

Original Research Article

Knowledge and Attitude of Dental Students towards the Treatment of Patients with Hepatitis and HIV; A Survey Done in Riyadh, Saudi Arabia.

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Accepted, 28th June, 2018.

Dentists can be infected by HIV or Hepatitis B and C patients during their clinical work; therefore, there is a need to know how they would deal with these patients. Knowledge regarding this sensitive issue might be adequate in many dentists, but attitude could be of question as some of them may not be willing to treat such patients. This is a cross-sectional study, which aimed to target 500 male and female dental students from levels 9 to 12. The eventual sample size was 417 students. A closed-ended questionnaire was used. A total of 417 dental students took part in this research, out of which 196 were males and 221 females. 82 students belonged to 4th year dentistry, 211 and 124 were from 5th and 6th year respectively. Knowledge regarding the treatment of HIV was inadequate as majority of the respondents gave wrong answers with the difference being statistically significant.

Keywords: Dental students, HIV/AIDS, Hepatitis B and C, Saudi Arabia.

INTRODUCTION

Dentists can be infected by HIV or Hepatitis B and C patients during their clinical work; therefore, there is a need to know how they would deal with these patients. Knowledge regarding this sensitive issue might be adequate in many dentists, but attitude could be of question as some of them may not be willing to treat such patients. In order to improve this kind of attitude, there is a need to promote educational programs (Kadeh et al, 2014).

HIV and Hepatitis B have largely increased nowadays and people infected with them may involve directly or indirectly with dental health care so it was important to improve dental students attitude (eliminate the fear of treat such patients), knowledge (confidant in treat such patients) and awareness (training and guidance on treat such patients). There was a study done among dental students of Karachi, Pakistan to evaluate their knowledge, attitude and awareness of treating patients with HIV and Hepatitis B. Findings revealed positive attitude with good knowledge and awareness (Iqbal et al, 2015).

Another study was conducted in Libya to evaluate the attitude and knowledge of graduating dental students towards treating HCV patients. Cross-sectional survey revealed that the

knowledge of participants was unsatisfactory and their attitude was differential. There is a lot of information regarding infection control but there is few information regarding HCV and how to handle it. Lack of knowledge can lead to fear and stress while treating patients with HCV which will make most of the dentist refuse to treat such patients and that not what a dentist with moral should be, so it is important to start providing knowledge and training about this matter starting from 3rd year onwards and updating this knowledge every year (Peeran et al, 2016).

A study done in Taiwan involving dental students disclosed that the majority of participants were willing to treat HBV positive patients as compared to HCV and HIV patients. On the other hand, their knowledge was assessed regarding the above-mentioned infections, revealing that majority of the respondents had better knowledge of HIV and HCV as compared to HBV. Overall, the dental students require adequate exposure to undergraduate knowledge of these infections in order to treat these patients in their clinical practice (Hu et al, 2004)

With more than two billion infected people, of whom 350 to 400 million suffer from chronic infection, hepatitis B virus (HBV) is still a major health problem worldwide. As dental treatment

puts both dentists and patients at a higher risk of HBV infection, dentists can play an important role in preventing HBV transmission in dental settings. This study was performed to evaluate dental students' awareness and practice regarding HBV-related issues and to compare the results obtained from different academic years. Overall, a relatively good level of knowledge was observed amongst this population. However, students' answers to practice questions were less satisfying (Alavian et al, 2011).

With increasing numbers of people with HIV/AIDS receiving oral dental care, dentists should have sufficient knowledge of the disease, and their attitude should meet professional expectations. HIV and AIDS-related knowledge among dental students provides a crucial foundation for efforts aimed at developing appropriate education on these topics. The results indicated that the students' knowledge on HIV/AIDS generally increased as they progressed through the curriculum, but their utilization of all barrier techniques for infection control and clinical protocol lacked consistency and compliance (Aggarwal & Panat, 2013).

Chinese dental students' knowledge and attitudes toward HIV/AIDS. Despite their good level of knowledge, the majority (93.68%) displayed a negative attitude (nonprofessional attitude) towards treating HIV/AIDS patients. These findings might help to define strategies to improve the quality of education among Chinese dental students and suggests that there is a need to address student misconceptions and attitudes toward the disease (Li et al, 2016).

