

**Program Studi S1 Keperawatan
STIKes MERCUBAKTIJAYA PADANG
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Pengaruh *Isometric Handgrip Exercise* Terhadap Tekanan Darah Pada Penderita Hipertensi Di Kelurahan Andalas Padang

ix + 88 Halaman + 1 Skema + 12 Tabel + 13 Lampiran

ABSTRAK

Batas tekanan darah normal $\leq 130/85$ mmHg, sedangkan $\geq 140/90$ mmHg dinyatakan hipertensi. *Mean Arterial Pressure* (MAP) adalah hasil rata-rata tekanan darah arteri yang dibutuhkan untuk sirkulasi darah sampai ke otak. Tekanan darah yang terus meningkat dalam jangka panjang akan menyebabkan terbentuknya kerak (plak) yang dapat mempersempit pembuluh darah koroner yang merupakan jalur oksigen dan nutrisi (energi) bagi jantung. Salah satu penatalaksanaan yang diberikan pada penderita hipertensi adalah melakukan aktivitas fisik seperti *isometric handgrip exercise*. Tujuan penelitian ini untuk mengetahui pengaruh *isometric handgrip exercise* terhadap tekanan darah pada penderita hipertensi di Kelurahan Andalas Padang. Jenis penelitian ini *pre eksperimen* dengan rancangan *one group pre-test pos-test without control group*. Sampel berjumlah 13 responden dengan teknik pengambilan sampel yaitu *purposive sampling*. Pengolahan data penelitian ini adalah uji *paired sampel t-test*. Hasil penelitian didapatkan rerata MAP sebelum dilakukan intervensi *isometric handgrip exercise* adalah 110,869 dan rerata MAP sesudah intervensi adalah 102,123. Terdapat perbedaan antara nilai rerata MAP tekanan darah sebelum dan sesudah diberikan intervensi *isometric handgrip exercise* dengan *p value* = 0,000 ($p \leq 0,05$), berarti terdapat pengaruh *isometric handgrip exercise* terhadap tekanan darah pada penderita hipertensi di Kelurahan Andalas Padang. Disarankan bagi pelayanan keperawatan untuk memberikan informasi dan intervensi *isometric handgrip exercise* sebagai salah satu terapi non farmakologis dalam menurunkan tekanan darah pada penderita hipertensi.

Kata kunci : Hipertensi, *Isometric handgrip exercise*, *Mean Arterial Pressure* (MAP)

Daftar bacaan : 51 (2000-2022)

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Effect of Isometric Handgrip Exercise on Blood Pressure in Hypertension Patients in Andalas Padang

ix + 88 Pages + 1 Scheme + 12 Tables + 13 Attachment Scheme

ABSTRACT

Normal blood pressure limit $\leq 130/85$ mmHg, while $\geq 140/90$ mmHg is declared hypertension. Mean Arterial Pressure (MAP) is the result of the average arterial blood pressure needed for blood circulation to the brain. Blood pressure that continues to increase in the long term will cause plaque to form which can narrow the coronary arteries which are the pathways for oxygen and nutrients (energy) for the heart. One of the treatments given to people with hypertension is to do physical activity such as isometric handgrip exercise. The purpose of this study was to determine the effect of isometric handgrip exercise on blood pressure in hypertensive patients in Andalas Padang Village. This type of research was pre-experimental with a one-group pre-test post-test design without a control group. The sample is 13 respondents with a sampling technique that is purposive sampling. Processing of research data is paired sample t-test. The results showed that the average MAP before the isometric handgrip exercise intervention was 110.869 and the average MAP after the intervention was 102.123. There is a difference between the mean value of MAP blood pressure before and after being given the isometric handgrip exercise intervention with p value = 0.000 ($p \leq 0.05$), meaning that there is an effect of isometric handgrip exercise on blood pressure in hypertensive patients in Andalas Padang Village. It is recommended for nursing services to provide information and isometric handgrip exercise interventions as a non-pharmacological therapy in lowering blood pressure in hypertensive patients..

Keywords : Hypertension, Isometric handgrip exercise, Mean Arterial Pressure (MAP)

Literature : 51 (2000-2022)