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Concerns and attitude of dental students towards HIV infected individuals

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ABSTRACT: **Objective:** To determine attitude and concerns of University of Benin final year dental students towards HIV infected individuals.
Methods: The entire final year dental students of University of Benin who were treating patients at the University Outpatient Clinics at the time of the study were surveyed using a self-administered questionnaire.
Results: Less than half (46.6%) had done HIV testing and 40(69%) had had hepatitis B vaccination. One third of the respondents (32.7%) would be comfortable having HIV-infected roommate or classmate. Only 1(1.7%) will recommend expulsion of HIV-infected dental student. One third of the respondents (32.8%) will keep status of infected family member as a secret but 32(55.2%) agreed that disclosure of positive result by dental patients is geared toward cross infection prevention.

The respondents that agreed that HIV-infected dentist must inform their patient before treatment is 18(31%). Twenty-five (43.1%) respondents would receive treatment in dental clinic that offer care to HIV-infected individuals and only 17 (29.3%) would allow HIV-infected dentist to treat their relative or friend.
Thirteen (22.4%) believed that dentist has the right to refuse treatment to HIV infected patient. Interpersonal relations that were reported that would adversely affect intention to treat HIV-infected individual include 8(13.8%), family members and friends, and 22(37.9%) other patients. Twenty-nine (50%) will continue to treat patients when they are already diagnosed HIV positive.
Conclusion: Discriminatory attitude among respondents was low but significant concern about personal risk due to treatment of HIV-infected patient needs to be addressed by health care professional tutors.

Keywords: concerns, attitude, dental students, HIV-infected individual.

Introduction

Infection with HIV, the aetiologic agent of AIDS, has emerged as the medicine's modern scourge of mankind[1]. Globally, HIV has caused an estimated 25 million deaths and has generated profound demographic changes in the most heavily affected countries in last 27 years. Also in 2007 there were 2.7 million new HIV infections and 2 million HIV-related deaths worldwide[2]. More than two-thirds of the world's total infections and 75% of deaths due to AIDS in 2007 occurred in Sub-Saharan Africa[2].

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People with HIV are at special risk for oral health problems, have more dental needs, require more dental care than the average person because their weakened immune system and the antiretroviral drugs they take. The importance of good dental care in the management of HIV is clear. In fact, a study in 2001 by Kevin C. Heslin of UCLA stated that any HIV Health care entity that does not provide dental care as a part of their program is not meeting the needs of their patients.

The availability of antiretroviral treatment has resulted in a dramatic reduction in HIV/AIDS-related mortality and morbidity and also an increase in the number of HIV patients who receive care at the dental clinic. A Malaysian based study reported that 15.1% of HIV-positive individuals attended dental clinic after the confirmation of their status[3]. With this increase in the number of individuals suffering from HIV/AIDS, dental practitioners are obviously expected to contribute to the dental care of these individuals[4].

Oral health services and professionals can contribute effectively to the control of HIV/AIDS through health education and health promotion, patient care, effective infection control, and surveillance[5]. Some oral health care providers report negative attitudes toward treating patients with HIV/AIDS. Although their fear is decreasing, possibly due to their increased compliance with infection-control procedures and increased access to care for those with HIV/AIDS[6].

HIV transmission in the dental care setting continues to be of immense concern. Since an unknown number of HIV-infected individuals are either undiagnosed or asymptomatic when seeking dental service, dental professionals have become fearful of becoming infected with HIV. A study documented that 1.2% of undiagnosed patient in the dental outpatient clinic is HIV positive[7]. The fear of HIV infection is a salient concern among health care workers, and such fear is often associated with reluctance to treat HIV-positive patients[8]. Dentists are afraid of contracting the virus, they do not trust the honesty of HIV patients, and they believe there are additional costs involved in treating these patients[9].

However, fear of status disclosure is a significant barrier to access to care. Preparing future oral health care providers to maintain all aspects of confidentiality and to understand the role stigma plays in the lives of HIV-positive individuals are critical issues that must be addressed by dental education.

