The Impacts of Improper Body Posture on Office Workers’ Health: Analysis and Prevention of Chronic Injuries

Hani H. Al-Nakhli
Chief Dietitian, Noor Hospital, India

Increasing rates of musculoskeletal disorders among the working community have been encountered. These health-related complications are considered to be amongst the leading causes of disability, and limitation of motion within modern office workers. Many of these disorders are commonly caused by improperly accommodated or designed workplaces. However, office caused injuries have not yet received the required attention in the Middle Eastern working community. The purpose of this study was to detect and prevent office related injuries by investigating their associations with improper workstation ergonomics. The study was conducted within the framework of studying the current situation of office ergonomics with focus on sitting postures. The study employed a thirty-item questionnaire distributed to more than one thousand randomly selected workers. This questionnaire was developed to better study the personal demographics, medical information, muscular pain, physical therapy history, workstation ergonomics, and sitting practices of the participants. The continuation of the data collection process was performed by conducting two randomized crossover trials (within-subjects) consisting of twenty-four individuals. This trial hypothesized significant variations of the subjects’ heart rates and blood pressures in accordance with different postures and workloads. Sitting posture was found to have significant effects on the studied vital signs. The results also indicated that approximately 78% of the participants experienced some sort of muscular pain, however more than 65% of them never visited a physical therapy clinic. The study also showed that 74% of the total number of participants were either supplied with ergonomically inconvenient workstations, or were not occupying their workstations correctly. Raising the awareness of the population regarding the importance of workplace ergonomics is a must; after highlighting the risks of improper sitting postures, and lack of treatment.