



INTISARI

Hubungan Indeks Massa Tubuh Terhadap Kadar Gula Darah Ibu Hamil Trimester Pertama

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LATAR BELAKANG: Prevalensi diabetes melitus gestasional meningkat sekitar 3-14% dari seluruh kehamilan di dunia. Gestasional diabetes melitus mendasari banyak kejadian morbiditas jangka pendek maupun panjang baik pada ibu maupun janin. Disisi lain terjadi pula peningkatan prevalensi wanita dengan diabetes melitus dan indeks massa tubuh yang tinggi (obes) dari tahun ketahun.

TUJUAN: Menentukan risiko diabetes melitus gestasional dengan mengetahui dan mempelajari hubungan indeks massa tubuh terhadap kadar gula darah ibu hamil trimester pertama guna menurunkan morbiditas ibu dan janin melalui pencegahan kejadian gestasional diabetes melitus.

METODE: Penelitian observasional analitik dengan desain potong-lintang. Data diambil langsung dari responden melalui wawancara menggunakan kuesioner, serta pengukuran langsung berat badan menggunakan timbangan, tinggi badan menggunakan staturmeter, dan kadar gula darah puasa menggunakan strip uji gula darah. Teknik pengambilan sampel dengan metode konsekutif. Sampel sebanyak 35 ibu hamil trimester pertama yang memenuhi kriteria inklusi dan eksklusi yang melakukan kunjungan *ante natal care* di Puskesmas di Yogyakarta dari bulan Juli - September 2016. Analisis data dilakukan dengan menggunakan SPSS versi 22.0 dengan analisis frekuensi deskriptif, uji korelasi dan uji regresi linier. *Pearson correlation* digunakan untuk menguji korelasi antar variabel, p-value < 0,05 dianggap signifikan.

HASIL: Didapatkan nilai *significancy* $p=0,016$ antara indeks masa tubuh dan kadar gula darah puasa ibu hamil trimester pertama dengan korelasi koefisien=0,40. Didapatkan $R^2=0,1635$ untuk pengaruh indeks massa tubuh terhadap kadar gula darah puasa ibu hamil trimester pertama.

KESIMPULAN: Terdapat hubungan positif dengan kekuatan sedang antara indeks massa tubuh dan kadar gula darah puasa ibu hamil trimester pertama. Indeks massa tubuh memiliki pengaruh sebesar 16,35% terhadap kadar gula darah puasa.

KATA KUNCI: Indeks Massa Tubuh, Kadar Gula Darah, Obesitas Ibu, Diabetes Melitus Gestasional, Usia Ibu, Kehamilan, Trimester Pertama.



ABSTRACT

Correlation between Body Mass Index and Blood Sugar Levels on First Trimester Maternal

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BACKGROUND: The prevalence of gestational diabetes mellitus increased by approximately 3-14% of all pregnancies in the world. Gestational diabetes mellitus incidence underlies many short and long-term morbidity both in the mother and fetus. On the other hand there is also an increase in the prevalence of women with diabetes mellitus and high body mass index (obese) from year to year.

OBJECTIVE: Determine the risk of gestational diabetes mellitus by knowing and studying the correlation between body mass index and blood sugar levels on first trimester maternal in order to reduce maternal and fetal morbidity by preventing the incidence of gestational diabetes mellitus.

METHODS: The study was observational analytic with cross-sectional design. Data is taken directly from the respondents through interviews using questionnaires, as well as direct measurement of weight using scales, height using stature meter, and fasting blood sugar levels using a blood glucose test strips. The sampling technique with consecutive method. The sample is 35 first trimester pregnant women who meet the inclusion and exclusion criteria that make a visit antenatal care at the health center in Yogyakarta from the month of July to September 2016. Data analysis was performed using SPSS version 22.0 with descriptive frequency analysis, correlation and linear regression test. Pearson correlation was used to test the correlation between variables, p-value <0.05 was considered significant.

RESULTS: We found significancy value $p=0.016$ between body mass index and fasting blood sugar levels on first trimester maternal with a correlation coefficient=0.40. We also found $R^2=0.1635$ for the effect of body mass index on fasting blood sugar levels in first trimester maternal.

CONCLUSION: There is a positive correlation with moderate strength between body mass index and fasting blood sugar levels on first trimester maternal. The body mass index has amounted to 16.35% effect on fasting blood sugar levels.

KEYWORDS: Body Mass Index, Blood sugar, Maternal obesity, Gestational diabetes mellitus, Maternal age, Pregnancy, First Trimester.