

PP 06 - Relationship between muscle flexibility and involvement in static stretching exercises among badminton players

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Introduction: Good body flexibility is important for badminton players to enhance their performance and engaging in static stretching exercises will help players to improve their flexibility. This study aimed to determine any relationship between flexibilities of shoulders, trunk and hamstring muscles and involvement in static stretching exercises among badminton players from selected schools in the Colombo district.

Methods: A cross sectional study was conducted between May - October 2019 with 100 badminton players (55 males; 45 females) randomly selected from 10 schools in the Colombo district. Shoulder flexibility test, sit & reach test and lateral side bending test were used to measure flexibilities of the shoulders, hamstring muscles and trunk respectively. Interviewer administered questionnaire determined their involvement in static stretching exercises. Ethical clearance was obtained from Faculty of Medicine, Colombo. Data was analysed using independent sample T test, Pearson's correlation test and one-way ANOVA test.

Results: Mean values of shoulders flexibility test and sit & reach test were 31.75cm (male), 34.80cm (female) and 23.84cm (male), 25.73cm (female) respectively. Mean values of lateral side bending test for dominant hand side and non-dominant hand side were 21.31cm (male), 22.51cm (female) and 21.20cm (male), 21.84cm (female) respectively. Majority of players (>90%) performed static stretching exercises during warm-up as well as cool-down periods in practice sessions, but more than half the players held their stretches for 10 seconds or less. Most players (>85%) did only 1 repetition of a particular stretch. There was a significant difference between the dominant hand side trunk lateral flexibility of players who performed only 1 repetition of a stretch and those who performed 2 repetitions during the cool-down period ($p=0.005$).

Conclusion: Encouraging school badminton players to perform static stretching exercises according to the recommended guidelines will contribute to improving their flexibility and thereby enhance their performance.

Keywords: school badminton players, flexibility, static stretching exercises

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