HIV/AIDS-related stigma and discrimination can reduce the quality of treatment and health care received[10]. It can also negatively affect the experience and self-esteem of HIV-positive patients[11] Thus, even where HIV-positive people have access to health care, they may not experience better health and quality of life as a result.

The quality of care provided to HIV infected patients is determined by the health care workers`attitudes and concern. In order to provide quality dental treatment for HIV patients, dentists must overcome their misperceptions and feelings of anxiety and fear about HIV[9]. Every dentist should accept the responsibility of treating HIV-infected and AIDS' patients in his own office. Refusal to treat HIV-infected individuals irrespective of current disease state constitutes discrimination, which is prohibited by law.

Concerns regarding the perceived stigma of treating such patients, together with a fear that HIV is transmitted through dental treatment are major reasons why dentists are reluctant to care for HIV-positive and AIDS patients. Successful resolution of these concerns is time consuming and expensive but necessary if dentists are to satisfy their professional obligations to patients with HIV infection and AIDS[12].

Information on the HIV-related attitude among dental students provides a crucial foundation for efforts aimed at developing an appropriate dental curriculum on HIV and AIDS, and for attracting the attention of dental school educators towards the subject.

The objective of this study was to determine attitude and concerns of University of Benin final year dental students towards HIV infected individuals.

Materials and Methods

This descriptive cross-sectional survey was conducted School of Dentistry, University of Benin, Benin City among the entire final year dental students of University of Benin who were treating patients at the university outpatient clinics. A self-administered questionnaire was the tool of data collection. The questionnaire elicited information on demography, self-rated HIV/AIDS knowledge, attitudes towards homosexuals, infection control practices, perceived occupational risk perception and willingness to care for HIV patients. Participation was voluntary and informed consent obtained prior to onset of research. Data analysis was done with SPSS version 13.0 and the results were presented as tables.

Results

Response rate was 76.3% (58/76). About four-fifth (77.5%) was in 25-30 years age group. Male: Female ratio was approximately 1:1.6. **(Table 1)**. Less than half (46.6%) had done HIV testing. More than two-thirds (69%) had been vaccinated against hepatitis B **(Table 2)**.

One third of the respondents (32.7%) would be comfortable having HIV-infected roommate or classmate. Only 1.7%will recommend expulsion of HIV-infected dental student. Though 19% reported having HIV-infected friend or relative, only 3.4% will avoid HIV-infected friend or relative. Twenty-nine (50%) will continue to treat patients when they are already diagnosed HIV positive **(Table 3)**.

Thirty one percent of the respondents agreed that HIV-infected dentist must inform their patient before treatment. One third of the respondents (32.8%) will keep status of infected family member as a secret but 55.2% agreed that disclosure of positive result by dental patients is geared toward cross infection prevention. Twenty-five respondents (43.1%) would receive treatment in dental clinic that offer care to HIV-infected individuals, only 29.3% would allow HIV-infected dentist to treat their relative or friend. Substantial number (65.5%) perceived increased personal risk on treatment of infected patients. Only 34.5% believed that other dental staffs will support their rendering care to HIV-infected individuals **(Table 4)**.

Thirteen (22.4%) believed that a dentist has the right to refuse treatment to HIV infected patient. Respondents' refusal to treat HIV-infected individuals is as a result of the opinion of family members and friends in 13.8% of cases and that of other patients in 37.9% of cases **(Table 5)**.

TABLE 1: SAMPLE CHARACTERISTICS

Characteristics	**Frequency**	**Percent**
Age		
<25	11	20
25-30	45	77.5
>30	2	3.5
Gender		
Male	36	62.1
Female	22	37.9
Total	**58**	**100**

TABLE 2: PRECAUTIONARY HABIT

Question	Yes (%)	No (%)	No Response (%)
HIV test	27(46.6)	30(51.7)	1(1.7)
Hepatitis B vaccination	40(69)	17(29.3)	1(1.7)

TABLE 3: ATTITUDE OF DENTAL STUDENTS

Question	Agree (%)
Comfortable with HIV +ve classmate/roommate	19 (32.7)
Expulsion for HIV +ve classmate	1 (1.7)
Have HIV +ve relative or friend	11 (19)
Avoid HIV +ve relative or friend	2 (3.4)
If HIV +ve will continue to treat patients	29 (50)

