

# Prosthetic Need between Different Age and Gender With Patient Attending College of Dentistry, Tikrit University

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## Abstract

**Background:** the most important factor that affects speak, mastication and aesthetics is tooth loss which in turn imitated on the quality of life. The goal of our research was to evaluate the prosthetic need in sample attending prosthetic department and compare between age and gender.

**Material and methods:** A sample of 244 patients was randomly chosen for questionnaire in the (Removable Prosthodontics Clinic) into College of Dentistry-Tikrit University. All subjects were divided in six groups according to their age and also divided according to gender. Intraoral examinations were performed and reasons for extraction were recorded. All statistic calculations were performed using SPSS 23 (Statistical Package for Social Sciences).

**Results:** The total number of 244 patients was involved in this study: 165 (67.6%) males and 79 (32.4%) females. We found that the higher percentage of patients were in the age group of (20-29) for males which was (23%, 56 patient), while the higher female percentage was found in the age group of (40-49) which was 11.5% . Reasons for extraction recorded the higher percentage due to Caries for both males (75.2%) & females (81 %) as suspected.

**Conclusion:**The number of patient attending prosthetic department male more than female. Dental caries were the principal cause for extractions in younger patients followed by periodontitis. Society needs more motivation about dental health and care.

**Key word:** Age, Gender, periodontitis, dental health .

## الخلاصة

لفقدان الاسنان تاثير مباشر على الناحية الجماليه للشخص ومضغ الطعام الدراسه تتركز حول تقييم حاجه المريض للتعويضات الاصطناعيه مع اخذ بنظر الاعتبار العمر والجنس والمقارنه بينهما.

العينه تتكون من 244 شخص (165 رجل و 79 امراه) يرتادون قسم التعويضات الاصطناعيه بمستشفى التعليمي بكلية طب الاسنان وتمت الدراسه عن طريق الفحص الفموي واخذ معلومات عن سبب فقدان الاسنان . وكانت النتائج ان نسبة الاعمار الصغيره من الرجال بين 20-29 اكثر نسبة من النساء وسبب فقدان الاسنان هو التسوس بالدرجه الاولى وامراض الغم بالدرجه الثانيه . الوعي الصحي والخدمات الصحيه مهمه جدا للتقليل من فقدان الاسنان.

**الكلمات المفتاحيه:** العمر ,الجنس ,امراض الغم ,صحة الغم.

## Introduction

Loss of tooth /teeth is a process in which one or more teeth come loose and fall out. Tooth loss is normal for deciduous teeth (baby teeth), when they are replaced by a person's adult teeth. Otherwise, losing teeth is undesirable and is the result of injury or disease, such as dental avulsion, tooth decay, and gum diseases.(ADA,2014) Tooth loss in adults and elderly individuals continues to be an oral health hazard that has negative impacts on quality of life and interferes with work activities. Missing teeth can interfere with chewing ability, talking, and esthetics. Low self-esteem related to tooth loss can hinder an individual's ability to socialize, hamper the performance of work and daily activities, and lead to absence from work. Thus, the identification of tooth loss risk indicators in workers is an important public health measure (Petersen, 2003; Steele *et al*, 2000)

The main reasons for tooth loss in adults are dental decay and periodontitis. Which are considered as clinical causes, other factors have been associated with tooth loss, such as the dental duty used, time since the last visit to the dentist, reason for seeking treatment, lifestyle and socioeconomic factors (Barbato *et al* ,2007).

The objective of present day dentistry may be on restoring ordinary function, comfort, aesthetic, speech, What's more wellbeing should people who have lost teeth (Levinson,1999). Age & sex impact those medication needs and the decision for a prosthesis to displace the out absent tooth & both factors are related to tooth loss (Fiske *et al.*,1998).

This cross sectional study was planned to evaluate the prosthetic status and treatment needs between different patients who attending Prosthodontics clinic , college of dentistry ,Tikrit University, for the period of ten months

## Materials and Methods

A sample of 244 patients were randomly chosen for questionnaire in the (Prosthodontics Clinic) in College of Dentistry-Tikrit University. All subjects were divided into six groups according to their age and also divided according to gender. Intraoral examinations were performed and reasons for extraction were recorded.

All statistic calculations were performed using SPSS 23 (Statistical Package for Social Sciences). Data descriptive statistics were used for the analysis. A p value <0.05 was considered as statistically significant. Results are presented as numbers (n) and percent (%).

## Results

The total number of 244 patients were involved in this study of which: 165 (67.6%) were males and 79 (32.4%) were females.

