

# PROSPECTIVE STUDY OF EMOTIONAL EFFECTS OF TOOTH LOSS IN AN AGEING ELDERLY COMMUNITY IN RAJASTHAN

## Dentistry

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### Abstract:

Aesthetic emotions due to tooth loss seem to be a universal problem. Aesthetic perception and judgement are not merely cognitive process but also involve feelings. Main purpose to conduct the study of emotional effects is complete and partial loss of teeth in an ageing elderly Rajasthani. A questionnaire was prepared for 150 elderly people above the age of 60 years who were interviewed in dental check-up. The data was collected and analyzed using Chi square or chi-square exact tests. 30% of the people were found to have difficulty accepting tooth loss, whereas more than 50% of people reported to have restricted their food choices. Other problems like reduced their presence in social gatherings for lunch/dinner or eating out in public were also noted. 60% felt that dental consultation prior to tooth loss would have helped them in a significant way. It was concluded that tooth loss did not cause a marked impact on emotions of people but affected their social activities however there was negligible difference between complete and partial tooth loss subjects.

**Keywords:** Aesthetic, emotions, tooth loss

### Introduction

Although human face consists of very small proportion of surface area of the body, but it implies our social identities. The loss of teeth can cause many adverse anatomical, physiological, esthetic and biomechanical sequels. Dentistry has witnessed much research into the physical aspects of tooth loss it is study carried out from July 2018 to May 2019 among the Rajasthani population at Pacific Institute of Medical Sciences, Udaipur, who were more than 60years of age and having partial or complete loss of teeth. The loss of few or all natural teeth has been accepted as handicapping condition for the ageing elderly people. Apart from the negative emotions of normal ageing, the loss of teeth adds to the emotional imbalance of the elderly.<sup>1-6</sup> previously conducted studies

on this subject implies that such subjects having less confidence, restricting social activities and inter personal relationships.<sup>7-8</sup> Countries of the east have shown to be more negatively influenced by tooth loss compared to their western counter parts.<sup>9,10</sup> The awareness and availability of dental treatment and education were also a matter of concern in this issue. Hence a need was felt by the department of dentistry to conduct a study to understand the emotional effects of tooth loss in elderly population of Rajasthan. More over emotional effect for complete tooth loss compared to partial tooth loss was evaluated.

### Material and Methods

In this study 150 subjects between age group of 60 to 85 years were involved a

questionnaire was designed on basis of results of previous studies on emotional effects of tooth loss.<sup>7-8</sup> A questionnaire was designed in Hindi language with a appropriate space for any special comments for each question. Various aspects covered in each question were emotional disturbances, loss of confidence, social performance productivity and dental wear if any. The interview was conducted by single consultant of dentistry at PIMS, Udaipur who conducted this study to reduced inter operator variability. A self assessment tooth counting protocol including tooth counting and denture wear designed by Jepson ET all was

used in the study. Denture wearers were asked regarding their denture use and positive or negative effects of it in their mouths. Data was collected and analyzed. Comparisons were made between three groups namely, completely edentulous, partially edentulous and weather denture wearers, and non denture wearers for the first two groups. Variables including loss of confidence, acceptability of tooth loss and restriction in activities were also analyzed. An independent chi-square are exact chi-square was used to compare various distributions. The level of significance was set at 0.5

**Table 1: Distribution of subjects (%) according to dentition with respect to age and gender.**

		<b>Edentulous (N=50)</b>	<b>Partially edentulous with dentures (n=54)</b>	<b>Partially edentulous without dentures (n=46)</b>
Age (years)	60-69	8	28	32
	70 to 85	42	26	14
Gender	Male	30	45	20
	Female	20	25	10

## Results

150 elderly persons between the age group of 60 to 85 years with complete or partial tooth loss were interviewed in Dental OPD at Pacific Institute of Medical Science in Rajasthan State of India by a research consultant of this article there was no significant difference between three dentition group in the social, economic and educational back ground of the participants (Table 1)

33.3% (50) of cases were edentulous and all of them or complete denture. 36% (54) were partially edentulous and wore partial dentures, whereas about 33.7% (46) were partially edentulous and not wearing partial dentures.

