

KAJIAN MULTILEVEL PROGRAM USAHA KESEHATAN GIGI SEKOLAH, PERILAKU KESEHATAN GIGI DAN STATUS KESEHATAN GIGI MURID SEKOLAH DASAR

Widiati, S., Supartinah, Al., Prabandari, Y.S., Prawitasari, J.E.

INTISARI

Latarbelakang. Program upaya kesehatan gigi sekolah (UKGS) sudah diimplementasikan sejak puluhan tahun yang lalu di Indonesia, namun status kesehatan gigi dan mulut semakin memburuk. Riskesdas menunjukkan bahwa DMFT naik dari 0,9 pada tahun 2007 menjadi 1,4 pada tahun 2014 pada anak usia 12 tahun. Penelitian ini bertujuan untuk melakukan kajian tentang peran puskesmas, sekolah dan perilaku murid sekolah dasar dan hubungannya dengan status kesehatan gigi dan mulut murid sekolah dasar.

Subjek dan cara penelitian. Subjek penelitian terdiri dari 1144 murid kelas 5 sekolah dasar negeri (SDN) di Kabupaten Sleman. Sampel penelitian diambil dari wilayah kerja puskesmas yang terletak di wilayah pedesaan dataran tinggi, pedesaan dataran rendah, dan pinggiran kota, sebanyak 15 puskesmas. Dari masing-masing puskesmas dipilih tiga SDN secara acak sehingga keseluruhan ada 45 SDN. Semua murid kelas 5 SD diikutsertakan dalam penelitian ini setelah mendapatkan *informed consent* dari orangtua atau wali. Kuesioner digunakan untuk mengetahui karakteristik demografi, sosial ekonomi, dan perilaku murid sekolah didasarkan pada teori perilaku terencana. Pemeriksaan kesehatan gigi dan mulut mengukur status kebersihan gigi (OHIS, menurut Green dan Vermillion, 1964), kesehatan gusi (GI, menurut Loe dan Silness, 1963) dan karies gigi (DMFT, menurut WHO, 2013). Analisis multilevel dilakukan untuk mengetahui efek individual (demografi, perilaku, pendidikan ayah dan ibu, dukungan keluarga terhadap perilaku dan pengeluaran rumah tangga), sekolah dan puskesmas.

Hasil penelitian. Dalam regresi berganda ditemukan bahwa perilaku kesehatan gigit berhubungan dengan GI (koefisien -0,003, $p = 0,059$) tetapi tidak berhubungan dengan OHIS dan DMFT. Dukungan keluarga terhadap perilaku hanya berhubungan dengan OHIS (koefisien -0,01, $p = 0,01$) yang menjadi tidak bermakna ketika sekolah diperhitungkan. Faktor sosio-demografi merupakan prediktor DMFT (anak laki-laki lebih rendah 0,44, $p < 0,001$ dibandingkan perempuan; umur 11 tahun lebih rendah 0,45, $p = 0,001$ dibandingkan umur 12 tahun; pendidikan ayah perguruan tinggi 0,66 lebih rendah, $p = 0,002$ dan SLTA 0,34 lebih rendah, $p = 0,015$; pendidikan ibu SLTA 0,34 lebih tinggi, $p = 0,014$ dibandingkan pendidikan SLTP). Pengeluaran rumah tangga 1 juta-1,4 juta rupiah per bulan terkait dengan OHIS 0,19 lebih tinggi ($p = 0,02$) dibandingkan dengan penghasilan kurang dari 1 juta rupiah per bulan. Sekolah berhubungan dengan OHIS, DMFT dan GI dengan SD Turi 3 sebagai pembanding. Puskesmas tidak berhubungan dengan OHIS, DMFT dan GI.

Kesimpulan. Perilaku kesehatan gigi dan mulut merupakan predictor GI, tetapi tidak berhubungan dengan DMFT dan OHIS. Dukungan keluarga terhadap

perilaku hanya berhubungan dengan OHIS, yang menjadi tidak berhubungan ketika sekolah diperhitungkan. Faktor sosio-demografi (jenis kelamin, umur, pendidikan ayah dan pendidikan ibu) merupakan prediktor DMFT tetapi tidak berhubungan dengan OHIS dan GI. Pengeluaran rumah tangga berhubungan dengan OHIS, tanpa atau dengan memperhitungkan sekolah. Sekolah berhubungan dengan OHIS, DMFT dan GI, puskesmas tidak berhubungan dengan OHIS, DMFT dan GI.

