ORIGINAL ARTICLE

Nigerian Dental Students' Knowledge of HIV Prevention, Stigma and Discrimination

M Okoh[1], JE Enabulele[2]

ABSTRACT

Background: Knowledge of prevention and removing the barriers of stigma and discrimination is a critical public health issue for HIV/AIDS prevention strategies in Nigeria.
Objective: This paper is aimed at accessing the knowledge of HIV/AIDS prevention, causes and effects of stigma and discrimination towards people living with HIV/AIDS (PLWHA), among the final year dental students. **Methodology:** This was a descriptive cross-sectional study among final year dental students in accredited dental schools in Nigeria, 2016. At the time of conducting this study there were 8 accredited dental schools in Nigeria. Simple random sampling technique was used to pick four schools from the existing eight. All data obtained was analysed using IBM SPSS version 21.0. **Results**: Out of the 70 questionnaires administered 60 were filled and returned giving a response rate of 85.7%. Half (50.0%) of the respondents exhibited a good level of knowledge of HIV prevention. About two-thirds (66.7%) of the respondents exhibited good level of knowledge of HIV discrimination and stigma. The main cause of stigma against PLWHA was lack of knowledge about HIV (86.7%). The main effect of stigma on PLWHA as stated by 83.3% is that they hide their HIV status. **Conclusion:** The study showed that most final year dental students have good knowledge of HIV prevention; causes; and effects of stigma and discriminations among people living with HIV/AIDS. However, they need more training on how occupational HIV exposure should be handled in the clinic.

Keywords: HIV/AIDS, prevention, stigma, discrimination, dental students.

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Introduction

Since the first case of Acquired immunodeficiency syndrome (AIDS) was reported in Nigeria in 1986, it has attained an epidemic status with Nigeria accounting for the highest proportion of people living with HIV/AIDS (PLWHA) in the West Africa sub-region. The region is also home to 1 in 11 of the 40 million people living with HIV/AIDS worldwide.[1] The care of people with HIV/AIDS is challenging due to its multidisciplinary nature, its medical complexity, physical manifestations, the need for infection control procedures and the associated stigma and discrimination. [2, 3]

The knowledge of HIVAIDS is crucial for dental professionals because of the increasing

prevalence of the infection, and also because of the significant role the dentist plays in preventing cross infection while providing care for HIV-infected patients both diagnosed and undiagnosed. [4]

Stigma is often associated with discrimination and human right abuse. Stigmatization can lead to prejudicial thoughts, behaviours, and actions on the part of governments, communities, employers, health care providers, co-workers, friends, and families.[5-7] Prejudice against HIV/AIDS patients appears to be widespread in Nigeria. Such attitude among health care workers has been identified as one of the core reasons many people living with HIV/AIDS in Nigeria are denied access to treatment.[1] Inadequate information on HIV/AIDS will continue to thwart efforts at the prevention of the disease, deprive PLWHA the much needed care and support; while encouraging stigmatization and discrimination against them. This trend will portend a great danger to the well-being of PLWHA.[2]

A study among dental students in Nigeria reported that 36.7% were not prepared to administer care to HIV/AIDS patients, and 38.1% of students indicated their unwillingness to share a meal from the same plate with people living with HIV/AIDS (PLWHA). This might lead to unwillingness to treat HIV/AIDS patients in future.[2]

Understanding and removing the barriers of stigma and discrimination is a critical public health issue for HIV/AIDS prevention strategies in Nigeria.[6] Thus, this paper aims to access the knowledge of HIV/AIDS prevention, stigma and discrimination towards people living with HIV/AIDS among final year dental students. This specific group is being targeted because they are future health care providers and can use their vantage position to promote and encourage PLWHA to access treatment without any form of stigma and discrimination.

Methodology

This was a descriptive cross-sectional study among final year dental students in Nigeria in 2016. At the time of conducting this study there were 8 accredited dental schools in Nigeria. Simple random sampling technique was used to pick four schools from the existing eight. All final year students from the 4 dental schools were recruited for the study making a total of 70 students. Participation was voluntary with all participants remaining anonymous after educating them on the importance of the survey and its benefit.

Data for the study was obtained by means of a pre-tested self-administered questionnaire. The questionnaire consisted of 3 sections. The first section sought information on the respondents' demographic characteristics which included age, gender, marital status and school. The second section assessed knowledge of HIV prevention and consisted of 23 questions which assessed the respondents' knowledge on ways of preventing HIV, availability of HIV vaccine, handling of occupational exposure, and timing of post-exposure ARV treatment. The 3rd section assessed knowledge of HIV stigma and discrimination, and consisted of 20 questions which assessed the respondents' knowledge of signs of discrimination, causes of stigma, effect of stigma on the community/society as well as people living with HIV and their families. Every correct response was awarded a score of 1 while incorrect response was not awarded any score. The knowledge of HIV prevention was graded by summing up the scores of all responses as follows: good knowledge 16-23, fair knowledge 8-15 and poor knowledge 0-7.