Various emotional feelings affected (Table -2)

1. Acceptance of tooth loss- 25% of subjects had difficulty accepting tooth loss. 60% had no difficulty accepting tooth loss and 50% were uncertain. There was no statistically significant difference between three groups. 36% accepted tooth loss immediately, 51% accepted it within six months, 6% within one year, 3% required more than one year and 4% have still not accepted the tooth loss. No significant difference was found in the time taken by three groups in accepting the loss.

2. Feelings about tooth loss - 60% of the subjects were in different and unconcerned about tooth loss and 30% felt relieve. The partially edentulous subjects were seen to be more concern and frightened than the other two groups. There was no difference between the groups for other emotional factors.
3. Discussing tooth loss – 30% of subjects talked about tooth loss with others, among which 50% talked to their dentist, 45% talked to their friends 35% talked to their spouse and 55% talked with their family and relatives.
4. Wear of dentures - 60% of the patients wore removable dentures, among them 18% avoided looking at themselves with dentures. Partially edentulous subjects (80%) considered dentures as part of themselves compared with 50% edentulous subjects. 90% accepted the advice of not wearing the dentures at night, whereas 2% were indifferent and 8% found it unacceptable. No difference were found in the groups for the same (P=0.05)
5. Preparation for tooth loss – 20% of the subjects were not prepare for the effect of tooth loss, 70% had felt prepare and rest had no answer.
6. Confidence - 90% did not feel any difference in their confidence while the rest were in different.

7. Restriction in activities (Table – 3) – more than 60% of subjects felt restricted with their food choices and environment of food, edentulous and partially edentulous with dentures felt most restricted. Other feelings like eating in public, going out, laughing and farming social relationships were of negligible importance

**Table 2: Emotional feelings associated with tooth loss (%)**

Emotions	Edentulous (n=50)	Partially edentulous with dentures (n=54)	Partially edentulous without dentures (n=46)
Unconcerned/indifferent	15	17	10
Scared/frightened	12	10	7
Handicapped feeling	1	1	2
Feeling old	1	2	2
Relieved	9	12	10
Angry	1	1	1
Resigned	3	4	2
Sad/depressed	0	1	1
Dismayed	8	6	10
This is not happening to me	0	0	1

**Table 3 Restriction in activities (%)**

Restriction	Edentulous (n=50)	Partially edentulous with dentures (n=54)	Partially edentulous without dentures (n=46)
Restricted food choice	19	18	12
Avoid eating out	4	5	9
Avoid going out	3	2	4
Enjoyed food less	13	15	1
Avoid laughing	2	2	15
Avoid social Relationship	3	5	3
	5	7	2

## Discussion

The present study has been conducted according to previous work done on the subject.<sup>9, 10</sup> ageing elderly Rajasthani people formed the representative population for this study. Dental awareness and availability of facilities are low in this reason. Elderly people turn up to the dentist only in pain and swelling. Hence a strategy was evolved stating that emotional effect of tooth loss would be less compare to counterpart privileged subjects majority of the subjects were indifferent are relieved by loss of teeth. Results of this study implies that very few subjects were grieved by loss of teeth as compared with other studies.<sup>9,10</sup> The choice of food an environment of food was negatively affected especially in complete edentulous and partial edentulous wearing dentures. This was directly proportional to the number of natural teeth remaining. In Indian social gathering, traditionally most of food consists of Rotis, Paranthas and vegetables which require more masticatory efficiency. Hence loss of tooth imposes a handicapping situation for the ageing elderly not only from the nutritional point of view affecting their physical health but also from the point of their overall mental wellbeing. Loss of teeth also means loss of esthetics in facial profile an personality, which does affect the social performance and ability of individual to form social relations. But psychosocial effects of tooth loss are less manifested compared with other studies.<sup>9-10</sup> this satisfaction after tooth loss also shows the less awareness, availability and expectations of dental treatment to this elderly people. Only few subjects discussed tooth loss with family, friends showing the society's acceptance of tooth loss age normal ageing procedure as compare to social stigma as compared to western countries.<sup>9, 10</sup> Acceptance of dentures was variable according to the availability and satisfaction of dental treatment.

## Conclusion

Loss of teeth did not have a marked emotional effect in the lives of selected elderly community and had no difference between edentulous and partially edentulous subjects it has been observed that significant restrictions and disabilities were found in daily social activities. Restrictions were more evident in elderly subjects who had lost significant number of natural teeth requiring dentures wearing.

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