

Musculoskeletal health issues related to computer ergonomics in Library paraprofessional staff: A case study at the University of Colombo Library

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Penetration of computers to the Libraries have changed the traditional work of library paraprofessionals, forcing them to work long hours in front of the computer. Improper use of computers for a prolonged period of time increases the risk of adverse health effects. Computer ergonomics were given a major concern as patients suffering from musculoskeletal conditions have increased globally over the past decades. Although in the European countries numerous studies have been carried out on ergonomic health issues especially on musculoskeletal discomforts, in the Sri Lankan university library context there is a dearth of studies on computer ergonomic health issues. The present study attempts to identify health related issues pertaining to musculoskeletal conditions of the library paraprofessionals related to use of computers at the Library of the University of Colombo and to provide recommendations to improve the working environment. The population consisted of 42 Library paraprofessionals. Krejcie and Morgan's (1970) recommendations were adopted to maintain the sample size, which was 38 and stratified random sampling technique was used to draw the sample. A questionnaire was administered to collect data and was descriptively analysed using SPSS (23). According to the findings, pain in the neck (53.33%), pain in the wrist (46.67%), shoulder pain (43.33%) and upper back pain (43.33%) are the main musculoskeletal discomforts, whereas pain in the elbow (20%) is identified as the least experienced discomfort. The respondents (70%) are aware of the correct sitting posture while working on the computer and 46.67% are changing the distance between the monitor and the seat frequently which negates the recommended workstation practices. The wrist/palm support is not available for 53.33%, whereas 73.33% lack of foot rest. Chi-Square test proved that there is a significant relationship between pain in the neck and height of the computer desk ($P=0.038$), whereas upper back pain revealed a significant relationship between height of the computer desk ($P=0.037$) and distance of the keyboard ($P=0.037$). Furthermore, height and distance of the keyboard have a significant relationship with pain in lower back ($P=0.001$), muscle ($P=0.02$), fingers ($P=0.04$) and lower arm ($P=0.04$). To reduce health problems Library management should organise workstation ergonomic training sessions to paraprofessional staff to provide knowledge and skills to optimise their workstation configuration and provide ergonomically safe working equipment.

Keywords: *computer ergonomics, library paraprofessional, musculoskeletal discomfort*