Journal of Advanced Medical and Dental Sciences Research

@Society of Scientific Research and Studies

Journal home page: www.jamdsr.com doi: 10.21276/jamdsr ICV 2018= 82.06 UGC approved journal no. 63854

(e) ISSN Online: 2321-9599; (p) ISSN Print: 2348-6805

Original Research

Assessment of risk factors for loss of tooth- A survey

Prahlad Gupta[1], Nidhi Gupta[2]

[1]Associate Professor, Department of Public Health Dentistry, Dasmesh Institute of Research and Dental Sciences, Faridkot, Punjab, India; [2]Associate Professor, Department of Prosthodontics, Desh Bhagat Dental College, Mandi Gobindgarh, Punjab, India

***ABSTRACT*:**

Background: Tooth loss is a result of complex interactions such as poor oral hygiene and dietary habits. The present study was conducted to determine risk factors of tooth loss in population. **Materials & Methods:** The present study was conducted on 370 patients of both genders. A self-administered questionnaire was prepared and given to all patients. The number of missing teeth was recorded and reason for missing teeth was also recorded. **Results:** Out of 370 patients, males were 180 and females were 190. 240 were partial edentulism and 130 were complete edentulism, 160 used tooth brush and 210 used finger for brushing, 210 used sugar >twice. 190 were vegetarian and 180 were on mixed diet. 240 had habit of tobacco chewing and 130 had not. 230 used alcohol and 140 not. The difference was significant (P< 0.05). **Conclusion:** Risk factors for loss of tooth were tobacco chewing, alcoholism, increased sugar consumption and vegetarian diet.

Key words: Tooth, Tobacco, Sugar.

Received: 12 March, 2019 Revised: 2 April, 2019 Accepted: 4 April, 2019

Corresponding author: Dr. Prahlad Gupta, Associate Professor, Department of Public Health Dentistry, Dasmesh Institute of Research and Dental Sciences, Faridkot, Punjab, India

This article may be cited as: Gupta P, Gupta N. Assessment of risk factors for loss of tooth- A survey. J Adv Med Dent Scie Res 2019;7(5): 11-13.

INTRODUCTION

General health is related to oral health and general health is related to QOL, tooth loss could have an impact on quality of life. The oral health is center to a person's overall health and well‐being.[1] The ability to retain more number of teeth throughout life is one of the most important oral health indicators. Oral health goals recommended by the World Health Organization (WHO) for the year 2020 has stated that there should be an increase in the number of individuals with functional dentitions at the ages of 35–44 and 65–74 years.[2]

Tooth loss, still ranked among the hundred health conditions that most affect the world's population, is an oral condition that leads to functional, aesthetic, and social damage with impact on people's quality of life.[3] Tooth loss is a result of complex interactions such as poor oral hygiene and dietary habits, other demographic factors influencing tooth loss are – age, gender, geographic region, education, occupation, and income.[4] There is a lack of oral health awareness regarding causes and consequences of tooth loss. It includes the need perceived by a patient to get the dental treatment done. The clinical aspects of tooth loss, such as most affected teeth, their distribution, and condition before tooth extraction, have been more exploited in clinical studies and may not correspond to the reality of the population.[5] The present study was conducted to determine risk factors of tooth loss in population.

MATERIALS & METHODS

The present study was conducted in the department of Community dentistry. It comprised of 370 patients of both genders. All were informed regarding the study and written consent was obtained. Ethical clearance was obtained prior to the study.

General information such as name, age, gender etc. was recorded. A self-administered questionnaire was prepared and given to all patients. The number of missing teeth was

recorded and reason for missing teeth was also recorded. Results were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of teeth

Total- 370		
Gender	**Males**	**Females**
Number	180	190

Table I, graph I shows that out of 370 patients, males were 180 and females were 190.

