

ABSTRAK

Greace Nadia Areline Purba: Hubungan *Self Care* Dan Kualitas Hidup Dengan Kadar Glukosa Darah Penderita Diabetes Di Wilayah Kerja Puskesmas Matiti Doloksanggul. 2026.

Diabetes melitus adalah suatu kondisi metabolik yang ditandai dengan terganggunya proses pengaturan gula dalam tubuh, sehingga menyebabkan kadar glukosa darah berada di atas nilai normal atau meningkat. Kadar glukosa darah yang tinggi lebih sering dijumpai pada kelompok usia lanjut. Kondisi tersebut terjadi akibat penurunan fungsi tubuh, seperti menurunnya kemampuan pankreas dalam menghasilkan insulin, yang selanjutnya dapat menyebabkan resistensi insulin. Tujuan penelitian ini untuk mengetahui hubungan *self care* dengan kadar glukosa darah pada penderita diabetes melitus, hubungan kualitas hidup dengan kadar glukosa darah pada penderita diabetes melitus serta hubungan *self care* dan kualitas hidup dengan kadar glukosa darah pada penderita diabetes melitus di wilayah kerja Puskesmas Matiti Doloksanggul.

Tempat penelitian dilaksanakan di wilayah kerja Puskesmas Matiti Doloksanggul, Kec. Doloksanggul Kab. Humbang Hasundutan, Sumatera Utara, dan waktu penelitian dilaksanakan dari bulan Oktober 2025 hingga November 2025. Teknik pengambilan sampel secara total *sampling*, dengan jumlah sampel 61 orang. Desain penelitian *cross sectional*. Teknik pengumpulan data *self care* menggunakan *The Summary Diabetes Self Care Activities* (SDSCA), kualitas hidup menggunakan WHOQOL-BREF dan kadar glukosa darah melalui pengukuran kadar glukosa darah menggunakan glukometer. Teknik analisis data menggunakan uji normalitas, uji linearitas, uji kolerasi *pearson product moment* dan uji regresi linear berganda.

Hasil penelitian menunjukkan bahwa sebanyak 29 responden (47,5%) memiliki tingkat *self care* dengan kategori cukup baik. Sebagian besar tingkat kualitas hidup berada pada kategori sedang yaitu 49 responden (80,3%). Sebagian besar kadar glukosa darah pada kategori tinggi berjumlah 55 responden (90,2%). Berdasarkan hasil uji korelasi *pearson product moment* menunjukkan bahwa *self care* memiliki hubungan yang signifikan dan berbanding terbalik dengan kadar glukosa darah penderita diabetes melitus, dengan kekuatan pada tingkat sedang ($p=0,000$, $r= -0,468$). Hasil analisis menunjukkan bahwa kualitas hidup memiliki hubungan yang signifikan dan berbanding terbalik dengan kadar glukosa darah penderita diabetes melitus, dengan kekuatan hubungan pada tingkat sedang ($p=0,000$, $r= -0,436$). Hasil analisis uji regresi linear berganda didapatkan $Y= 508,978 - 1,988(\text{self care}) - 2,082 (\text{kualitas hidup})$ menunjukkan bahwa terdapat hubungan yang negatif dan signifikan antara *self care* dan kualitas hidup dengan kadar glukosa darah penderita diabetes melitus di wilayah kerja Puskesmas Matiti Doloksanggul.

Kata Kunci: *Self Care*, Kualitas Hidup, Kadar Glukosa Darah, Diabetes Melitus

ABSTRACT

Greace Nadia Areline Purba: *The Relationship between Self Care and Quality of Life and Blood Glucose Levels of Diabetics in the Working Area of the Matiti Doloksanggul Health Center. 2026.*

Diabetes mellitus is a metabolic condition characterized by a disruption of the sugar regulation process in the body, causing blood glucose levels to be above normal or increase. High blood glucose levels are more common in the elderly group. This condition occurs due to a decrease in bodily functions, such as a decrease in the ability of the pancreas to produce insulin, which can further lead to insulin resistance. The purpose of this study is to determine the relationship between self-care and blood glucose levels in people with diabetes mellitus, the relationship between quality of life and blood glucose levels in people with diabetes mellitus, and the relationship between self-care and quality of life and blood glucose levels in people with diabetes mellitus in the working area of the Matiti Doloksanggul Health Center.

The research site was carried out in the working area of the Matiti Doloksanggul Health Center, Doloksanggul District, Humbang Hasundutan Regency, North Sumatra, and the research time was carried out from October 2025 to November 2025. The sampling technique was a total of 61 people. Cross sectional research design. Self-care data collection techniques use The Summary Diabetes Self Care Activities (SDSCA), quality of life using WHOQOL-BREF and blood glucose levels through blood glucose level measurement using a glucometer. The data analysis technique used normality test, linearity test, pearson product moment correlation test, and multiple linear regression test.

The results of the study showed that as many as 29 respondents (47.5%) had a level of self-care with a fairly good category. Most of the quality of life levels are in the medium category, namely 49 respondents (80.3%). Most of the blood glucose cadres in the high category amounted to 55 respondents (90.2%). Based on the results of the Pearson Product Moment correlation test, it was shown that self care had a significant and inversely proportional relationship with blood glucose levels in people with diabetes mellitus, with strength at a moderate level ($p=0.000$, $r=-0.468$). The results of the analysis showed that quality of life had a significant and inversely proportional relationship with blood glucose levels in people with diabetes mellitus, with the strength of the relationship at moderate levels ($p=0.000$, $r=-0.436$). The results of the analysis of the multiple linear regression test were obtained $Y = 508.978 - 1.988$ (self care) $- 2.082$ (quality of life) showing that there was a negative and significant relationship between self care and quality of life and blood glucose levels of people with diabetes mellitus in the working area of the Matiti Doloksanggul Health Center.

Keywords: Self Care, Quality of Life, Diabetes Mellitus Blood Glucose Levels