



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3252112>Available online at: <http://www.iajps.com>

Research Article

**ANALYSIS OF KNOWLEDGE AND ATTITUDE OF MEDICAL
STUDENTS TOWARDS HIV/AIDS PATIENTS IN PAKISTAN**Dr Abdullah khan¹, Dr Ahmed Hussain¹, Dr Wazir Zeeshan Haider²¹Bahawal Victoria Hospital, Bahawalpur, ²Jinnah Hospital, Lahore.

Article Received: April 2019

Accepted: May 2019

Published: June 2019

Abstract:

Introduction: In this contemporary era, Human Immunodeficiency (HIV) and the Acquired Immune Deficiency Syndrome (AIDS) is a most significant public health challenge.

Objectives of the study: The main objective of the study is to analyze the knowledge and attitude of dental students towards HIV/AIDS patients in Pakistan.

Material and methods: This survey analysis was conducted in Bahawal Victoria hospital, Bahawalpur during November 2018 to April 2019. The data was collected through a questionnaire. The study included a convenience sample comprising dental students of all basic and clinical year. All the questions were anonymous, participant's voluntary took part in the study, and consent was taken from them and no incentive was given for completing the survey. The questionnaire was made up of four parts. The answer to each question about attitude was rated on a five-point Likert scale (strongly agree, agree, neutral, disagree, and strongly disagree).

Results: Out of 200 students who were sent the survey, a total of one ninety-three completed the survey. Therefore, the respond rate was 96.5%. These participants were from first, second, third, final professional year and house officers. On question 1 (HIV is same as AIDS), majority of students have inadequate knowledge and were not aware of the fact that HIV is same as AIDS. Regarding question 2 (saliva act as a vehicle of transmission), students from all the professional years and house officers have enough knowledge that saliva can act as vehicle of transmission.

Corresponding author:**Dr. Abdullah khan,**

Bahawal Victoria Hospital, Bahawalpur.

QR code



Please cite this article in press Abdullah khan et al., *Analysis Of Knowledge And Attitude Of Medical Students Towards Hiv/Aids Patients In Pakistan.*, Indo Am. J. P. Sci, 2019; 06[06].

INTRODUCTION:

In this contemporary era, Human Immunodeficiency (HIV) and the Acquired Immune Deficiency Syndrome (AIDS) is a most significant public health challenge. It becomes a major health issue worldwide after recognition in 1981. By the end of 2014, approximately 1.2 million people had died from AIDS-related infections and 34.3–41.4 million people were living with HIV infection. In Pakistan, first case of HIV was diagnosed in 1986 and was reported in 1987. According to the national estimates, in Pakistan there are 102,000 people infected with HIV [1]. In Pakistan it is now classified into concentrated phase of the epidemic because of its high prevalence. The mode of transmission is mainly because of heterosexuals (52.55%) which is followed by (11.73%) blood transfusion [2]. In Asia region Pakistan is among 12 countries which account for more than 90% of the infected people living with HIV. Globally, during last decade new HIV infections have dropped by 0.7%. But in Pakistan the disease burden and incidence of HIV is rising at disturbing pace [3]. In Pakistan there is a 17.6% increase in annual incidence of HIV compared to 2.2% for the rest of the world according to Global disease burden (GBD). The condition is becoming more poorer as there is very low coverage (5.87%) of antiretroviral treatment (ART) in Pakistani patients [4].

Fear of HIV infection creates major health concerns among health care personnel. This produces a barrier to effective educational efforts about AIDS and related awareness. The consequences of this fear might lead to unwillingness to treat AIDS infected patients. It has been observed that health care staff are lacking in appropriately managing and counselling HIV and AIDS patients. A huge knowledge gap has been notified among health care personnel regarding diagnosis and treatment of HIV and AIDS [5].

In a study conducted by Crossley Mat al the author found that there were lacking in the knowledge regarding transmission routes of HIV and AIDS but found good knowledge about oral manifestations associated with HIV and AIDS. Lack of knowledge was found among Tanzanian health care workers regarding treatment procedures related to HIV and AIDS [6]. This was result in unwillingness to provide care for HIV patients. In Pakistan a study conducted by Shaikh FD et al concluded in their study there is a

need for further education regarding knowledge, symptoms and modes of transmission of HIV and AIDS. Similar findings have been reported among nurses, dentists and health care personnel in Kenya, Brazil, Singapore, South Africa and Iran [7].