Graph I

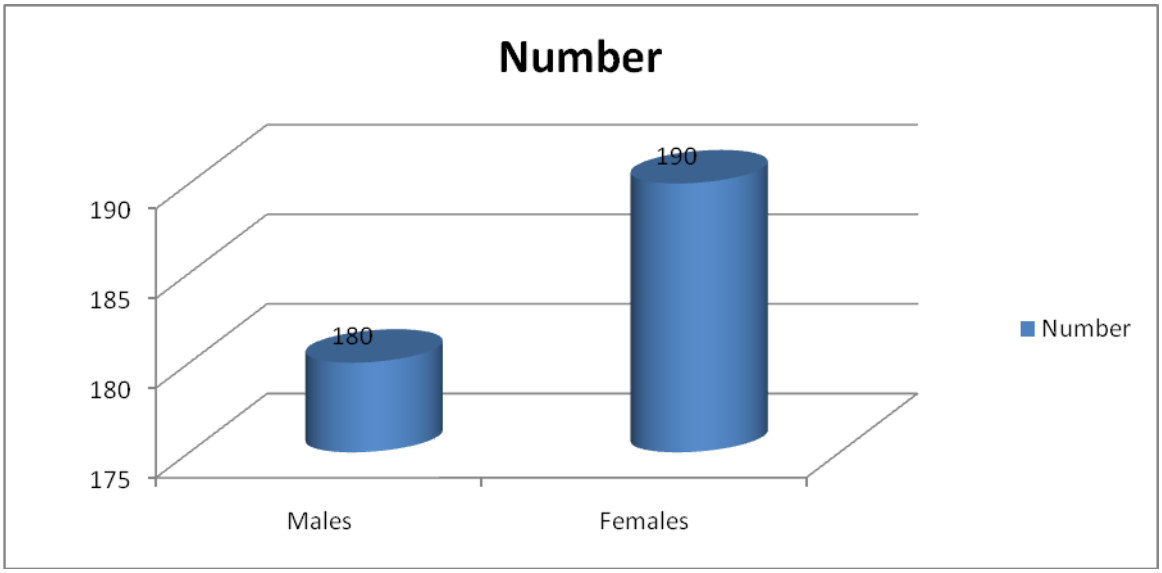

Table II: Risk factor for missing teeth

Parameters	Number	P value
Partial edentulism	240	0.01
Complete edentulism	130	
Type of cleaning		
Tooth brush	160	0.05
Finger	210	
Sugar consumption		
Once	90	0.02
Twice	70	
>twice	210	
Diet		
Vegetarian	190	0.5
Mixed	180	
Tobacco Chewing		
Yes	240	0.41
No	130	
Alcohol usage		
Yes	230	0.01
No	140	

Table II, graph I shows that 240 were partial edentulism and 130 were complete edentulism, 160 used tooth brush and 210 used finger for brushing, 210 used sugar >twice. 190 were vegetarian and 180 were on mixed diet. 240 had habit of tobacco chewing and 130 had not. 230 used alcohol and 140 not. The difference was significant (P< 0.05).

DISCUSSION

Edentulism or tooth loss can hamper not only the ability to chew and properly digest the food but also has serious social, psychological, and emotional consequences impacting the quality of life of the patient, self-image, and self-esteem. Edentulism or tooth loss is known to reduce QOL, as has been reported in many studies. In addition, several studies have compared characteristics of edentulous subjects treated with CDs or implant-supported dentures.[6] The present study was conducted to determine risk factors of tooth loss in population.

In present study, out of 370 patients, males were 180 and females were 190. We found that 240 were partial edentulism and 130 were complete edentulism, 160 used tooth brush and 210 used finger for brushing, 210 used sugar >twice. 190 were vegetarian and 180 were on mixed diet. 240 had habit of tobacco chewing and 130 had not. 230 used alcohol and 140 not.

Khazaei et al[7] found that nearly 75.3% of laborers were partially edentulous. Habits, including smoking, tobacco chewing, and alcohol consumption, had an impact on tooth loss. Patients suffering from diabetes and hypertension had 97.5% and 100% had tooth loss, respectively. Regarding the first visit to the dentist, 65.6% population underwent dental treatment from the dental college in the vicinity. "No dental problems" were reported by 68.4% of patients of the total population and among them 81.3% were edentulous. Regarding "Self- perceived treatment" the result revealed that 72% of them had felt the need for dental treatment.

Other risk factors, such as tobacco chewing, may restrict the blood flow to the tissues, which would limit the nutrients necessary to the bone and periodontal support of the teeth causing tooth loss. Availability and utilization of the dental services are an important reason as well. Systemic diseases, such as heart disease, respiratory disease, diabetes, HIV, malnutrition, and immunosuppression, are all associated with different forms of periodontitis and often results in tooth loss.[8]

Sen et al[9] in their study compared the means of incidence of tooth loss between age groups. After four years, 57.7% (n = 143) of adults were followed up and the mean incidence of tooth loss was 0.91 (SD = 1.65); among these, 51 adults (35.7%) who lost their teeth showed mean tooth loss of 2.55 (SD = 1.86). In older adults, incidence of tooth loss was higher (p = 0.008), but no difference between age groups was found when only adults with incidence of tooth loss were assessed.

CONCLUSION

Authors found that risk factors for loss of tooth were tobacco chewing, alcoholism, increased sugar consumption and vegetarian diet.

REFERENCES

1. Jaleel BF, Nagarajappa R, Mohapatra AK, Ramesh G. Risk indicators associated with tooth loss among Indian adults. Oral Health Dent Manag 2014;13:170-8.
2. Natto ZS, Aladmawy M, Alasqah M, Papas A. Factors contributing to tooth loss among the elderly: A cross sectional study. Singapore Dent J 2014;35:17-22.
3. Gupta P, Gupta N, Pawar AP, Birajdar SS, Natt AS, Singh HP, *et al.* Role of sugar and sugar substitutes in dental caries: A review. ISRN Dent 2013;2013:519421.
4. Dudala SR, Arlappa N. An updated prasad's socio economic status classification for 2013. Int J Res Dev Health 2013;1:1-28.
5. Tsai SJ, Lin MS, Chiu WN, Jane SW, Tu LT, Chen MY, et al. Factors associated with having less than 20 natural teeth in rural adults: A cross-sectional study. BMC Oral Health 2015;15:158.
6. M. J. Batista, L. B. Rihs, and M. D. L. R. de Sousa. Risk indicators for tooth loss in adult workers. Brazilian Oral Research 2012; 5: 390–396.
7. Khazaei S, Keshteli AH, Feizi A, Savabi O, Adibi P. Epidemiology and risk factors of tooth loss among Iranian adults: Findings from a large community-based study. Biomed Res Int 2013; 1-9.
8. M. J. Batista, H. P. Lawrence, M. D. L. R. de Sousa. Tooth loss classification: Factors associated with a new classification in an adult population group. Ciencia e Saude Coletiva 2015; 9: 2825–2835.
9. Sen S, Balwani T, Sahu A, Parate N, Gehani A, Deolia S. Tooth loss and associated risk factors among rural population of Wardha District: A cross-sectional study. J Indian Assoc Public Health Dent 2018;16:11-7.