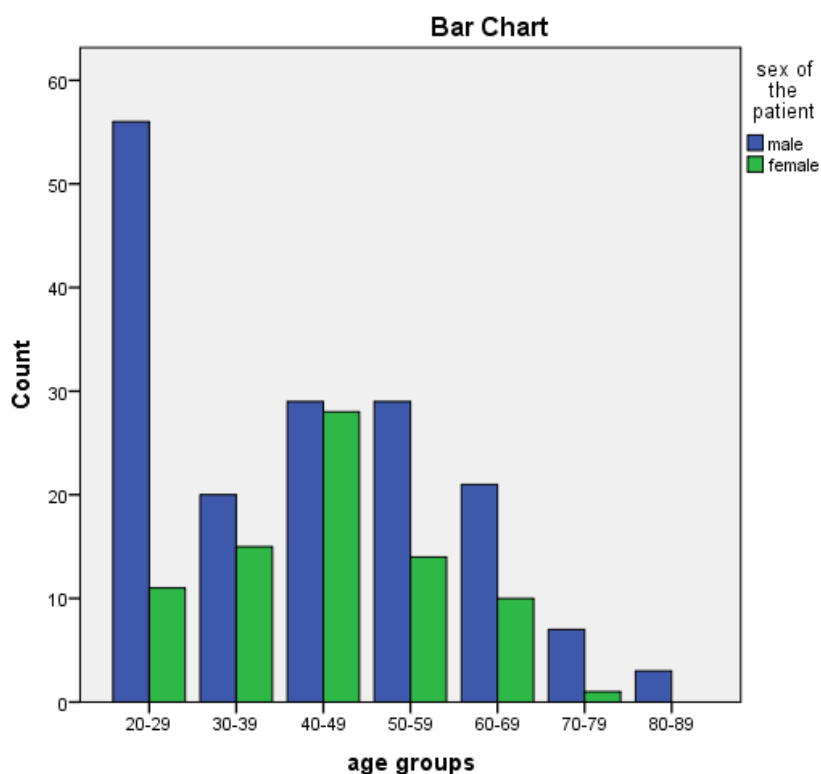
We found that the higher percentage of patients was in the age group of (20-29) for males which was (23%, 56 patient), while the higher female percentage was found in the age group of (40-49) which was 11.5% (28 patient) (Table 1) (Fig.1).

Reasons for extraction recorded the higher percentage due to caries for both males (75.2%) & females (81 %) as suspected, but the higher value for males was in the age group of (20-29) which was 24.2% of total male percentage, while for females it was for the age group of (40-49) which was 25.3% of total female percentage. Teeth loss due to periodontal diseases showed no difference in percentages between the two gender groups. On the other hand, there was a pronounced difference in percentage between males and females in tooth loss due to trauma (10.3% for males, 3.8% for females) especially in age group of 20-29 for males. While tooth loss due to congenital reasons recorded the lowest percentages in both gender groups (1.2% of total male percentage and 2.5% of total female percentage) as suspected and being seen in younger age groups (20-29) and (30-39) (Table 2) (Fig 2,3).

There was generally no statistically significant difference between males and females counted in all age groups in attendance to the hospital, except at the age groups of 20-29 years (p=0.007) and 40-49 years (p=0.011) (Table 4).

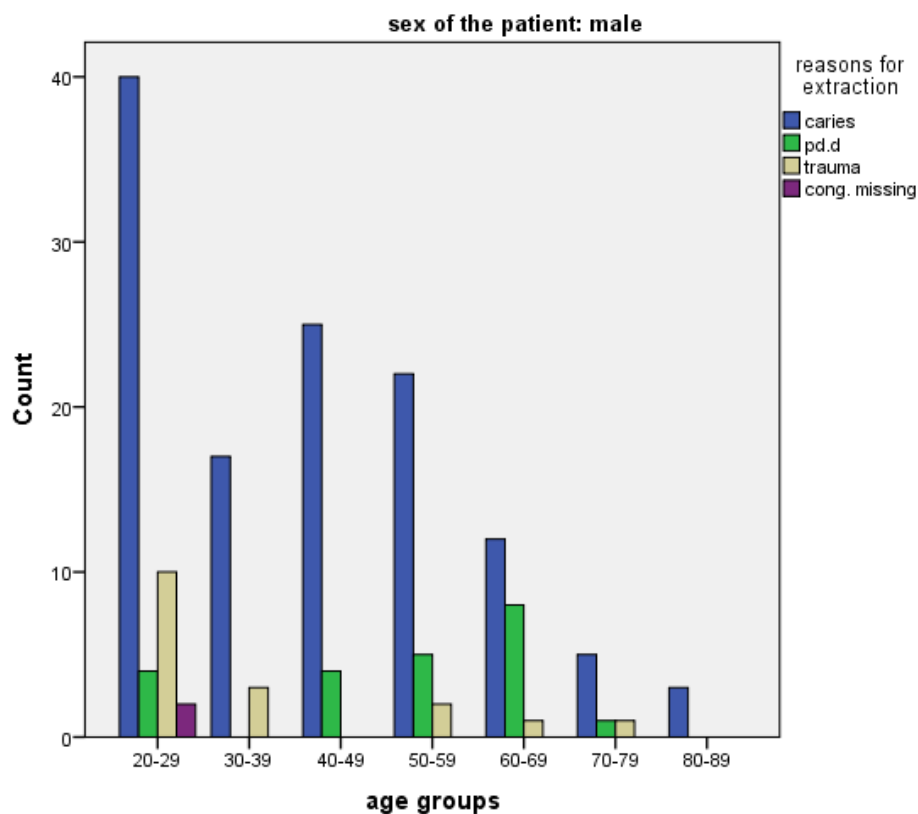
**Table 1. Percentage of gender counted according to age groups.**

