

**Hubungan Pemberian ASI dengan Kejadian Karies  
(Early Childhood Caries) pada Anak Usia Dibawah Tiga Tahun  
di DKI Jakarta**

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**Background** : The prevalence and severity of caries in children under three years old are constantly increasing. One of the cause of this fact is increased consumption of cariogenic carbohydrate. Low socioeconomic status and lack of knowledge on the importance of breastfeeding for a child's health are the reasons why in Indonesia a child often given sweetened condensed milk or other sweet drinks to complement or replace breast milk. Breast milk contains Ig A and many kinds of other protein, it also have buffer capacity that eventually able to prevent caries.

**Objectives** : The aim of this research are to investigate the relationship between breastfeeding with the severity of Early Childhood Caries in children under three years old, to give description on prevalence and severity of caries in children under three years, and to explain factors influencing the incidence of ECC.

**Method** : This research designed cross sectionally and conducted upon 565 children aged 12 months – 38 months, whom are selected using multistage cluster random sampling. Questionnaire are used to obtain sociodemographic data of the mother, the child, type of complements/replacement of breast milk, including the frequency and duration of consumption, child's habitual consumption of cariogenic carbohydrate, mother's knowledge of dental health, and mother's behavior in preserving their child's dental hygiene. Intra oral data measured in this research are; severity of caries, salivary pH, salivary buffer capacity, and plaque pH. **Result** : The ECC prevalence of children under three years in DKI Jakarta is 52,7%, with average score of def-t 2.85. Bivariate analysis showed that, variables which correlate with the level of ECC are ; type of complements/replacement of breast milk ( $p=0,000$ ), the way to deliver ( $p=0,012$ ), frequency ( $p=0,002$ ), duration ( $p=0,002$ ), salivary buffer capacity ( $p=0,013$ ), plaque pH ( $p=0,000$ ), habitual consumption of sugary diet ( $p=0,005$ ), age ( $p=0,000$ ), child's dental hygiene behavior ( $p=0,002$ ), and mother's education ( $p=0,001$ ). Multivariate analysis showed that ECC can be described by these variables; age, mother's education, the way to deliver and frequency of consuming complements/replacement of breast milk, child's brushing habit, plaque pH, and salivary buffer capacity. Resulting determination coefficient 32,1%. **Conclusion** : There is no significant relationship between breastfeeding and the level of Early Childhood

Caries (ECC). The relationship between breastfeeding and ECC is complex.. In this research, the role of breastfeeding protective qualities are not shown, because of bias to obtain data influencing the onset of caries.

*Keywords:* Early Childhood Caries, breastfeeding, formula milk, sucrose solution, saliva, plaque, mother's education, socioeconomic status.