

**PENGARUH *SLOW DEEP BREATHING EXERCISE* (SDBE) TERHADAP
DENYUT NADI ISTIRAHAT DAN FREKUENSI PERNAPASAN
PENDERITA HIPERTENSI DI KELURAHAN ARCAWINANGUN**

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ABSTRAK

Latar Belakang: Prevalensi penderita hipertensi di Indonesia meningkat seiring dengan peningkatan usia. Pemeriksaan tanda-tanda vital seperti denyut nadi istirahat dan Frekuensi pernapasan merupakan parameter morbiditas hipertensi. Salah satu terapi alternatif bagi hipertensi adalah latihan relaksasi pernapasan *slow deep breathing exercise*.

Tujuan: Tujuan penelitian ini adalah mengetahui pengaruh *slow deep breathing exercise* terhadap denyut nadi istirahat dan frekuensi pernapasan penderita hipertensi di Kelurahan Arcawinangun.

Metode: penelitian ini menggunakan metode pre eksperimental dengan *one group pretest posttest* pada 26 penderita hipertensi di Posyandu Lansia Waras Winangun. Pengambilan sampel menggunakan teknik *total sampling*. Partisipan diberi perlakuan latihan pernapasan *slow deep breathing exercise* tiga kali seminggu selama enam minggu. Pengukuran denyut nadi istirahat menggunakan metode palpasi arteri radialis dan frekuensi pernapasan menggunakan metode inspeksi pengembangan dinding dada yang dilaksanakan sebelum dan setelah pemberian intervensi. Analisis data hasil penelitian menggunakan uji non parametrik *wilcoxon*.

Hasil: Hasil penelitian didapatkan bahwa pemberian intervensi *slow deep breathing exercise* memberikan penurunan yang bermakna pada denyut nadi istirahat ($p=0,001$) dengan rerata $89,9231 \pm 16,47525$ kali per menit menjadi $79,1538 \pm 8,23987$ kali per menit. Sedangkan pada frekuensi pernapasan tidak didapatkan penurunan yang bermakna ($p=0,209$) dengan rerata dari $22,9615 \pm 4,06429$ kali per menit menjadi $22,00 \pm 4,30813$ kali per menit.

Kesimpulan: Dapat disimpulkan bahwa pemberian intervensi *slow deep breathing exercise* memengaruhi denyut nadi istirahat dan tidak memengaruhi frekuensi pernapasan penderita hipertensi.

Kata Kunci: denyut nadi istirahat, frekuensi pernapasan, penderita hipertensi, *slow deep breathing exercise*.

EFFECT OF SLOW DEEP BREATHING EXERCISE (SDBE) TO RESTING HEART RATE AND RESPIRATION RATE OF HYPERTENSION PATIENT IN ARCAWINANGUN

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ABSTRACT

Backgrounds: The prevalence of hypertension in Indonesia increases with age. Examination of vital signs such as resting pulse and respiratory rate are parameters of hypertension morbidity. One alternative therapy for hypertension is slow deep breathing exercise.

Aim: The purpose of this study was to determine the effect of slow deep breathing exercise on resting heart rate and respiratory rate of hypertensive patients in Arcawinangun.

Method: The research design used is pre-experimental with one group pretest posttest on 26 hypertensive patients at Posyandu Lansia Waras Winangun. The sampling method used is total sampling technique. Participants were treated with slow deep breathing exercise three times a week for six weeks. Examination of resting heart rate used the radial artery palpation method and respiratory rate examined by observing the expansion of chest wall before and after the intervention of slow deep breathing exercise. Data analysis of the results in this study used the wilcoxon non-parametric test.

Result: The results showed that the intervention of slow deep breathing exercise gave a significant decrease in resting heart rate ($p=0.001$) with a mean of $89.9231 \pm 16,47525$ beats per minute to $79.1538 \pm 8,23987$ beats per minute. While the respiratory rate was not found to decrease significantly ($p=0.209$) with a mean of $22,9615 \pm 4,06429$ breaths per minutes to $22,00 \pm 4,30813$ breaths per minutes.

Conclusion: It can be concluded that the administration of slow deep breathing exercise affected the resting heart rate but did not affect the respiration rate.

Key Words: Hypertension patient, respiration rate, resting heart rate, slow deep breathing exercise.