It is important that dental students, as future dentists, develop not only the necessary practical skills but also attitudes that will prepare them to treat HIV/AIDS patients. (Sadeghi et al 2009)

An anonymous survey was administered to 534 pre-doctoral students at the School of Dental Medicine, University of Zagreb, Croatia. The level of their knowledge of infectious diseases and routes of their transmission increases with each year of study, senior students showed a more positive approach and were less discriminative in comparison to junior students; the level of personal knowledge plays a very important role in forming these students' attitudes and risk perception regarding patients with HIV, HBV, and HCV. Social factors such as gender, high school education, and parents' profession have minimal impact on students' knowledge, attitude formation, and risk perception. Future dentists show willingness and a need for further theoretical and practical education on the dental treatment (Brailo et al, 2011).

Contamination with Human Immunodeficiency Virus Type 1 (HIV-1) and the resultant Acquired Immune Deficiency Syndrome (AIDS) is a noteworthy general wellbeing challenge in current circumstances. Since its first acknowledgment in 1981, HIV/AIDS disease has turned into a noteworthy wellbeing concern around the world. Worldwide measurements record that before the finish of 2014, around 34.3– 41.4 million individuals were living with HIV and roughly 1.2 million individuals had passed on from AIDS-related ailments. In view of observation information, before the finish of 2014 the total number of HIV cases in Malaysia since the main instance of HIV contamination was accounted for in Malaysia in 1986 had achieved 105,189, AIDS cases had achieved 21,384, and there had been 17,096 passages identified with AIDS (Suh-Woan, Hsiang-Ru & Pao-Hsin, 2004).

Individuals living with HIV/AIDS are liable to a range of conceivably difficult and wellbeing trading off oral conditions related with HIV malady. Late examinations around the globe demonstrate that oral sores (e.g., oral candidiasis and Kaposi's sarcoma) happen in upwards of 50%– 70% of all HIV/AIDS

cases. The oral social insurance setting has turned into an accommodating domain for the early location of HIV contamination in light of the fact that the greater part of its injuries displays orally amid the principal phases of the illness. Helpful systems in dentistry as often as possible include blood and salivation that may contain an assortment of blood-borne pathogens and microorganisms, for example, HIV. In this way, dental practitioners turn into a high-chance classification for cross-defilement, frequently by a needle prick damage, be that as it may, the danger of disease after prudent presentation is just 0.3%. Research in nations, for example, South Africa, Brazil, Japan, and Sudan have discovered dental understudies had deficient learning about HIV, especially in connection to its transmission (Priyadarshni et al, 2014).

The dread of transmission of this infection is one reason why dental specialists decline to treat patients with HIV contamination. Eagerness to treat HIV patients has all the earmarks of being identified with information and infection process, acknowledgment of oral signs, and understanding the methods of its transmission. Expanded learning of HIV has prompted an expanded eagerness and certainty of dental specialists and dental understudies to treat HIV-positive patients. Henceforth, it is basic to pick up understanding into dental understudies' learning levels and mentalities towards HIV-positive patients (Mohammad, Mohsen & Reg, 2010).

Human immunodeficiency (HIV) is a sickness which brings about diminished chemotaxis, blemished granuloma development and support, disabled antigen handling and introduction, and summed up loss of CD4+ T cells. (AIDS) is a comprehensively developing general medical issue. India alone records for more than 2.5 million individuals living with HIV with an expected predominance of 0.91%. The danger of ward-related transmission of the infection from a patient to a human services supplier has been evaluated at 0.3% after a solitary percutaneous presentation to HIV-tainted blood (Crossley et al, 2004).

We can enhance the pharmaceutical resilience/adequacy, treatment achievement rate, and personal satisfaction by giving great oral care to HIV-constructive people. With enhanced survival rates, sooner rather than later more HIV-positive patients will look for dental care. Past reports have demonstrated that roughly 90% of the HIV contaminations among medicinal services specialists happen in creating nations where word related wellbeing is a disregarded issue (Hamideh, Shirin & Parviz, 2014).

