Improvement of upper limb function with balance training and adjunct intervention in stroke

ABSTRACT

Objective The goal of this review was to summarise the most recent research on the benefits of balance training and adjunct intervention for stroke survivors' upper limb function. Methods Using the search phrases "stroke AND balance training AND hand function", PubMed and Scopus databases were used to find relevant articles. Only articles published in English were chosen. Included were published randomised controlled trials between 2012 and 2021 that involved persons with stroke age 18 and above who underwent balance training. Dissertations, case studies, and review articles were not included. Results Out of 232 search results, a total of 27 articles were eligible after detailed screening. Only nine articles were selected for the review. The intervention and control groups each had 141 and 139 participants, respectively. Therapeutic core muscle exercises, adjunct interventions such as virtual reality, action observation, resistance training, and comparisons with combination therapy were among the main types of balance training that were used. FMA-UE and WMFT were the primary outcome measures utilised to evaluate upper limb function. Five of the nine trials that were chosen and used combination therapy demonstrated a noticeable improvement in upper limb function.