

Oral Hygiene Measures and the Periodontal Status of School Children

Kolawole KA

Adamawa State University, Nigeria

Background: Tooth brushing and other mechanical cleaning procedures are considered the most reliable methods of effective plaque removal, which is essential for prevention of periodontal diseases.

Objective: To investigate the relationship between oral hygiene practices, socioeconomic status and gingival health in a group of Nigerian children.

Methods: Our study population consisted of 242 randomly selected school children in Ile-Ife, Nigeria. Participants completed a questionnaire on oral hygiene measures, their gingival health was assessed using oral hygiene index (OHI), plaque index (PI) and index of gingival inflammation (GI).

Results: Tooth brushing once daily was the most common practice (52.1%). Toothbrush with fluoride-containing toothpaste was the most common tooth cleaning aid, while the up and down brushing technique was predominantly used. There was no statistically significant gender difference in tooth brushing frequency; however, significant gender differences were observed in PI and OHI scores ($P < 0.05$). Gingivitis was absent in 28.9% of the children, while 50.8% had mild, 13.6% moderate and 6.6% severe gingivitis. There was a weak but significant negative correlation between oral hygiene frequency and GI ($P < 0.05$). Socioeconomic status had no relationship with oral hygiene frequency, however it had low but significant correlation with OHI and GI ($P < 0.05$). A logistic regression analysis of the predictors on gingivitis showed that male gender and medium textured toothbrush had significant association with gingival health.

Conclusions: Gingival health was influenced by gender, socioeconomic status, oral hygiene frequency and toothbrush texture. Motivation to apply instructions given on oral health care and regular reinforcement are essential.