Over the most recent two decades everywhere throughout the world, numerous dental specialists don't treat HIV-positive people. Unwillingness to treat patients with HIV by the dental specialists has been related with insufficient learning of ailment process, transmission, analysis, and treatment of HIV contaminated patients which thus has prompted fear in regards to infection or AIDS fear (Oliveira, Narendran & Falcão, 2002).

Dental workforce should go about as a good example for the dental understudies with respect to the dental treatment of AIDS patients. In the investigations directed in different nations, albeit acceptable information level among the examination members was there, a shame was accounted for in regards to the treatment of HIV/AIDS patients. Concentrates done in South Africa, Brazil, Japan, and Sudan showed that dental understudies had inadequate learning with respect to HIV, its method of transmission, and administration of HIV positive patients. The absence of learning, dread of getting the disease over the span of treating HIV contaminated patients, protection of care staff, and saw absence of clinical aptitudes go about as boundaries to treating HIV positive people among dental specialists (Rotimi & Oluwafemi, 2010).

AIMS OF THE STUDY

- Determine dental students' knowledge, attitude and practice of treating patients with hepatitis and HIV.
- Compare between male and female respondents.
- Compare among different dentistry years' students.

MATERIALS AND METHODS

This is a cross-sectional study, which aimed to target 500 male and female dental students from levels 9 to 12. The eventual sample size was 417 students. A closed-ended questionnaire was used. Questions from various studies were collected and the most suitable ones were utilized in this study. Online survey was prepared using survey monkey and was sent to the above-mentioned participants via email. The data were analyzed using SPSS v. 16. Descriptive statistics was done to retrieve the results including Chi-square tests, where the level of significance was kept under 0.05.

RESULTS

A total of 417 dental students took part in this research, out of which 196 were males and 221 females. 82 students belonged to 4th year dentistry, 211 and 124 were from 5th and 6th year respectively. 78% of the students believed that HIV can be transferred from the mother to the child. 39% responded that HIV can be transmitted by social contact e.g. shaking hand, which is incorrect. 22% of the participants disclosed that HIV can be treated with antiviral drugs; however, 77% believed that the HIV positive patients cannot donate blood.

59% of the study participants revealed that it is obligatory for the Hep B & C, HIV patients to inform their dentists about their condition. Around 57% of the students were not willing to treat a patient with Hepatitis. Same was the case with HIV patients, where 54% of them refused to treat in future.

DISCUSSION

Patients having serious infectious conditions always carry a high risk of transmission especially when it comes to dental treatment. There is always an increased incidence of contracting Hepatitis B, C or HIV and dentists find themselves vulnerable, therefore they are extra careful when treating such patients. This study was aimed to assess and determine the extent of dental students' knowledge and readiness to treat patients with infectious diseases.

We compared our results with other related studies done in different countries. A research conducted by Li et al (2016) among the Chinese dental students revealed that a large majority had very good levels of knowledge (between 75-80%). These findings are somewhat similar to what we found out in our study. The major difference between two studies was the attitude of dental students to treat patients with infectious diseases. Around 93% of the Chinese students revealed that they were not willing to treat any patients, which was higher than the number of students with a similar attitude in our study (57%).

Another study was done among the Iranian dental students by Sadeghi & Hakimi (2009), which revealed that there were no significant differences in the knowledge or attitude between male and females. As far as our study is concerned, it was not much of the difference compared with Iranian study, with only few of the knowledge and attitudinal factors being significant and majority not significant. Another similarity with the study

was the non-readiness of our students to treat patients with infectious diseases. There is a clear need to educate and train our students in order to make them prepared for any exposure with such patients.

Another study was done in Pakistan (Lakdawala et al, 2015) and we found that the knowledge of these students was sufficient (86.7%) of them know about the infection of hepatitis B virus and its effect, with the majority of them (99%) know about the vaccine existence of this disease, and (70%) were actually vaccinated, and its somehow similar to the result in our study, example; when they asked about Hepatitis B is mainly transmitted through sexual contact or blood?(90%) of them answer it correctly, and when they been asked if in health care workers hepatitis B can transmitted through mechanical skin injury?(77%) of them answer correctly, and when they got asked about Hep B virus-infections can result in chronic hepatitis and liver cancer? (63%) of our students got the correct answer.

