Assessing the relationship between dietary habits and the occurrence of dental caries among UniKL RCMP medical students

Chan Sook Ching, Muhammad Aiman Fahmi Abdul Mutalib, Nayli Afza Sharizal, Ventiny Mohan

Community Based Department, Faculty of Medicine, Royal College of Medicine Perak, Universiti Kuala Lumpur, Ipoh, Perak, Malaysia

ABSTRACT

Introduction: Dental caries are due to bacteria metabolizing sugars to produce acid that demineralized the tooth structure. Contributing factors include oral health practice and diet. Objective: To determine the dietary habits and oral health practices among Universiti Kuala Lumpur Royal College of Medicine Perak (UniKL RCMP) medical students and any relationship with the occurrence of dental caries. **Materials and Methods:** This cross-sectional study used a pretested questionnaire (google form) requesting demographic data (gender, ethnicity, year of study), dietary habits, oral health practices and occurrence of dental caries from UniKL RCMP medical students (total population 749). Minimum sample size calculated was 255 students. After prior ethical approval and student consent, 305 students (61 from each year of study) were selected using a randomizer system to account for non-responders. Data was analysed using SPSS with Chi-square tests used to explore the associations among the study variables (significant for p-value <0.05). Results: Two hundred and seventy students (85.5%) responded. The majority were female (172-63.7%) and Malay (264-97.8%), which corresponded to the overall medical students' composition. Significantly more females (49.4%) than males (32%); more Year 5 students (62.7%) compared to Year 1 students (29.6%) skipped meals (p value=0.008). Female students (49.2%) rarely or never took carbonated drinks as compared to male students (19.6%) (p<0.001). Snacking in between meals were significantly related to occurrence of dental caries (p-value = 0.037). Skipping meals, frequency of eating in fast food restaurant, daily sugar, sweets and chocolates intake, weekly carbonated drinks intake and fresh fruit juices intake were not significantly associated with dental caries. Conclusion: This study found that snacking in between meal had a significant association with the occurrence of dental carries among UniKL RCMP medical students. Other factors such as taking sugary snacks, carbonated drinks and fast food had no association with the occurrence of dental carries.