

ABSTRAK

Merry Diana: Hubungan Kualitas Tidur dan Tingkat Stres dengan Kadar HbA1c Pada Penderita Diabetes Melitus Tipe 2 di RSUD Dr. Pirngadi Medan. Skripsi. Fakultas Teknik. Universitas Negeri Medan. 2024.

Diabetes Melitus merupakan penyakit kronis jangka panjang yang terjadi ketika peningkatan kadar glukosa dalam darah karena tubuh tidak dapat memproduksi hormon insulin yang dihasilkan secara efektif. Kontrol kadar gula darah pada pasien DM tipe 2 berupa pemeriksaan kadar HbA1c. Penelitian ini bertujuan untuk mengetahui hubungan kualitas tidur dan tingkat stres dengan kadar HbA1c pada penderita diabetes melitus tipe 2 di RSUD Dr. Pirngadi Medan.

Penelitian dilaksanakan di RSUD Dr. Pirngadi Medan di poli penyakit dalam dan dilaksanakan pada bulan April – Mei 2024. Penelitian ini menggunakan desain *cross sectional*. Populasi penelitian ini adalah pasien DM tipe 2 di RSUD Dr. Pirngadi Medan. Teknik pengambilan sampel dengan *purposive sampling* dengan total sampel 39 responden. Teknik pengumpulan data menggunakan kuesioner *Pittsburgh Sleep Quality Index* (PSQI) dan kuesioner *Perceived Stress Scale-10* (PSS-10). Kadar HbA1c didapat dari data rekam medik pasien. Teknik analisis data menggunakan deskripsi data, Uji *Rank Spearman* dan Uji *Regresi Linier Berganda*.

Hasil penelitian ini menunjukkan terdapat hubungan yang positif dan signifikan antara kualitas tidur dan kadar HbA1c, dengan nilai koefisien korelasi yaitu $r = 0,506$ dan $p\text{-value} = 0,001$. Selain itu, tingkat stress memiliki hubungan yang positif dan signifikan dengan kadar HbA1c, diperoleh nilai koefisien korelasi yaitu $r = 0,427$ dan $p\text{-value} = 0,007$. Hasil Uji Regresi Linier Berganda menunjukkan terdapat hubungan yang positif dan signifikan antara kualitas tidur dan tingkat stres dengan kadar HbA1c dengan persamaan regresi $Y = -1.508 + 0,39X_1 + 0,33X_2$ dan nilai *adjusted R square* sebesar 0,275.

Kata kunci : diabetes melitus tipe 2, kualitas tidur, tingkat stres

ABSTRACT

Merry Diana: The Relationship between Sleep Quality and Stress Level with HbA1c Levels in Type 2 Diabetes Mellitus Patients at Dr. Pirngadi Medan Regional Hospital. Thesis. Faculty Of Engineering. State University of Medan. 2024.

Diabetes Mellitus is a long-term chronic disease that occurs when there is an increase in blood glucose levels because the body cannot effectively produce the insulin hormone. Blood glucose control in patients with Type 2 DM is measured through HbA1c levels. This study aims to determine the relationship between sleep quality and stress levels with HbA1c levels in patients with Type 2 Diabetes Mellitus at Dr. Pirngadi Hospital Medan.

The research was conducted at Dr. Pirngadi Hospital Medan in the internal medicine department during April to May 2024. This study used a cross-sectional design. The population of this study consisted of Type 2 DM patients at Dr. Pirngadi Hospital Medan. Sampling was done using purposive sampling with a total sample of 39 respondents. Data collection techniques used the Pittsburgh Sleep Quality Index (PSQI) questionnaire and the Perceived Stress Scale-10 (PSS-10) questionnaire. HbA1c levels were obtained from patient medical records. Data analysis techniques included descriptive statistics, Spearman Rank Test, and Multiple Linear Regression Test.

The results of this study show that there is a positive and significant relationship between sleep quality and HbA1c levels, with a correlation coefficient value of $r = 0.506$ and $-value = 0.001$. Apart from that, stress levels have a positive and significant relationship with HbA1c levels, the correlation coefficient values obtained are $r = 0.427$ and $-value = 0.007$. The results of the Multiple Linear Regression Test show that there is a positive and significant relationship between sleep quality and stress levels and HbA1c levels with the regression equation $Y = -1.508 + 0.39X_1 + 0.33X_2$ and an adjusted R square value of 0.275.

Keywords : Type 2 diabetes mellitus, sleep quality, stress