			Sex of the Patient		Total
			Male	Female	
Age Groups	20-29	Count	56	11	67
		% of Total	23.0%	4.5%	27.5%
	30-39	Count	20	15	35
		% of Total	8.2%	6.1%	14.3%
	40-49	Count	29	28	57
		% of Total	11.9%	11.5%	23.4%
	50-59	Count	29	14	43
		% of Total	11.9%	5.7%	17.6%
	60-69	Count	21	10	31
		% of Total	8.6%	4.1%	12.7%
	70-79	Count	7	1	8
		% of Total	2.9%	0.4%	3.3%
Total		Count	165	79	244
		% of Total	67.6%	32.4%	100.0%

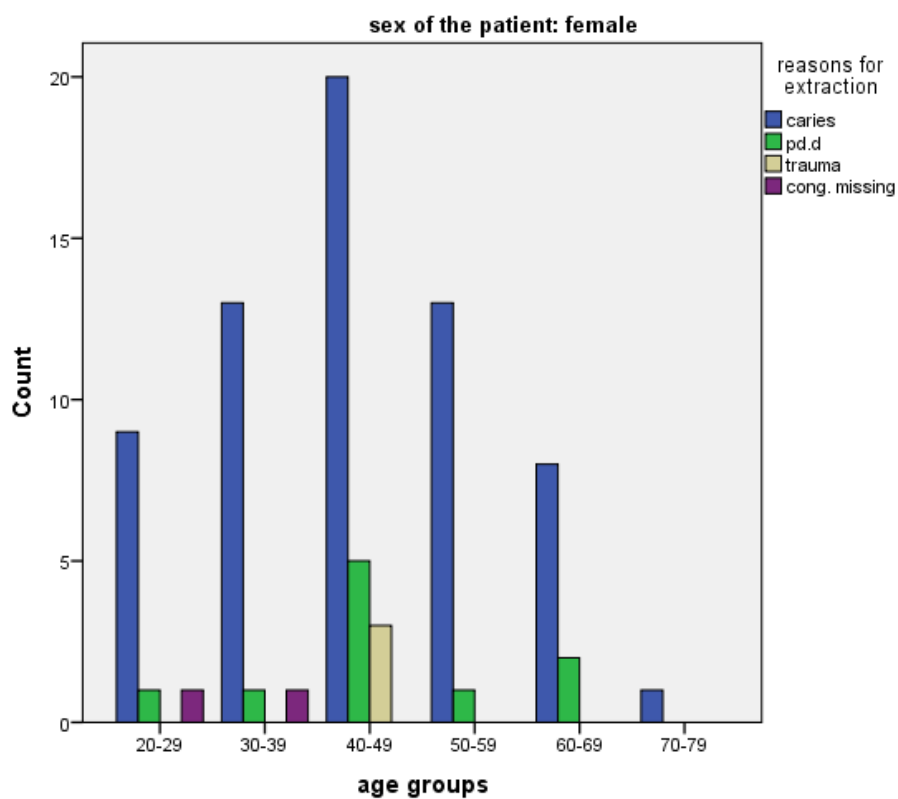
**Fig. 1: Bar Chart showing the gender percentage in age groups**

