

ABSTRACT

The following bachelor thesis deals with the issue of flat feet in children of younger school age. Nowadays, flat feet happen to be the most common deformity in children which may be diagnosed by using several methods. One of them is the indexing method which counts the size (toes not included) and the width of the foot in the 5th base metatarsus area. Some systems are able to evaluate a specific type of foot using a particular software. This thesis aims to observe one specific type of foot among a selected group of younger school-aged children. Using a pressure platform, this thesis deals with finding out the percentage occurrence of flat feet. The thesis also focuses on the relationship between the prevalence of flatfoot and BMI. In order to collect the data, Footscan (RS Scan, Belgium) was used. The measuring was undertaken by 32 third grade children from an elementary school in Brandýs (N = 32, age = $9,66 \pm 0,68$; weight = $32,55 \pm 8,29$ kg; height = $137,09 \pm 8,05$; BMI = $17,02 \pm 3,58$). The children were divided into three groups according to their foot deformities (natural, flat, high arch). Out of the whole group, there were 13 children (40,6 %) with normal feet, 16 children with flat feet (50 %), and 3 children with a high arch (9,4 %). Thanks to statistical methods, we observed the correlation between the occurrence of flat feet and BMI. We proved that in children with higher BMI flat feet occurred more regularly. Therefore, for the teaching practice in elementary schools, this thesis suggests including compensatory exercises in children of younger school age.

KEYWORDS

children; walking; plantar pressure; foot deformities