Prevalence of dental caries and evaluation of mean DMFT index among secondary school students in Asmara, Eritrea

Nada A., Habtom B., Saud M., Chandrakant D., Mohammed E. F.
1Department of Public Dentistry, Orotta School of Medicine and Dentistry, Asmara, Eritrea
2Department of Internal Medicine, Orotta School of Medicine and Dentistry, Asmara, Eritrea
3Department of Medical Microbiology, Orotta School of Medicine & Dentistry, Asmara, Eritrea

Abstract:
OBJECTIVE: Dental caries is an irreversible, microbiological infectious disease of the hard structure of the teeth which affects the population worldwide. The purpose of the study was to determine the prevalence of dental caries and to assess mean DMFT index among secondary school students in Asmara, Eritrea.

Methods: A descriptive cross-sectional study was performed on 330 students (135 boys and 195 girls) between January and May 2018 using simple random sampling method. Students aged 14-17 years were interviewed with a pre-structured questionnaire and clinical examination was conducted in the classroom by the investigators using examination gloves, mouth mirror, and dental explorer under natural light.

Results: The overall prevalence of dental caries was 67.9%. The mean Decayed, Missed and Filled Tooth (DMFT) value for all ages was 2.1. Female children had higher mean DMFT value of 2.50 compared with 1.56 for males (P > 0.05). Majority of the DMFT score was contributed by “DT” component and maximum mean DMFT (3.18) was observed among students that consumed sugary food several times a day. No association was observed between mean DMFT and the frequency of dental visit among the study population.

Conclusion: The study indicated that a significant portion of the students were having dental caries. This implies the necessity of oral health education and dental caries preventive strategies to be implemented on community-based and school-based programs.

KEYWORDS: Dental caries; Prevalence; DMFT index