



## HUBUNGAN ANTARA PERILAKU MENJAGA KESEHATAN GIGI DAN MULUT ANAK OVERWEIGHT DAN OBESITAS USIA 9-12 TAHUN DENGAN KEJADIAN KARIES SERTA NYERI

(Kajian secara *Teledentistry* di Kecamatan Jetis Kota Yogyakarta)

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### INTISARI

Jumlah anak usia sekolah yang mengalami *overweight* dan obesitas naik pada negara berkembang sebagai faktor risiko peningkatan kemakmurhan yang diikuti perubahan gaya hidup. Orang obesitas lebih rentan terkena karies dibandingkan orang yang tidak dan rerata jumlah karies pada molar permanen bertambah bersamaan kenaikan BMI (*Body Mass Index*). Karies merupakan penyakit infeksi diawali proses demineralisasi gigi dan memiliki hubungan dengan perilaku menjaga kesehatan gigi dan mulut. Penelitian ini bertujuan untuk mengetahui hubungan antara perilaku menjaga kesehatan gigi dan mulut dengan kejadian karies dan nyeri pada anak *overweight* serta obesitas di Kecamatan Jetis.

Penelitian ini merupakan penelitian observasional analitik dengan rancangan *cross sectional*. Sebanyak 196 *overweight* dan obesitas anak Sekolah Dasar di Kecamatan Jetis dilibatkan dengan *multistage cluster proportional random sampling*. Variabel independen yaitu perilaku menjaga kesehatan gigi dan mulut, variabel dependen adalah kejadian karies dan tingkat nyeri. Variabel perilaku diukur dengan kuesioner dengan skala Likert dengan pengujian validitas (koefisien korelasi  $\geq 0,30$ ) dan uji reliabilitas (alpha cronbach = 0,819). Variabel kejadian karies diukur dari foto *teledentistry*. Variabel nyeri diukur menggunakan VASOF (*Visual Analogue Scale of Face*). Analisa data menggunakan analisis korelasi *Spearman*.

Hasil penelitian sebesar 42,9% anak dengan *overweight* dan obesitas memiliki tingkat nyeri sedang (skala VAS 3 dan 4). Perilaku menjaga kesehatan gigi dan mulut pada anak *overweight* serta obesitas memiliki hubungan pada variabel kejadian karies dan nyeri namun lebih kuat terhadap nyeri ( $p < 0,001$  dan  $r = -0,410$ ). Kesimpulan: semakin baik perilaku menjaga kesehatan gigi dan mulut anak-anak maka semakin rendah kejadian karies serta semakin ringan tingkat nyeri.

**Kata kunci :** perilaku, karies, obesitas, *overweight*.



## **THE CORRELATION BETWEEN ORAL HEALTH BEHAVIOUR WITH CARIES INCIDENCE AND PAIN ON 9-12 YEARS OLD OVERWEIGHT AND OBESE CHILDREN**

**(Teledentistry Study In Jetis District Yogyakarta)**

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### **ABSTRACT**

The number of school-aged children with overweight and obesity increases in developing countries as a consequence of prosperity improvement which is followed by lifestyle changes. People with obesity were reported to be more susceptible to caries than people who were not and the average number of caries in permanent molars increased on higher BMI (Body Mass Index). Dental caries is an infectious disease as a result of the demineralization in enamel and dentine which has a relationship with the behavior. The purpose of this study was to determine the relationship between behavior of maintaining dental and oral health with the incidence of caries and pain on children with overweight and obesity in Jetis District.

This research was an analytic observational study with a cross sectional design. One hundred ninety six elementary school children with overweight and obesity in Jetis District were chosen using multistage cluster proportional random sampling. The independent variable was behavior and the dependent variable were the incidence of caries and pain. Behavior variables were measured using a questionnaire based on Likert scale with validity testing (correlation coefficient > 0.30) and reliability testing (Cronbach alpha = 0.819). The caries was measured by teledentistry photo. Pain was measured using VASOF (Visual Analogue Scale of Face). Data analysis using Spearman correlation analysis.

Children with overweight and obesity were mostly suffered moderate pain as high as 42.9% (VAS scale 3 and 4). The results of this research are behavior of maintaining oral and dental health in overweight and obese children had relationship with both variables and was shown stronger relationship with the pain than caries ( $p < 0.001$  and  $r = -0.410$  ). Conclusion: The better of behavior in maintaining dental and oral health of overweight and obese children, the lower the incidence of caries and the milder pain.

**Keywords :** behaviour, caries, obesity, overweight.