

ABSTRAK

Pengaruh Senam Kaki Diabetik terhadap Neuropati dan Kadar Glukosa Darah pada Pasien Neuropati yang Menjalani Rawat Jalan di Puskesmas Sukodono Sidoarjo

Rachma Jauharotul Firdausi, Adivtian Ragayasa, Moh. Najib, Adin Mu'afiro

Email: rachmajauharotulfirdausi@gmail.com

Latar Belakang: Neuropati diabetik dan kadar glukosa darah yang tidak terkontrol merupakan masalah utama pada penderita neuropati, sehingga diperlukan intervensi seperti senam kaki diabetik untuk membantu mengurangi gejala neuropati dan menstabilkan kadar glukosa darah. Oleh karena itu, penelitian ini bertujuan untuk menganalisis pengaruh senam kaki diabetik terhadap neuropati dan kadar glukosa darah pada pasien neuropati.

Metode: Penelitian ini menggunakan *one group pretest posttest design*. Sampel pada penelitian ini adalah pasien neuropati yang menjalani rawat jalan di Puskesmas Sukodono Sidoarjo yang berjumlah 25 pasien. Variabel dependen senam kaki diabetik, variabel independen neuropati dan kadar glukosa darah. Alat ukur yang digunakan adalah *Semmes-Weinstein Monofilament* 10g dan glukometer. Analisa data menggunakan *wilcoxon signed-rank test* dengan signifikansi $p < 0,05$.

Hasil: Terdapat pengaruh senam kaki diabetik terhadap neuropati sebelum dan sesudah intervensi ($p = 0,008 < 0,05$) dibuktikan dengan hasil skor neuropati sebelum intervensi, sebagian besar pasien mengalami neuropati ringan (52%), dan setelah intervensi meningkat menjadi hampir seluruhnya mengalami neuropati ringan (76%). Terdapat pengaruh senam kaki diabetik terhadap kadar glukosa darah sebelum dan sesudah intervensi ($p = 0,003 < 0,05$) dibuktikan dengan hasil GDA sebelum intervensi, seluruh pasien (100%) mengalami hiperglikemia, setelah intervensi sebagian besar (64%) pasien dengan hiperglikemia menurun, dan hampir setengahnya (36%) mencapai kadar glukosa darah normal.

Kesimpulan: Adanya pengaruh senam kaki diabetik terhadap neuropati dan kadar glukosa darah pada pasien neuropati. Hasil penelitian menunjukkan bahwa latihan ini dapat meningkatkan sirkulasi darah, mengurangi gejala neuropati, dan membantu mengontrol kadar gula darah. Oleh karena itu, senam kaki diabetik dapat direkomendasikan sebagai terapi pendukung dalam manajemen neuropati diabetik.

Kata Kunci: Senam Kaki Diabetik, Neuropati, Glukosa Darah Acak

ABSTRACT

The Effect of Diabetic Foot Exercise on Neuropathy and Blood Glucose Levels in Neuropathy Patients Undergoing Outpatient Treatment at Sukodono Public Health Center, Sidoarjo

Rachma Jauharotul Firdausi, Adivtian Ragayasa, Moh. Najib, Adin Mu'afiro

Email: rachmajauharotulfirdausi@gmail.com

Background: Diabetic neuropathy and uncontrolled blood glucose levels are major issues for neuropathy patients, necessitating interventions such as diabetic foot exercises to help alleviate neuropathy symptoms and stabilize blood glucose levels. Therefore, this study aims to analyze the effect of diabetic foot exercises on neuropathy and blood glucose levels in neuropathy patients.

Methods: This study employed a one-group pretest-posttest design. The sample consisted of 25 neuropathy patients undergoing outpatient treatment at Sukodono Public Health Center, Sidoarjo. The dependent variable was diabetic foot exercises, while the independent variables were neuropathy and blood glucose levels. The measurement tools used were the Semmes-Weinstein Monofilament 10g and a glucometer. Data analysis was conducted using the Wilcoxon signed-rank test with a significance level of $p < 0.05$.

Results: There was a significant effect of diabetic foot exercises on neuropathy before and after the intervention ($p = 0.008 < 0.05$), as evidenced by neuropathy scores. Before the intervention, the majority of patients experienced mild neuropathy (52%), which increased to almost all patients (76%) after the intervention. Additionally, diabetic foot exercises had a significant effect on blood glucose levels before and after the intervention ($p = 0.003 < 0.05$). Prior to the intervention, all patients (100%) experienced hyperglycemia. After the intervention, hyperglycemia decreased in most patients (64%), and nearly half (36%) achieved normal blood glucose levels.

Conclusion: Diabetic foot exercises have a significant impact on neuropathy and blood glucose levels in neuropathy patients. The findings suggest that these exercises can improve blood circulation, reduce neuropathy symptoms, and help regulate blood sugar levels. Therefore, diabetic foot exercises can be recommended as a supportive therapy in the management of diabetic neuropathy.

Keywords: Diabetic Foot Exercise, Neuropathy, Random Blood Glucose