EFFECTS OF AQUATIC PROGRAMS IN CHILDREN AND ADOLESCENTS WITH CEREBRAL PALSY: SYSTEMATIC REVIEW

Abstract
Cerebral palsy is the most common cause of serious physical disability in childhood. Inadequate physical fitness is one of the major problems in children with cerebral palsy. Various aquatic activities and exercises can improve fitness levels in children with cerebral palsy. The aim of this paper is the analysis of the studies published from 1990 to 2011, which investigate the effects of aquatic programs in children and adolescents with cerebral palsy. The following research databases have been googled: PubMed, Web of Science, PEDro and Google Scholar. The criteria for acceptance the papers have been as follows: the examinees were children and adolescents with cerebral palsy, the experimental programme was a longitudinal study which involved aquatic exercise programme and the papers were published in English. On the basis of the search databases and the criteria, 13 papers were included in the analysis. The analysis of applied aquatic programs in the analyzed studies indicate that they can have positive effects and impact on improving physical fitness and social behavior in people with CP. Aquatic programs have consisted of different aquatic exercise and aquatic activities, whereas swimming was the most common. Optimal duration of aquatic programs should have been at least 10 weeks, with a frequency as high as three times per week, and a 45-minute single session. A small number of collected papers should be a subject of the further research in terms of aquatic activities, aquatic exercise and cerebral palsy.

Keywords: aquatic activities, influence, effect, physical fitness, cerebral palsy