Effect of eight-week plyometrics training in attacking of volleyball

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Volleyball involves key skills of passing, setting, blocking, digging, serving and attacking. Attacking is the offensive action of striking the ball to the ground on the opponent's side to terminate the play. Plyometric or "plyos" is a training modality which involves stretch-shortening cycle of rapid cyclical muscle action to exert maximum force in short interval time, with the goal of increasing power. The aim of this study was to assess the effectiveness of eight-week plyometric training on attacking performance in Volleyball. With the institutional ethics approval, twelve young female volleyball players, age between 20-25, were divided into control (CG, n = 5) and experimental (EG, n = 7) groups. An eight-week training programme comprising three sessions per week was conducted for the both groups. Plyometric training sessions were conducted for the experimental group and usual training sessions were conducted for the control group. All other training was identical between the groups. Pre-test, post-test and control group under true experimental design was used to collect the data by using three tests namely vertical jump test, medicine ball test (overhead), teacher maid test. Data was analysed by using paired t-test in Minitab software. According to the data analysis, p values of the EG and CG of vertical jump test were 0.001 and 0.909, p values of the EG and CG of medicine ball test were -0.058 and 0.824, p values of the EG and CG which used teacher maid test were 0.015 and 0.238. P value of EG all the tests was <0.005. Results indicate that plyometric training significantly improved attacking performance of volleyball players.

Keywords: volleyball, attack, plyometric training