The efficacy of chair-based aerobic exercise with resistance using thera-band in improving the cardiovascular endurance of post-stroke patients in cavity

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Introduction & Aim: Aerobic Exercise refers to an exercise which helps to increase the maximum endurance capacity such as cycling, running, swimming, dancing and even walking. But, since older people perform limited movements, many people in different fields develop programs to enhance the endurance of geriatric patients. One of these is the chair-based aerobic exercise. Chair-based aerobic exercise is designed to elevate the heart rate and keep it elevated for a set period of time. It helps build endurance and strengthen the heart. The purpose of this study is to determine whether Chair-based Aerobic Exercise with resistance training or Chair-based aerobic exercise without resistance training is more effective in improving the cardiovascular endurance of post-stroke geriatric patients in Panapaan II, Bacoor City, Cavite.

Method: The research was conducted with fourteen chronic post-stroke geriatric patients both male and female aged 60-80, and they were divided into two groups named chair-based aerobic exercise with resistance using thera-band (group 1) and chair-based aerobic exercise without resistance (group 2) which consist of marching in place for 5 minutes, bilateral D2 flexion and extension, bilateral D1 flexion and extension 12 repetition for 3 sets and cool down exercises for 10 minutes that lasts for a total of 30 minutes for both groups. Both groups consist of seven participants. The research lasted for four weeks with a total of 12 treatment sessions which the participants were individually visited from the research locale Barangay Panapaan II, Bacoor City, Cavite three times a week. Cardiovascular endurance was measured using 6 minute walk test (6MWT) for pre-test and post-test. Paired t-test was used to get the results with 0.005 level of significance.

Result: The two groups were calculated using paired t-test in determining the significance difference in cardiovascular endurance of both group. Results show that the weighed mean (WM) of group 1 and 2 is 27.72 in the pre-test. The post-test result shows that the group 1 and 2 got also the same WM of 32.64. Group 1 received a t-value of -4.585 and a P-value of 0.004. Since the computed P-value is less than the 0.05 significance level, the null hypothesis is rejected. Group 2 received a t-value of -5.450 and a P-value of 0.002. Since the computed P-value is less than the 0.05 significance level, the null hypothesis is rejected.

Conclusion: According to the data gathered, it has been proven that both chair based aerobic exercise with and without resistance have significant effects in improving the cardiovascular pulmonary endurance of the patients.

Biography
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