

Salomeh Shajari (BSc) has been involved with the studies of injuries among healthcare workers and patients and evaluation of various injury prevention programs both as a statistician and a research assistant at BC Women and Children Hospital and Occupational Health and Safety Agency for Healthcare in BC.

Study of recurrent work-related musculoskeletal injuries among healthcare workers

Salomeh Shajari, Shicheng Yu, Hasanat Alamgir

Objective: To study recurrent work-related musculoskeletal injuries among a well-defined cohort of healthcare workers and to explore the association of the probability of sustaining a second MSI with demographic and workplace characteristics.

Methods: A cohort of healthcare workers (HCW) who worked in a large health region of British Columbia was identified for this study. The employees who had not had a musculoskeletal injury during the time period 1/1/2005-31/12/2005 and were hired prior to Jan 1, 2005 were included in this study. The incidences of MSI occurring during the time period 1/1/2006-31/12/2006 (first surveillance year) were recorded as the first MSI, a second incidence of MSI was recorded if an employee had a musculoskeletal injury within a year of developing the first MSI (inter-injury interval). These observations were made up to the end of 2007 (second surveillance year). The incident rates of first and second MSI (per 100 employees), as well as 95% Confidence Intervals and the relative risk of developing second MSI are provided for the following characteristics: occupation, age, and sub-sector.

Results: A total of 735 MSIs occurred in 2006 out of 17,416 employees (4.2%), 110 of the HCWs with first MSI developed a second MSI within a year of the first MSI (15%). Health services assistants, licensed practical nurses, and facility support services employees, employees in the 17- 29 and 30-39 age groups, and employees working at acute care and community care sub-sectors had the highest relative risk of developing a second MSI.

Conclusion: An MSI incident can cause major work disruptions. This study helps identify the groups at high-risk of sustaining a second MSI as to guide the focus of MSI preventative methods and help reduce the reoccurrence of MSIs among healthcare workers.