

Effectiveness of preventive measures on oral health among rural preschool children in Dharwad district

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ABSTRACT

Introduction: Dental caries and gingivitis are more prevalent oral diseases affecting children. School oral health promotion programs are effective in improving the oral health of children, to make its more effective we should target these programs as early as possible like in preschool. Hence the aim of the present study is to compare the effectiveness of four different oral health preventive measure on oral health among rural preschool children in Dharwad district.

Methodology: study was a preschool based intervention study with four intervention group and a control group, intervention groups were health education group, tooth brushing group, fluoride toothpaste group and fluoride varnish group. A total of 225 preschool children were selected for the study, 45 children in each group. Children were followed for 6 month after baseline examination. Primary outcome measured in terms of caries increment, reduction in number of teeth with bleeding on probing and reduction in plaque score. Analysis was done using SPSS-20 software.

Results: caries increment in fluoride toothpaste group were 2.2%% for 1st follow up and 10.23% for 2nd follow up, which differed significantly from control group with p value 0.021 and 0.018 respectively. Fluoride varnish followed by tooth brushing group also showed less caries increment than control group but were not statistically significant. Repeated measure ANOVA showed in all group there was reduction in number of teeth with bleeding on probing and plaque score, which was statistically significant(p<0.05). when compared to other groups in tooth brushing group there was statistically significant difference in reduction in number of teeth with bleeding on probing and plaque scores.

Conclusion: Supervised tooth brushing group demonstrated maximum reduction in plaque score and improvement in gingival status. Reduction in caries increment was seen in fluoride toothpaste group.

Key words: dental caries, bleeding on probing, health education, tooth brushing, topical fluorides