

## INTISARI

Plak gigi merupakan endapan lunak yang terakumulasi dan melekat erat pada permukaan gigi, yang berperan penting dalam proses terjadinya karies gigi. Karies gigi merupakan penyakit jaringan keras gigi yang disebabkan oleh adanya aktivitas bakteri penghasil asam sehingga mengakibatkan terjadinya demineralisasi. Penyebab lain terjadinya karies gigi ialah faktor perilaku dan tradisi masyarakat, salah satunya adalah aktivitas menyirih. Menyirih adalah mengunyah daun sirih disertai dengan campuran gambir dan kapur yang dapat juga dicampur dengan tembakau ataupun pinang. Prevalensi menyirih di Indonesia pada perempuan di atas usia 51 tahun cukup tinggi. Tujuan penelitian ini untuk mengetahui adanya hubungan akumulasi plak gigi dan status karies pada perempuan menyirih di Kotamadya Yogyakarta.

Jenis penelitian ini merupakan penelitian observasional dengan pendekatan *cross-sectional*. Subjek penelitian terdiri dari 40 orang perempuan. Subjek dibagi menjadi 2 kelompok sama besar subjeknya dengan aktivitas menyirih dan tidak menyirih. Dilakukan penilaian indeks karies gigi menggunakan indeks DMF-T dan dilakukan penilaian indeks plak gigi menggunakan indeks plak *O'Leary*. Data dianalisis dengan *independent t-test*, korelasi regresi, dan regresi linear berganda ( $p < 0,05$ ).

Hasil uji *independent t-test* menunjukkan terdapat perbedaan yang bermakna akumulasi plak gigi dan status karies antara perempuan yang menyirih dibandingkan perempuan yang tidak menyirih. Hasil uji korelasi regresi menunjukkan bahwa terdapat hubungan yang kuat indeks plak dan indeks karies terhadap menyirih ( $R=0,737$ ). Uji regresi linear berganda dengan memperhitungkan variabel usia dan status kebersihan mulut, menunjukkan bahwa menyirih dan akumulasi plak gigi berpengaruh signifikan terhadap status karies. Kesimpulan penelitian ini adalah menyirih dan akumulasi plak gigi berhubungan secara signifikan terhadap peningkatan indeks karies gigi pada perempuan di Kotamadya Yogyakarta.

Kata kunci: menyirih, akumulasi plak gigi, status karies

## **Abstract**

Dental plaques are soft deposits that accumulate and adhere tightly to the surface of the tooth, has an essential role in the process of caries dental formation. Dental caries is a hard tissue disease of the teeth caused by the activity of acid-producing bacteria resulting in demineralization. Other causes of dental caries are behaviour and the community tradition, one of which is chewing betel leaves. Chewing betel leaves is accompanied by a mixture of gambier and lime which is can also mixed with tobacco or areca nut. The prevalence of women who have habits of chewing betel leaves over age 51 years in Indonesia is very high. The aim of this study was to determine the association of dental plaques accumulation and caries status in women who have habits of chewing betel leaves in the municipality's Yogyakarta.

The study was an observational with a cross-sectional approach on 40 selected women subjects. The subjects was divided into 2 groups, as namely chewing and not chewing. Dental caries index was assessed using the DMF-T index. After that, a dental plaque index was evaluated using the O'Leary plaque index. Data were analyzed by independent t-test, regression correlation and multiple linear regression ( $p < 0.05$ ).

The results of the independent t-test showed that there were significant differences in dental plaque accumulation and caries status between women who are chewing compared to women who were not chewing. The results of the regression correlation test showed that there was a strong relationship between dental plaque accumulation and caries status with chewing betel leaves activity ( $R = 0.737$ ). Multiple linear regression test taking into age variable and oral hygiene status, showed that chewing betel leaves and dental plaque accumulation have a significant impact on caries status. It can be concluded that there was a significant relationship between chewing betel leaves and dental plaque accumulation that can an increase caries index on women in municipality's Yogyakarta.

**Keywords:** chewing betel leaves, dental plaque accumulation, and caries status