bounse S. Condom effectiveness: where are we now? Sexual health. 2012;9 (1): 10-7.