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Research Article

Evaluation of competency and willingness of junior residents to provide oral care for people living with HIV and AIDS in satellite treatment centers

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ABSTRACT

Objectives: Oral health care to people living with HIV/AIDS (PLWHA) is usually neglected due to the social stigma and the fear of cross infection. Hence, this study aimed to assess the knowledge regarding HIV/AIDS and the attitude of junior residents in providing oral care to PLWHA.

Materials and Methods: A cross-sectional questionnaire was administered to 96 junior dental residents in our institute, who were providing oral care at peripheral dental centers. Subjects answered a question "will you be willing to provide oral care on your free will if you knew the patient has HIV/AIDS" either "yes" or "no;" followed by questionnaire assessing knowledge on HIV/AIDS, and its oral manifestations and Medical Condition Regard Scale were used for assessing the attitude of residents.

Results: Of the 96, only four reported to treat HIV/AIDS patients willingly; only 2% of residents have ever treated HIV/AIDS patients. More than 70% of them did not know the protocol in case of needle prick or blood splatter and post-exposure prophylaxis. However, the knowledge regarding oral manifestation of HIV/AIDS was satisfactory. The attitude of the residents was more negative (median=3.02) toward treating HIV/AIDS patients.

Conclusion: Knowledge regarding post-exposure protocol was poor and it is high time that special care dentistry is included as part of the dental curriculum to increase awareness and knowledge regarding HIV/AIDS; and we do recommend compulsory postings for junior residents in tertiary hospitals to alleviate the fear, discrimination, and stigmatizing attitude toward HIV/AIDS.

Keywords: AIDS, Attitude, Dentist, HIV, Knowledge

INTRODUCTION

Provision of oral care to people living with HIV and AIDS (PLWHA) is a challenging task considering the stigma and risk it carries along with it. It is, however, regrettable that many health-care professionals have a negative attitude in providing care to these socially disadvantaged groups and dentistry is no exception. The stigma and fear associated with treating PLWHA can be partly attributed to the insufficient knowledge and training they receive during their undergraduate training. Hence, the objective of this study was to assess the knowledge regarding HIV/AIDS and the attitude of junior residents in providing oral care to PLWHA.

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MATERIALS AND METHODS

A cross-sectional study was conducted among 96 junior residents during November– December 2015 in Davangere, who provide oral health care in peripheral dental centers in the outskirts of the city as a part of their compulsory rotational internship regarding their knowledge and attitude toward treating PLWHA.

Subjects answered a question "will you be willing to provide oral care on your free will if you knew the patient has HIV/AIDS" with response either "yes" or "no" at the beginning followed by a pre-tested questionnaire for assessing knowledge on HIV/AIDS and its oral manifestations and the Medical Condition Regard Scale (MCRS)[1] were used for assessing the attitude of residents toward HIV/AIDS. It has 11 items and rated on a six-point Likert scale ranging from strongly disagree to strongly agree; the median or mean score of 3.5 is the cutoff in MCRS, less than that is considered negative and values closer to six indicates positive regard. A questionnaire was assessed for its reliability and validity before the study and was found to be above satisfactory. The data were summarized and analyzed using SPSS V.16.

RESULTS

Of 96 residents, 92% responded to all the items and female residents comprised 68% of the total sample. To the question "will you be willing to provide oral care on your free will if you knew the patient has HIV/AIDS?" only four of them responded with a "yes" and all were male. Table 1 presents the distribution of responses to the HIV/AIDS knowledge questionnaire. Only 2% of the residents had reported having treated PLWHA and more than 50% believe that HIV can be transmitted through saliva. Further, only 25% of the residents responded correctly regarding post-exposure prophylaxis. Similarly, 72% did not know the protocol following a needlestick injury or blood splatter. Knowledge regarding oral manifestations of HIV/AIDS was above average regarding usual manifestations such as candidiasis, Kaposi sarcoma, and periodontitis, as presented in Table 2. However, the majority (92%) of them did not know linear gingival erythema and only 30% of them reported the association between hairy leukoplakia and salivary gland dysfunction with HIV/AIDS. Nearly 50% of the respondents failed to know the association of xerostomia and major aphthous ulcers with HIV/AIDS. Female residents reported (median 2.43) negative attitude toward PLWHA compared to male residents who were relatively borderline or marginally positive (median 3.61) in the MCRS toward PLWHA and this difference was statistically significant ($P < 0.05$, independent t-test).