TABLE 4: CONCERNS OF DENTAL STUDENTS

Question	Agree (%)
HIV +ve patient must inform dentist of their status	18 (31)
Will keep status of HIV +ve family member as a secret	19 (32.8)
Disclosure of HIV +ve status is geared toward Cross infection prevention.	32 (55.2)
Would receive treatment in dental clinic offering care to HIV +ve individuals	25 (43.1)
Would allow HIV +ve dentist to treat their relative or friend	17 (29.3)
Perceived increased personal risk on treatment of HIV +ve patients	38 (65.5)
Belief that other dental staffs will support their rendering care to HIV +ve individuals	20(34.5)

TABLE 5: BARRIER TO HIV CARE

Question	Agree (%)
Belief that a dentist has the right to refuse treatment to HIV +ve patient	13(22.4)
Refusal to treat HIV +ve individuals is as a result of the opinion of family members and friends	8(13.8)
Refusal to treat HIV +ve individuals is as a result of the other patients in	22(37.9)

Discussion

Less than half (46.6%) had done HIV testing which was similar to findings in a study among Nigeria dental nursing students[13].More than two-thirds (69%) had been vaccinated against hepatitis B which is higher than 28.8% reported in a study among preclinical dental students[14].

Half (50%) of the respondents will continue to treat patients when they are already diagnosed HIV positive which is similar 49% reported among Taiwanese dental students[15]. In one study, 76 percent of students felt dentists had a responsibility to treat HIV-positive patients, but only 62 percent said they were willing to treat those with HIV[16]. Close relations and friends of final dental students appear few as only 19% reported having HIV-infected friend or

relative. This could explain why only one third of the respondents (32.7%) would be comfortable having HIV-infected roommate or classmate.

Discriminatory attitude among respondents was evident although low as only 1.7%will recommend expulsion of HIV-infected dental student and only 3.4% will avoid HIV-infected friend or relative. Thirty one percent of the respondents agreed that HIV-infected dentist must inform their patient before treatment which was lower than 57.4% reported among professors in a Brazilian dental school[17]. One third of the respondents (32.8%) will keep status of infected family member as a secret. This secrecy may be explained by fear of HIV-related stigma and discrimination.

While disclosure may be difficult, it's important to consider the benefits of sharing HIV/AIDS status with oral health care providers. In our survey 55.2% agreed that disclosure of positive result by dental patients is geared toward cross infection prevention. Knowing that a patient is living with HIV/AIDS can help health professionals to diagnose specific oral conditions and determine the best treatment is main reason for patient disclosure.

Twenty-five respondents (43.1%) would receive treatment in dental clinic that offer care to HIV-infected individuals, only 29.3% would allow HIV-infected dentist to treat their relative or friend. It was apparent that dental students who were not be willing to be treated by a HIV-positive professional because of fear of being infected. Substantial number (65.5%) professed increased personal risk on treatment of infected patients. Only 34.5% believed that other dental staffs will support their rendering care to HIV-infected individuals. The stigma of caring for patients with HIV/AIDS poses a significant barrier to their treatment. Significant predictors of refusal to treat patients with HIV include; staff fears, loss of patients from the practice; cost of infection control procedures; and concerns related to safety, including the respondents' reluctance to attend a dentist who treats HIV infected patients[18]. Losing other patients that attend the dental clinic remained a significant reason for not treating HIV infected individuals among 37.9% of the respondents. The opinion of family member and relatives appears small (13.8%).

Oral health problems in patients living with HIV can be more complicated and harder to treat than in the general population and often require the attention of both dental and medical providers. Thirteen (22.4%) believed that a dentist has the right to refuse treatment to HIV infected patient. A study in Canada among dentist revealed 16% will refuse treatment to HIV infected patients[18]**.**

Conclusions

Discriminatory attitude among respondents was low but significant concern about personal risk due to treatment of HIV-infected patient needs to be addressed by health care professional tutors.

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