

Editorial

A Systematic Review And Meta-Analysis Of The Impact Of Physiotherapy On Back Care And The Prevention Of Non-Specific Low Back Pain In Children And Adolescents.

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Since its prevalence among kids and teenagers has grown recently, low back pain (LBP) has emerged as a significant public health issue [1,2]. It should be mentioned that the likelihood of developing LBP in adulthood is increased if it occurs throughout childhood and adolescence [2,4]. Non-specific low back pain (NSLBP) is the most prevalent type of LBP [1]. When LBP first manifests in childhood or adolescence, it can have detrimental effects, including limiting daily living activities, preventing participation in sports and school-related activities, and even leading to instances of absence. Modifying behavior during daily activities that can affect the back [5,6] is another way to promote back care. Some examples include making sure school backpacks are used correctly [9], maintaining consistent posture changes [5], correctly lifting weights from the floor [6], and enhancing sitting and standing postures for extended periods of time [5,6]. The lessons gained can be reinforced by teaching these behavioral adjustments and spreading awareness through physical activities related to back care and postural hygiene [5,6,10]. Clinical studies [11] and meta-analyses [12] have demonstrated the potent preventative impact of exercise and education in adults. An intriguing prospect is to modify this strategy for the younger demographic. The goal of the current study was to measure how preventative physiotherapy interventions affected children's and teenagers' behavior and knowledge regarding back care and NSLBP prevention.

This subject has been addressed in earlier systematic reviews [13] and meta-analyses [14,15], but no meta-analysis encompassing all research published to far has been

carried out. Thus, a thorough and current analysis of how PT affects back treatment in this population is needed. The PICOS strategy—participants, interventions, comparators, outcomes, and study design—was previously used to construct the inclusion and exclusion criteria. Participants under the age of eighteen who did not have spinal pathologies or other pathologies that cause low back pain (LBP) were required to meet the following criteria: (1) the interventions had to be preventive physiotherapy, including education, therapeutic exercise, and physical activity, either alone or in combination; (2) the studies had to compare at least one experimental group with a control group, and the same study could have multiple experimental groups; (4) the results had to measure the participants' knowledge and/or behavior in a pretest and posttest evaluation using the same tool, providing enough statistical information to perform the analyses (sample size, mean, and SD); (5) the studies had to be controlled clinical trials, both randomized and non-randomized, including published and unpublished.

A total of 4107 items were discovered when the search approach described above was applied. 4058 articles were selected after duplicates were removed. A total of 4107 items were discovered after the previously described search approach was applied. Following the removal of duplicates, 4058 articles were selected for review. 121 publications were chosen for in-depth analysis to ascertain whether they satisfied the inclusion requirements following a review of the abstracts and titles. Ultimately, 28 papers were produced after 24 studies were included. A thorough explanation

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of the article selection procedure is given in the flow chart (Figure 1) for analysis. Regarding treatment duration, the experimental groups' durations varied from 1 week [22,47] to 96 weeks [35,36] in terms of weeks. The range of treatment intensity (hours/week) was 0.16 [22,23] to 2.625 [48]. The duration of the entire treatment varied from 0.16 hours [22,23] to 19 hours [32]. All experimental groups, with the exception of one [40], were based on uniform treatments for all participants, and the number of sessions was determined prior to the start of treatment. Just four trials gave patients homework to complete at home as part of their treatment [32,43,44,47]. Regarding external agents, in certain studies, instructors [23,24,30,31,35–37,40,41], family members [23], or both in the same intervention group [32,33] were used as external agents in the treatment. Furthermore, there were a variety of therapists that conducted the treatment, ranging from one [22–25,30,33–39,41,42,44,47,48] to six [40].

This meta-analysis comprised 28 reports from 24 studies with the goal of quantifying the impact of preventative physiotherapy on children's and teenagers' back care knowledge and behavior.

Despite the fact that behavior and knowledge have been the subject of numerous meta-analyses in the past [14,15], not all of the research conducted on this topic has been compiled into a single meta-analysis prior to this study, which is why it is more pertinent.

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