DISCUSSION

Indifferent attitude and insufficient knowledge of oral health-care providers toward patients with HIV/AIDS hinder their fair share of optimal oral care. The present findings of our study report the stigma, negative attitude, and lack of sufficient knowledge to effectively provide oral care to PLWHA without risk of cross-contamination and self-injury. Many studies assessing the knowledge and attitude toward HIV/AIDS among dental students are available in the literature, but each of them reported individual validated questionnaire; hence, comparison of HIV/AIDS knowledge with the previous literature is quite difficult. We mainly wanted to assess the knowledge to prevent cross-contamination and injury, moreover, protocol for action in case of exposure to HIV. The residents' unawareness toward life-saving protocol following exposure and post-exposure prophylaxis are quite alarming; it further signifies the need for curriculum reforms in dental education and continuing education programs for enforcement and constant update related to HIV/AIDS.

Table 1: Responses of junior residents to questionnaire assessing their knowledge on HIV/AIDS.

Knowledge	Correct response (%)
HIV/AIDS can be transmitted from patients to dental professional	94.8
Needlestick injury transmits HIV	96.7
ELISA is screening test for HIV/AIDS	74.3
Western Blot is confirmatory test for HIV/AIDS diagnosis	68.4
Negative HIV test prove that the persons are free of viruses	43.2
HIV/AIDS can spread through saliva	49.7
Saliva can be used as an diagnostic tool for HIV/AIDS	54.1
Sterilization protocol for instruments used in HIV/AIDS patients is the same as any other	26.2
HIV/AIDS is a communicable disease	68.9
HIV can be transmitted by aerosols during routine scaling and filling	75.4
Do you know the post-exposure prophylaxis	25.3
Do you know the protocol in case of needlestick injury or blood splatter from a HIV/AIDS patient	27.8
HIV becomes AIDS when CD4<200	31.7

Table 2: Responses of junior residents to questionnaire assessing their knowledge on oral manifestation of HIV/AIDS.

Oral manifestations	Yes (%)
Kaposi sarcoma	89.5
Herpes zoster	74.3
Herpes simplex	72.9
Major aphthous ulcers	53.2
Candidiasis	96.8
NUG/NUP	47.8
Periodontitis	89.7
Papilloma	42.2
Xerostomia	51.3
Oral hairy leukoplakia	32.5
Linear gingival erythema	7.2
Salivary gland infection	27.4

In a study conducted among Iranian dental students,[2] excellent knowledge regarding HIV/AIDS was reported, but only 1% had the attitude to treat PLWHA. These findings are similar to ours regarding the attitude, female residents reported negative regard toward PLWHA and males reported only a borderline positive attitude. These findings can be attributed mainly to the lack of sufficient training, knowledge, and experience in treating PLWHA. There are approximately 2–3.1 million PLWHA in India and sooner or later dentists have to encounter them in their day-to-day practice, but only 2% reported to have treated HIV/AIDS patients and hence more experience in treating them is, thus, required to desensitize the prejudice effect among our residents. It is a common finding among health-care professionals to exhibit negative, stigmatizing attitudes toward PLWHA, and it may partly be the reason for the persistence of these attitudes in subsequent generations.[3] The present study explores the dire need to expand the curriculum and to entangle the strata's of stigma, improve the knowledge and first-hand experience under appropriate guidance to provide oral care to PLWHA. Further, the attitude toward PLWHA can be a result of a multiplicity of factors such as culture, social media, taboos, and individual experiences and not necessarily related to the curriculum which could be considered a limitation of the study.

CONCLUSION

The knowledge of junior residents toward HIV/AIDS is not satisfactory for providing oral care to PLWHA and more than the majority reported negative attitudes toward treating HIV/AIDS patients. It is high time that special care dentistry is included as part of the dental curriculum to increase awareness and knowledge regarding HIV/AIDS and we do recommend compulsory postings for junior residents as a part of their internship in tertiary hospitals to alleviate the fear and discrimination toward PLWHA.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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