**Table 2: Percentage of gender and age according to reasons of tooth loss**

Age group	Reasons for Extraction							
	Caries		Pd.d		Trauma		Cong. missing	
	Female	Male	Female	male	Femal e	male	Female	male
20-29	9 11,4%	40 24.2%	1 1.3%	4 2.4%	0.0%	10 6.1%	1 1.3%	2 1.2%
30-39	13 16,5%	17 10.3%	1 1.3%	0 0.0%	0.0%	3 1.8%	1 1.3%	00.0%
40-49	20 25,3%	25 15.2%	5 6.3%	4 2.4%	3 3.8%	0 0.0%	0 0.0%	00.0%
50-59	13 16.5%	22 13.3%	1 1.3%	5 3.0%	0 0.0%	2 1.2%	0 0.0%	0 0.0%
60-69	8 10.1%	12 7.3%	2 2.5%	8 4.8%	0.0%	1 0.6%	0 0.0%	0 0.0%
70-79	1 1.3%	5 3.0%	0.0%	1 0.6%	0 0.0%	1 0.6%	0 0.0%	00.0%
80-89	0 0%	3 1.8%	0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Tttrtotal	64 81%	124 75.2%	10 12.7%	22 13.3%	3 3.8%	17 10.3%	2 2.5%	2 1.2%



**Fig. 2: Bar Chart illustrating the reasons of tooth loss in all age groups for males.**



**Fig. 3: Bar Chart illustrating the reasons of tooth loss in all age groups for females.**

**Table 3. Statistical difference between the two gender groups in all age groups in hospital attendance.**

Age Groups	P-value
20-29	0.007
30-39	0.361
40-49	0.011
50-59	0.439
60-69	0.662
70-79	0.451

## Discussion

The principle system for keeping tooth rot misfortune is avoidance from claiming oral sicknesses. Tooth rot reduction might be expected to tooth specialist and gum ailment. Tooth specialist may be initiated toward expanded plaque maintenance. Microscopic organisms could that point attack the plaque and cause dental caries (cavities). Whether cavities persimmon tree untreated for a developed time , tooth rot breakdown happens (Burt *et al.*, 1990) .Oral wellbeing and dental forethought would critical viewpoints from claiming wellbeing and more health awareness.

Tooth rot reduction reasons issue in the personal satisfaction about term of the individual, especially when it influences their great being appearance, furthermore dietary status( Harford, 2009).

Similarly as may be those situation to history and more prehistory, tooth rot reduction for cutting edge people frequently all the varies toward Sex/gender and by etiology. In general, a higher predominance for both tooth rot reduction and dental caries need been archived around ladies over around men ( Lukacs JR,2011 and Lukacs JR,2011) .

The most proportion of the samples was between the age(20-29)years as a first level(27.5%) and this result compatible with (Nasreen and Haq, 2011; Jafarian and Etebarian, 2013) then (40-49)(50-59) as second level that is mean that the society need more motivation about dental health and care because tooth loss at early age is serious problem.

According to gender , male more than female who attending the prosthodontics department in this period and between all different age categories fig(1) and this agreed with ( Hamasha *et al.* ,2000; Mohammed,2013).

We found that there was statically significant difference between males and females at age between(20-29)years and between( 40- 49)years with p value <0.05.

But there was no gender difference among the age group (30-39)years , (50-59)years,(60-69)years and (70-79)years old.

This will be likely a reflection of the sex -related contrasts in the utilization of dental benefits. Ladies have a tendency to utilize dental benefits that's only the tip of the iceberg frequently all the other more seasoned men(Trulsson *et al.*, 2002). All the more again to ladies ,oral wellbeing could need an effect on their affections about allure. This Might bring helped a large amount about denture wearers "around ladies over men (Ettinger, 2004).

In this study the most cause for tooth loss was dental caries(75.2%)for male and (81%)for females, this result was similar to many research about tooth loss like (Banikak, 1998; Mohammed, 2013; Yahya *et al.*,2015) which had been shown that caries is the major cause of tooth loss in early age as shown in table (2) and fig(2,3).

The second reason for tooth loss was periodontal disease for both sexes (13.3%) for male and (12.7%) for female as shown in table (2) except in the age (20-29) years for male in which the second reason for tooth loss was traumatized. Our result was similar to (Hamasha *et al.*, 2000 and Yahya *et al.*, 2015). We found loss of teeth from trauma is the third cause in male about all age group except in age (80-89) years while in female the age group (40-49) years the third cause of tooth loss (3.8%) (fig 3).

We found that it may be gainful to expand mindfulness. Furthermore, education, concerning illustration this might assist in empowering the staying group keeping on take a finer consideration about their oral cavity.

A standard dental visit, aides on further uphold the teeth, it will be critical will attempt and support the teeth toward a sound state on having a great nature from claiming life, particularly over elderly populace.

A great masticatory execution or dietary admission complex is connected with beneficial oral wellbeing status (Kazemi S., 2011).

