



KNOWLEDGE AND ATTITUDE REGARDING PERIODONTAL DISEASES AMONG UNDERGRADUATE STUDENTS OF A DENTAL COLLEGE, UDAIPUR CITY

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ABSTRACT

Aim: The present study is conducted to explore knowledge and attitude regarding periodontal diseases among dental undergraduate students.

Material and Methods: This is a descriptive cross-sectional questionnaire study. Samples are undergraduate students of third year, fourth year and internship students. Students who are present on the day of study was included in the study and given their informed consent.

Results: Majority of study subjects among all study participants knows the meaning of periodontal diseases {207(72%)}. Most of the study participants {158(55%)} told that the vitamin C deficiency, poor oral hygiene and injury to gums all are main cause of periodontal diseases. Most of the study participants {192(66%)} were agree with the fact that periodontal diseases are very hazardous for teeth. Most of the undergraduate students {189(65%)} were agree with the fact that periodontal diseases in its early cannot be ignored. Periodontal diseases can affect general health was agreed by most of study participants {151 (52%)}.
Conclusions: Based on above results it was revealed that the well-educated dental professionals who are going to become the foundation of future dentistry had a fair knowledge and positive attitude regarding the periodontal diseases.

KEYWORDS: periodontal disease, undergraduate, cross-sectional

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INTRODUCTION

Health cannot be isolated from its social context, and the last few decades have shown that the social and economic factors have as much influence on health as the medical interventions¹. General health cannot be maintained without

good oral health. The mouth is regarded as the gateway to the body and acts as a mirror that reflects the status of general health². Oral health plays an important role to maintain the overall health³. There is evidence that the oral health depends on social, biological, and environmental

factors⁴.

Periodontal disease is an inflammatory disease that affects the soft and hard structures that support the teeth. In its early stage, called gingivitis, the gums become swollen and red due to inflammation, which is the body's natural

response to the presence of harmful bacteria⁵. Periodontal disease is thought to have systemic ramifications and has been implicated in a wide range of conditions such as hypertension, stroke, atherosclerosis, poor pregnancy outcome, to name a few⁶.

The main role of dentists is to increase the lifespan of dentition by means of disease prevention or thorough treatment⁷. Budding Dental health professionals belong to the strata of society considered to have a better knowledge and awareness than the general population. But to spread knowledge and awareness regarding the periodontal diseases, dental undergraduate students should have proper knowledge regarding this diseases⁸.

The behavior of oral health care providers and their attitudes toward their own health reflect their understanding toward the importance of preventive dental procedure and improving the oral health of patients. Attitude is an acquired characteristic of an individual. A wide variety of attitudes is demonstrated toward teeth by people, dental care, and dentists. These attitudes naturally reflect their own experiences, cultural perceptions, familial beliefs and other life situations and they strongly influence the oral health behavior⁹⁻¹². Attitudes are not learned from textbooks; they are acquired by social interactions. According to present literature most of the study conducted was mainly on Health professionals and general dentists therefore the present study is conducted to explore knowledge and attitude regarding periodontal diseases among Dental undergraduate students.

MATERIAL AND METHODS

The present study is conducted to explore the knowledge and attitude of

undergraduate students of private Dental College in Udaipur city, Rajasthan. This is a descriptive cross-sectional questionnaire study. Samples are undergraduate students of third year, fourth year and internship students. Students who are present on the day of study was included in the study and given there informed consent. Ethical clearance was obtained from independent ethical committee. A total of 289 students were interviewed. 98 students belonged to 3rd year, 99 students belonged to 4th year and 92 students belonged to internship.

The questionnaire was given to students by the investigators on the day of survey. It consists of 3 parts. 1st part consists of demographic details of study participants which includes age, gender, socioeconomic status and year of under graduation. 2nd part consists of questions regarding knowledge towards periodontal diseases and 3rd part consists of attitude towards periodontal diseases.

