Comparison assessment regarding the Awareness, Behaviors and Attitude towards HIV/AIDS of Dental students in comparison to other allied sciences.

Lovepreet Singh^{1*}, Kanu priya¹, Kajal Chaudhary¹

¹BDS Tutor, Genesis Dental College, Ferozepur, Punjab, India

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Abstract:-

Introduction: HIV/AIDS, a pandemic epidemic impacting 40 million people around the world within a limited period. The largest victims of the epidemic, representing 95% of the world's overall HIV transmission, are adults in developed countries. **Objectives:** Dentists and nurses taking charge of these patients should have ample awareness of the disease as a consequence of a growing number of HIV/AIDS patients and their conduct and actions should be satisfactory. Our research attempted to determine the awareness levels of dental students including UG-PG and nursing students concerning HIV/AIDS and to study attitudes and actions and information gaps between dental and nursing students. The research involved dental and nursing students from our university. **Methods:-** A questionnaire was given to a total of 300 applicants, 150 dental graduates, 150 nursing graduates and all of them accessed. **Results:-** According to ninety-eight point-six

AIDS were CD4-T lymphocytes. Sixty percent (60 percent) of dental students claimed that both care and treatment for AIDS were present. Thirty percent (30 percent) of dental students believed that AIDS care was available, while ten percent (10 percent) of dental students believed that AIDS treatment was present. Fifty percent (50 percent) of nursing students claimed that AIDS are present in both recovery and remedy. In our research, it was observed that HIV/AIDS awareness in developing countries such as India is deficient. Increased knowledge may contribute to a decrease in fear of caring for patients infected with HIV. There are studies measuring HIV/AIDS awareness and attitude among oral health care staff in North India, but so far no such research has been undertaken evaluating the knowledge and attitude of dental and nursing students. **Conclusions:** For most factors, such as fragile ages, forms of transmission, sexual symptoms and common illness, the research sample was quite satisfactory. But misunderstandings still occurred in both dental and nursing students.

Keywords: Awareness, Mentality, Dentistry, Nursing, HIV/AIDS.

INTRODUCTION

The largest public health problem in modern times is infection with human immune deficiency type 1 (HIV-1) and the subsequent acquired immune deficiency syndrome (AIDS)¹. The HIV/AIDS pandemic continues to spread globally and there

**Corresponding Author*

Lovepreet Singh BDS Tutor,

Genesis Dental College, Ferozepur, Punjab, India

Email: deptomr@gmail.com

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are about 1600 new cases that occur every single day. More than 95% of all persons infected with HIV live now with the developed world, and Africa alone is home to 70% of people infected with HIV, with 90% of all deaths from HIV/AIDS mainly among adults happening in the developing world². Oral health complications have been reported as being of concern to persons infected with HIV. In very large numbers of people living with HIV / AIDS, oral HIV/AIDS incidents like thrush, warts, periodontal disorders and quickly developing tooth loss arise³.

The virions produce an enzyme allowing the incorporation of viral DNA in the host cell Genome where it can survive. HIV/AIDS is a persistent illness. Both persons afflicted with HIV who express signs of AIDS will be killed. The human immunodeficiency virus weakens the host immune system and is therefore more vulnerable to opportunistic diseases and other viruses such as tuberculosis and malaria, with an impaired immune system. No treatment or vaccination has been identified to help eliminate HIV/AIDS to date. Antiretroviral drugs are the therapies that occur. Retroviral therapy does not kill the virus; it only stops the reproduction of the virions. Due to the fast replication rate and the virus mutation rate, anti-retroviral drug resistance occurs⁴.

The rest of healthcare professionals are surgeons, dentists and nurses. The awareness, status and actions of such professions in relation to contagious illnesses such as HIV/AIDS is very relevant because in the future they will care for HIV/AIDS patients⁵.

Aim and Objective:

To know the rate of HIV/AIDS awareness of dental and nursing students

To analyze how their actions and behaviors are towards patients with HIV/AIDS?

To recognize there are gaps in HIV/AIDS-related awareness, actions and attitudes between dental and nursing students

To know, students at this university regard HIV/AIDS as a big disease for India and the world

METHODOLOGY:-

The research involved dental and nursing students from our university. A questionnaire was given to a total of 300 applicants, 150 dental graduates, 150 nursing graduates and all of them accessed.

Collection of data: The students were required to fill out questionnaires on information and attitude during data collection. The students addressed the questions under the guidance of the answering person in the classroom. There were three sections of the questionnaire. Part one consisted of ten single-choice questions; part two consisted of 20 multi-choice questions. Thirty questions were asked in the first and second part to determine the level of knowledge among students of HIV/AIDS. The third portion included concerns about the actions of dental and nursing students in relation to HIV. The correct answer was displayed as one and wrong or no answers as null. The best score available was 20. The intelligence scoring was 1-4 – score 1 (average), 4-8 - score 2 (Good), 8-10- score 2 (Excellent) and 0-8 (average) – 8-16(good), 16-20(excellent) for multiple choice responses.