OBJECTIVES OF THE STUDY:

The main objective of the study is to analyze the knowledge and attitude of dental students towards HIV/AIDS patients in Pakistan.

MATERIAL AND METHODS:

This survey analysis was conducted in Bahawal Victoria hospital, Bahawalpur during November 2018 to April 2019. The data was collected through a questionnaire. The study included a convenience sample comprising dental students of all basic and clinical year. All the questions were anonymous, participant's voluntary took part in the study, and consent was taken from them and no incentive was given for completing the survey. The questionnaire was made up of four parts. The answer to each question about attitude was rated on a five-point Likert scale (strongly agree, agree, neutral, disagree, and strongly disagree).

STATISTICAL ANALYSIS:

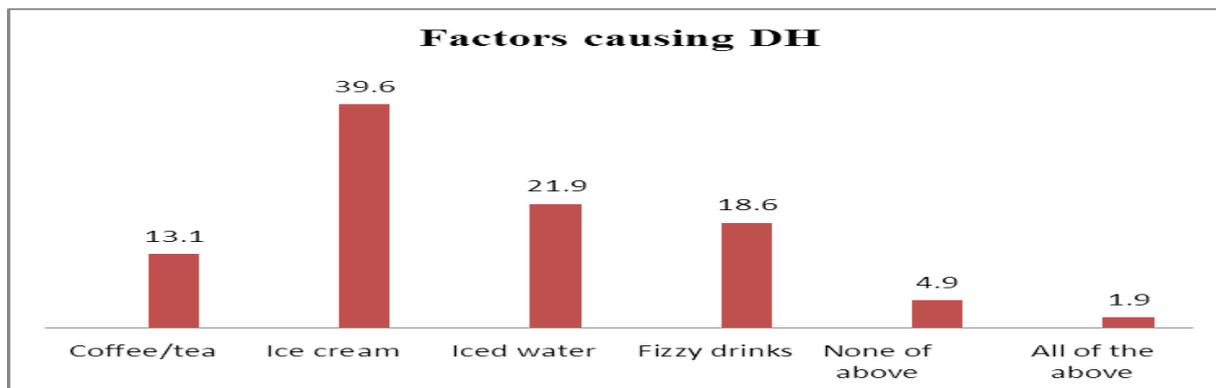
SPSS software version 17.0 was used for statistical analysis. Frequency and percentages were used to describe gender, level of education. The descriptive indices such as percentages were used to express the knowledge level among the students. Independents t test was used to assess attitude and stigma of the students and house officers regarding HIV/AIDS.

RESULTS:

Out of 200 students who were sent the survey, a total of one ninety three completed the survey. Therefore the respond rate was 96.5% .These participants were from first, second, third, final professional year and house officers. On question 1 (HIV is same as AIDS), majority of students have inadequate knowledge and were not aware of the fact that HIV is same as AIDS. Regarding question 2 (saliva act as a vehicle of transmission), students from all the professional years and house officers have enough knowledge that saliva can act as vehicle of transmission. For question 3 (needle stick injury can transmit AIDS/HIV), all the students and House officers have remarkable knowledge.

Table 01: Frequency of Dentine Hypersensitivity among the respondents

Dentine Hypersensitivity	Male n (%)	Female n(%)
Present	107(29.2)	159(43.4)
Absent	27 (7.4)	6 (1.6)
Occasionally	34(9.3)	27(7.4)
Rare	6(1.6)	0(0)
Total n (%)	174(47.5)	192(52.5)

**Figure 01: Factors responsible for causing DH identified by the respondents****DISCUSSION:**

Saliva can be a vehicle for the transmission of AIDS/HIV. In a study conducted by Askarian M at al, some students (24.5%) agreed that saliva can be a vehicle for the transmission. However, majority of students 72.5 % declared it is possible that a CPR giving to HIV/AIDS patients will might transmit the infection. In our study, first, second, final year and house officers did have the sound knowledge in this context [8].

