Effect of Progressive Step Marching Exercise on Balance Ability in the Elderly: A Cluster Randomized Clinical Trial

Soraya Ismi Nur Azizah[1], Dita Mirawati[2]

SUMMARY

Background: This study highlights that the aging process in the elderly causes a decline in the function of the musculoskeletal system, especially leg muscle strength, which has an impact on balance disorders and an increased risk of falls. This condition can reduce the functional ability and quality of life of the elderly, so that effective, safe, and easy-to-do exercise interventions are needed. One of the exercises that can be used is step marching exercise which involves repetitive movements of the lower extremities to increase muscle strength and postural control. **Purpose**: This study was to determine the effectiveness of step marching exercise in increasing leg muscle strength and reducing the risk of falls in the elderly. **Method**: The method used was using KIE media in the form of a booklet. The booklet was chosen as an educational media tool that has several advantages. The booklet was created by paying attention to the guidelines from Aisyiyah University Surakarta, **the result**: this printed media in the form of a booklet can be distributed directly to physiotherapists, physiotherapy students and the elderly. **Conclusion**: as a promotional, informational and educational media for physiotherapists and the elderly that step marching exercise is an effective, simple and safe exercise to increase leg muscle strength and reduce the risk of falls in the elderly in an effort to improve the quality of life of the elderly

Keywords: Elderly, Step Marching Exercise, cool-down muscle strength, risk of falls, balance