

Occurrence of midline diastema and frenum attachments amongst school children in Nairobi, Kenya

Abstract:

The aim of this study was to determine the prevalence of midline diastema, tongue tie and frenum attachments amongst school children in Nairobi. A total of 1802 children aged between 4 and 16 years were selected randomly using multistage sampling technique. To avoid oversampling in either sex, a proportionate sampling procedure was used. Thereafter, a thorough intra-oral examination was carried out using a mouth mirror under artificial or natural light with the children lying on a supine position. Presence or absence of midline interdental spaces unusually bigger than other interdental spaces were noted and recorded on a prepared data collection form. Accurate location of the origin of the frenum was done using Placek et al Morphological-functional classification of the labial frenum attachments. Data was analyzed manually by tally method. Results showed that 35% had upper and lower midline diastema. 55% were females and 45% were males. Their mean age was 7.6 years. 0.2% had a high lingual frenum. The commonest location of frenum attachment amongst children with lower midline diastema was the mucogingival junction (86%) whereas amongst those with upper midline diastema it was attached gingiva (50%). None of the children had frenum attachment on the interdental papilla. It was concluded that the maxilla had a higher prevalence of midline diastema than the mandible and that papillary penetrating frenum attachments amongst these patients were higher in the maxilla than the mandible.