

ABSTRACT

AIM

Tooth fracture is not only a distressing experience on physical level of a child, but it may also have an effect on emotional and psychological levels. This study aims to assess the various factors influencing permanent anterior teeth fractures and its impact on oral health related quality of life (OHRQoL) among 8-15 years old school children of Chennai city.

MATERIALS AND METHODS

The cross sectional survey included all school going children aged 8-15 years with fracture of permanent anterior teeth. 30 schools (Corporation, Government aided and Private) were randomly selected by stratified random sampling. A written consent was obtained from both the parents/guardians and from the school children. A total of 7247 school children were screened and the 628 school children reported with permanent anterior teeth fractures comprised the sample for the study. Case record form was used to record the demographic details, various factors influencing tooth fractures by a customised structured questionnaire, oral health status by WHO oral health assessment form (1997), type of tooth fracture by Ellis and Davey's classification (1970) and the OHRQoL using Child Oral Health Impact Profile (COHIP) by Hillary L. Border and Wilson-Genderson (2007). The data was tabulated and analysed using SPSS version 22. The normal distribution of the data were assessed by Normality tests Kolmogorov-Smirnov and Shapiro-Wilks tests. Chi-square test, Kruskal Wallis test, Bonferroni adjusted Mann Whitney test were used for analysing non-parametric data. One way ANOVA, Tukey's HSD post hoc tests was used for comparison of anterior teeth fractures between schools.

RESULTS

The prevalence of permanent anterior teeth fracture was found to be 8.7% among which boys were 3.5 times more likely for fracture than girls. Class I fracture was more

prevalent (86.4%) among all reported fractures. 54.3% had negative OHRQoL, and 100% of the study participants had negative functional well-being, social/emotional well-being and school environment. Age, religion, socioeconomic status and type of school had significant influence on the impact of permanent anterior teeth fracture on OHRQoL.

CONCLUSION

Facial appearance and oral health related problem can affect psychological and social wellbeing. All the children reporting with tooth fractures report negative oral health related quality of life especially in their functional wellbeing, socio-emotional wellbeing and in school environment domains. Hence the study stresses the importance of promoting good oral healthcare practices to prevent oral disease in children and to meet children's unmet oral healthcare needs.

KEYWORDS: Oral Health, Quality of life, School children, Tooth fractures