International Journal of Healthcare Education & Medical Informatics
CHETPHYSIOCON 2024 Conference
1-June-2024

Effects of E-media Supported Exercise-Based Phase Ii Cardiac Rehabilitation in Coronary Artery Bypass Grafting Surgery Patients: A Randomized Control Trial

Manoj Kumar R[1], T Senthil Kumar[2]

[1]Postgraduate Student, [2]Assistant professor, Faculty of Physiotherapy, Sri Ramachandra Institute of Higher Education and Research, Chennai.

E-mail Id: manojkumarmpt1999@gmail.com

Abstract

Introduction: Coronary artery disease (CAD) involves narrowing blood vessels supplying heart muscles. Coronary artery bypass grafting (CABG) is a common surgery for treating CAD, involving bypassing blocked arteries with harvested veins or arteries.

Methods: 40 subjects were included in the study based on the inclusion and exclusion criteria. The subjects were then randomly assigned to the experimental and control groups. The control group received routine care, including pre-discharge counselling and follow-up as needed/reference. The experimental group received e-media-supported exercise using Videos posted on WhatsApp Channel and through Video calls using Google Meet. The Duration of the Intervention was 3 months.

Results: Statistical analysis was conducted using SPSS 22.0. After 3 months of intervention, the mean distance covered during the 6-Minute Walk Test (6MWT) showed a significant increase in both the control and experimental groups. Specifically, the control group's mean distance improved from 265.25 ± 11.86 meters to 323.25 ± 16.56 meters, while the experimental group's mean distance increased from 264 ± 12.2 meters to 500.5 ± 20.38 meters. The experimental group demonstrated a statistically significant improvement compared to the control group ($p < 0.001$). Furthermore, the experimental group showed significant improvements in the RPE, WHOQOL-BREF, and GPAQ scores compared to the control group, with all p-values < 0.001. The confidence interval for the study was set at 95%, and the significance level was determined at $p = 0.05$.

Conclusion: These findings suggest that e-media-supported rehabilitation can effectively overcome barriers to participation in rehabilitation and provide exercise adherence, offering an alternative for post-surgery cardiac care.