Kata kunci: murid sekolah dasar, OHIS, GI, DMFT, perilaku kesehatan gigi dan mulut, teori perilaku terencana, analisis multilevel

A MULTILEVEL STUDY OF SCHOOL-BASED DENTAL HEALTH PROGRAM, ORAL HEALTH BEHAVIOR, AND ORAL HEALTH STATUS OF PRIMARY SCHOOL CHILDREN

Widiati, S.¹, Supartinah, Al.², Prabandari, Y.S.³, Prawitasari, J.E.⁴

ABSTRACT

Background. School-based dental health programs have been implemented in Indonesia for many decades, however, dental health status in Indonesia has been worsening. Basic Health Surveys carried out in Indonesia indicated an increase of DMF-T from 0.9 in 2007 to 1.4 in 2013 among children 12 years of age. The objective of the study was to address whether school dental health programs, school, and oral health behavior among school children were associated with oral health status among the children.

Subjects and Methods. Subjects of this study were 1144 children attending 5th grade in primary schools located in Sleman Regency. Fifteen primary health centers were selected to represent rural highland areas, rural lowland areas and suburbs. State-owned primary schools where the primary health centers were responsible to implement oral health programs, were randomly selected, involving a total of 45 schools. All children attending the 5th grade of the selected schools were invited to participate in this study after informed consents were given by parents or guardians. Questionnaires asking for demographic, parental educations, household expenditures, perceived attitude and behaviors based on planned behavior theory and self-efficacy were administered to the students. Oral health examinations were carried out by trained research assistants to measure OHI-S according to Green and Vermillion (1964), GI according to Loe and Silness (1963) and DMF-T according to WHO (2013). Multilevel analyses were conducted to address variance components attributed to variables associated with individual subjects, schools and primary health centers.

Results. Multiple regression showed that oral health behavior of the school children was associated with GI (coefficient -0.003, $p = 0.059$) but not associated with OHIS and DMFT after controlling for school. Family support to oral health behavior was only associated with OHIS (coefficient -0.01, $p = 0.01$), but the association disappeared after school was entered in the regression model. Socio-demographic factors were associated with DMFT (boys were 0.44 lower, with $p < 0.001$, than girls; children aged 11 were 0.45 lower, $p = 0.002$ than aged 12; paternal education university level 0,66 lower, $p = 0.002$, high-school level 0.34 lower, $p = 0.015$, and maternal education at high-school level 0,34 higher, 0.014 compared to those at junior high school or less). Household expenditure ranging from 1 million to 1.4 million rupiah per month indicated OHIS 0.19 higher ($p = 0.02$) compared to less than 1 million. School was associated with OHIS, DMFT and GI with Turi 3 Primary School as reference. Primary health center was not related to any of oral health indicators.

Conclusions. Oral health behavior was a predictor of GI, not DMFT and OHIS. Family support was only associated with OHIS, the association disappeared when adjustment for school was made. Socio-demographic variables (sex, age, parental education) were predictors for DMFT but were not associated with OHIS and GI. Household expenditure was associated with OHIS, before and after adjustment for school. School was associated with OHIS, DMFT and GI, while primary health center was not associated with any of the oral health indicators.

Keywords: primary school children, OHIS, DMFT, GI, oral health behavior, theory of planned behavior and multilevel analysis

¹ Department of Preventive and Public Health Dentistry Faculty of Dentistry – Universitas Gadjah Mada

² Department of Pedodontics Faculty of Dentistry – Universitas Gadjah Mada

³ Department Health Behavior, Environment Health and Social Medicine Faculty of Medicine – Universitas Gadjah Mada

⁴ Faculty of Psychology, Faculty of Humaniora and Social sciences University of Kristen Krida Wacana