Another study was done by (Brailo et al, 2011) among Croatian dental students and we found that their knowledge about hepatitis and HIV increased during the course of study. More than half of the respondents (51.8 percent) and had more professional attitudes and were significantly more positive about dentists' professional obligation to treat patients 97.4%, in our study, Higher level of students showed better attitude towards treating HIV patients. The knowledge was satisfactory among them, female more than male.

Also study conducted by Azodo et al 2010 between Nigerian dental students we found that only 31 percent of the respondents were their knowledge about HIV was high which is lower than our study, and willingness of Nigerian dental students to treat HIV-positive individuals is low when compared with the findings among Nigerian dentists which only 58.8 percent agree to treat and Forty-one percent of the dental students said they would be unwilling to treat HIV-positive patients. Which was a slightly better than our result with 54% of our students refused to treat in future. This suggests the need to introduce into the dental curriculum a comprehensive educational and motivational program for the next generation of dentists in order to ensure adequate care of HIV-positive patients.

We found some statistically significant differences in the responses from genders and dentistry years. As far as gender comparison is concerned, there was a significant difference when inquired about the transmission of HIV through saliva, treatment of HIV with antiviral, risk of HIV through a needle stick, whether healthcare professionals belong to high-risk workers and some other important points, which can be appreciated from table 1. Similarly, various dentistry levels showed significant differences in some responses including all HIV transmission related queries, familiarity with post needle stick injury protocol, preference of refusing treatment to HIV/Hep patients and a few more.

A limitation of this study was the small sample that we were able to receive. There was a marked difference between the numbers of students in various levels, which resulted in insignificant results. We might increase the sample size in future and select the participants with stratified sampling.

Human services experts ought to have sufficient learning of HIV/AIDS, and their mentality and conduct ought to be appropriate to deal with such patients. Medicinal services experts procure their insight and conduct from their expert instruction. In our examination, the mean learning score of the members about HIV was great (72.7%).

