

Abstract

Title: Most common injuries of the musculoskeletal system among children of elementary school age who engage in gymnastic aerobics, artistic or rhythmic gymnastics at an elite level.

Objectives: Ascertain the occurrence of problems of the musculoskeletal system in the form of a painful conditions and injuries among girls of elementary school age who engage in gymnastic sports at an elite level. Which part of the musculoskeletal system were most prone to injury and if and to what extent does the development of pain or the occurrence of an injury effect the performance level of the gymnasts was also constituent of the objectives as well as how is the started issue addressed from the aspect of physical therapy.

Methods: For the obtainment of data the combination of quality and quantity research was employed, in the form of a structured interview and a questionnaire. The collection of data was devised retrospectively. The research population comprised of 58 girls (average age 13,5 years) who engage in gymnastic sports at an elite level.

Results: A problem with the musculoskeletal system occurred with 98 % of gymnasts during the time of their elementary age. The most susceptible area of the musculoskeletal system turned out to be the lower limbs, specifically knees and ankles. Situations, in which the combination of multiple problems of the musculoskeletal system occurred were more common, then the occurrence of a sole problem. In the correlation with the performance level, gymnasts placing at non-medal positions had a higher percentage of pain occurrence and injuries. The statistic analysis indicated that the occurrence of injuries of non-medal gymnasts is always higher than that of the medal gymnasts. Physical therapy prevention, whether primary or secondary, was practiced among a minimum of the gymnasts.

Keywords: elementary school age, gymnastic, musculoskeletal system, pain and injury, physical therapy prevention