Participation was voluntary, survey participants were taught, exclusively private, and an informed consent was obtained prior to the administration of the questionnaire. The survey took place from March 2011 to June 2011. The t test and the chi square test is used for data interpretation.

RESULTS

Characteristics of the study:- The survey included 300 students, of which 150 were dental students and 150 were nursing students.

HIV/AIDS Awareness: The data review showed that most of the students had a decent to outstanding comprehension of most HIV/AIDS problems. The overall HIV awareness score ranged from 0-10 in the single option Component A questionnaire and 0-20 in the multiple choice questionnaire.

According to ninety-eight point-six percent (98.6 percent) of dental students and ninety-eight percent (98 percent) of nursing students, the host

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defensive cells mainly active in AIDS were CD4-T lymphocytes. Sixty percent (60 percent) of dental students claimed that both care and treatment for AIDS were present. Thirty percent (30 percent) of dental students believed that AIDS care was available, while ten percent (10 percent) of dental students believed that AIDS treatment was present. Fifty percent (50 percent) of nursing students claimed that AIDS are present in both recovery and remedy. Forty percent (40 percent) of nursing students agree that care for AIDS is present, and five percent (5 percent) of nursing students believe that treatment for AIDS is present. Interestingly, five percent (5 percent) replied that there is no medication or cure for HIV.

Table 1 showed that in part A questions nursing students have greater knowledge with the significant p value of 0.029 and in part B questions

dental students have greater knowledge with a significant p value of 0.001. Interestingly when we combined the both questionnaire, the results showed that overall dental students have greater knowledge than nursing student with the significant p value of 0.026

Table1: Comparison between Dental and Nursing students about knowledge regarding HIV.
Group Statistics

	STREAM	N	Mean	Std. Deviation	Std. Error Mean
A	DENTAL	150	7.10	1.263	.103
	NURSING	150	7.46	1.566	.128
B	DENTAL	150	13.26	3.735	.305
	NURSING	150	11.69	4.094	.334
TOTAL	DENTAL	150	20.36	4.397	.359
	NURSING	150	19.15	4.903	.400

When we questioned the students about the procedure used for prophylaxis after exposure, approx. Eighty percent (80%) of dental students indicated they should go for timely reporting and wash their hands with soap and water, while seventy percent (70%) of nursing students felt they should go for urgent blood tests. The behaviors of the respondents towards persons living with HIV and AIDS were usually found to be accepting and optimistic. Table 3 indicates that nobody has discriminatory views against people with

HIV/AIDS-sixty percent (60 percent) showed a deep desire to live with HIV/AIDS people in the same group. Most of the nearly ninety percent (90 percent) of total dental and nursing students choose to receive education with HIV/AIDS friends in the same classroom and said they will handle HIV/AIDS patients in the future. Table 2 showed that postgraduates in dental have greater knowledge about HIV /AIDS than the undergraduates with the significant p value of 0.002.

Table2: Comparison between UG and PG Students of Dental Sciences reading the knowledge of HIV Group Statistics

STREAM		UG/PG	N	Mean	Std. Deviation	Std. Error Mean
DENTAL	A	UG	125	7.05	1.300	.116
		PG	25	7.36	1.036	.207
	B	UG	125	12.82	3.793	.339
		PG	25	15.44	2.518	.504
	TOTAL A+TOTAL B	UG	125	19.87	4.470	.400
		PG	25	22.80	3.055	.611

Discussion

In relation to HIV/AIDS, the awareness and mindset of health professionals is a significant determinant of their ability to care and the standard of the care they can give to AIDS patients. Insufficient awareness may contribute to a hostile attitude towards patients who are HIV positive. The connection between better awareness of the disease and improved attitudes towards HIV/AIDS patients has been reported. In 1981, in Los Angeles, New York City & Sanfrancisco, HIV was first identified. AIDS has entered nearly every region of the planet since 1981. HIV infection was first reported among prostitutes in India in 1986. There would be an improvement in awareness and a constructive outlook towards HIV/AIDS with an alarming increase in HIV/AIDS in developed countries (estimated prevalence in India-0.91 percent).^{5,6,12}

In our research, it was observed that HIV/AIDS awareness in developing countries such as India is deficient. Increased knowledge may contribute to a decrease in fear of caring for patients infected with HIV. There are studies measuring HIV/AIDS awareness and attitude among oral health care staff in North India, but so far no such research has been undertaken evaluating the knowledge and attitude of dental and nursing students. So we carried out this current survey and the goal was to determine the awareness

and attitude of dental and nursing students in the North Indian community linked to HIV.

