



A comparative study of musculoskeletal imbalances in professional musicians

Poster Presentation

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Abstract

Introduction: Playing a musical instrument at a professional level is physically and mentally challenging. These days, playing the instrument in different groups of society is increasing day by day. Therefore, it seems necessary to pay attention to musculoskeletal imbalances and their consequences in musicians. The aim of this study was to compare musculoskeletal imbalances in different groups of musicians.

Methods: Ninety men and women instrumentalists, including 26 wood wind players (age: 28.46 ± 4.62 years, BMI: 26.59 ± 2.11 kg/m², history: 7.88 ± 3.80 years), 37 string players (age 28.18 ± 7 years, BMI: 24.92 ± 3.60 kg/m², history: 8.24 ± 6.30 years), and 27 percussionists (age: 31.88 ± 6.6 years, BMI: 24.95 ± 3.32 kg/m², history: 9.22 ± 6.27 years) were selected to participate in this study. Abnormalities of kyphosis, lordosis, scoliosis, forward head, torticollis, uneven shoulder and lateral shoulder slip test were assessed. The ANOVA, Scheffe and Kruskal-Wallis statistical tests were performed in SPSS version 23 with a significance level of 0.05.

Results: The results of this study did not show a significant difference between the degree of musculoskeletal imbalances of kyphosis, lordosis, torticollis, scapular lateral slip test at 0 degree between the study groups ($p > 0.05$). Results in musculoskeletal imbalances of scoliosis ($p = 0.001$), forearm ($p = 0.001$), uneven shoulder ($p = 0.001$), lateral shoulder slip test at 45° ($p = 0.006$) and lateral shoulder slip test at a 90° ($p = 0.030$) showed a significant difference between the groups ($p < 0.05$).

Conclusion: According to the results, some musculoskeletal imbalances in the group of woodwind instrumentalists showed a higher intensity and prevalence. These variabilities between different groups of musicians indicate different physical needs and postures to play different instruments.

Keywords

Musicians; Musculoskeletal Imbalances; Epidemiology

Reference:

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