A pilot study was conducted on 10 % of study participants before the final survey to check the validity and reliability of questionnaire. The Proforma was tested for reproducibility by test-retest. Reliability of the Questionnaire was assessed by using Test-Retest and the values of measured Kappa (k) = 0.80 Weighted Kappa (k_w) = 0.8. Internal consistency of questionnaires was assessed by applying Chronbachs-Alpha (α) and the value of α = 0.79 was measured.

The data was entered in Microsoft excel 2007. Descriptive analysis was applied; numbers and percentages were presented in tables.

RESULTS

Table 1 shows demographic details of study participants. Majority of

study participants {186 (64%)} belongs to age group of more than 21 years. Males {171(59%)} constitutes most of study participants. Majority of study participants belonged to Middle class in Socio-economic status {158 (55%)}

Table 2 shows knowledge of study participants regarding Periodontal Diseases. Majority of study subjects among all study participants knows the meaning of Periodontal diseases {207(72%)}. Most of the study participants {158(55%)} told that the Vitamin C deficiency, poor oral hygiene and injury to gums all are main cause of Periodontal diseases. According to {168 (57%)} of study participants poor oral Hygiene is the main cause of bad breath. 179(62%) of study participants knows that gingival enlargement is caused by Phenytoin. Majority of study participants {201(70%)} thought that there is correlation between pregnancy and periodontal diseases. 221 (76%) of study participants answered that coffee or tea can cause staining of teeth. Majority of study participants {249 (86%)} thought that sensitivity to hot cold food or beverages can be treated.

Table 3 shows attitude of study participants regarding periodontal diseases. Most of the study participants {192(66%)} were agrees with the fact that periodontal diseases are very hazardous for teeth. Most of the undergraduate students {189(65%)} were agree with the fact that periodontal diseases in its early cannot be ignored. Periodontal diseases can affect general health was agreed by most of study participants {151 (52%)}. Almost equal numbers of study participants were agree 148 (51%) and disagree 141 (49%) with the statement that periodontal diseases can be cured with active periodontal treatment. Large number of study participants {157 (54%)} were disagreed with the fact that Equal care is needed for a decayed teeth and a

teeth with recession and also with statement that majority of tooth loss is due to periodontal Diseases.

Table 1. Demographic status of Dental undergraduate students.

Demographic variables		N (%)
Age	Less than 21 years	103 (36%)
	More than 21 years	186 (64%)
	Total	289 (100%)
Gender	Male	171 (59%)
	Female	118 (41%)
	Total	279 (100%)
Socio-economic status	High	69 (24%)
	Middle	158 (55%)
	Low	62 (21%)
	Total	289 (100%)
Year of under graduation	3 rd year	98 (34%)
	4 th year	99 (34%)
	Internship	92 (32%)
	Total	289 (100%)

DISCUSSION

Present study is conducted to explore the knowledge and attitude of undergraduate students regarding periodontal diseases. In the past studies had conducted to determine knowledge and attitude regarding periodontal diseases but study participants were health professionals or dental professionals. In the present study, knowledge and attitude of budding dentist was determined.

Undergraduate students should have proper knowledge of periodontal diseases in their budding stage. In the present study Majority of study participants were males which is same in study done by Asa'ad et al¹³ and Nagarakanti¹⁴ et al in which 66% of study participants were males and 34% were females. While in the study done by Dayakar MM,⁸ 67% subjects were females and 33% males.

In the present study 55% of study subjects were aware about common causes of bleeding gums as compared to study by Dayakar et al⁸ among Engineering students only 24% knows the common causes of bleeding gums.

This may be due to lack of exposure to life sciences among the Engineering students.

In the present study most of study participants reported that poor oral hygiene is the main cause of bad breath same results were shown in study by Dayakar et al⁸.