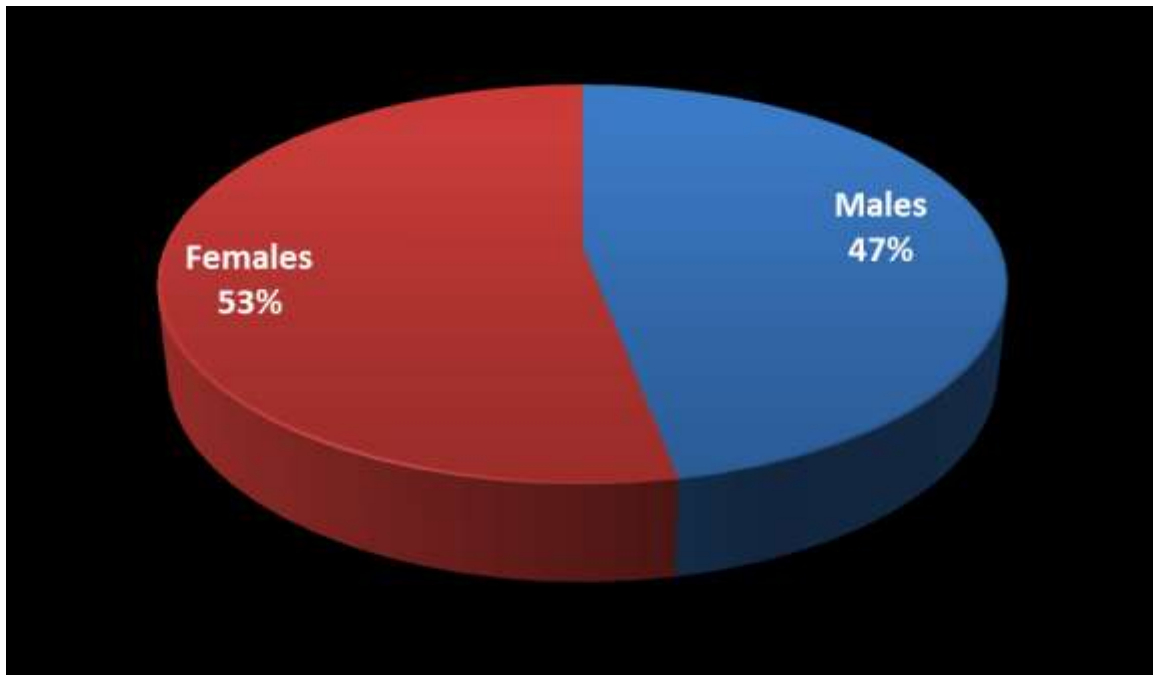


Figure 1: Gender distribution of the participants in this study

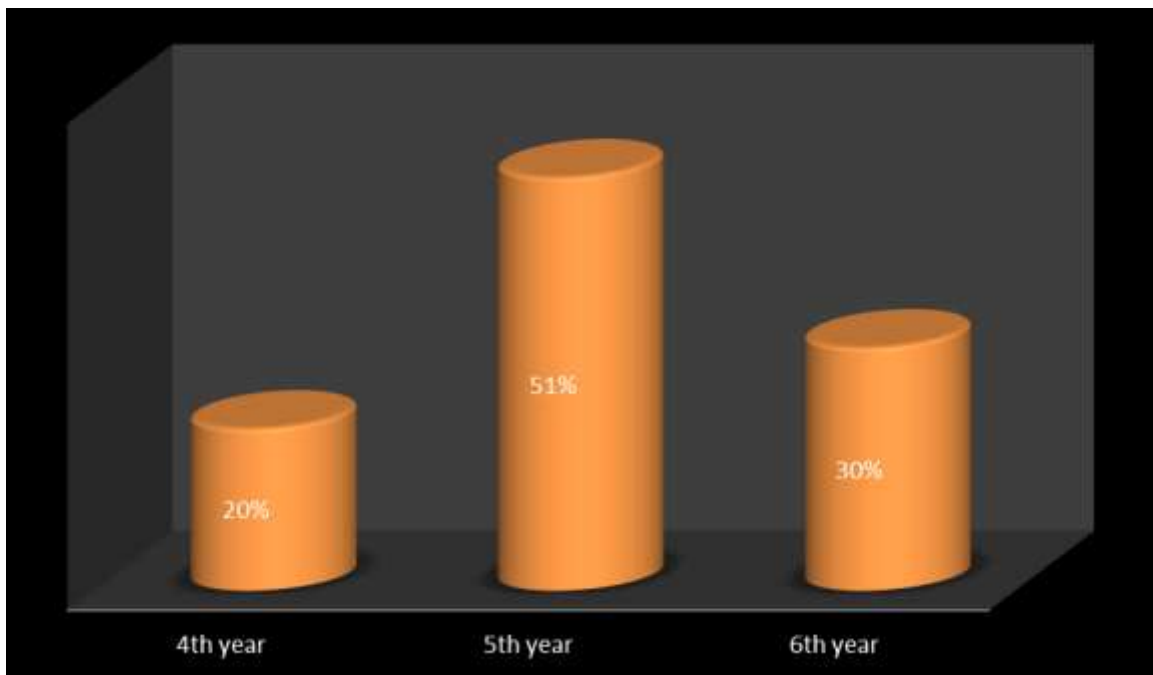


Figure 2: Various levels of dental students participating in this study.

Table 1: Dental students' knowledge and attitudes towards HIV/Hepatitis patients.

