

Iranian dental students' knowledge, attitudes, and health behavior toward HIV patients

Madam,

Human immunodeficiency virus (HIV) is transmitted by sexual contact, by blood and blood products, and by infected mothers to infants either intrapartum, prenatally, or via breast milk.^[1] Willingness to treat patients appears to be related to the knowledge of the HIV/AIDS process, its oral manifestations, and modes of transmission, thus influencing dentist's attitudes and behavior toward treatment of these patients.^[2] The aim of this study was to determine the extent of knowledge, attitude, and behavior of dental students in Shahid Sadoughi University of Medical Sciences in Yazd, Iran, toward HIV/AIDS patients. In this cross-sectional study, dental students from College of Dental Science of Shahid Sadoughi University of Medical Sciences in Yazd, Iran, were surveyed. The students in third, fourth, fifth, and sixth years of their study, who were clinically in contact with patients were included. The students were asked to fill up a self-administered questionnaire. Data analysis was done with SPSS version 16 and frequency distributions were obtained. Chi-square test was used to compare differences between groups; results were significant when $P \leq 0.05$.

One hundred and nine (60 females and 49 males) dental students out of 116 (93.96%) completed the questionnaires. The distribution according to the age range of the students was 53.21% in the group 20-22 years and 46.78% in the group ≥ 23 years.

Surprisingly, only 26 (43.3%) female and 22 (44.9%) male students were aware that an individual carrying anti-HIV antibodies is an HIV carrier ($P > 0.05$).

The only significant difference was in the knowledge about salivary gland enlargement between males and females ($P = 0.024$).

Approximately 70% of students, without significant differences in gender and year of education, correctly thought that HIV cannot be transmitted to them if their unbroken skin comes into contact with blood, saliva, or unbroken skin of an HIV/AIDS patient [Table 1].

Table 2 shows Iranian dental students' knowledge of oral lesions and oral conditions associated with AIDS. Figure 1 shows the dental student's opinion on the place that HIV patients should be treated.

Table 1: Third to sixth year iranian dental students' knowledge of potential transmission routes of HIV to dental students

Percent of students who responded correct				
Questions	3 rd year (n=28)	4 th year (n=26)	5 th year (n=28)	6 th year (n=27)
Student's unbroken skin in contact with unbroken skin of the HIV-positive patient	82.1	88.5	67.9	81.5
Student's unbroken skin in contact with blood of the HIV-positive patient	85.7	76.9	71.9	77.8
Student's unbroken skin in contact with saliva	78.6	88.5	71.4	63.0
Student's cut skin in contact with unbroken skin of the patient	85.7	73.1	67.9	63.0
Student's cut skin in contact with blood of the patient	89.3	80.8	78.6	70.4
Student's cut skin in contact with saliva of the patient	28.6	42.3	53.6	22.2

Table 2: Iranian dental students' knowledge of oral lesions and oral conditions associated with AIDS*

Lesion	3 rd year (n=28)	4 th year (n=26)	5 th year (n=28)	6 th year (n=27)	Total (n=109)	P value
Oral candidiasis	53.6	80.8	75.0	81.5	72.5	NS
Oral kaposi sarcoma	46.4	73.1	42.9	48.1	57.0	NS
Oral hairy leukoplakia	46.4	46.2	57.1	74.1	56.0	NS
Xerostomia	28.6	42.3	32.1	66.7	42.2	NS
Salivary gland enlargement	35.7	46.2	50.0	81.5	53.2	NS

*% of correct response, NS=Not significant

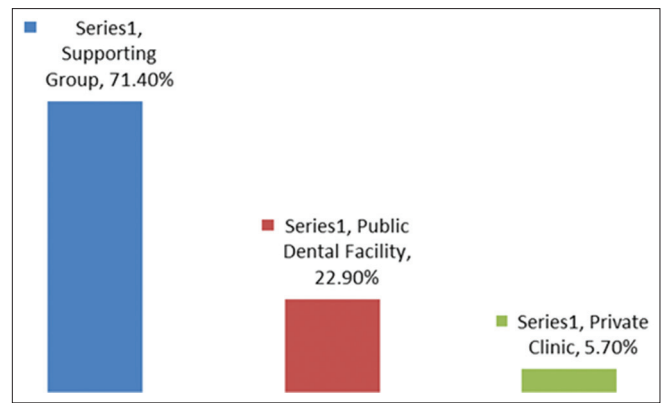


Figure 1: Dental students' opinion: The place that HIV patients should be treated

In this study, comparison was made between age gender, and educational stage of dental students regarding their knowledge, attitude, and practice about HIV/AIDS.

Several students thought it takes up to 6 months to 5 years for seroconversion to happen. Surprisingly, 30.3% of dental students thought that anti-HIV antibody positive indicates immunity against the disease.

The inadequate knowledge of virology was also observed in Sudanese^[2] and Taiwanese dental students.^[3] Many dentists have the fear of treating AIDS patients.^[4]

After needle sticking, some chemoprophylaxis exists;^[5] but in our study only 51.4% of students knew it, which shows that students' knowledge was insufficient.^[6]

Inhalation of blood or saliva aerosols harboring HIV was considered as potential transmission route of HIV^[7] in our study, as nearly half of the students thought that HIV infection could be transmitted through this route.

In conclusion, the above findings clearly highlight some inadequacies in some essential aspects of the knowledge, attitude, and behavior of Iranian dental students about HIV/AIDS patients; therefore, curriculum focusing on the management of HIV/AIDS patients must be updated and improved.

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