

**PENGARUH TINGKAT KARIOGENITAS DAN FREKUENSI MAKAN
TERHADAP TINGKAT KEPARAHAN *EARLY CHILDHOOD CARIES*
PADA ANAK USIA 3-5 TAHUN DENGAN STATUS SOSIAL EKONOMI
RENDAH
(Kajian di PAUD Kecamatan Pulo Gadung Jakarta Timur)**

INTISARI

Latar belakang: Prevalensi *Early Childhood Caries* (ECC) pada anak-anak prasekolah di seluruh dunia masih tinggi. Kebiasaan anak-anak prasekolah makan makanan padat dan lengket serta minuman manis pada waktu yang tidak tepat dapat menyebabkan ECC. Tujuan penelitian ini adalah untuk mengetahui pengaruh tingkat kariogenitas dan frekuensi makan terhadap tingkat keparahan ECC pada anak usia 3-5 tahun dengan status sosial ekonomi rendah di PAUD kecamatan Pulo Gadung.

Metode penelitian: Jenis penelitian ini adalah observasional analitik dengan rancangan pendekatan *cross sectional*. Sampel penelitian adalah 320 pasangan ibu dan anak dari 11 PAUD di Kecamatan Pulo Gadung. Teknik pengambilan sampel dengan cara *simple random sampling stratified*. Data tingkat kariogenitas dan frekuensi makan diukur dengan kuesioner. Pengukuran tingkat kariogenitas makanan berdasarkan klasifikasi kariogenitas menurut Papas.dkk (1989). Pengukuran frekuensi makan dengan kariogram yang dimodifikasi. Pengukuran tingkat keparahan ECC berdasarkan tipe menurut Wyne (1999) yaitu tipe ringan, sedang, dan parah. Analisis data menggunakan analisis multivariat dengan regresi ordinal.

Hasil penelitian: Hasil penelitian menunjukkan jumlah subyek dengan kariogenitas makanan rendah 0.0%, sedang 20.9%, tinggi 79.1%. Jumlah subyek frekuensi makan rendah 8.1%, sedang 19.1%, tinggi 72.8%. Jumlah subyek tingkat keparahan ECC ringan 20.0%, sedang 49.1%, parah 30.9%. Hasil analisis multivariat menunjukkan odds ratio kariogenitas makanan tinggi 3,73, frekuensi makan sedang 0,97 dan frekuensi makan tinggi 0,51. Nilai koefisien determinasi 0,270.

Kesimpulan: Kesimpulan penelitian pada anak usia 3-5 tahun dengan status sosial ekonomi rendah di PAUD Kecamatan Pulo Gadung adalah: 1. Tingkat kariogenitas makanan tinggi lebih berisiko menimbulkan keparahan ECC dibanding tingkat kariogenitas makanan sedang. 2. Frekuensi makan memiliki faktor risiko keparahan ECC lebih rendah dibanding tingkat kariogenitas makanan. 3. Pengaruh tingkat kariogenitas dan frekuensi makan terhadap keparahan ECC sebesar 27%.

Kata kunci: kariogenitas makanan, frekuensi makan, keparahan ECC, sosial ekonomi rendah

**THE EFFECT OF CARIOGENITY AND FEEDING FREQUENCY ON
THE EARLY CHILDHOOD CARIES SEVERITY IN CHILDREN 3-5
YEARS OLD WITH LOW SOCIAL ECONOMIC STATUS
(Study at PAUD Pulo Gadung District of East Jakarta)**

ABSTRACT

Background: The prevalence of Early Childhood Caries in preschool children around the world was still high. The habitual pattern of preschool children eating solid and sticky foods and sugary drinks at inappropriate times could lead to ECC. The purpose of this study was to determine the effect of cariogenicity level and feeding frequency on the severity of ECC in children aged 3-5 years with low socioeconomic status at PAUD Pulo Gadung district.

Research method: This type of research is analytic observational with cross sectional approach design. The research sample was 320 pairs of mothers and children from 11 PAUD at Pulo Gadung District. The sampling technique was stratified simple random sampling. Data on cariogenicity level and frequency of meals were measured used a questionnaire method. ECC severity was measured by the dmf-t index. Measurement of the level of cariogenicity of food based on the classification of cariogenicity according to Papas.et al (1989). Measurement of feeding frequency with a modified cariogram. Measurement of the severity of ECC based on Wyne type (1999), namely mild, moderate and severe. Data analysis used multivariate analysis with ordinal regression

Results: It showed the number of subjects with low food cariogenicity 0.0%, 20.9% medium, 79.1% high. The number of subjects had low eating frequency 8.1%, moderate 19.1%, high 72.8%. The number of subjects with mild ECC severity was 20.0%, moderate 49.1%, severe 30.9%. The result of multivariate analysis showed a high food cariogenicity odds ratio of 3.73, moderate feeding frequency was 0.97 and high feeding frequency was 0.51. The coefficient of determination was 0.270.

Conclusion: The conclusion of the study on children aged 3-5 years with low socioeconomic status at PAUD Pulo Gadung District are: 1. The level of food cariogenicity was higher at risk of causing ECC severity compared to the level of moderate food cariogenicity. 2. Feeding frequency had a lower risk factor for ECC severity than food cariogenicity. 3. The effect of food cariogenicity level and meal frequency on ECC severity was 27%.

Key words: Cariogenicity of food, frequency of eating, severity of ECC, low socioeconomic