Preventive projects have with a chance to be actualized in place on diminishing those levels about caries in this district. Those coordinated efforts of caries aversion projects for national open wellbeing projects has acknowledged those The majority powerful system.

## Conclusion

### In this study we found:

- 1-The high percentage of early aged patient numbers between (20-29) years old that suffering from tooth loss and attending prosthetic department that is meant the society need more motivation about the importance of dental health and care.
- 2-dental decay was the major cause for tooth loss and the second cause was periodontitis and the last causes was trauma and congenital missing.
- 3-the most number of the patient attending Prosthodontics department was male more than female that is mean female seeking dental service more than male.

## References

- American Dental Association-ADA., June 2014, "Tooth Eruption: The primary teeth. Mouth healthy.org." Retrieved 2 .
- Banik AK. 1998, "Reasons for extraction of permanent teeth in Dhaka Dental College Hospital: A statistical study." Bangladesh Dent J.;14:34-37.
- Barbato PR, Nagano HCM, Zanchet FN, Boing AF, Peres MA., Aug 2007, "Tooth Loss and Associated Socioeconomic, Demographic, and Dental-Care Factors in Brazilian Adults" An Analysis of the Brazilian Oral Health Survey, Cad Saude Publica.;23(8):1803-14.
- Burt BA, Ismail AI, Morrison EC, Beltran ED .May 1990, "Risk factors for tooth loss over a 28-year period". J. Dent Res. 69 (5): 1126-30.
- Ettinger RL, Warren JJ, Levy SM ,2004, "Oral health: perceptions of need in a rural Iowa country" Spec Care Dentist ;24:13-21.
- Fiske J. Davis DM. Frances C. Gelbier S., 1998, "The Emotional Effects of Tooth Loss in Edentulous People." Br Dent J.:184:90-3.
- Hamasha AH, Sasa I, AL Qudah M. 2000, "Risk indicators associated with tooth loss in Jordanian adults" Community Dent Oral Epidemiol ;28:67-72.
- Harford J., 2009, "Population ageing and dental care ." Community Dent. Oral Epidemiol.;37(2):97-103.

- Jafarian M. and Etebarian A.2013, "Reasons for Extraction of Permanent Teeth in General Dental Practice in Tehran, Iran." *Medical Principles and Practice* ;22:239-244.
- Kazemi S, Savabi G., Khazaei S., Savabi O, .Esmailzadeh A, Keshteli A.H., Adibi P.2011, "Association between food intake and oral health in elderly: SEPAHAN systematic review no. 8" *Dent. Res. J.*, 8 (Suppl. 1) , pp. S15-S20
- Levinson NA.,1999," Psychological Facets of Esthetic Dental Health Care: A Development Perspective." *J Prosthet. Dent* :64:486-91.
- Lukacs JR.,2011," Sex differences in dental caries experience: clinical evidence and complex etiology." *Clin Oral Investig* ;15(5):649–56.
- Lukacs JR.2011," Gender difference in oral health in South Asia: metadata imply multifactorial biological and cultural causes." *Am J Human Biol* ;23(3):398–411.
- Mohammed F. Moutlak.2013,"Tooth Loss , Prosthodontic Treatment need and Association Factors in A sample of Adults attending College of Dentistry, AL Mustansiriya University." *J. AL Raf.Univers.*;31;125-136.
- Nasreen T. and Haq M E.2011," Factors of tooth extraction among adult patients attending in exodontia department of Dhaka College and Hospital" *BJO and DFO.*;2;1:7-10.
- Petersen PE.,December 2003," The World Oral Health Report 2003: Continuous Improvement of Oral Health in the 21<sup>st</sup>. Century – The Approach of the WHO Global Oral Health Programme." *Community Dent Oral Epidemiol.* ;31(Suppl. 01):3-24.
- Silva DD, Rihs LB, Sousa MRL.,Nov.2009," Factors Associated of Maintenance of Teeth in Adults in the State of São Paulo, Brazil." *Cad. Saude . Publica.* ;25(11):2407-18.
- Steele JG, Treasure E, Pitts NB, Morris J, Brandnock G.,Dec.2000," Total tooth loss in the United Kingdom in 1998 and implications for the future." *Br Dent J.* ;189(11):598-603.
- Trulsson U, Engstrand P, Berggren U. 2002,"Edentulousness and oral rehabilitation :experiences from patients ,perspective " *Eur. J. Oral Sci.*;110:417-424 .
- Yahya I. Gossadi et al.2015, "REASONS FOR PERMANENT TEETH EXTRACTION IN JIZAN REGION OF SAUDI ARABIA";vol.14:86-89.