HIV/AIDS has been one of the world's most severe health problems.¹ Types of HIV-1 infection transmission may occur by occupational exposure in the medical environment as a consequence of needle stick injury, through transmission during treatment, in outpatient dental conditions, or in other situations in which transmission-enabling interaction may occur. In our research, sexual interaction was the most common aspect that was known to be the mode of transmission of HIV/AIDS. Although the most prevalent mode of transmission via needle stick injury was proposed in the literature. In our research, it was concluded that most dental and nursing students have inadequate awareness of the mode of transmission through needle stick injury, so dental and nursing education services for dentists and nurses who are at risk of transmission by needle stick injury should be completely informed of HIV/AIDS and should be advised to foster healthy attitudes and behaviors.

Owing to poverty and bigotry by dental staff who show inability to handle them, oral health treatment and access to dental facilities have historically remained an unmet requirement among people living with HIV/AIDS. The dental and nursing workers in the current research had a good outlook about managing patients with HIV/AIDS.

As oral lesions such as hairy leukoplakia, candidiasis and Kaposi's sarcoma are frequently observed in HIV-infected patients, dentists and other dental staff have a clinical and ethical duty to offer care for patients with HIV/AIDS. Patients of HIV/AIDS are often not resistant to other disorders routinely found in dental patients.^{7,8}

This represents evolving perceptions and gaining recognition of routine dental and nursing cases for HIV patients. Due to the growing incidence of these diseases, HIV/AIDS is critical for health care practitioners. In medical and dental staff, especially during the skilled training era, the occupational risk of such infections is well established. This is one of the key factors for having information regarding prevention strategies and universal precautions.⁶ Appropriate Internet usage regulations should be enforced as unsafe sexual activities can now be connected to the Internet by teenagers.

In this research, students found blood transfusions, syringes and needles to be an important element in the spread of these lethal infections. Studies (Simonsen L, Kane A, Lloyd J, Zaffran M, Kane M., Sakowski P., Berry AJ.) show that the largest probability of occupational infection of blood-borne infections such as Hepatitis B and C viruses and HIV is correlated with unintended needle sticks. More than half of the nursing students in our sample were ignorant of HIV/AIDS post-exposure prophylaxis, which mimics the findings found in an Indian research conducted in July 2005 by Qudsia Anjum, Hemna Siddiqui et al in Karachi . While there was a big influx of patients with HIV/AIDS, the awareness of post-exposure prophylaxis remained unsatisfactory.

For undergraduate students, CDE/CME programs should be conducted such that they can get a shared forum to share their opinions on the awareness, mindset and practice of different diseases in order to solve realistic problems. In order for dental students to conquer the fear of handling HIV/AIDS patients, each dental institution should be linked to the medical centre where HIV patients are handled. A program focused on HIV/AIDS management should be included because of such differences in awareness

and infection prevention procedures among respondents.^{9,10}

Results from a West Bengal study indicated that subjects were not conscious of any group of persons in general and displayed a pessimistic attitude towards AIDS. There were major variations between our informed community of groups who were conscious of and had a good outlook towards AIDS^{11,12}.

We are fully informed, as health practitioners, of the risks of infected needles and lethal diseases. T.V., instructional booklets and own readings from books and magazines became the primary sources of information.⁷ Effective sources for student education.

RESEARCH LIMITS

1. The sample size was too tiny to take.
2. A single field was restricted to the study.
3. The engagement was voluntary.

CONCLUSION

In conclusion, further focus should be put on the relevance of HIV/AIDS as a public health issue across the world and in our region, and understanding of all humanity should be increased. Physicians, dentists, and nurses who are at risk of infection who are responsible for the diagnosis and treatment of HIV carriers should have full awareness of HIV/AIDS in undergraduate and postgraduate education programs, and healthy attitudes and activities should be supported. In our research, inadequate knowledge is more apparent among all two occupational classes in the nursing community. For this cause, we conclude that it will be beneficial to rearrange teaching in order to bring about meaningful improvements in their attitudes and actions, in addition to seminars that raise the degree of awareness in instructional programs in schools training health care professionals. It is apparent that there is a lack of real knowledge of the disorder. A concerted attempt should be made to transform the uninformed view of dental students and nurses by introducing curricula that will strengthen their HIV/AIDS awareness

beginning at the preclinical point, which will be retained at the clinical level.

It is clear that gaining sufficient HIV/AIDS awareness raises trust in the abilities of students to treat contaminated patients. This is a reasonable opportunity for a peer engagement initiative to discuss self-esteem, positive sexual behaviors, acceptance and love for human beings.⁸ It is advised to provide a curriculum focused on HIV/AIDS management, including infectious diseases.

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