

Morphological and functional traits of malocclusion in 3-5 year-olds in Moshi, Tanzania

Abstract:

To assess the morphological and functional traits of malocclusion. DESIGN: Cross-sectional study. SETTING: Moshi Municipality, Kilimanjaro region, Tanzania. SUBJECTS: Examination for occlusal traits was done on 372 randomly selected 3-5-year olds (157 males and 215 females). RESULTS: The overall prevalence of malocclusion was 26.9%. Females had significantly more occlusal anomalies than males. The flush terminal plane (93.8%) was the commonest anteroposterior relation. Excessive maxillary overjet and deep-bite occurred in 5.1% and 21.5% of the children respectively. Reverse overbite (1.9%), frontal open-bite (1.6%), lateral open-bite (0.8%) and posterior cross-bite (0.3%) were relatively rare. Harmful oral habits were uncommon in this population. The sample mean for inter canine width in the maxilla was 31.1 mm (SD +/- 2.72) and for the mandible 25.3 mm (SD +/- 2.46). Lack of natural spacing in the anterior segment of the maxilla occurred in 34.4% of the children and 33.6% in the mandible. CONCLUSION: Generally, females had significantly more occlusal anomalies than males. The flush terminal plane was the commonest anteroposterior finding. Lack of natural spacing in the anterior segments and deep bite were common.