

Occupational Health 2015 - The assessment of upper extremity musculoskeletal disorders and posture problems caused by occupational hazard on dental students - Kapucu B - Yeditepe University, Turkey

Kapucu B

Abstract

The purpose of the study was to find out the prevalence of musculoskeletal problems, pain and posture problems among dental students and also the impact of clinic hours and physical activity practice. The study was conducted in Yeditepe University, Dentistry Faculty during April 2014- May 2014. The study included 30 randomly selected student who are in 3rd (n=6), 4th (n=18) and 5th (n=6) degree in Yeditepe University Dentistry (n=30; 20F & 10M) and age is 23.33 ± 0.95 year, weight 75.50 ± 13.2 kg, height 171.2 ± 4.87 cm, BMI 23.89 ± 2.08 kg/m². Participants were involved to the study on a voluntary basis. In our study a specially prepared questionnaire was used to analyze sociodemographic features of students. It was questioned not only sociodemographic features but also physical activity habits and total clinical hours including while sitting. For physical assessment, universal goniometer was utilized to evaluate range of motion of shoulder internal/external rotation, Jtech Commander TM Grip Electronic. Dynamometer was used to assess hand grip muscle force and J-Tech Commander TM Pinch Track was utilized to assess pinch force. Furthermore, the Turkish Version of Cornell Musculoskeletal Discomfort Questionnaire (CMDQ) was used to assess musculoskeletal pain frequencies and severities in several body regions. Neck Disability Index was used to determine that how the neck pain intensity affect the daily living activities. Student's postural states were assessed

by New York Posture State Test and all datas were analyzed by Statistical Package for Social Sciences" (SPSS) Version 21.0. In our study, when the questionnaires and assessment were examined according to gender, it was not seen that there was not a significant difference between males and females ($p < 0.05$). The results of CMDQ scores showed that the highest core among dentistry students was neck & shoulder region with 21.23 ± 44.30 average scores. At the same time, it was examined that the highest score of New York Posture State Test was posterior view of shoulders with 3.11 ± 1.00 average scores. It was not seen a correlation between physical activity habits, the sitting clinical hours and Cornell Musculoskeletal Discomfort Questionnaire and New York State Posture Rating Test. ($p > 0.05$). However, there was a significant correlation between Neck Disability Index and Cornell Musculoskeletal Discomfort Questionnaire ($p < 0.05$). Additionally, there was a significant correlation between CMDQ neck & shoulder scores and CMDQ upper & lower back scores.

Bottom Note: This work is partly presented at Joint Meeting on 4th International Conference and Exhibition on Occupational Health & Safety August 24-25, 2015 Toronto, Canada

Kapucu B

Yeditepe University, Turkey E-mail: burcu.kapucu@windowslive.com