OCCURRENCE, PATTERN AND TREND OF DENTAL CARIES AMONG CHILDREN WHO PRESENTED AT THE MOI TEACHING AND REFERRAL HOSPITAL AND MOI UNIVERSITY DENTAL CLINICS

Presenter: Elkanah Masinde

Co-Authors: Debbora Chepkemoi Nicole Odhiambo, George Nduati, Dolly Njeru, Kimani

Felix, Wambui Mary,

Supervisors: Dr. Joyce Omuok, Dr. Diana Rop,

Abstract

Background:

Dental caries is among the most prevalent oral diseases worldwide, with a multifactorial etiology involving diet, oral microorganisms, host factors, and time. It remains a significant public health challenge, particularly in children, due to changing dietary habits, poor oral hygiene, and limited access to dental services.

Objective:

To determine the prevalence, pattern, and trend of dental caries over a 10-year period among children presenting at the Moi Teaching and Referral Hospital (MTRH) and Moi University School of Dentistry (MUSoD) dental clinics.

Methods:

This retrospective study reviewed 384 patient records of children below 18 years who attended MTRH and MUSoD dental clinics between 2014 and 2023. Systematic random sampling was used. Data were collected using abstraction forms and analyzed descriptively, with results presented in percentages, tables, and charts.

Results:

The prevalence of dental caries was 58.9%. Pain was the most common presenting complaint (32.1%). Class I cavities predominated (46.3%). A sharp increase in caries cases was observed in 2020. Despite 78.5% of children reporting brushing once or twice daily, caries burden remained high. Notably, 74.1% of the children were visiting a dentist for the first time.

Conclusion:

Dental caries prevalence among children attending MTRH and MUSoD clinics is high, despite reported oral hygiene practices. These findings highlight the urgent need for strengthened preventive strategies, early dental visits, and targeted oral health interventions for children.