ORIGINAL RESEARCH PAPER

Oral Medicine

TREATING THE PATIENTS WITH HIV/AIDS – A CROSS-SECTIONAL SURVEY IN DENTISTS

KEY WORDS: Dentists, HIV/AIDS

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ABSTRACT

INTRODUCTION: Every 15 seconds, a person dies of AIDS and every 13 seconds, another person gets infected with AIDS, an information which needs attention . As people are diagnosed with HIV and live longer lives due to the success of antiretroviral therapies, people living with HIV/AIDS (PLWHA) will require increasingly competent and compassionate health care, including oral health care.

OBJECTIVES: willingness of dentist (staff, students and dentist) to provide treatment to HIV/AIDS patient.

MATERIALS AND METHODS: a descriptive cross-sectional survey among dentist and dental students was conducted with the use self-administered questionnaire eliciting information on self-rated HIV/AIDS knowledge, attitudes, infection control practices, perceived occupational risk perception and willingness to treat HIV/AIDS patients.

RESULTS: Interns and post graduate students strongly agree that patients with HIV/AIDS should be treated which showed a positive attitude towards this patients. An increase in level knowledge observed as the increasing year of study from first BDS to post graduation and MDS staff and practicing dentist.

CONCLUSION: Studies regarding the willingness to treat HIV/ AIDS patients have been published previously with very few studies from India, which is one of the second wave countries. Although there is considerable research on AIDS, uncertainty towards HIV-positive patients and refusal to treat these patients still persist along with the fear and possibility that an HIV positive one might be preventing from practicing dentistry.

INTRODUCTION:

HIV (human immunodeficiency virus) the etiological agent for AIDS (acquired immune deficiency syndrome)**. (1)** India often referred to as the 'second wave' countries of the HIV pandemic, these regions share sizable populations, represent high levels of cultural diversity, and have low levels of knowledge concerning HIV prevention and transmission. Due to the success of antiretroviral therapies people diagnosed with HIV live longer lives necessitating an competent and compassionate health care, including oral health care**. (1)** International studies indicate that oral lesions (e.g., oral candidiasis and Kaposi's sarcoma) occur in as many as 50 to 70 percent of all HIV/AIDS cases**.(2)** These conditions, which may be preventable and/or treatable with regular dental care, often persist and lead to discomfort, dysfunction, and disability that, if left untreated, can significantly impede quality of life. **(1)** Despite the importance of oral health care for people with HIV/AIDS [PLWHA], many of these individuals fail to receive adequate oral health care treatment due to the influence of various barriers. **(3)**

The possibility of HIV transmission in the oral health care setting is considered to be very low. **(4)** However, most lesions of HIV infection present orally during the first stages of the disease, so dentists fall into the high-risk category for cross-contamination. **(5)** Since 1988, the World Health Organization (WHO) has stated that all dentists must treat HIV-positive patients**.(6)** It is not only unethical but also unlawful for a dentist or dental student to refuse treatment to an HIV-positive patient. **(7)** Despite these recommendations, ignorance of the risk of HIV transmission during dental procedures has led many dentists to refuse and/or become reluctant to treat HIV/AIDS patients**.(8, 9)**

MATERIALS AND METHODS:

A cross-sectional survey was conducted at Nizamabad, India. A total of 380 participants were given a self-administered questionnaire for data collection which comprised of 26 close ended questions. The questionnaire elicited information on self-rated HIV/AIDS knowledge, attitudes, infection control practices, perceived occupational risk perception and willingness to treat HIV/AIDS patients. Participation was voluntary and informed consent obtained. Data was subjected to statistical analyses and used chi-square test of significance.

RESULTS:

Total of 380 participants including staff and students participated voluntarily and an anonymous survey was designed to avoid the influence on responses. Detailed description of all the observations made in the study is shown in TABLE 1. An increase in level knowledge observed as the increasing year of study (figure 1). Interns and post graduate students strongly agree that patients with HIV/AIDS should be treated which showed a positive attitude towards this patients (figure 2). Overall good infection control practices followed according to the WHO guideline of universal precautions, students of third and final year BDS have shown improvised infection control procedures (figure 3). Students expressed higher percentage representing 82.5% willingness to treat patients with HIV/AIDS (figure 4).

DISCUSSION:

The risk of transmission of HIV in the dental care setting has been reported to be low; however, this does not indicate a zero risk as dentists can be accidentally exposed to the virus and other blood-borne pathogens in the course of treating patients. **(10)** HIV transmission risk for health care professionals after percutaneous exposure to HIV-contaminated blood was estimated to be between 0.2 and 0.5 percent and following exposure to mucosa to be approximately 0.1 percent. **(11)** In contrast, for HBV virus, the transmission risk after accidental exposure is between 6 and 30 percent. Annual cumulative risk of infection from routine treatment of patients whose seropositivity is undisclosed is 57 times greater from HBV than from HIV, and that the risk of dying from HBV infection is 1.7 times greater than risk of HIV infection for which mortality is almost certain. **(11)** So dental practitioners will be required to enhance their knowledge of the disease and its oral manifestations**. (13)** In our study knowledge about HIV/AIDS patients was fairly good with p value < 0.001 and showed an increase in level of knowledge corresponding with the increasing year of study, but this knowledge was not significantly associated with the willingness to treat HIV/AIDS patients. If dental health care workers are not confident of their knowledge about HIV/AIDS patient management, they do not properly prepare themselves to treat these patients. A lack of confidence in their own ability to manage HIV/AIDS patients could have amplified their perceived risk of being infected with HIV as well**.(14)** Among the participants, Interns and post graduate students strongly agree that patients with HIV/AIDS should be treated in dental office which showed a positive attitude towards this patients. Attitude factors significantly associated with the willingness to treat these patients were the following: ability to treat infected patients safely, feeling moral responsibility, and believing that HIV/AIDS patients can live with others**. (14)** Interns and post graduate students expressed higher percentage, representing 82.5% willingness to treat patients with HIV/AIDS (figure 4). In this study, the general willingness to treat HIV/ AIDS patients was comparable to results

