## The investigation of relationship between work-related musculoskeletal disorders and level of physical activity and body posture of dentists in Mashhad city in 2012-2013

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## **Abstract**

**Background & aims:** The aim of this study is to determine the relationship between work–Related musculoskeletal disorders and level of physical activity and body posture of dentists in Mashhad.

**Methods:** The standardized Nordic questionnaire was used to record the history of musculoskeletal disorders cases. Also imaging and scoring were done using RULA method to determine the final score of people adopted posture during the work. To analyze data, Pearson correlation test was used to identify the relationship between variables.

**Results:** The findings of this study showed that in the past year, more than 90 percent of dentists had discomfort at least at one part of their bodies. 56.3% of complaints were related to neck and shoulder pain. The results of RULA technique showed that 94% of dentists are above average risk range that 60% of the dentists required definite ergonomic measures and 34% of them required essential ergonomic measures. Moreover, there was a significant negative relationship between physical activity and Musculoskeletal disorders (r = -0.79).

**Conclusion:** To prevent musculoskeletal disorders, it is necessary to recognize the unsafe positions, applying suitable ergonomic tools, and introducing specific sports to overcome stressful situation.

Keywords: Musculoskeletal disorders, Body Posture, Physical activity, Dentists