PO-H-17-SUN1 EFFECT OF TASK-ORIENTED TRAINING ON UPPER LIMB FUNCTION IN ADULTS FOLLOWING STROKE - A SYSTEMATIC REVIEW

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Background: According to the World Health Organization (WHO) stroke is one of the three top causes of years of life lost due to premature mortality and is the leading cause of adult disability worldwide. Disability of the upper limb (UL) is one of the most common forms of impairment after stroke and functional limitations are the manifestation of the disability. Rehabilitation, such as physiotherapy, represents the major support of post-stroke health care. Task-oriented training (TOT), as part of the physiotherapy rehabilitation program, seems to be an efficient intervention for these patients.

Purpose: To understand, through a review of the literature, the effect of TOT on UL functionality in adult individuals following stroke.

Methods: A systematic review following PRISMA statement was conducted. Two databases (PubMed and PEDro) were searched within the last 10 years for randomized controlled trials of adults diagnosed with, at least, one stroke and receiving task-oriented training to improve UL function. Three authors independently selected the studies for inclusion, assessed their quality and extracted data to analyze.

Results: From 95 studies identified, 7 were included, with 167 participants, aged between 49 and 70 years. All studies described the interventions in both groups experimental and control. Qualitative analysis showed that all intervention groups performing task-oriented training improved UL function. Best-evidence synthesis found limited evidence based on at least one randomized controlled trial for the efficacy of TOT to improve UL function in the following conditions: TOT and strength training in patients in chronic stage; bilateral training rather than unilateral training; TOT in association with electrical stimulation.

Conclusion(s): The results of this review suggest that TOT may result in a better recovery of UL functionality of adults following stroke. Further research is needed with well-designed studies and larger samples in order to investigate the effect of TOT, alone, on recovery, as well as the amount of training that should be performed.

Key-Words: Physiotherapy, Arm, Cerebrovascular Accident

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