POSITIONAL DIFFERENCES IN BODY COMPOSITION AND JUMPING PERFORMANCE AMONG YOUTH ELITE VOLLEYBALL PLAYERS

Abstract

The aim of this study was to examine the positional differences in body composition and jumping performance of elite youth volleyball players. The research was conducted on a youth national team players of Serbia (n=28, average $age=15.68\pm0.47$ years). Players were categorized as middle blockers (n=7), opposite hitters (n=5), outside hitters (n=8), setters (n=6), and liberos (n=2). The middle blockers and the opposite hitters are the tallest (201.57 ± 4.92 cm; 203.00 ± 4.41 cm) and the heaviest (86.14 ± 6.79 kg; 91.60 ± 6.69 kg) players in the team. The smallest values for body height and body weight was found among liberos. The results of % body fat have shown the smallest values among liberos (11.60 ± 3.06) and the greatest among the opposite hitters (14.00 ± 1.64). The results in jumping performance tests have shown similar values for all the positions in the team with no statistically significant difference. Statistically significant difference was found among positions for body height, body weight and standing reach height. It can not be concluded that volleyball players develop distinctive performance characteristics at this age and level. Therefore, more researches must be conducted in order to understand better selection and training process that consider positional roles and demands.

Key words: anthropometric, jumping, spike, block, body mass index