

# **Original Research Paper**

**Dental Science** 

# PREVALENCE OF COMPLETE AND PARTIAL EDENTULOUS PATIENTS IN KASHMIR (J&K)

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**ABSTRACT** 

**Aim:** The aim of the study was to evaluate the prevalence of complete and partial edentuluism in Kashmir division of I&K

**Materials and Methods:** twelve hundred subjects aged between 15 and 70 years (600 males and 600 females) were included in the study. The patients were examined for the entire finding and patients of partial and complete edentuluism were recorded.

**Results:** There was no statistically significant relationship between age and gender of the patient with edentuluism. However, with an increase in age, there was greater trend toward partial edentuluism followed by complete edentuluism of the patients in the groups of above 45 years of age.

**Conclusion:** From the findings of the present study, it can be concluded that the prevalence of edentuluism increases with age, which results in various long-term effects of tooth removal on patient's facial structure and general well being, thereby increasing the need for prosthodontics rehabilitation. More awareness and proper dental education regarding proper dental hygiene and timely replacement of the missing teeth need to be taken care of.

# **KEYWORDS**: Complete edentuluism, edentuluism, Extraction, Partial edentuluism

#### INTRODUCTION

Oral cavity is home to microorganism, food debris, dead epithelial cells that may lead to tooth loss. The tooth loss has an impact on an individual's oral health- related quality of life at biologic, psychological, and social levels. The prevalence and extent of tooth loss have decreased significantly in many countries during the recent decades.<sup>1-3</sup> Tooth loss is identified by an edentulous space, which is present as missing space in the dental arch normally occupied by one tooth or more due to migration. It could be partial or complete. A person may lack a few teeth (partially edentulous) or all the teeth in one or both upper and lower jaws (completely edentulous) for various reasons. The cause of teeth loss is due to caries, periodontal problems, traumatic injuries, Disimpactions, supernumerary teeth, and neoplastic and cystic lesions. 5-6 Partial edentuluism leads to clinical challenges like supaeruption of remaining teeth; enlarging tuberosities, change in the occlusal plane, flabby ridges due to resorption and temporomandibular disorders. 78 Furthermore, the loss and continuing degradation of the alveolar bone, the adjacent teeth, and also the supporting structures will lead to difficulty in restoring of edentulous patient.9 Pattern of tooth loss is a clear indicator of levels of oral hygiene, dental health awareness, the magnitude of dental problems, and the management. 12,13

#### **MATERIALS AND METHODS**

Twelve hundred subjects aged between 15 and 70 years (600 males and 600 females) who visited Hospital were included in the study. The same dentist did the intraoral examination of all these patients and a questionnaire was prepared for the study including the duration and various causes for edentuluism. The questionnaire was given to the patient and they filled it up according. The written informed consent was obtained from the patient before undergoing the study.

#### **Inclusion Criteria**

- The subjects with permanent teeth were included
- The age group chosen for the study was 15-70 years.

#### **Exclusion Criteria**

Third molar was excluded from the study.

### RESULTS

Of 1200 subjects, 600 (50%) were males and 600 (50%) females, and

19% of males and 17.6% of females were in the age group of the 15-25 years. 15.6% of males and 16.3% of females were in the age group of 26-35 years. 16% of males and 15.6% of females were in the age group of 36-45 years. 16.3% of males and 17% of females were in the age group of 46-55 years. 17.6% of males and 17.3% of females were in the age group of 56-65 years. 15.3% of males and 16% of females were above 65 years of age (Table & Graph-1).

In the age group of 15-25years, 29.8% of males and 26.4% of females were completely dentulous. In the age group of 26-35 years, 29.8% of males and 24.5% of females were completely dentulous. In the age group of 36-45 years, 18.7% of males and 14.9% of females were dentulous. In the age group of 46-55 years, 12.2% of males and 7.8% of females were dentulous. In the age group of 56-65 years, 5.6% of males and 3.8% of females were dentulous. There was no completely dentulous patient above 65 years of age (Table & Graph-2).

There was no edentulous patient in the age group of 15-25 years. In the age group of 26-35 years, 14.8% of males and 18.4% of females were partially edentulous. In the age group of 36-45 years, 47.9% of males and 55.3% of females were partially edentulous. In the age group of 46-55 years, 32.6% of males and 33.3% of females were partially edentulous. In the age group of 56-65 years, 58.5% of males and 63.5% of females were partially edentulous. Above 65 years of age, 34.8% of males and 35.4% of females were partially edentulous (Table & Graph-3).

There was no completely edentulous patient in the age group of 15-25 years and so as in the age group of 26-35 years. In the age group of 36-45 years, 33.3% of males and 29.8% of females were completely edentulous. In the age group of 46-55 years, 55.1% of males and 58.8% of females were completely edentulous. In the age group of 56-65 years, 54.7% of males and 32.6% of females were completely edentulous. Above 65 years of age, 65.2% of males and 64.5% females were completely edentulous.

From the present study it was concluded there is no specific relation on the basis of basis of gender but age do have significant impact on the number of teeth remaining. (Table & Graph-4)

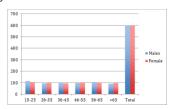
Table-1 Age and gender distribution

Age (years)	Male	Female	Total
15-25	114	106	220
26-35	94	98	192

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36-45	96	94	190
46-55	98	102	200
56-65	106	104	210
>65	92	96	188
Total	600	600	1200

Pvalue=1.000

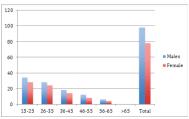


Graph - 1 Age and gender distribution

Table - 2 Distribution of edentulous patients

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Age (years)	Males	Female	Total
15-25	34	28	62
26-35	28	24	52
36-45	18	14	32
46-55	12	8	20
56-65	6	4	10
>65	0	0	0
Total	98	78	176

Pvalue=1.000

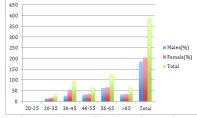


Graph - 2 Distribution of dentulous subjects

Table-3 Distribution of partially edentulous

Age (years)	Males	Female	Total
15-25	0	0	0
26-35	14	18	32
36-45	26	52	98
46-55	32	34	66
56-65	62	66	128
>65	32	34	66
Total	186	204	390

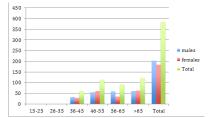
P<0.005



Graph-3 Distribution of partially edentulous subjects

Table -4 Distribution of complete edentulous

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Age (yeas)	Males	Females	Total
15-25	0	0	0
26-35	0	0	0
36-45	32	28	60
46-55	54	60	114
56-65	58	34	92
>65	60	62	122
Total	202	184	386



Graph-4 Distribution of complete edentulous subjects

#### DISCUSSION

Due to the loss of the teeth the patients faces a lot of problems ranging from aesthetics, function, and mastication. With the advance age the frequency of tooth loss increases. There are various reason of loss of teeth due to advanced age like caries, periodontal problems, accident, poor oral hygiene or the failure to visit the dentist on due time can lead to loss of teeth. It was found that patient who had regular visits to the dentist has less frequency of tooth loss .the study leads to the fact that there is no gender predilection for tooth loss however with advanced age the rate of edentuluism is on rise and above 65 years of age the patients becomes completely edentulous. The findings of our study related to age predisposition affecting partial and complete edentuluism is in agreement with the studies done by Sonkesariya *et al.* 16

## CONCLUSION

The study concluded that with the advanced age the rate of edentuluism increases and there is no predilection of tooth loss with the gender of the patient. Timely treatment however prevents the loss of teeth.

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