Risk Factors of Work-Related Musculoskeletal Disorders among Computer Users Post-COVID-19 Pandemic at Al-Baha University

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ABSTRACT

Background: Due to the worldwide lockdowns brought on by the Covid-19 epidemic, a natural increase in the use of digital technologies has occurred, leading to an increase in musculoskeletal disorders among computer users.

Aims: This study aimed to investigate the risk factors for work-related musculoskeletal disorders (WMSD) among computer users' post-COVID-19 pandemic at Al-Baha University.

Methods: A cross-sectional study design was utilized; three hundred computer users participated in the study selected by simple random sampling at Al-Baha University for 4 months. Data was obtained by modified standardized Nordic Musculoskeletal Questionnaire, posture observation checklist, and workstation observation checklist, and analyzed by SPSS 20.

Results: In the prevalence of WMSD among the respondents; the uppermost prevalence rate of WMSDs symptoms in the last 12 months was related to the neck (62.7%), lower back (59%), upper back (55.3%), right shoulder (46%), and right wrist (45.3%). In total preventive ergonomic practices scored workstation design 70%, and 63.3% respectively of the participants scored poorly. Multivariate and univariate regression models showed that female participants were 2.189 times more likely to develop WMSDs than male participants [OR=2.189, 95% CI 1.063 – 4.507]. Older age was 1.685 times more likely to develop WMSDs than younger age [OR=1.308, 95% CI 1.193 – 1.434].

Conclusion: The highest regions of the body that experienced work musculoskeletal disorders post-COVID-19 pandemic were the neck ,lower back, upper back, and right shoulder. Being female, older age, and years of working as a computer user were predictor factors of developing WMSDs. Respondents who have good preventive ergonomic practices and workstation adjustment were less likely to develop WMSDs.

Keywords: Computer users, WMSDs, Ergonomics, Risk factors, Workstation adjustment, Post COVID 19

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