

ABSTRACT

THE EFFECT OF ISOMETRIC HANDGRIP EXERCISE ON BLOOD PRESSURE IN ELDERLY PATIENTS WITH HYPERTENSION AT DLANGGU HEALTH CENTER MOJOKERTO REGENCY

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Hypertension is a chronic disease that has the potential to increase the risk of various complications if it is not properly managed. Isometric handgrip exercise is one of the non-pharmacological interventions that has the potential to help reduce blood pressure in patients with hypertension. This study aims to determine the effect of isometric handgrip exercise on blood pressure among older adults with hypertension at Dlanggu Public Health Center, Mojokerto Regency. This study used a pre-experimental design with a one-group pretest-posttest approach. The population consisted of 34 patients with hypertension who actively participated in the Program Pengelolaan Penyakit Kronis (Prolanis) at Dlanggu Public Health Center, Mojokerto Regency. A total of 28 respondents were selected using a purposive sampling technique based on the inclusion criteria. The intervention was conducted for five consecutive days, and blood pressure was measured before and after the intervention. The analysis showed that the p-value for systolic blood pressure was 0.000, while the p-value for diastolic blood pressure was 0.012. Both p-values were lower than $\alpha = 0.05$, indicating that isometric handgrip exercise had a significant effect on blood pressure among older adults with hypertension. The findings indicate that performing isometric handgrip exercise for five consecutive days can help reduce blood pressure in older adults with hypertension. Regular and continuous implementation of isometric handgrip exercise has the potential to improve blood pressure control.

Keywords: blood pressure, elderly, hypertension, isometric handgrip exercise

ABSTRAK

PENGARUH ISOMETRIC HANDGRIP EXERCISE TERHADAP TEKANAN DARAH PADA LANSIA PENDERITA HIPERTENSI DI PUSKESMAS DLANGGU KABUPATEN MOJOKERTO

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Hipertensi merupakan penyakit kronis yang berpotensi meningkatkan risiko berbagai komplikasi apabila tidak ditangani dengan baik. *Isometric handgrip exercise* merupakan salah satu terapi nonfarmakologis yang berpotensi membantu menurunkan tekanan darah pada penderita hipertensi. Penelitian ini bertujuan untuk mengetahui pengaruh *isometric handgrip exercise* terhadap tekanan darah pada lansia penderita hipertensi di Puskesmas Dlanggu Kabupaten Mojokerto. Penelitian ini menggunakan desain *pra-eksperimental* dengan pendekatan *one group pretest-posttest*. Populasi dalam penelitian ini sebanyak 34 penderita hipertensi yang aktif mengikuti program Prolanis di Puskesmas Dlanggu Kabupaten Mojokerto. Sampel sebanyak 28 responden dipilih menggunakan teknik *purposive sampling* berdasarkan kriteria inklusi. Intervensi dilakukan selama 5 hari berturut-turut dengan pengukuran tekanan darah sebelum dan sesudah intervensi. Hasil analisis menunjukkan nilai *p-value* tekanan darah sistolik sebesar 0,000 dan tekanan darah diastolik sebesar 0,012. Nilai *p-value* pada kedua variabel lebih kecil dari $\alpha = 0,05$, sehingga menunjukkan bahwa terdapat pengaruh *isometric handgrip exercise* terhadap tekanan darah pada lansia penderita hipertensi. Penelitian ini menunjukkan bahwa pelaksanaan *isometric handgrip exercise* selama 5 hari berturut-turut dapat membantu menurunkan tekanan darah pada penderita hipertensi. *Isometric handgrip exercise* yang dilakukan secara rutin dan berkelanjutan berpotensi membantu mengontrol tekanan darah secara lebih optimal.

Kata Kunci: hipertensi, *isometric handgrip exercise*, lansia, tekanan darah