

Effect of Hypertension Exercise and Slow Deep Breathing Combination to Blood Pressure: A Mini Research in Elderly Community

Authors : Prima Khairunisa, Febriana Tri Kusumawati, Endah Luthfiana

Abstract : Background: Hypertension in elderly, caused by cardiovascular system cannot work normally, because the valves thickened and inelastic blood vessels. It causes vasoconstriction of the blood vessels. Hypertension exercise, increase cardiovascular function and the elasticity of the blood vessels. While slow deep breathing helps the body and mind feel relax. Combination both of them will decrease the blood pressure. Objective: To know the effect of hypertension exercise and slow deep breathing combination to blood pressure in elderly. Method: The study conducted with one group pre-post test experimental design. The samples were 10 elderly both male and female in a Village in Semarang, Central Java, Indonesia. The tool was manual sphygmomanometer to measure blood pressure. Result: Based on paired t-test between hypertension exercise and slow deep breathing with systole blood pressure showed sig (2-tailed) was 0.045, while paired t-test between hypertension exercise and slow deep breathing with diastole blood pressure showed sig (2-tailed) was 0,343. The changes of systole blood pressure were 127.5 mmHg, and diastole blood pressure was 80 mmHg. Systole blood pressure decreases significantly because the average of systole blood pressure before implementation was 135-160 mmHg. While diastole blood pressure was not decreased significantly. It was influenced by the average of diastole blood pressure before implementation of hypertension exercise was not too high. It was between 80- 90 mmHg. Conclusion: There was an effect of hypertension exercise and slow deep breathing combination to the blood pressure in elderly after 6 times implementations.

Keywords : hypertension exercise, slow deep breathing, elderly, blood pressure

Conference Title : ICNH 2016 : International Conference on Nursing and Healthcare

Conference Location : Rome, Italy

Conference Dates : September 15-16, 2016