

ABSTRACT

THE EFFECT OF COMBINATION OF SLOW DEEP BREATHING EXERCISE AND ISOMETRIC HANDGRIP EXERCISE THERAPY TOWARDS REDUCING BLOOD PRESSURE IN HYPERTENSION PATIENTS IN KEBONSARI PUSKESMAS SURABAYA

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Introduction. The group of non-communicable diseases that are very common and easily detected in the community is hypertension. Uncontrolled hypertension or high blood pressure can cause long-term and potentially fatal complications in coronary artery disease, heart failure, stroke, and kidney failure. In addition, sufferers will experience cognitive decline and poor quality of life overall. Thus, there is a need for non-pharmacological therapy to reduce blood pressure in hypertensive patients. The purpose of this study was to determine the effect of the combination therapy of Slow Deep Breathing and Isometric Handgrip Exercise on reducing blood pressure in hypertensive patients at the Kebonsari Public Health Center Surabaya. **Materials & Methods.** This type of research uses a quasi-experimental approach carried out with a two group pre post test approach where the samples used are the intervention group and the control group. The population in this study were all controlled hypertension patients at the Kebonsari Public Health Center Surabaya from April - June as many as 52 patients. The sample size is 46 with non-probability sampling technique with purposive sampling technique. The intervention group was given a combination of Slow Deep Breathing and Isometric Handgrip Exercise therapy for 10-15 minutes and the control group was given standard intervention for 5 days. The variable studied was blood pressure. Analysis using Independent t-test test if normally distributed, if not normal then use Mann-Whitney test to determine the difference between the intervention group and control group with a significance level of <0.05 . **Results.** The results obtained in the analysis of the Wilcoxon Signed Rank Test Systolic blood pressure in the intervention group p value = 0.000 and in the control group p value = 0.036. In the results of diastolic blood pressure in the intervention group, p value = 0.000 and p value = 0.035 in the control group. So that the results showed that there was an effect of the combination therapy of Slow Deep Breathing and Isometric Handgrip Exercise on blood pressure in hypertensive patients at the Kebonsari Health Center Surabaya. **Conclusion.** The combination exercise therapy of Slow Deep Breathing and Isometric Handgrip Exercise can be used as a non-pharmacologic therapy for hypertensive patients, whether taking drugs or not taking drugs.

Keywords: Slow Deep Breathing, Isometric Handgrip Exercise, Blood Pressure and Hypertension