In the present study of study participants states that gingival enlargement of 18%, 62%, 20% occurs due to Nifedepine, Phenytoin, Cyclosporine respectively. In a study by Al-Khininy et al¹⁵ among undergraduate dental students on the effect of various medications on periodontal health, revealed that 26.7%, 23.8%, and 19.3% of the students answered "Gingival overgrowth" when asked about Phenytoin, Nifedepine, and Cyclosporine respectively.

In the present study 52% students agree with the statement that periodontal diseases can affect general health. Contrary results were shown by study done by Farah Asa'ad¹³ in which only 10% of students know the correlation of periodontal diseases and general health. In study done by Dayakar et al⁸ on

among engineering students states that poor periodontal health effects general health.

CONCLUSIONS

Based on above results it was revealed that the well-educated dental professionals who are going to become the foundation of future dentistry had a fair knowledge and positive attitude regarding the periodontal diseases. Apart from giving more importance to decayed teeth as compared to periodontal diseases and periodontal diseases as a major cause of loss of teeth. The overall attitude was positive.

Future longitudinal studies should be conducted to explore knowledge attitude and practice of dental professionals towards periodontal diseases, as cross-sectional nature of present study is one of the limitations of present study.

Table 2. Knowledge among undergraduate students regarding periodontal diseases.

Knowledge regarding Periodontal Diseases		N (%)
Q1. What do you mean by Periodontal diseases?		
a)	Diseases effecting supporting structure of Teeth	207 (72%)
b)	Diseases effecting gums	82 (28%)
TOTAL		289 (100%)
Q2. What is the main cause of Bleeding gums?		
a)	Vitamin c deficiency	32 (11%)
b)	Poor oral Hygiene	61 (21%)
c)	Injury to gums	38 (13%)
d)	All of the above	158 (55%)
TOTAL		289 (100%)
Q3. What is the main cause of Bad breath?		
a)	Smoking	89 (31%)
b)	Poor oral Hygiene	168 (57%)
c)	Injury to gums	13 (5%)
d)	All of the above	19 (7%)
TOTAL		289 (100%)
Q4 Which drug causes Gingival enlargement		
a)	Nifedipine	51 (18%)
b)	Phenytoin	179 (62%)
c)	Cyclosporine	59 (20%)
TOTAL		289 (100%)
Q5 Is there is any correlation between pregnancy and periodontal diseases?		
a)	Yes	201 (70%)
b)	No	88 (30%)
TOTAL		289 (100%)
Q6 Do you think coffee or tea can cause staining of teeth?		
a)	Yes	221 (76%)
b)	No	68 (24%)
TOTAL		289 (100%)
Q7 Do you think sensitivity to hot cold food or beverages can be treated?		
a)	Yes	249 (86%)
b)	No	40 (14%)
TOTAL		289 (100%)

Table 3. Attitude among undergraduate students regarding periodontal diseases.

Attitude regarding Periodontal Diseases		N (%)
Q1. Periodontal diseases are very hazardous for teeth?		
a)	Agree	192 (66%)
b)	Disagree	97 (34%)
TOTAL		289 (100%)
Q2. Periodontal diseases in its early cannot be ignored?		
a)	Agree	189 (65%)
b)	Disagree	100 (35%)
TOTAL		289 (100%)
Q3. Periodontal diseases can affect general health?		
a)	Agree	151 (52%)
b)	Disagree	138 (48%)
TOTAL		289 (100%)
Q4 Periodontal diseases can be cured with active periodontal treatment?		
a)	Agree	148 (51%)
b)	Disagree	141 (49%)
TOTAL		289 (100%)
Q5 In female pregnant patient more care is needed to prevent periodontal diseases?		
a)	Agree	199 (69%)
b)	Disagree	90 (31%)
TOTAL		289 (100%)

Q6 Equal care is needed for a decayed teeth and a teeth with recession		
a)	Agree	132 (46%)
b)	Disagree	157 (54%)
TOTAL		289 (100%)
Q7 Majority of tooth loss is due to periodontal Diseases?		
a)	Agree	119 (41%)
b)	Disagree	170 (59%)
TOTAL		289 (100%)

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