During dental operation procedures it is possible to transmit HIV/AIDS. HIV/AIDS can be transmitted through saliva or blood contaminated instruments and equipment's. It can also be transmitted by inhalation of aerosol emitted from hand pieces. However, in previous studies very few students have the knowledge HIV/AIDS can transmit through inhalation of aerosol emitted from hand pieces [9]. The results were similar with our study as majority of first year students don't know that HIV/AIDS can be transmitted through aerosol inhalation. But their results were in contrast with results of our study as second, third final year students and house officers have the enough knowledge in this context. In one previous study, it was found that more than half of the students participants believed that there is no such route of transmission exist [10]. There is statistically significant difference in the knowledge of the participants when asked that aerosols from hand piece can cause HIV transmission among first, second and

final year students. Statistically significant results were observed in the present study regarding concerns that aerosols from hand piece can cause HIV transmission. According to CDC guidelines dental health care personnel should position patients properly and make appropriate use of barriers e.g., surgical masks, face shields, high-volume evacuators, rubber dams and gowns [11]. This will prevent the dentists and assistant from contact with splashes and spatter. As these splashes and spatter creates a visible spray that is released from rotary surgical instruments and dental equipments e.g air-water syringes, handpieces and ultrasonic scalers. This spray contains mainly a large-particle spatter of blood, microorganisms, aerosol, water, debris and saliva [12].

Key factor in transmitting these contagious infections are contaminated needles. In our part of the world one of the significant modes of transmitting hepatitis B and C virus is through these needles pricks. The current study analyzed that majority of the students among all the professional years (1st, 2nd, 3rd and 4th) and house officers knew about needle safety. It is mandatory that Students should give the training in an environment where stressed should on both patient safety and on personal safety during their clinical training [13].

CONCLUSION:

It is concluded that dental students appear to have a more negative attitude towards treating HIV/AIDS patients. Refusal to treat patients with HIV was primarily associated with lack of ethical responsibility and fears related to cross-infection.

REFERENCES:

1. Darling M, Arendorf T, Samaranyake L. Oral care of HIV-infected patients: the knowledge and attitudes of South African dentists. *The Journal of the Dental Association of South Africa= Die Tydskrif van die Tandheelkundige Vereniging van Suid-Afrika.* 1992;47(9):399-402.
2. Gachigo J, Naidoo S. HIV/AIDS: the knowledge, attitudes and behaviour of dentists in Nairobi, Kenya. *SADJ: journal of the South African Dental Association= tydskrif van die Suid-Afrikaanse Tandheelkundige Vereniging.* 2001;56(12):587-91.
3. Oliveira E, Narendran S, Falcao A. Brazilian dental students' knowledge and attitudes towards HIV infection. *AIDS care.* 2002;14(4):569-76.
4. Chan R, Khoo L, Goh C, Lam M. A knowledge, attitudes, beliefs and practices (KABP) survey on HIV infection and AIDS among doctors and dental surgeons in Singapore. *Annals of the Academy of Medicine, Singapore.* 1997;26(5):581-7.
5. Kitaura H, Adachi N, Kobayashi K, Yamada T. Knowledge and attitudes of Japanese dental health care workers towards HIV-related disease. *Journal of dentistry.* 1997;25(3-4):279-83.
6. Khanghahi BM, Jamali Z, Azar FP, Behzad MN, Azami-Aghdash S. Knowledge, attitude, practice, and status of infection control among Iranian dentists and dental students: a systematic review. *Journal of dental research, dental clinics, dental prospects.* 2013;7(2):55.
7. Blignaut E. The role of the dental profession in the AIDS epidemic. *Practitioners corner. J Dent Assoc S Afr.* 1994;49:113-52.
8. Erasmus S, Luiters S, Brijlal P. Oral Hygiene and dental student's knowledge, attitude and behaviour in managing HIV/AIDS patients. *International Journal of Dental Hygiene.* 2005;3(4):213-7.
9. Kohn WG, Collins AS, Cleveland JL, Harte JA, Eklund KJ, Malvitz DM. Guidelines for infection control in dental health-care settings-2003. US Government Printing Office; 2003.
10. Sadeghi M, Hakimi H. Iranian dental students' knowledge of and attitudes towards HIV/AIDS patients. *Journal of dental education.* 2009;73(6):740-5.
11. Khan AJ, Luby SP, Fikree F, Karim A, Obaid S, Dellawala S, et al. Unsafe injections and the transmission of hepatitis B and C in a periurban community in Pakistan. *Bulletin of the World Health Organization.* 2000;78(8):956-63.
12. Luby S, Qamruddin K, Shah A, Omair A, Pahsa O, Khan A, et al. The relationship between therapeutic injections and high prevalence of hepatitis C infection in Hafizabad, Pakistan. *Epidemiology and infection.* 1997;119(03):349-56.
13. Ryalat ST, Sawair FA, Shayyab MH, Amin WM. The knowledge and attitude about HIV/AIDS among Jordanian dental students:(Clinical versus pre clinical students) at the University of Jordan. *BMC research notes.* 2011;4(1):191.