Comparison of caries experience with the salivary levels of Streptococcus Mutans and Lactobacilli in 8-14 years old children between institutionalized (orphanage) Children and school going children in Namakkal district, Tamil Nadu

ABSTRACT

Introduction:

The general welfare and dental health of an individual are encompassed with each other. Dental caries being one which destructs both the organic and inorganic materials of tooth structure it in turn creates a social, physical and a mental problem for the individuals. Unfavourable oral health of children indicates them to be a caries risk group. This stresses a unique attention and scheduling of oral health program for children.

Aim and objectives:-

To comparatively evaluate the caries experience of institutionalized children with that of school children of age 8-14 years in Namakkal district and correlate the findings with that of salivary levels of streptococcus mutans and lactobacillus among the groups.

Materials and method:-

The Study sample consist of 200 Institutionalized children and 200 school going children in Namakkal District. The data was collected on a self designed proforma. DMFT scores were obtained. Stimulated saliva was collected in sterile containers and transported in the thioglycollate medium to the laboratory and streaks were duplicated on Mitis Salivarius Bacitracin (MSB) agar selective for Streptococcus mutans and Rogosa SL agar selective for lactobacilli. The MSB agar plates and Rogosa SL agar plates were incubated anaerobically for 48 hours at 37°C and 96 hours at 37°C respectively.

Results:-

The results showed a significant relationship was observed between colony count values of streptococcus mutans and Lactobacilli. The statistical significant were observed as p< 0.001 in school and p< 0.05 in orphanage children. The mean DMFT score for the school children was 3.03 ± 0.12 and Orphanage students were 2.68 ± 0.29 respectively. A significant correlation was obtained between the means of caries score with Colony Counts.
Conclusion:-

The orphan children being less advantaged and because of less availability of cariogenic food agents their carious level is comparatively low. The microbial levels of streptococcus mutans and lactobacilli to the carious process is also proved to be interrelated.

KEYWORDS:- DMFT scores ,Institutionalized, Lactobacilli, Streptococcus mutans.