

ABSTRAK

Latar Belakang: Neuropati diabetika merupakan salah satu komplikasi mikrovaskular yang paling sering terjadi pada penderita diabetes melitus dan dapat berujung pada ulserasi kaki maupun amputasi. Risiko terjadinya neuropati diabetika meningkat apabila kadar glikohemoglobin A1c (HbA1c) tidak terkontrol. Oleh karena itu, penelitian ini bertujuan untuk mengetahui hubungan kadar HbA1c dengan kejadian neuropati diabetika pada pasien diabetes melitus tipe 2 di Puskesmas Garuda Kota Bandung tahun 2025.

Metode: Penelitian ini menggunakan desain kuantitatif analitik observasional dengan pendekatan potong lintang. Instrumen penelitian meliputi kuesioner DN4 dan data rekam medis yang memuat kadar HbA1c. Analisis hubungan antara kadar HbA1c dengan kejadian neuropati diabetik dilakukan menggunakan uji korelasi Spearman.

Hasil: Sebanyak 68 responden memenuhi kriteria inklusi, dengan 40 responden (58,8%) diantaranya mengalami neuropati diabetika. Sebagian besar responden dengan neuropati diabetika berda pada kelompok usia ≥ 60 tahun (82,5%), berjenis kelamin perempuan (80,0%), memiliki kadar HbA1c $\geq 7\%$ (53,5%), dan telah menderita diabetes melitus selama ≥ 5 tahun (82,5%). Analisis korelasi Spearman menunjukkan adanya hubungan positif yang signifikan antara kadar HbA1c dan kejadian neuropati diabetika ($p < 0,001$; $r = 0,585$).

Kesimpulan: Terdapat hubungan positif yang signifikan antara kadar HbA1c dengan kejadian neuropati diabetika pada pasien diabetes melitus tipe 2 dengan kekuatan korelasi sedang.

Kata kunci: Diabetes melitus, HbA1c, Neuropati diabetika.

ABSTRACT

Background: Diabetic neuropathy is a common microvascular complication of diabetes mellitus, potentially leading to foot ulceration or amputation. The risk of developing diabetic neuropathy increases when glycated hemoglobin A1c (HbA1c) levels are poorly controlled. Therefore, this study aimed to examine the relationship between HbA1c levels and the incidence of diabetic neuropathy among patients with type 2 diabetes mellitus at Garuda Public Health Center, Bandung City.

Methods: This study employed an observational analytic quantitative design with a cross-sectional approach. The research instruments included the DN4 questionnaire and medical record data containing HbA1c levels. The relationship between HbA1c levels and the incidence of diabetic neuropathy was analyzed using the Spearman correlation test.

Results: A total of 68 respondents met the inclusion criteria, of whom 40 (58.8%) had diabetic neuropathy. Most respondents with diabetic neuropathy were aged ≥ 60 years (82.5%), female (80.0%), had HbA1c levels $\geq 7\%$ (53.5%), and had been diagnosed with diabetes mellitus for ≥ 5 years (82.5%). Spearman's correlation analysis revealed a significant positive correlation between HbA1c levels and the occurrence of diabetic neuropathy ($p < 0.001$; $r = 0.585$).

Conclusion: There was a significant positive correlation between HbA1c levels and the incidence of diabetic neuropathy among patients with type 2 diabetes mellitus, with moderate correlation strength.

Keywords: Diabetes mellitus, HbA1c, Diabetic neuropathy