The knowledge of causes and effects HIV stigma and discrimination was graded by summing up the scores of all responses as follows good knowledge 14-20, fair knowledge 7-13 and poor knowledge 0-6.

All data obtained was analysed using IBM SPSS version 21.0. The data were subjected to descriptive statistics in the form of mean, standard deviation, frequencies and percentages.

Results

Out of the 70 questionnaires administered 60 were filled and returned giving a response rate of 85.7%. The questionnaires were proportionately distributed. There was a higher proportion of male respondents with a male female ratio of 1:0.6. Four dental schools were represented with University of Benin dental school making up 35.0% of the respondents (Table 1).

Half (50.0%) of the respondents exhibited a good level of knowledge of HIV prevention while 5.0% exhibited a poor level of knowledge (Figure1).

Prevention of HIV by condom use during sexual intercourse was reported by 91.7%. In like manner, 96.7% opined that the practice of not sharing needles and syringes is a way of preventing HIV infection. Similarly, 93.3% declared that safe blood transfusion can prevent HIV infection. Majority (73.3%) of the respondents reported that no HIV vaccine is available for prevention. Circumstances that could lead to occupational exposure to HIV was reported by 76.7% of the respondents to include exposure of blood/body secretions to scratches/wounds and 95.0% stated that skin puncture by needles/sharps were one of the circumstances that could lead to occupational exposure to HIV. For the question on how should occupational HIV exposure be handled, more than half (56.7%) stated that there was need for on-the-spot treatment of any injury that occurred, 61.7% felt assessment of HIV exposure risk should be carried out, 81.7% declared that the HIV status of the source person be determined, 65.0% acclaimed that test for HIV be repeated 3-6 months after the exposure and 73.3% indicated that post-exposure antiretroviral treatment (ARV) treatment be instituted for the exposed person (Table 2).

About two-thirds (66.7%) of the respondents exhibited good level of knowledge of HIV discrimination and stigma (Figure 2). The three most commonly identified signs of discrimination as depicted in table 4 were; avoidance: avoid touching and proximity (96.7%), Denial: denied housing and job (88.3%) and isolation: isolated area in hospital (83.3%). The main cause of stigma against PLWHA as identified by the respondents was lack of knowledge about HIV (86.7%). However, 80.0% and 85.0% also stated that fear of HIV and connection of HIV to "social evils" such as promiscuity were contributory factors to stigma against PLWHA (Table 3).

Various effects of stigma on PLWHA were recorded in this study with 83.3% stating that stigma makes individuals hide their HIV status. In like manner, 75.0% and 78.3% stated that stigma is associated with self-discrimination and job loss or inability to find employment respectively. Furthermore, 73.3% of the respondents were of the opinion that stigma makes it difficult for PLWHA to access social support services (Table 3).

With regards to the effect of stigma on HIV patients' families, 53.3% claimed that family members of PLWHA tend to lose access to social support services, while 61.7% were of the opinion that family income of PLWHA can be affected by limited employment due to stigma. Majority (91.7%) of the respondents indicated that family members of PLWHA

could also become victims of stigma while, 85.0% felt that the relationships within the households are affected by stigma.

With respect to how stigma affects the community/society 61.7% of the respondents felt stigma increases HIV transmission risks while 81.7% stated that stigma destroys traditional values. More than half (55.0%) felt that resources would be wasted due to PLWHA not wanting to access intervention programs.

Table 1. Demographic characteristics of the final year dental students

Characteristics	Frequency n=60	Percent (%)
Gender		
Male	38	63.3
Female	22	36.7
Marital status		
Single	59	98.3
Married	1	1.7
Dental school		
University of Benin	21	35.0
University of Port-Harcourt	12	20.0
Obafemi Awolowo University	18	30.0
University of Nigeria	9	15.0
Total	60	100.0

Table 2: Knowledge of HIV Prevention by the final year dental students

Questions	Frequency n=60	Percent (%)
Ways of preventing HIV infection		
Use of condom during sexual intercourse	55	91.7
Not sharing syringes/needles	56	93.3
Safe blood transfusion	58	96.7
No HIV vaccine available for prevention	44	73.3
The circumstances of occupational exposure		
Blood/body secretions onto scratches/wounds	46	76.7
Skin puncture by needles/sharps	57	95.0
How to handle occupational HIV exposure		
On the spot treatment of the injury	34	56.7
Assessment of HIV exposure risk	37	61.7
Determination of HIV status of the source person	49	81.7
Test for HIV 3-6 months after exposure	39	65.0
Post exposure ARV treatment of the exposed person	49	73.3

