Predictors of musculoskeletal disorders among public elderly care home workers in west coast Malaysia

ABSTRACT

Background: Work related musculoskeletal disorders (WMSD) among elderly care home workers is related to the type of movement and work environment. Frequency and burden of manual handling while assisting elderly residents and domestic tasks contributed to the MSD symptoms over several body parts such as neck, shoulder, forearm, hand, lower back leg and foot. The objectives of this study are to determine the prevalence of MSD among elderly care home worker, associated factors and predictors contribute to MSD symptoms among the workers.

Materials and Methods: A cross sectional study was conducted in eight elderly care home in West Coast Malaysia from February until July 2016. Eight elderly care home was selected. A total of 252 workers were randomly selected based on simple random sampling method. Validated and reliable self-administered questionnaire was used. The dependent variable was worker with MSD symptoms and independent variable were socio demographic factors organizational and factors ergonomic factors. Analysis was done using SPSS Version 22. Chi-square test and logistic regression was used for analysis.

Result: Based on respondents report, prevalence rate of WMSD in the previous 12 months was 50%. Prevalence rate was highest at lower back (33.8%). Twenty three percent (23%) of them needed to get treatment and 15.3% needed to take sick leave due to MSD. Highest prevalence rate of WMSD was among female (56.9%) and assistant nurse (55.6%). The predictors for WMSD were female (AOR=2.0, 95% CI=1.1-3.6) and burden of manual task (AOR=2.2, 95% CI=1.3-4.0).

Conclusion: The prevalence of WMSD was high among the female workers and assistant nurses. Burden of manual handling tasks was an important factor associated with MSD. Hence ergonomic intervention is important to reduce prevalence of WMSD among the workers.

Keyword: Work related musculoskeletal disorders; Elderly care home workers; Physical demand tasks