

PROGRAM STUDI KEPERAWATAN
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**PENGARUH SENAM KAKI DIABETES TERHADAP PERUBAHAN KADAR
GULA DARAH PADA PASIEN DIABETES MELITUS TIPE 2 DI PUSKESMAS
MANGKUBUMI KOTA TASIKMALAYA**

ABSTRAK

Latar Belakang: Diabetes Melitus tipe 2 merupakan penyakit kronis yang ditandai dengan peningkatan kadar glukosa darah akibat gangguan sekresi atau kerja insulin. Salah satu upaya nonfarmakologis yang dapat membantu mengontrol kadar gula darah adalah melalui aktivitas fisik seperti senam kaki diabetes yang dapat meningkatkan sirkulasi darah dan sensitivitas insulin. **Tujuan:** Penelitian ini bertujuan untuk mengetahui pengaruh senam kaki diabetes terhadap perubahan kadar glukosa darah pada pasien DM tipe 2. **Metode:** Penelitian ini menggunakan metode kuantitatif dengan desain *quasi experiment* menggunakan pendekatan *one group pretest–posttest design*. Sampel penelitian berjumlah 30 responden yang dipilih menggunakan teknik *purposive sampling*. Intervensi senam kaki diabetes dilakukan selama 15–30 menit sekali sehari selama 3 hari berturut-turut. Data kadar glukosa darah diukur sebelum dan sesudah intervensi. Analisis data menggunakan uji *Wilcoxon Signed Rank Test*. **Hasil:** Hasil penelitian menunjukkan rata-rata kadar glukosa darah sebelum intervensi sebesar 240,70 mg/dL dan setelah intervensi menurun menjadi 207,30 mg/dL. Hasil uji statistik menunjukkan nilai $Z = -4,783$ dengan $p\text{-value } 0,000$ ($p < 0,05$), yang berarti terdapat pengaruh signifikan senam kaki diabetes terhadap penurunan kadar glukosa darah. **Kesimpulan:** Senam kaki diabetes berpengaruh terhadap penurunan kadar glukosa darah pada pasien DM tipe 2 dan dapat dijadikan sebagai salah satu intervensi nonfarmakologis untuk membantu mengontrol kadar gula darah.

Kata kunci : Diabetes Melitus Tipe 2, Senam Kaki, Kadar Gula Darah

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**THE EFFECT OF DIABETIC FOOT EXERCISE ON CHANGES IN BLOOD
GLUCOSE LEVELS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS AT
MANGKUBUMI PUBLIC HEALTH CENTER, TASIKMALAYA CITY**

ABSTRACT

Background: Type 2 Diabetes Mellitus is a chronic disease characterized by increased blood glucose levels due to impaired insulin secretion or action. One of the non-pharmacological efforts that can help control blood glucose levels is physical activity such as diabetic foot exercises, which can improve blood circulation and increase insulin sensitivity. **Objective:** This study aimed to determine the effect of diabetic foot exercises on changes in blood glucose levels in patients with Type 2 Diabetes Mellitus. **Methods:** This study used a quantitative method with a quasi-experimental design using a one group pretest–posttest approach. The sample consisted of 30 respondents selected using a purposive sampling technique. The diabetic foot exercise intervention was carried out for 15–30 minutes once a day for 3 consecutive days. Blood glucose levels were measured before and after the intervention. Data were analyzed using the Wilcoxon Signed Rank Test. **Results:** The results showed that the average blood glucose level before the intervention was 240.70 mg/dL and decreased to 207.30 mg/dL after the intervention. Statistical analysis showed a Z value of -4.783 with a p-value of 0.000 ($p < 0.05$), indicating that there was a significant effect of diabetic foot exercises on reducing blood glucose levels. **Conclusion:** Diabetic foot exercises have an effect on reducing blood glucose levels in patients with Type 2 Diabetes Mellitus and can be used as a non-pharmacological intervention to help control blood glucose levels.

Keywords: Type 2 Diabetes Mellitus, Diabetic Foot Exercise, Blood Glucose Level