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

The Effectiveness of Retro Walking Gait Performance Among Stroke Patients

Divya K[1], Hariharasudhan[2], Manojabraham[3]

[1] Postgraduate student, [2] Associate professor, [3] Principal, KG College of Physiotherapy, Coimbatore.

E-mail Id: divyakannan3920@gmail.com

Abstract

Introduction: Gait impairment is a common consequence of stroke, significantly affecting patients' independence and quality of life. Traditional gait training often results in an asymmetrical gait pattern. Retro walking has been suggested to engage different muscle groups and motor programs, potentially improving gait symmetry and overall mobility in stroke patients.

Methods: A randomized experimental study was conducted at KG Hospital, Coimbatore. A total of 10 male stroke patients, aged 40-50 years, with left-sided hemiplegic and within six months post-stroke, were selected using random sampling. They were divided into two groups: the experimental group (n=5), which received additional backward walking training, and the control group (n=5), which received standard rehabilitation. Both groups underwent 40-minute training sessions three times a week for six weeks. Outcome measures included gait velocity (10-meter walk test), functional balance (functional reach test), and cadence.

Results: Significant improvements were observed in the experimental group compared to the control group. The experimental group showed a greater increase in gait velocity (mean difference of 19.47 vs .5.36), functional reach (mean difference of 3.93 vs. 1.82), and cadence (mean difference of 14.67 vs. 9.27). Statistical analysis using paired and independent 't-test confirmed the significance of these findings ($p < 0.05$).

Conclusion: The study concludes that backward walking training, in conjunction with conventional rehabilitation, significantly improves gait velocity, functional balance, and cadence in stroke patients. This suggests that incorporating backwards walking into stroke rehabilitation programs can enhance recovery outcomes.

International Journal of Healthcare Education & Medical Informatics (ISSN: 2455-9199)