## Dental caries, gingivitis and the treatment needs among 12-year-olds.

## Abstract:

BACKGROUND: One of the World Health Organisation (WHO) global health goals stated that the global average for dental caries should not have been more than 3 DMFT at 12 years of age by the year 2000. However, the prevalence of dental caries, gingivitis and dental treatment needs among 12-year-old children in many regions of the developing world had then hardly been investigated. OBJECTIVE: To determine the prevalence of dental caries and gingivitis and the dental treatment needs among 12-year-old children in Kitale Municipality in North-Western Kenya. DESIGN: Descriptive cross-sectional study. SETTING: Primary schools in Kitale Municipality. SUBJECTS: Two hundred and ninety two children aged 12 years were randomly selected from eight schools that were also randomly selected. Data were collected according to the WHO Oral Health Survey Methods. The children were examined for decayed (D), missing due to decay (M) and filled teeth and the caries experience using the DMFT index was computed. Gingivitis and treatment needs were assessed using the CPITN index. RESULTS: The overall prevalence of dental caries was 50.3% while its prevalence when only the permanent teeth were considered was 44.5% with a mean DMFT of  $0.92 \pm -501.36$ . Girls had a significantly higher caries experience (DMFT) than boys (p<0.05). The main treatment need indicated for decayed teeth was one surface restoration with 46.9% of all the children requiring this kind of treatment. Endodontics was indicated in 7.5% of the children while extractions were the least required treatment with 5.1% of the children examined requiring this treatment. The prevalence of gingivitis was 77.7%. Out of these 38.7% of the children required professional dental care entailing scaling and oral prophylaxis. CONCLUSION: The prevalence of dental caries and gingivitis was high hence there was greater need for one surface restoration and full mouth scaling for these children. School based oral health programme to improve oral hygiene of these children is recommended.