

Effect of Strategic Targeted Exercise Programme on Balance in Elderly People: An Experimental Study

Gagan Deep Singh, PhD Scholar, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Mararishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

Yogeshwar Bindra, Postgraduate Student, Department of Physiotherapy, T.D.T.R. D.A.V. Institute of Physiotherapy and Rehabilitation, Yamuna Nagar, Haryana, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Gagan Deep Singh,

PhD Scholar, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Mararishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

E-mail: drgagan150@gmail.com

ABSTRACT

Introduction: For older adults, falls and fall-related injuries are frequent and dangerous health issues. For the elderly people of age >65 years, the fifth most common cause of death is unintentional injury. Lack of balance, confidence and fear of falling are reported to have a debilitating effect on mobility and functioning in geriatric people.

Aim: To determine the effect of strategic targeted exercise on balance in elderly people.

Materials and Methods: This experimental study included a total of 50 participants who matched the inclusion criteria from old age home and relatives of patients obtained from T.D.T.R. D.A.V. Institute of Physiotherapy and Rehabilitation, Yamuna Nagar, Haryana, India. The study was of 8 weeks duration and 3 sessions per week. The participants were randomly allotted to an experimental group-

Strategic Targeted Exercise and balance training (n=50) and a control group-balance training alone (n=50). Outcome measures used were the Berg Balance Scale (BBS) and Timed Up and Go (TUG) test. A paired t-test was used to determine significant variations between the pre- and post-test measurements and unpaired t-test was done to determine between group variations.

Results: The average mean of age was found to be 69.04 years. The experimental group and the control group both show notable changes in terms of within group differences. BBS ($p=0.0497$) and TUG ($p=0.0380$) both showed greater improvement in experimental group as compared to control group.

Conclusion: Strategic targeted exercises along with balance exercises showed better outcome in BBS and TUG as compared to balance exercises alone.

Keywords: Balance exercise, Berg Balance Scale, Fall.