



Effect of 12 weeks of Judo Practice and Ball Games on Neck and Low Back Pain in Children and Adolescents: A Randomized Clinical Trial

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To the Editor: Neck and low back pain (LBP) are conditions of musculoskeletal pain or discomfort in these regions, and are also present in children and adolescents [1]. The information regarding musculoskeletal pain in relation to physical activity has been contrasting. While studies have observed a high prevalence of LBP in adolescents who play sports [2], others have observed that children who played sports in childhood and adolescence were less likely to develop neck and back pain during this age [3]. One of the reasons for these discrepancies may be because some participants are from high-level competitions. This study was done to analyze the effects of 12 wk of practicing Judo and Ball Games (BG) on cervical and LBP in children and adolescents.

This randomized clinical trial (NCT03068000) consisted of 74 participants of both sexes between 6 and 15 y of age. The participants were randomized into two groups (34 in Judo and 40 in BG). To identify neck pain and LBP in the subjects, the Nordic musculoskeletal symptoms questionnaire was used, in addition to the ABEP questionnaire to assess the economic conditions of the participants' families.

The McNemar test in the Judo group and the BG group showed significant reductions, both in the prevalence of neck pain (Judo p -value = 0.039; BG p -value = 0.021) and LBP (Judo p -value = 0.039; BG p -value = 0.039). Furthermore, using the Odds ratio (OR) confidence ratio, both modalities demonstrated that adolescents who reported pain before the intervention are not likely to report pain after the intervention, regardless of the group to which they belonged (Model 1: Neck pain OR = 1.98; p -value = 0.436; Model 2: LBP OR = 1.43; p -value = 0.791; Model 3: Neck pain OR = 2.75; p -value = 0.297, LBP OR = 0.04; p -value = 0.065).

In conclusion, 12 wk of practicing Judo and BG aimed at health, reduced the prevalence of neck and LBP in children and adolescents.

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Declarations

Conflict of Interest None.

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