Table 3: Knowledge of causes, signs of discrimination and effects of stigma

Questions	Frequency n=60	Percent (%)
Main causes of stigma against PLHIV:		
Lack of knowledge of HIV	52	86.7
Fear of HIV transmission	48	80.0
Connection of HIV to social evils such as promiscuity	51	85.0
Signs of discrimination:		
Avoidance: avoid touching, proximity	58	96.7
Isolation: isolated area in hospital	50	83.3
Loss of status within household and community	48	80.0
Denial: denied housing, job loss	53	88.3
Gossip from the community	45	75.0
Loss of access to essential resources	43	71.7
Effects of stigma on PLWHA:		
Hiding of HIV status	50	83.3
Self-discrimination	45	75.0
Job loss or inability to get employment	47	78.3
Difficulty to get access to social support services	44	73.3

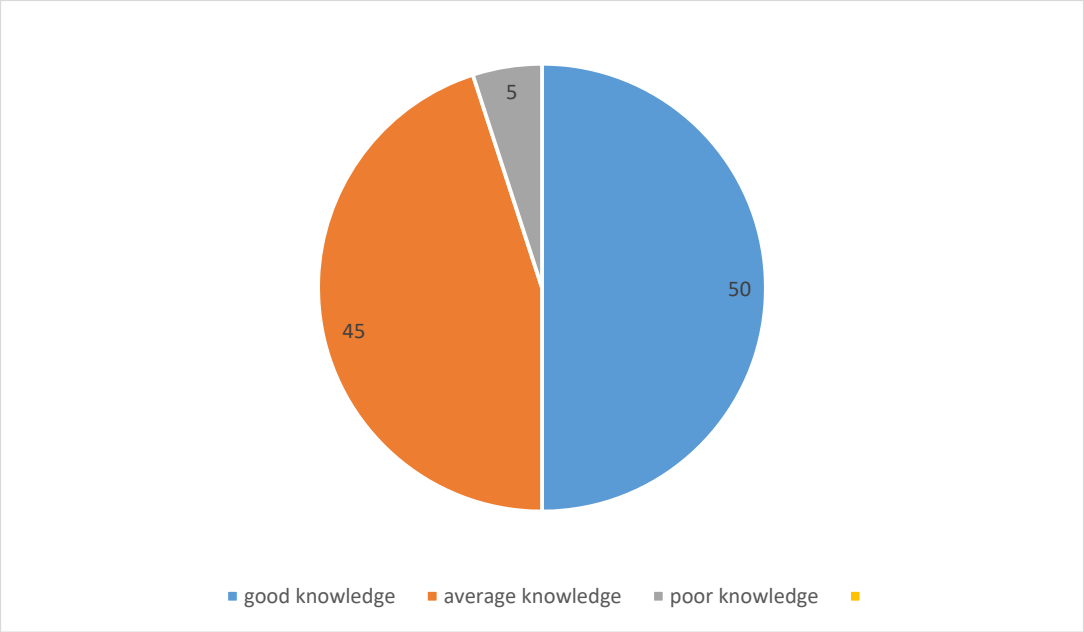

Figure 1: Knowledge grade of HIV prevention among the respondents

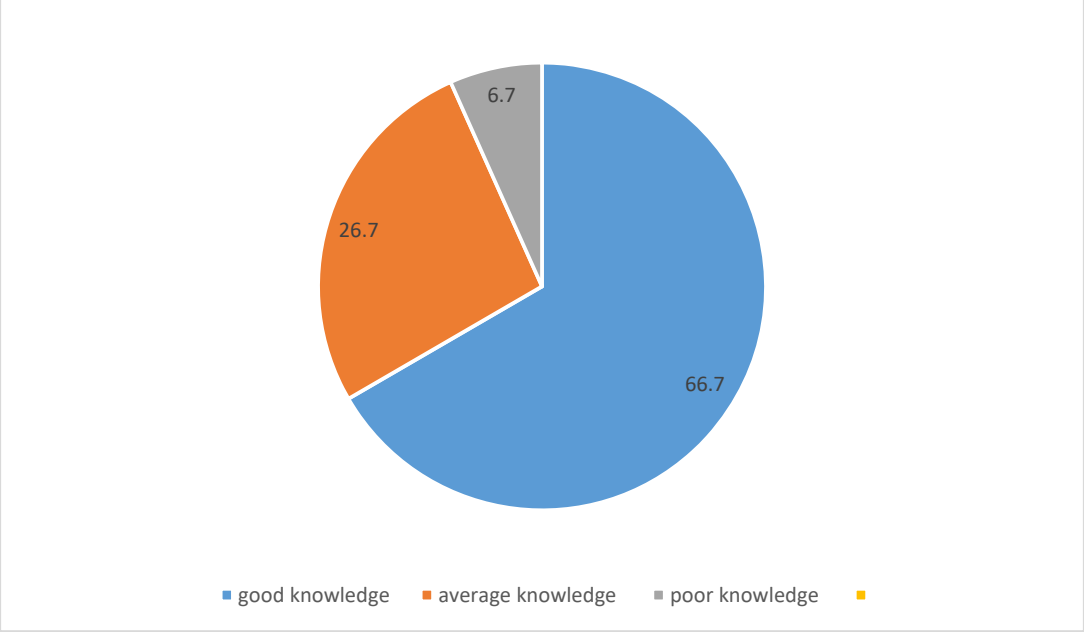

Figure 2: Knowledge score of causes and effects HIV discrimination and stigma among the respondents.

Discussion

The present study observed a good knowledge about HIV transmission and prevention among the respondents, but the knowledge of handling of occupational HIV exposure by the respondents was a little above average except for determination of HIV status of the source person, and the use of ART as post-exposure prophylaxis (PEP) treatment of the exposed person. The use of anti-retroviral drugs as post-exposure prophylaxis in cases of actual or potential exposure, has become the standard of care after occupational exposure to HIV.[8] Studies on occupational exposure of healthcare worker to HIV suggest that PEP may be effective in preventing HIV transmission.[9] A previous study[2] done among preclinical dental students reported that 32.4% were aware of post exposure prophylaxis (PEP) as a means of handling occupational exposure, as against the 73.3% awareness of PEP among final year dental students in the present study. This may be attributed to increased knowledge acquired about HIV/AIDS prevention as dental students move from preclinical to clinical years.

Circumstances that could lead to occupational exposure to HIV was reported by 76.7% of the respondents to include exposure of scratches/wounds to blood/body secretions of HIV infected patients, and 95.0% stated that skin puncture by needles/sharps were one of the circumstances that could lead to occupational exposure to HIV. This is in agreement with reports indicating that about 90% of the HIV infections among healthcare workers occur in developing countries where occupational safety is a neglected issue,[10-12] and the global incidence of HIV infections among health workers attributable to sharps injuries range between 200-5,000 cases per annum. [13]

The present study reported that 53.3% of the respondents claimed that family members of PLWHA tend to lose access to social support services, while 61.7% believed family income of PLWHA can be affected due to limited employment due to stigma.

