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Research Article

**DENTAL PROBLEMS AND ASSOCIATED RISK FACTOR  
OBSERVED IN PATIENTS VISITING DENTAL HOSPITAL**

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**Article Received:** October 2019 **Accepted:** November 2019 **Published:** December 2019**Abstract:**

**Background:** The purpose of the study was to identify common dental problem and the associated risk factor found in the population of Lahore who visited the dental hospital for treatment purpose.

**Methodology:**

The present study was conducted in the University of Lahore Dental Hospital from the period of August 2017 to November 2017 in their OPD. The questionnaire was designed addressing the dental problems and their eating and life style pattern. The risk factors were identified. The sample size of the study was 400 patients.

**Results:** Out of 400 patients there were 250 male and 150 female patients. Their income, education, oral care and tooth paste use was noted. They came with complain of periodontal diseases and dental caries. The risk factors observed were smoking, pan consumption, dental disease history, medical illness like diabetes and duration of dental problem etc.

**Conclusion:** The risk factors were the main cause of periodontal diseases and dental caries among the patients. Better care of oral health and healthy eating habits can help to reduce the risk of dental issues among the people.

**KEYWORDS:** Periodontal disease, Risk factors, Dental caries,

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**INTRODUCTION:**

Oral diseases prevalence has been observed all over the world like periodontal diseases and dental caries (1). From the report of WHO the school children who faced dental caries accounted 60 to 90 % of the cases and in adults the dental caries rate can be 100 %. The periodontal disease in the world was found 20 % (3). The oral health in Pakistan is linked with the education level and access to health care facilities. The rural population due to hard access to dental health set ups and poor awareness about oral health has more chances of getting dental diseases as compared to the people residing in urban areas. From WHO reports Pakistani population dental issues are common and periodontal problems accounts for 18 % of the dental issue and periodontitis was observed among 31% of the population(5). From the study of Albander et al the risk factors for dental problems were identified like smoking, alcohol, age, gender, oral practices and sugar consumption. He associated these factors with tooth loss and periodontal disease among adults. (6). Another study conducted by Treasure et al has also addressed the risk factors associated with tooth loss and periodontal diseases and he found age, smoking, marital status, gender and income major risk factors in UK adult population(7). From the study of Khan et al the oral health awareness, practices and attitude of people was studied about dental diseases. He found smoking and sugar consumption the major risk factor for dental caries and periodontal diseases (4).The study conducted by Eke et al was about the peirodontitis prevalence among the adult of USA.He found that 64 % of the adult population suffer low to severe issue of periodontitis(8).Dental health is very expensive in USA and Canada therefore the people who enjoy good income can visits the dentist on frequent basis and can avoid the dental issue severe problems. A study conducted by Brothwell et al in Canada has addressed the factors which encouraged the people

to visit the dentist like education, age, income group and support from the family. A study conducted by Khalifa et al in Sudan has addressed the factors which were associated with tooth loss accounted the education, age, tobacco use, tooth wear and the prevailing conditions of periodontal (10).In Pakistan dental diseases are common among adults and children. But in present study the focus was adults who came with complain of periodontal disease and dental caries. The aim of the study is to identify the risk factors associated with the tooth loss and periodontal diseases among the population of Lahore who visited the dental hospital with their dental problem.

**METHODOLOGY:**

The present study was conducted in the University of Lahore Dental Hospital from August 2017 to November 2017.Total of 400 patients participated in the study who have complain of gum bleeding, periodontal disease and dental caries. The demographic characteristics of the patients were also noted along with the dental problems. The risk factors were observed and the results were presented in percentage for understanding.

**RESULT AND DISCUSSION:**

The participant's gender, age, income group, education and location are presented in table 1. These factors are associated with the dental caries and periodontal disease. Education and location effect on the oral health of population. The culture of dental cleaning is not widely practiced in rural areas. Poor oral care awareness is observed in the rural population. The senior citizens in rural areas hardly clean their teeth until the dental problem found. Low income group dental issues were more in percentage as compared to the middle and high income group. Educated people were more aware about their dental hygiene and take care of their dental cleaning practices. Following table 1 shows the distribution of participant's demographic characteristics.

Table 1

Gender	Number	Percentage
Male	250	0.625
Female	150	0.375
<b>Age group</b>		
15-30 years	200	0.5
31-45 years	100	0.25
46-60 years	100	0.25
<b>Income</b>		
Low income	280	0.7
Middle Income	100	0.25
Higher Middle income	20	0.05
<b>Education</b>		
Primary –secondary	200	0.5
Graduate	150	0.375
Post Graduate	50	0.125
<b>Location</b>		
Urban	200	.50
Rural	200	.50

The relation between the family and dental diseases were observed. There were 62.5 percent patients who had the family history of dental caries, bleeding gums and periodontal diseases. There was 37.5 percent of the patient who did not have any family history of dental disease. There was found significant relation between the family history of dental issue with the dental disease among the patients (P value 0.02)

The dental issue when become unbearable for the patients then they visit the dentist usually in  
Table 2

Pakistani culture. Therefore the duration of the disease do matter in the treatment of the dental problem. There were 12.5% of the patients who visited the dentist in one week of the problem observed like dental caries; bleeding gum and periodontal diseases. 37.5% of the patients have the dental problem from more than a month. Remaining 50 % of the patients were suffering with dental issue from many months. The coefficient of significance observed between the duration of disease and dental disease was (p-value <0.01).

Dental Problem	Number	Percentage
Bleeding gums	70	0.175
Dental caries	120	0.3125
Periodontal Disease	110	0.275
<b>Duration of Disease</b>		
More than a week	50	0.125
More than a month	150	0.375
More than few months	200	0.50
<b>Family History of Dental Disease</b>		
Yes	250	0.625
No	150	0.375

Use of Pan and tobacco consumption have significantly positive impact upon the dental problems like periodontal diseases, dental caries and bleeding gums (p-value = 0.04). These dental issues were also observed in non smoking and no pan users too but the frequency in the prior said group was higher.

The selection of tooth paste and age has no relationship. Dental cleaning practices and the oral health care are the factors which can help to avoid the dental diseases among the population.

Different studies from Pakistan like Parveen et al, Nasir et al, Anwar et al, Sheikh et al and Umer et al in different dental set ups in different cities have concluded that dental practices, smoking, education, profession, brushing teeth, diabetes and age are the factors which can cause the periodontal disease and dental caries.

### CONCLUSION:

From the study it can be concluded that family history of dental diseases, duration of the disease, smoking, eating habits, diabetes, education and poor oral health awareness are the main factors which can cause dental caries and periodontal diseases among masses. Therefore it is recommended that awareness about oral health and hygiene is vital for maintaining healthy life and can help to prevent dental diseases.

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