Questions	Yes %	No %	Don't know %	Correct answer %	Differences associated with gender P-value	Differences associated with dentistry years P-value
Can HIV/AIDS be transmitted from mother to child?	78%	14%	8%	78%	0.090	0.003
Can HIV be transmitted through air or water?	23%	70%	7%	70%	0.253	0.000
Can HIV be transmitted through social contact	39%	54%	8%	54%	0.293	0.002
Can HIV be transmitted through saliva?	64%	30%	7%	64%	0.003	0.000
Can HIV be completely cured with antiretroviral therapy?	20%	58%	23%	58%	0.567	0.092
Can antiviral medications be used to treat HIV/AIDS?	22%	34%	44%	34%	0.018	0.480
Can patients with HIV/AIDS donate blood?	18%	77%	6%	77%	0.224	0.751
Risk of HIV infection after a needle-stick is about 50-75%	49%	15%	37%	49%	0.005	0.204
Hepatitis B is mainly transmitted through sexual contact or blood	90%	6%	4%	90%	0.748	0.008
In health care workers, Hep B can be transmitted through blood splashing into mucous membranes.	77%	10%	13%	77%	0.923	0.035
In health care workers, hepatitis B can be transmitted through mechanical skin injury.	77%	8%	15%	77%	0.040	0.055
Hep B & C virus-infections can result in chronic hepatitis and liver cancer.	63%	14%	24%	63%	0.438	0.232
Is a hepatitis C vaccine available?	23%	56%	21%	56%	0.310	0.578
Should individuals with hepatitis B or C infection receive dental treatment in hospital?	74%	14%	10%	74%	0.377	0.002
Do health care professionals belong to the high-risk group for hepatitis virus infections?	74%	7%	20%	74%	0.035	0.247
Are you familiar with the procedure in case of needle-stick injury?	48%	34%	18%	48%	0.042	0.005
Dentists have a professional obligation to treat patients who are HIV-positive	59%	19%	23%	59%	0.443	0.419
I would prefer not to treat patients who are HIV-positive	57%	23%	19%	23%	0.000	0.048
Patients who are HIV-positive are themselves responsible for their condition.	38%	37%	25%	37%	0.026	0.227
Patients who are HIV-	76%	8%	16%	76%	0.010	0.220

positive should have a legal obligation to inform their dentists about their disease.						
Patients with HIV or hepatitis should receive dental treatment in specialized clinics.	76%	14%	10%	76%	0.005	0.418
Because of an increased risk of infection, I would prefer not to treat patients with hepatitis.	54%	31%	15%	31%	0.016	0.196
Because of the risk of hepatitis infection, I would prefer not to treat intravenous drug users.	42%	36%	22%	36%	0.000	0.062
If I found out that my longtime patient had HIV or hepatitis, I would stop treating him.	30%	47%	24%	47%	0.068	0.260
If a patient informed me about having an infectious disease, I would stop treating him	25%	51%	25%	51%	0.082	0.925
Dentists should have the opportunity to refuse to treat patients with HIV or hepatitis.	53%	28%	19%	28%	0.492	0.775
All patients should be considered potentially infectious	73%	12%	15%	73%	0.391	0.420
All health care professionals should go for mandatory HIV and hepatitis testing once a year.	73%	9%	18%	73%	0.488	0.454
Standard protective equipment (gloves, mask, glasses) provides sufficient safety against infection	60%	24%	16%	24%	0.074	0.032
I feel competent enough to provide dental care to patients with HIV/AIDS.	35%	38%	27%	NA	0.239	0.543
I believe that routine dental treatment carries significant risk of HIV and hepatitis infection.	60%	15%	25%	60%	0.126	0.999
In case of an infection at the work place, I would partially accept responsibility.	51%	22%	27%	22%	0.046	0.215
There are 100% efficient methods of Disinfection instruments used with patients with HIV, HBV, and HCV.	50%	17%	33%	17%	0.263	0.775
Dentists having HIV or hepatitis should cease their occupational activity	43%	26%	31%	26%	0.001	0.763

Notwithstanding, it was brought down in contrast with the astounding learning detailed by Sadeghi and Hakimi (82.1%) and Aggarwal and Panat (78.8%) (Sadowsky&Kunzel, 1996).

Another study stated that it is outstanding that 98.5% of the understudies realized that needle stick damage could transmit HIV. In spite of the fact that the danger of HIV contamination to human services laborers after percutaneous introduction is low (0.3%), needle stick wounds can be a potential hazard factor for the dental expert making outrageous mental pressure. Consequently, understudies should be made mindful of the best possible conventions for provoke administration of needle stick damage. Just 19% of the understudies concurred that HIV could be transmitted through mist concentrates delivered by a fast air-rotor handpiece and ultrasonic scaler. This might be on the grounds that reports of HIV transmission through this course are exceptionally uncommon. A hypothetical plausibility exists if the pressurized canned products contain the blood of the HIV-positive patient. The likelihood of goal of oral liquids and blood from a contaminated patient into a dental unit waterline exist, and this could uncover the organisms of past patients to the clinician or a back to back patient (Brailo et al, 1996).

