

POSTER PRESENTATION PP11

Effects of Bobath-Integrated Motor Relearning Program on Functional Mobility Among Stroke Patients

Mithrra Rathanasamy^{1,2}, Balaji Sivapiragasam², Pradeep Balakrishnan²

¹ Physiotherapy Unit, Hospital Tengku Ampuan Rahimah, Jalan Langat, 41200 Klang, Malaysia.

² Faculty of Allied Science, University of Cyberjaya, 63000 Cyberjaya, Selangor, Malaysia

ABSTRACT

Background and Objectives: Stroke commonly results in impaired functional mobility, affecting sitting, sit-to-stand, and walking ability. Rehabilitation approaches such as the Bobath Approach and Motor Relearning Program (MRP) are widely used to enhance motor recovery. However, limited evidence exists regarding the effectiveness of combining both approaches compared with conventional exercise in improving functional mobility among stroke patients. **This study aimed to determine the effectiveness of a Bobath-integrated Motor Relearning Program compared with conventional exercise in improving functional mobility among stroke patients. Methods:** A true experimental pre-test–post-test design was conducted among 84 stroke patients aged 30–55 years. Participants were allocated into an intervention group (n = 42), receiving a combination of Bobath and MRP, and a control group (n = 42), receiving conventional exercise. Both groups underwent rehabilitation for seven weeks. Functional mobility was measured using the Stroke Rehabilitation Assessment of Movement (STREAM), including Lower Extremity, Basic Mobility, and total STREAM scores. Data were analyzed using independent sample t-tests and one-way analysis of variance (ANOVA). **Results:** Both groups showed improvement. However, the intervention group demonstrated significantly greater gains. Post-test STREAM scores were significantly higher in the intervention group (M = 50.64, SD = 8.00) compared to the control group (M = 36.55, SD = 6.86; $p < 0.001$). Significant differences were also observed in Lower Extremity and Basic Mobility scores. One-way ANOVA revealed highly significant post-test differences across mobility categories ($F = 399.20$, $p < 0.001$), indicating superior effectiveness of the combined intervention. **Conclusion:** The combination of the Bobath Approach and Motor Relearning Program is more effective than conventional exercise in improving functional mobility among stroke patients. Integrating both approaches may enhance overall motor recovery and functional independence in stroke rehabilitation.

Keywords: Bobath Approach; Motor Relearning Program; Conventional Exercise; Functional Mobility; Stroke Rehabilitation; STREAM

Corresponding Author:

Mithrra Rathanasamy

Email: mithrra24@gmail.com