INTRODUCTION

Tooth are an important part of the masticatory apparatus, the importance of which is felt more especially when it is lost because an insufficient chewing ability compromises the nutritional status leading to not only deterioration of the general health status of the individual but leaves a psychological trauma as well. Teeth have an important role in mastication and esthetics. Its importance is felt more when it is lost because the chewing ability of a person is reduced which comprises the general health of the individual. So, teeth mean just more than aesthetic appeal to a person at this juncture. A minimum of 21 functional teeth is essential for proper food intake according to World Health Organization (WHO). Besides deteriorating the health, edentulism of an individual also seems to reduce the quality of life. Compared to dentate people, edentulous counterparts are conscious and avoid social interaction. Edentulism leaves a psychological stigma in an individual.

The aim of the present study was to find out the prevalence of tooth mortality and possible etiologic factors causing the same. The objectives were to find out the prevalence of tooth loss in relation to both arches; the prevalence of tooth loss in relation to the most common etiology related to tooth loss and the most commonly lost tooth among all the types.

SUBJECTS AND METHODS

Subjects for this study were selected from the Outpatient Department of Karpaga Vinayaga Institute of Dental Sciences, Kancheepuram, Tamilnadu. The study was approved by the institutional ethical committee (KVIDS/2017/09/217; Dated: 25/09/2017) and the study was conducted in accordance to Helsinki's Declaration. A written informed consent was received from each participant of the study. Towards the end of the study, treatment was given addressing their chief complaints. The age criteria for the subjects participating in the study were between 18 and 60 years. Third molars were excluded from examination for the study. The proforma was more of questionnaire highlighting the reasons for tooth loss. Data were collected from the subjects based on the information they gave to the questionnaire. The subjects were examined in a dental chair by a single, trained and calibrated examiner. The instruments used were mouth mirror, explorer, and William's periodontal probe. Intraoral examination included dental caries and periodontal status examination. Periodontal status was observed with Russell's periodontal index and Loe and Silness Gingival Index.

The data collected were subjected to statistical analysis (Chi-square Test) using SPSS 21 and the level of significance chosen was p < 0.05 (Statistically Significant).

RESULTS

The survey participants were a total of 200 subjects out of which 145 were males (72.5%) with a mean age of 34.8 ± 11.74 and 55 females with a mean age of 35.1 ± 9.83. Of the 200 subjects, 84 subjects had no tooth loss, while 116 subjects had tooth loss. Out of 200 subjects, 42% had no tooth loss. Study findings showed that females (p = 0.003) have a higher tooth mortality rate 74.5% compared to males with a tooth loss rate of 51.7% (Table 1). When the etiologic factors (Figure 1) causing tooth loss was examined in the survey participants, the most common cause was found both periodontal disease (24.5%) as well as dental caries (24.5%) followed by therapeutic extraction (4.5%) and trauma (4.5%). About 66 subjects (33%) had tooth loss in the mandibular arch while 50 subjects (25%)
had tooth loss in maxillary arch (Figure 2). The most commonly lost tooth was mandibular molar (25.5%) followed by maxillary molar (10.5%).

**DISCUSSION**

The presence or absence of teeth is a good indicator of an individual’s oral health. One cannot deny the fact that oral and general health of an individual is dependent on each other. Oral diseases and oral health concern is a matter of less concern and attention in low and middle-income countries. While discussing the etiology of tooth loss, our present study shows that both periodontal disease and dental caries to be the most common cause of equal prevalence. Epidemiological studies have shown that dental caries and periodontal disease are the most prevalent pathologies affecting oral cavity which is coincident with our present study. Periodontal disease is considered to be one of the important etiologic factors, resulting in tooth loss. The subgingival microflora plays an important role in provoking inflammatory host response causing a transition from health to disease.

Many studies suggest that females had higher tooth loss than males. The reason for this variation still remains unidentified. The changing hormonal levels through the life related to women’s reproductive function may also prove that the most commonly lost tooth is the mandibular molars. In a way to acknowledge the fact that the most important duty of a dentist is to prevent tooth loss, let us make sincere attempts to address patient’s salient complaints and make every effort to put a check to major tooth mortality causes like periodontal disease and dental caries through prompt preventive and oral prophylactic measures like fluoride application, scaling and regular recall visits.

**REFERENCES**


An Initiative of The Tamil Nadu Dr. M.G.R. Medical University
University Journal of Medicine and Medical Specialities


Table 1: Prevalence of Tooth Loss in relation to Gender

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* = p < 0.05 (Statistically Significant)