

Validation of Protocol-Guided Phase-I Exercise-Based Cardiac Rehabilitation in Adult Cardiac Surgeries

Raja Shri R¹, Senthil Kumar²

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

E-mail Id: rajashrirajaguru@gmail.com

Abstract

Introduction: Cardiac rehabilitation is a comprehensive program integrating individualised and supervised exercise after cardiac surgeries. This study aims to analyse the need for structured exercise protocol for cardiac rehabilitation after cardiac surgeries by developing a protocol for phase-1 cardiac rehabilitation, validating it with experts, and checking their safety and feasibility in the early phase of cardiac surgeries.

Methods: A literature search was performed, and a pooling of available evidence and existing literature for cardiac rehabilitation was done and developed. The protocol was based on it and validated with a panel of experts. It obtained the reviews of each stage in the protocol. It was applied to the calculated sample size to check for their safety, feasibility, adverse events, and objective measures like functional capacity.

Results: The validation process in round 1, consisting of 5 stages with a sequence of exercises, was given to the panellists. Round 2 consisted of a modified version of questions. The uncertain questions in each round were sent for review before the next round. At the end of the review rounds, three were modified after the round 1 review, and none were excluded after the round 2 review. In round 3, a model exercise program was framed based on a literature search, results from previous rounds, and suggestions from panellists. This was given to panellists who were asked to provide their opinions and views on the framed protocol. From the results of all three rounds, the final framework of the structured exercise program with 5 stages of treatment was framed.

Conclusion: Early involvement of patients in phase 1 of the program will provide a natural liaison for continuing their rehabilitation on an outpatient basis.