

Universitas Ngudi Waluyo
Program Studi S1 Keperawatan
Skripsi, Maret 2025
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Pengaruh *Walking Exercise* Terhadap Kadar Gula Darah (GDP dan G2PP) Pada Orang Dewasa Yang Mengalami Prediabetes Di Desa Sidorejo Kecamatan Gringsing Kabupaten Batang.

ABSTRAK

Latar Belakang : Kadar gula darah yang tidak seimbang dapat memicu terjadinya kondisi prediabetes dan beresiko berkembang menjadi diabetes mellitus tipe 2 jika tidak ditangani dengan baik. Dengan peningkatan aktifitas fisik *walking exercise* efektif meningkatkan sensitivitas insulin dan menurunkan kadar gula darah, namun efektivitasnya pada kondisi prediabetes masih perlu diteliti lebih lanjut.

Tujuan : Penelitian ini bertujuan untuk mengetahui pengaruh *walking exercise* terhadap kadar gula darah pada orang dewasa dengan prediabetes.

Metode : Desain penelitian menggunakan *Quasi Eksperimental* dengan pendekatan *pretest and posttest with control group design*. Populasi penelitian ini penderita prediabetes di Desa Sidorejo, Kecamatan Gringsing, Kabupaten Batang, berjumlah 46 orang usia 21-55 tahun. Sampel dipilih secara *purposive sampling* dengan total 24 responden yang memenuhi kriteria inklusi, kemudian dibagi menjadi kelompok kontrol dan perlakuan menggunakan teknik *simple random sampling*. Analisa data menggunakan *Independent T-Test*.

Hasil: Analisa *Independent T-Test* menunjukkan rerata kadar gula darah gula darah setelah *walking exercise* kelompok perlakuan GDP (98,3) dan G2PP (133,4), Sedangkan kelompok kontrol tanpa *walking exercise* GDP (111,9) dan G2PP (163,0). Nilai t hitung (4,822 dan 3,573) > t tabel (1,714) serta *p-value* GDP (<0,001) dan G2PP (0,004) yang mana nilai kedua *p value* < α (0,05).

Kesimpulan : Terdapat pengaruh signifikan *walking exercise* terhadap kadar gula darah pada orang dewasa dengan prediabetes di Desa Sidorejo Kecamatan Gringsing Kabupaten Batang dengan *p value* < α (0,05).

Saran : Bagi prediabetes dianjurkan melakukan *walking exercise* untuk mencegah diabetes melitus.

Kata Kunci : *Walking exercise*, Glukosa Darah, Prediabetes, Dewasa

Referensi : 61 (2007-2024)

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Final Project, March 2025

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The Effect of Walking Exercise on Blood Glucose Levels (Fasting Blood Glucose and 2-Hour Postprandial Glucose) in Adults with Prediabetes in Sidorejo Village, Gringsing District, Batang Regency.

ABSTRACT

Background : imbalanced blood sugar levels can trigger prediabetes and may progress to type 2 diabetes mellitus if not properly managed. Increased physical activity, such as walking exercise, is effective in enhancing insulin sensitivity and lowering blood sugar levels. However, its effectiveness in prediabetic conditions still requires further investigation.

Objective : This study aims to determine the effect of walking exercise on blood glucose levels in adults with prediabetes.

Methods : The research design employed a quasi-experimental approach with a pretest and posttest with control group design. The study population consisted of 46 adults aged 21–55 years with prediabetes in Sidorejo Village, Gringsing District, Batang Regency. The sample was selected using purposive sampling, resulting in 24 respondents who met the inclusion criteria. These respondents were then divided into control and intervention groups using simple random sampling techniques. Data Analysis Using Independent T-Test

Results: The Independent T-Test analysis shows the mean blood sugar levels after walking exercise in the treatment group were GDP (98.3) and G2PP (133.4), while the control group without walking exercise had GDP (111.9) and G2PP (163.0). The calculated t-values (4.822 and 3.573) are greater than the t-table value (1.714), and the p-values for GDP (<0.001) and G2PP (0.004) are both less than α (0.05).

Conclusion : There is a significant effect of walking exercise on blood sugar levels in adults with prediabetes in Sidorejo Village, Gringsing Subdistrict, Batang Regency, with a p-value $< \alpha$ (0.05).

Recommendation : Individuals with prediabetes are advised to perform walking exercise to prevent diabetes mellitus.

Keywords : Walking exercise, Blood Glucose, Prediabetes, Adult

Reference : 61 (2007-2024)