ABSTRACT

INTRODUCTION: Visually impaired children face limitations in interacting with the environment, as they cannot see the facial expression of parents, teachers and cannot perceive social behavior. These children are challenged every day in learning basic life skills and maintenance of oral hygiene being one among them.

AIM AND OBJECTIVES: The purpose of this study was to assess and compare the effectiveness of oral health education on oral health status among the visually challenged 6-21 years old institutionalized special children in Madurai City.

MATERIALS AND METHODS: The study population was selected from two available institutions for visually impaired, in Madurai city. The final sample consisted of 154 subjects with a response rate was 92.7%. The age range of study participants varies from 6 to 21 years old of both genders. After collecting the baseline data, oral health education and motivation was done at different time intervals with the help of audio aids, Braille and tactile aids. Fones and Modified Bass method of brushing was taught to the children. Oral hygiene index – simplified and dentition status were assessed using Modified WHO proforma at baseline and after the health education at 6 and 12 month intervals. The oral health awareness was assessed using a questionnaire by interview method at the beginning and end of the study. Data was analysed using chi-square test, Wilcoxon signed rank test, ANOVA and paired t-test.

RESULTS: At baseline, the mean OHI-S, DMFT and dft scores were 1.169, 1.95, and 0.40 respectively. At the end of 6 months and 12 months there was a significant decrease in OHI-S scores. No significant difference was seen in DMFT and dft at
different time interval. The oral health awareness increased significantly at the end of the study when compared to the baseline scores.

**CONCLUSION:** The present study proved that blind children can maintain an acceptable level of oral hygiene when taught with special customized methods like multisensory approach with creative use of other senses.

**DENTAL PUBLIC HEALTH SIGNIFICANCE:** Disabilities among school going children create a major impact on their life especially blindness. The present study showed that caries experience, malocclusion and traumatic dental injuries were most common among visually challenged children. In-service training in the promotion of good oral health for children with visual impairment, access to oral health care has been provided for teachers, institutional staff and parents of these under privileged children of god.

**KEY WORDS:**

Oral health education, Oral health status, Visually impaired children.