

ABSTRAK

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HUBUNGAN INDEKS MASSA TUBUH (IMT) DENGAN KADAR GLUKOSA DARAH PUASA DAN KADAR TRIGLISERIDA PADA PASIEN PROLANIS DIABETES MELITUS TIPE 2

xvii + 125 Halaman + 20 Tabel + 15 Lampiran

Diabetes melitus tipe 2 (DMT2) merupakan gangguan metabolik menahun yang ditandai hiperglikemia menetap akibat resistensi insulin disertai penurunan fungsi sel β pankreas, sehingga mengganggu keseimbangan glukosa dan metabolisme lipid. Indeks Massa Tubuh (IMT) sebagai parameter antropometri yang merefleksikan status gizi diperkirakan memengaruhi kontrol glikemik dan profil lipid, yang direpresentasikan melalui kadar glukosa darah puasa (GDP) serta trigliserida serum. Penelitian ini bertujuan mengkaji hubungan IMT dengan kadar GDP dan trigliserida pada pasien DMT2 peserta Program Pengelolaan Penyakit Kronis (Prolanis) di Klinik Mitra Sehat Wiyung Surabaya.

Desain penelitian yang digunakan berupa observasional analitik dengan desain *cross-sectional*. Sampel sebanyak 30 responden ditentukan melalui teknik *purposive sampling*. Data primer dikumpulkan melalui pengukuran berat dan tinggi badan, serta pemeriksaan laboratorium kadar GDP menggunakan metode GOD-PAP dan trigliserida menggunakan metode GPO-PAP, kemudian dianalisis dengan uji korelasi Spearman.

Hasil penelitian menunjukkan mayoritas responden tergolong obesitas I (46,7%), dengan 60,0% memiliki kadar GDP melampaui nilai rujukan (>109 mg/dL), sedangkan 53,3% menunjukkan kadar trigliserida dalam rentang normal (<150 mg/dL). Uji korelasi Spearman membuktikan hubungan IMT dengan kadar GDP tidak signifikan secara statistik ($p = 0,527$; $r = 0,120$), sebaliknya ditemukan korelasi positif bermakna dengan kekuatan sedang antara IMT dan kadar trigliserida ($p = 0,008$; $r = 0,477$). Dapat disimpulkan bahwa IMT tidak berkorelasi signifikan dengan kadar GDP, namun berkorelasi positif secara bermakna terhadap kadar trigliserida pada pasien diabetes melitus tipe 2 peserta Prolanis.

Kata kunci: Diabetes melitus tipe 2, indeks massa tubuh (IMT), glukosa darah puasa, trigliserida

Daftar bacaan: 10 Buku (2017-2025) + 21 Jurnal (2018-2025)

ABSTRACT

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THE RELATIONSHIP BETWEEN BODY MASS INDEX (BMI) AND FASTING BLOOD GLUCOSE AND TRIGLYCERIDE LEVELS IN PROLANIS TYPE 2 DIABETES MELLITUS PATIENTS

xvii + 125 Pages + 20 Tables + 15 Appendices

Type 2 diabetes mellitus (T2DM) is a long-term metabolic condition marked by sustained high blood glucose that develops when the body's cells become resistant to insulin while pancreatic β -cell activity gradually declines, disturbing the balance of glucose and lipid metabolism. Nutritional status, commonly assessed through Body Mass Index (BMI), is thought to play a role in shaping glycemic regulation and lipid profile, two conditions reflected respectively in fasting blood glucose (FBG) and serum triglyceride concentrations. The present research sought to determine whether BMI is associated with FBG and triglyceride levels among T2DM patients registered in the Program Pengelolaan Penyakit Kronis (Prolanis) at Mitra Sehat Clinic, Wiyung, Surabaya.

This research followed an analytical observational format built on a cross-sectional framework, with 30 respondents chosen through purposive sampling. Weight and height were measured directly from each participant, while blood samples underwent laboratory testing to determine FBG using the GOD-PAP method and triglycerides using the GPO-PAP method; Spearman's correlation test was then applied to examine the relationships within the data.

Findings show that class I obesity was the most common condition among respondents (46.7%), 60.0% had FBG readings exceeding the reference limit (>109 mg/dL), and 53.3% recorded triglyceride levels still within the normal threshold (<150 mg/dL). No statistically meaningful link was found between BMI and FBG through Spearman's test ($p = 0.527$; $r = 0.120$), whereas a positive, moderately strong, and statistically significant correlation emerged between BMI and triglyceride levels ($p = 0.008$; $r = 0.477$). These findings suggest that while BMI does not significantly relate to FBG, it is meaningfully and positively correlated with triglyceride levels in T2DM patients participating in Prolanis.

Keywords: Type 2 diabetes mellitus, body mass index (BMI), fasting blood glucose, triglycerides

References: 10 Books (2017-2025) + 21 Journals (2018-2025)