A study carried out quantified around 78% of the understudies in the investigation from another study concurred that dental specialists could go about as a go-between for the transmission of HIV, which proposes that most understudies knew about ailment transmission. In any case, this number is viewed as low contrasted with examines led in India and Iran. These discoveries obviously feature the significance of showing understudies about HIV illness transmission. A place for infection control (CDC), in their 1992 report, recommended that sharps wounds were the more probable course of transmission. Most of the understudies concurred or emphatically concurred that every one of the patients ought to be considered conceivably irresistible. It is essential that widespread safety measures are executed through institutional approach and fortified persistently at a standard interim with the goal that they turn into the standard in the every day routine with regards to clinicians (Kitaura et al, 1997).

A survey carried out published that upwards of 40 oral appearances of HIV have been accounted for. Giving appropriate dental care to HIV/AIDS patients requires great information for acknowledgment of the oral sores related with the ailment. The outcomes exhibit that a large portion of the understudies in this examination knew about the real oral appearances of AIDS. Kaposi's sarcoma, oral candidiasis and shaggy leukoplakia, three of the most widely recognized oral injury in HIV-positive patients, were the most distinguished in our examination. In any case, the understudies required a more extensive information of sores less firmly connected with HIV, for example, condyloma, papilloma and xerostomia. Understudies ought to likewise be instructed that even the injuries unequivocally connected with HIV/AIDS are not selective to HIV/AIDS. Kaposi's sarcoma, oral candidiasis, and bushy leukoplakia may likewise be found in patients not tainted with HIV/AIDS (Oliveira, Narendran & Falcão, 2002).

As the number of individuals with HIV/AIDS is expanding around the world, the need for contaminated people for restorative and dental care will consequently increase. Dental specialists ought to be required to improve their insight into the malady and its oral indications. The dental educational programs in our establishment include hypothetical classes on the sign of HIV/AIDS and disease control. In any case, extra training on HIV/AIDS ought to be actualized by the organization for the understudies. This could take the type of

meetings, workshops, courses or constant expert advancement (Ellepolo et al, 2011).

A similar survey specified that the state of mind of dental understudies towards patients with HIV/AIDS was non-proficient (latent) in our investigation, with a mean demeanor score of 69.08%. The relationship of demeanor with sexual orientation and ethnicity was non-critical. Our examination demonstrated higher demeanor scores than thinks about detailing negative states of mind by Sadeghi and Hakimi. In any case, contemplates done by Aggarwal and Danat and Seacat et al. revealed an inspirational state of mind, with higher mentality scores than our investigation. The member understudies in the present investigation had no past presentation on treating HIV patients, and the greater part of them were stressed over being contaminated with HIV patients. This may clarify the need in certainty and aloof state of mind of understudies in our examination. Nonetheless, an inspirational mentality was seen in their readiness to treat and comprehend the ethical obligation to treat HIV patients (Abhinav&Bharathi, 2011).

In another investigation, 27.74% of the dental understudies concurred that they were not committed to treating HIV/AIDS patients. These discoveries were similarly low when contrasted and the discoveries announced by Sadeghi and Hakimi; Aggarwal and Panat. Since 1988, WHO has confirmed that every single dental expert must treat HIV patients. Dental practitioners are morally committed to furnish look after patients with irresistible ailment. Understudies' dread and worry about being tainted with HIV may overwhelm their scholarly and down to earth capacity to adapt to the treatment and administration of such patients (Yadavalli & DineshSingh, 2011).

With 71.5% of the understudies concurring or emphatically consenting to treat HIV/AIDS patients and no understudies reacting with 'unequivocally deviate', plainly they are set up to give dental treatment to all patients without separation. Appropriate information and an expert state of mind to giving consideration and overseeing possibly irresistible patients may affect emphatically on the eagerness of understudies to treat patients. As opposed to the present investigation, Kadeh et al. what's more, Al-Sandook et al. revealed that most dental practitioners in their investigations declined to treat this sort of patient. Current rules are that dental practitioners must not decline to treat a patient exclusively on the grounds of HIV disease, and they can't lawfully allude these patients to strength centers for routine dental care (Vishal, Sakshi & Harmesh, 2017).