Majority (91.7%) of the respondents indicated that family members of PLWHA could also become victims of stigma. This is similar to an earlier study which reported that from interviews with PLWHA, their family members and others in the communities, it was found that the level of stigmatization is high and acceptance of PLWHA is low.

These reactions stem mainly from the fear of contracting 'the disease that has no cure', believed to be transmittable through any form of physical contact.[14]

According to previous reports[15-16] one of the main factors driving the infection in Nigeria includes low risk perception, concurrent sexual partnerships, and inadequate access to quality healthcare services. At the centre of these factors is the challenge of HIV-stigma and discrimination which are a major barrier militating against the national response to the epidemic.

Reports of studies on oral health-care providers in the Pacific showed that the major reasons for their unwillingness to provide care to PLWHA was fear of HIV transmission in the dental clinics, inadequate infection control procedures in the clinics to prevent cross transmission and that they lacked knowledge about HIV patient management in dental clinics.[17,18]

The respondents in this study were also of the view that the main causes of stigma against people living with HIV are lack of knowledge of HIV, fear of HIV transmission and connection of HIV to social evil such as promiscuity. All these would lead to unwillingness of future dentists to render treatment to PLWHA.

The three most commonly identified signs of discrimination as depicted in the present study were; avoidance: avoid touching and proximity (96.7%), Denial: denied housing and job (88.3%) and isolation: isolated area in hospital (83.3%). The result of discrimination is that PLWHA hide their HIV status and refuse to assess care and social support services. This would ultimately lead to increased transmission of HIV infection in the community and resources would be wasted due to PLWHA not wanting to access intervention programs.

Equipping healthcare providers with knowledge on HIV, through the provision of protocols and trainings, is of paramount importance in reducing stigma and discrimination against PLWHA amongst healthcare providers. [19] All dental students should have complete knowledge about the universal precautions which is an administrative control measure that calls for the implementation of practices and equipment to protect the health care workers whenever the potential exists for exposure to blood.[20] This would go a long way in encouraging health care workers to render treatment to PLWHA without any form of bias.

Conclusion

The study showed that most final year dental students have good knowledge of HIV prevention; causes; and effects of stigma and discriminations among people living with HIV/AIDS. However, they need more training on how occupational HIV exposure should be handled in the clinic.

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