from the study of Seacat and Inglehart (81.1 percent) **(15)** and considerably higher from other studies Hu et al. (51 percent vs. 49 percent, respectively) **(16)**, Kuthy et al. (60 percent) **(17)**.Most respondents (79 %) in our study had had no previous professional contact with HIV/AIDS patients. This factor among dental students must be disconcerting to dental educators because of increasing rates of HIV infection in the world. Most students thought that each patient should be considered potentially infectious. This feeling may be warranted since some HIV/AIDS patients abstain from declaring their illness out of fear of being denied dental care. **(14)**

Routine use of disposable gloves has been recommended for all patient contacts. Gloves ideally should be removed after seeing a patient and the hands washed thoroughly before re-gloving to see a new patient. The findings in this study are similar to Sofola's, where 92.5% claimed that they always wear gloves **(18).** Current guidelines state that dentists must not refuse to treat a patient solely on the grounds of HIV infection **(7)** and they cannot legally refer these patients to specialty clinics for routine dental care. **(19)** Various reasons for referring the patients include fear of staff members, concerns related to uncertainty regarding safety regulations, lack of knowledge regarding oral lesions associated with HIV, and loss of normal patients due to treating HIV-positive patients. **(20)** So continuous upgradation of knowledge current management would empower an dental health care worker to overcome these hurdles. When asked about undergoing training to treat patients with HIV/ AIDS staff of the institution and dentist (87.9 %) showed greater concern to undergo training and upgrade themselves to provide efficient treatment to patients with HIV/AIDS. Thus a study of this kind would be beneficial to the health care workers in understanding and upgrading themselves with research in the field.

CONCLUSION:

Studies regarding the willingness to treat HIV/ AIDS patients have been published previously with very few studies from India, which is one of the second wave countries. Although there is considerable research on AIDS, uncertainty towards HIV-positive patients and refusal to treat these patients still persist along with the fear and possibility that an HIV positive one might be preventing from practicing dentistry.

TABLE 1: OBSERVATIONS (KNOWLEDGE, ATTITUDE WILLINGNESS AND PROTOCOLS OF SAFETY) OF THE STUDY.

Cadre Of Dentist/ Category	Knowledge			Attitude			Willingness			Precaution / Protocol Followed		
	Good	Fair	Poor	Strongly Agree	Disagree	Agree	Willing	Unwilling	Unsure	Always	Never	Sometimes
I&II BDS	54.5	36.3	9.2	80	7.4	12.6	82.8	4.6	12.6	30.3	9.2	60.5
III&IV BDS	66.7	21.8	11.5	30.3	60.5	9.2	30.3	60.5	9.2	82.8	4.6	12.6
INTERN&PG	73.8	19.1	7	81	9.5	9.5	81	9.5	9.5	81	9.5	9.5
STAFF AND DENTIST	88.2	10.1	1.7	70	6	5	70	4	24	70	6	24

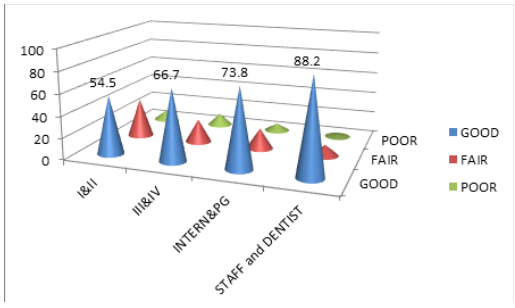
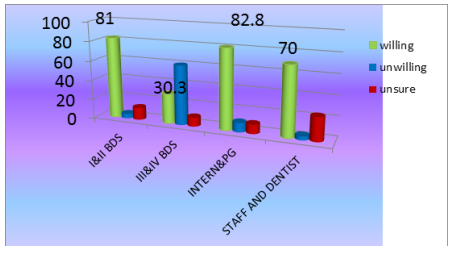
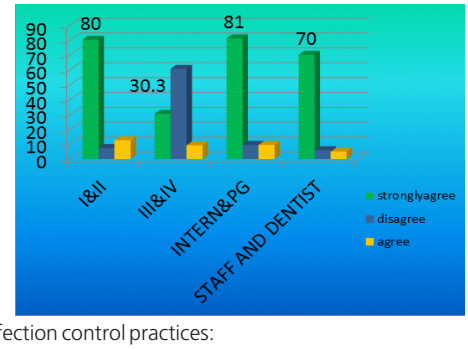


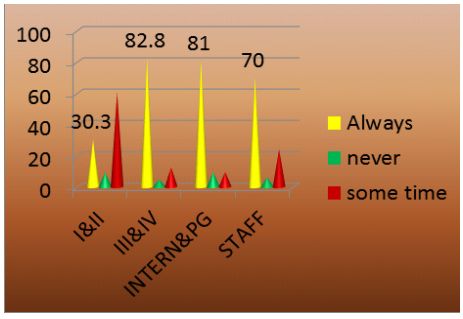
Figure 1: HIV/AIDS Knowledge among staff and students of dental institution:



Attitude:



Infection control practices:



Willingness to treat patients with HIV/AIDS:

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