

INTISARI

Latar Belakang: Penyakit gigi dan mulut yang sering terdiagnosa pada anak-anak di Indonesia adalah karies. Karies gigi sulung anak di bawah usia 71 bulan disebut *Early Childhood Caries* (ECC). Masalah gigi terbesar di Indonesia adalah karies (45,3%). **Tujuan:** Mengetahui korelasi kadar laktoferin saliva, pH, laju alir saliva, dan kebersihan mulut dengan tingkat keparahan karies anak usia 4-5 tahun.

Metode: Penelitian observasional dengan pendekatan *cross-sectional* melibatkan 56 siswa TK KB Baiturrohman Drono, Sleman, Yogyakarta dilakukan pada 9 – 13 September 2024. Saliva dikumpulkan dengan metode *drooling unstimulated*, kadar laktoferin diukur menggunakan spektrofotometri ELISA, derajat keasaman dengan pH *pen*, laju alir saliva dari volume saliva dalam 5 menit, dan kebersihan mulut menggunakan indeks PHP-M.

Hasil: Uji Korelasi *Spearman* menunjukkan hubungan signifikan antara laktoferin ($r = 0,971$), laju alir saliva ($r = -0,871$), kebersihan mulut ($r = 0,706$) terhadap tingkat keparahan karies. Derajat keasaman menunjukkan korelasi lemah ($r = -0,258$) terhadap tingkat keparahan karies. Uji regresi linear berganda menunjukkan bahwa kadar laktoferin, laju alir saliva, dan kebersihan mulut signifikan ($p < 0,05$), sementara derajat keasaman tidak signifikan ($p > 0,05$). Koefisien regresi paling besar adalah laju alir saliva (-11,124) dan koefisien regresi terkecil adalah kebersihan mulut (0,657). **Kesimpulan:** Terdapat korelasi sangat kuat antara kadar laktoferin terhadap tingkat keparahan karies, serta korelasi kuat antara laju alir saliva dan kebersihan mulut terhadap tingkat keparahan karies. Korelasi derajat keasaman bersifat lemah. Laju alir saliva berkontribusi paling besar, sedangkan kebersihan mulut berkontribusi paling kecil terhadap tingkat keparahan karies.

Kata kunci: anak, karies, kebersihan mulut, laktoferin, laju alir saliva, pH.

ABSTRACT

Background: The most commonly diagnosed oral disease in children in Indonesia is caries. Early Childhood Caries (ECC) is the term used for caries in the primary teeth of children under 71 months of age. The biggest dental problem in Indonesia is caries (45.3%). **Objective:** To determine the correlation between salivary lactoferrin levels, pH, salivary flow rate, and oral hygiene with the severity of caries in children aged 4-5 years.

Method: An observational study with a cross-sectional approach involving 56 students from TK KB Baiturrohman Drono, Sleman, Yogyakarta, conducted from September 9 to 13, 2024. Saliva was collected using the unstimulated drooling method, lactoferrin levels were measured using ELISA spectrophotometry, acidity levels were measured with a pH pen, saliva flow rate was measured from the volume of saliva in 5 minutes, and oral hygiene was assessed using the PHP-M index.

Results: The Spearman Correlation Test showed a significant relationship between lactoferrin ($r = 0.971$), saliva flow rate ($r = -0.871$), oral hygiene ($r = 0.706$) and the severity of caries. The degree of acidity shows a weak correlation ($r = -0.258$) with the severity of caries. Multiple linear regression test showed that lactoferrin levels, saliva flow rate, and oral hygiene are significant ($p < 0.05$), while the degree of acidity is not significant ($p > 0.05$). The largest regression coefficient is the saliva flow rate (-11.124) and the smallest regression coefficient is oral hygiene (0.657). **Conclusion:** There is a very strong correlation between lactoferrin levels and the severity of caries, as well as a strong correlation between saliva flow rate and oral hygiene with the severity of caries. The correlation of acidity level is weak. The saliva flow rate contributes the most, while oral hygiene contributes the least to the severity of caries.

Keywords: caries, children, lactoferrin, oral hygiene, pH, salivary flow rate