

ABSTRAK

Karies gigi merupakan penyakit multifaktorial yang masih menjadi masalah kesehatan gigi dan mulut dengan prevalensi tinggi di Indonesia. Berbagai faktor biologis dan perilaku berperan terhadap pengalaman karies sehingga diperlukan penilaian risiko secara komprehensif. Salah satu metode yang digunakan adalah Kariogram, yaitu alat penilaian risiko karies yang mengintegrasikan berbagai faktor risiko dan faktor protektif. Penelitian ini bertujuan menganalisis hubungan faktor-faktor risiko karies terhadap nilai DMFT serta menggambarkan tingkat risiko karies menggunakan metode Kariogram pada mahasiswa Fakultas Kedokteran Gigi Universitas Prima Indonesia Tahun 2026. Penelitian ini merupakan penelitian observasional analitik dengan desain *cross-sectional* yang melibatkan 50 mahasiswa. Data diperoleh melalui pemeriksaan indeks DMFT, indeks plak, pH saliva, serta kuesioner mengenai kebiasaan menyikat gigi, pola konsumsi makanan dan minuman manis, serta penggunaan pasta gigi berfluorida. Analisis hubungan menggunakan uji Chi-Square, sedangkan penilaian risiko karies dilakukan dengan metode Kariogram. Hasil penelitian menunjukkan bahwa frekuensi menyikat gigi ($p=0,007$), indeks plak ($p=0,033$), dan pH saliva ($p=0,038$) berhubungan signifikan dengan nilai DMFT. Variabel lainnya tidak menunjukkan hubungan yang bermakna ($p>0,05$). Berdasarkan analisis Kariogram, sebagian besar responden berada pada kategori risiko karies tinggi. Disimpulkan bahwa frekuensi menyikat gigi, indeks plak, dan pH saliva berhubungan dengan pengalaman karies, sedangkan Kariogram memberikan gambaran risiko karies secara komprehensif pada responden.

Kata kunci: karies gigi, DMFT, Kariogram, pH saliva, indeks plak

ABSTRACT

Dental caries is a multifactorial disease that remains a major oral health problem with a high prevalence in Indonesia. Various biological and behavioral factors contribute to caries experience, making comprehensive caries risk assessment essential. One of the methods used is the Cariogram, a caries risk assessment tool that integrates multiple risk and protective factors. This study aimed to analyze the relationship between caries risk factors and DMFT scores and to describe caries risk levels using the Cariogram among students of the Faculty of Dentistry, Universitas Prima Indonesia, in 2026. This analytical observational study employed a cross-sectional design involving 50 students. Data were collected through clinical examinations of the DMFT index, plaque index, and salivary pH, as well as questionnaires regarding toothbrushing habits, consumption of sugary foods and beverages, and the use of fluoridated toothpaste. The relationships between variables were analyzed using the Chi-square test, while caries risk was assessed using the Cariogram. The results showed that toothbrushing frequency ($p=0.007$), plaque index ($p=0.033$), and salivary pH ($p=0.038$) were significantly associated with DMFT scores. Other variables showed no statistically significant association ($p>0.05$). Based on the Cariogram analysis, most participants were classified as having a high risk of dental caries. In conclusion, toothbrushing frequency, plaque index, and salivary pH were associated with caries experience, while the Cariogram provided a comprehensive assessment of caries risk among the participants.

Keywords: dental caries, DMFT, Cariogram, salivary pH, plaque index.