The study which had similar contents stated that greater part of the understudies (59.8%) firmly concurred that they are qualified to know whether their patients are tainted by HIV. Correspondingly, in an examination including Thai dental professionals, around 41.9% of respondents concurred with the announcement 'You would feel furious if a patient disclosed to you he/she has HIV/AIDS after the treatment'. As dental specialists are among the social insurance suppliers who come in coordinate contact with patients' blood and other body liquids while performing systems, vulnerability about a patients' HIV status, the deficiency or close aggregate nonattendance of fitting security offices and an absence of unmistakably characterized strategies on the administration of HIV/AIDS in most human services organizations give dental specialists critical difficulties and dangers. Thusly, they are frequently awkward taking care of HIV/AIDS patients because of a paranoid fear of being tainted, and it isn't surprising in this manner that a few dental specialists are unwilling to offer treatment to HIV/AIDS patients (Soukaina T et al, 2011).

In another examination, the relationship amongst learning and state of mind was not critical. These discoveries were as per the examinations done by Chew and Cheong. In our examination, one member was found to have incredible information, however, this current member's state of mind was observed to be negative. An absence of trust in treating HIV patients may have opened up the member's apparent danger of being contaminated with HIV. Information was an altogether connected with sexual orientation and ethnicity in the present investigation, with females having better learning. In the examination by Ahmed et al., male understudies were more positive about both their competency and eagerness to treat HIV patients, while females were more sure about their HIV/AIDS training. This was additionally seen in our examination. Additionally, the extent of female members in our examination was altogether higher than the male members. Understudies from the distinctive socio-religious, ethnicity and family foundations had diverse levels of introduction to learning (Meena et al, 2016).

In the similar examination, 70.4% of the dental specialists concurred that it is hard to manage staff fears about patients with HIV. This is the most as often as possible announced concern with respect to HIV. This is equivalent to the investigation done by Bodadhe et al. in India where 61.4% consented to the same. In an examination led by Mc Carthy et al. in Canada, staff fear was the second incessant announced worries to HIV. This distinction can be ascribed to the contrasts amongst the Canadian and Indian populace.

In the examination which had quite similar contents, 67% of the dental specialists concurred that they would be put at more prominent individual hazard on the off chance that they treat HIV patients. This is like the investigation done by Mc Carthy et al. where 62% consented to the same. In the present investigation, 46.4% of dental practitioners concurred that, on the off chance that they treat patients with HIV/AIDS, different patients may stop treatment in their dental office. This finding is in intelligibility with the examination done by Bodadhe et al. where 49.7% of the dental specialists consented to the same. In the present investigation, 60.7 % of the examination members were eager to treat HIV patients. This is reliable with the examination done in UAE by Haroun et al., where 59% of the understudies reacted that the college should treat HIV contaminated staff or understudies ((Ryalat, Sawair, Shayyab & Amin, 2011).

This, likewise, corresponds with the investigation revealed by Sharma et al. where 60% of the dental practitioners indicated inspirational dispositions towards HIV patients. Interestingly, in the investigation led by Aggarwal et al., just 39.23% of the examination members were ready to treat HIV tainted patients. Just 4.4% of the investigation members accurately addressed the topic of the danger of contracting HIV disease from a HIV-sullied needlestick damage. This is as per the Bodadhe et al., where just 10.9% accurately addressed this inquiry (Santosh et al, 2017).

In the examination, 60.7% of the dental practitioners realized that it is conceivable to be tainted with HIV by mother's bosom drain. This is like the examination done by Li et al. among Chinese understudies, where the larger part of the understudies addressed effectively about the courses of transmission and furthermore as opposed to the examination done.

CONCLUSIONS

- Overall the knowledge was satisfactory among the dental students; however, the attitudes were on a negative side when it came to treating patients with infectious diseases. Points associated with transmission of HIV were statistically significant when it came to comparison based on dental school year.
- Knowledge regarding the treatment of HIV was inadequate as majority of the respondents gave wrong answers with the difference being statistically significant.
- Needlestick injury management was satisfactory among the genders as well as various dentistry levels. The difference between these groups was statistically significant.
- Higher level of students showed a better attitude towards treating HIV patients. However, half of the students were ready to accept responsibility if there was lack of infection control in the clinics, there was a significant difference in genders.

CONFLICTS OF INTEREST

There is no conflict of interest among the authors or any other personnel or organization with the publication of this study.

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