

**POLITEKNIK KESEHATAN TANJUNGKARANG**  
**JURUSAN TEKNOLOGI LABORATORIUM MEDIS**  
**PROGRAM STUDI TEKNOLOGI LABORATORIUM MEDIS**  
**PROGRAM SARJANA TERAPAN**  
Skripsi, Juni 2024

Amalia Octa Reza

**Hubungan Antara Kadar Glukosa Darah Puasa Dengan Kadar Trigliserida  
Pada Pasien Diabetes Mellitus Tipe 2 di Rumah Sakit Pertamina Bintang  
Amin**

xiv + 25 halaman, 13 tabel, 2 gambar, 15 lampiran

**ABSTRAK**

Pada penderita diabetes mellitus tipe 2 menunjukkan resistensi insulin, yang menandakan berkurangnya sensitivitas jaringan target terhadap efek metabolismik insulin. Selain itu, resistensi insulin juga menyebabkan peningkatan pelepasan asam lemak bebas dari jaringan adiposa. Akibatnya, trigliserida akan terhidrolisis melepaskan asam lemak dan gliserol dalam darah. Tujuan penelitian ini adalah untuk mengetahui hubungan antara kadar glukosa darah puasa dengan kadar trigliserida pada pasien diabetes mellitus tipe 2 di Rumah Sakit Pertamina Bintang Amin. Jenis penelitian *analitik* desain penelitian *cross sectional* dengan uji korelasi *spearman*. Penelitian dilakukan di Rumah Sakit Pertamina Bintang Amin pada pasien DM tipe 2. Jumlah populasi adalah 315 orang dan didapatkan sampel 38 orang. Hasil penelitian didapatkan kadar glukosa darah puasa rata-rata 164,32 mg/dl, dengan kadar glukosa darah puasa terendah yaitu 78 mg/dl dan kadar tertingginya yaitu 442 mg/dl. Serta kadar trigliserida rata-rata 170,32 mg/dl, dengan kadar trigliserida terendah yaitu 47 mg/dl dan kadar tertingginya yaitu 403 mg/dl dan didapatkan koefisien korelasi sebesar 0,097 yang kekuatan hubungannya sangat rendah dan nilai *p value* sebanyak 0,563 ( $p \geq 0,05$ ), disimpulkan bahwa tidak terdapat hubungan antara kadar glukosa darah puasa dengan kadar trigliserida pada pasien diabetes mellitus tipe 2 di Rumah Sakit Pertamina Bintang Amin.

**Kata Kunci** : Diabetes mellitus tipe 2, Glukosa Darah Puasa, Trigliserida  
**Daftar Bacaan** : 27 (2009 – 2023)

**TANJUNGPOLYTECHNIC  
DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY  
MEDICAL LABORATORY TECHNOLOGY STUDY PROGRAM  
APPLIED GRADUATE PROGRAMME**  
*Undergraduate Thesis, June 2024*

Amalia Octa Reza

***The Relationship between Fasting Blood Glucose Levels and Triglyceride Levels  
in Type 2 Diabetes Mellitus Patients at Pertamina Bintang Amin Hospital***

xiv + 25 pages, 13 tables, 2 images, 15 attachments

**ABSTRACT**

*Type 2 diabetes mellitus patients exhibit insulin resistance, which signifies reduced sensitivity of target tissues to the metabolic effects of insulin. In addition, insulin resistance also leads to increased release of free fatty acids from adipose tissue. As a result, triglycerides will be hydrolysed releasing fatty acids and glycerol in the blood. The purpose of this study was to determine the relationship between fasting blood glucose levels and triglyceride levels in patients with type 2 diabetes mellitus at Pertamina Bintang Amin Hospital. Analytical research type cross sectional research design with spearman correlation test. The study was conducted at Pertamina Bintang Amin Hospital for patients with type 2 diabetes mellitus. The population was 315 people and a sample of 38 people was obtained. The results showed that the average fasting blood glucose level was 164.32 mg/dl, with the lowest fasting blood glucose level being 78 mg/dl and the highest level being 442 mg/dl. And the average triglyceride level is 170.32 mg/dl, with the lowest triglyceride level is 47 mg/dl and the highest level is 403 mg/dl and obtained a correlation coefficient of 0.097 which the strength of the relationship is very low and the p value is 0.563 ( $p \geq 0.05$ ), it is concluded that there is no relationship between fasting blood glucose levels and triglyceride levels in patients with type 2 diabetes mellitus at Pertamina Bintang Amin Hospital.*

**Keywords** : Type 2 diabetes mellitus, Fasting Blood Glucose, Triglycerides  
**Reading List** : 27 (2009 – 2023)