



Reasons for the loss of teeth in patients attending teaching clinics

zahraa saad A. karkosh¹, Ola Faris Kasim²,

Karema Harith Ghassan³, Mohammed Qasim Mohammed⁴.

Zahraasad282@yahoo.com

lecturer/ prosthodontics Mc.S/college of dentistry/Ibn-Sina university for medical and pharmaceutical sciences¹

GP / college of dentistry/Ibn-Sina university for medical and pharmaceutical sciences²

GP / college of dentistry/Ibn-Sina university for medical and pharmaceutical sciences³

GP / college of dentistry/Ibn-Sina university for medical and pharmaceutical sciences⁴

ABSTRACT

one of the most dental problems present among population is losing of teeth that lead to many of side effects. However, there are different treatment plans available, including (bridges, dentures, and implant-supported teeth) or by preventing ways.

Aim: to determine the frequency of tooth loss and the causes lead to its loss among patients attending teaching clinic.

Subjects& Methods: Sixty patients between 41-65 years old (30 males and 30 females) were examined for causes of tooth loss by asking them different questions. IBM's statistical software for the social sciences (SPSS) version 21 was used to evaluate the collected data. Diagrams and tables were created using statistical information to describe the characteristics of the pupils in question.

A one-proportion z-test is a statistical test used to compare the proportion of a sample to a known population proportion.

Results: according to statistical analysis the results showed that the caries was the highest cause for losing of teeth followed by periodontal diseases with bad oral health.

Conclusions: The most common cause of tooth loss was dental caries that related to age of patient, socioeconomic habit like smoking and oral hygiene.

Keywords: tooth loss teaching clinic.

Introduction

The dental caries and periodontal disease were common causes for teeth loss which related to oral hygiene education level of patients that could affect adversely on general well-being of patient. (1).

However, these oral diseases can lead to shifting of remaining teeth, extrusion opposite teeth, residual ridge resorption, even the self-esteem of patient. (2)

Materials and methods

The patients involved in this study were selected by using random sampling through asking them different questions to realize the cause of losing their teeth. Equal sample use 30 males and 30 females involved with age range between 41-65 years old. The protocol designed for this study was approved by the College of Dentistry - Ibn Sina University of Medical and Pharmaceutical Sciences.

Results

A study of 60 patients attending teaching clinic were collected, the table below shows the reasons behind tooth loss and the major reason was having caries.

Table 1: the reason of tooth loss

Cause for extraction	Males		Females		Total		Z-proportion	C.S.
	N	%	N	%	N	%		
Caries	24	80	21	70	45	75	0.83333	NS
periodontal	3	10	7	23.3	10	16.6	0.37037	NS
Others	3	10	2	6	5	8.4	0.757576	NS
total	30	100	30	100	60	100	P ≤ 0.05	

Table 2: oral hygiene

Oral hygiene	Males		Females	
	N	%	N	%
Good	1	3	2	7
Poor	12	40	10	33
Fair	17	57	18	60
Total	30	100	30	100

Table 3: age of the participants (description of the samples)

Age	Males		Females		Total	
	N	%	N	%	N	%
18- 40	9	30	7	23.3	16	26.6
41- 65	21	70	23	76.6	44	73.4
Total	30	100	30	100	60	100

Many participants were between 41-65 years old

Discussion:

In this study, the results showed the highest cause of tooth loss is dental decay followed by losing of teeth due to periodontal disease then by others causes like car accident or genetic reasons. This is probably due to low dental educational level among people to understand the importance of teeth and how they effect on patient general health. A study was done in Scotland found the same results (3,4). Also another study was done in private dental clinics of South Wales showed the same results that involved the extraction of teeth due to dental caries was 59% of teeth(5).

In table 2, the results showed the fair condition of oral hygiene was the highest one followed by poor and the least one was good results for both genders. This may be due to for men always be care about function rather than aesthetic and for women, it could be due to hormonal changes and stressful lifestyle made them neglected for oral health.

In table 3, the group ages between 41-65 showed highest causes of teeth loss. This is probably due to aging process that involves decrease in the thickness of enamel and gum recession render tooth more suspected to bacteria which in turn lead to bone resorption. The same results found by a study done in Tehran, Iran (6, 7). However, a study done in Australia, found a relationship between tooth loss and getting old (8).

However, in South India, research was done, and the results showed the highest reasons for tooth loss are the periodontal diseases (9). But a little researcher has identified periodontitis disease as the most causes of losing teeth (10,11).

Conclusions

1. The main causes of tooth loss were dental caries followed by periodontal diseases.
2. Age and hygiene were the important determinants of extractions due to caries and its sequelae.

References:

- 1- Petersen PE. (2003) The World Oral Health Report 2003: continuous improvement of oral health in the 21st century – the approach of the WHO Global Oral Health Programme. *Community Dent Oral Epidemiol.* 2003; 31 Suppl 1:3-23.
- 2- Mack F, Schwahn C, Feine JS, Mundt T, Bernhardt O, John U, Kocher PT, Biffar R. (2005) The impact of tooth loss on general health related to quality of life among elderly Pomeranians: results from the study of health in Pomerania (SHIP-O). *Int J Prosthodont.* 2005; 18(5):414-9.
- 3- Kay EJ, Blinkhorn AS. (1986) The reasons underlying the extraction of teeth in Scotland. *Br Dent J.* 1986; 160(8):287-90.
- 4- McCaul LK, Jenkins WM, Kay EJ. (2001) The reasons for extraction of permanent teeth in Scotland: a 15-year follow-up study. *Br Dent J.* 2001; 190(12):658-62.
- 5- Richards W, Ameen J, Coll AM, Higgs G. (2005) Reasons for tooth extraction in four general dental practices in South Wales. *Br Dent J.* 2005; 198(5):275-8.
- 6- Abnet, C.C. et al. (2008) Tooth loss and lack of regular oral hygiene are associated with higher risk of esophageal squamous cell carcinoma, *Cancer epidemiology, biomarkers & prevention: a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology.*
- 7- Locker D, Slade GD, Murray H. Epidemiology of periodontal disease among older adults: a review. *Periodontol 2000.* 1998; 16:16-33.
- 8- Peres MA, Lalloo R. (2020) Tooth loss, denture wearing and implants: Findings from the National Study of Adult Oral Health 2017-18. *Aust Dent J.* 2020 Jun;65 Suppl 1: S23-S31. doi: 10.1111/adj.12761. PMID: 32583591.
- 9- Pradeep S. Anand and Sobha Kuriakose (2009) Causes and patterns of loss of permanent teeth among patients attending a dental teaching institution in South India, *The journal of contemporary dental practice.* Available at: <https://pubmed.ncbi.nlm.nih.gov/19838611/> (Accessed: 21 January 2024)

10- Richard J. Lamont, Paul G. Eglund, Chapter 52 - Dental Caries, Editor(s): YiWei Tang, Max Sussman, Dongyou Liu, Ian Poxton, Joseph Schwartzman, (2015) Molecular Medical Microbiology (Second Edition), Academic Press, 2015, Pages 945-955

11- Murray H, Locker D, Kay EJ. Patterns of and reasons for tooth extractions in general dental practice in Ontario, Canada. *Community Dent Oral Epidemiol.* 1996; 24(3):196-200.