

RESEARCH COLLOQUIUM SERIES 1/2023

Work Related Musculoskeletal Disorders Among Healthcare Workers In Hospital Pengajar Universiti Putra Malaysia (HPUPM): The Prevalence And Association Factors

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BACKGROUND

In Malaysia, the number of reported occupational health disease cases increases every year. Almost a third of all cases of sick leaves among healthcare professionals are reported to be linked to work related musculoskeletal disorder (WMSDs). Physical factors such as non ergonomic workplace, involvement in manual handling tasks, heavy lifting and other strenuous tasks are the risk factors. The long working hours and the need to attend to many patients at one time together with working uncomfortable positions are also known risk factors among the healthcare workers. Thus, this study aimed To determine the prevalence of WMSDs and its association with age group, gender, working experience and nature of job among health care workers in HPUPM.

METHOD

A cross sectional study was conducted among health care workers in HPUPM, Serdang, Selangor. A self-administered online questionnaire containing three sections which include sociodemographic factors, musculoskeletal disorders and the risk factors and effects of musculoskeletal disorder was distributed in April 2021. We divided the healthcare workers into three categories based on their nature of job. Group 1 consists of doctors and medical lecturers Group 2 consisting of nurses, medical attendants, therapists and medical assistants; and Group 3 consisting of pharmacists, radiographers and laboratory assistants.

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RESULTS

There were 167 responses received, but only 145 (96.67%) were in the inclusion criteria. Most of the respondents were from the age groups of 20-30 years old with 77 out of 145 (53.1%). Majority were female, 95 out of 145 (65.5%) and most of the respondents fall under group 2 with 81 responses out of 145 (55.9%). Most of the respondents had working experiences of less than 5 years which is 79 out of 145 (54.5%). Majority had an ideal BMI with a frequency of 57 out of 145 (39.3%).

Out of 145 respondents, 94 of them (64.83%) of them experienced musculoskeletal disorders (MSDs) in the past 12 months. Out of the 94 respondents who have musculoskeletal disorder, 35 respondents have a single part of the body region affected while 59 respondents have multiple body regions affected by MSDs. Among the 94 respondents, the most common body region affected by musculoskeletal disorders (MSDs) is the back region with frequency at 58 respondents out of 94 (61.7%) followed by shoulder 31 (33%), ankle and foot 26 (27.7%), neck region 25 (26.6%) knees (22.3%), wrist and hand 18 (19.1%), hip and thigh 12 (12.8%) and elbow 7 (7.4%).

Among 94 respondents, 60 respondents (62.8%) claimed to have work-related musculoskeletal disorders (WMSDs). The most common physical risk factors that lead to musculoskeletal disorder are "working in the same position for a long period of time" 44 (46.8%), followed by "lifting / transferring dependent patients" 43 (45.7%), "not enough rest / break during working" 36 (38.3%) and "carrying / lifting heavy equipment" 34 (36.2%). Out of 60 healthcare workers, 44 (73.3%) claimed that their works are affected by WMSDs with only 8 (13.3%) of them receiving treatment. However, most of them (44, 73.3%) do not need a medical certificate.

Among the respondents who were experiencing WMSDs, most of them are in the age range of 20-30 years (41.6%), female (43.3%), those with years of experience of less than 5 years (38%) and healthcare workers in Group 2 (43.2%). Fisher Exact Test was used to determine the association between WMSDs with age and years of working experience. The association between WMSDs with gender and nature of job on the other hand were determined by using Chi Square Test. However, after using these tests, there was no statistically significant association between WMSDs and the associated factors

CONCLUSION

The prevalence of WMSDs is the highest in healthcare workers with the age range of 20-30 years old with prevalence of 53.3% and in female healthcare workers at 68.3%. The workers with years of experience of 1-5 years old with prevalence of 50% are more susceptible to developing WMSDs. The occurrence of WMSDs is higher in group 2 which consists of the medical assistants, staff nurses, attendants, therapists with prevalence of 58.3%. There is no significant association between age, gender, year of experience and nature of job with WMSDs. Among the respondents who are experiencing WMSDs, it is found that the back region is the most common region of WMSDs among healthcare workers in HPUPM with the prevalence of 61.7%. Ergonomic programmes on prevention and coping strategies for musculoskeletal disorders are recommended for healthcare workers in order to reduce the rate of occupational hazards and also promote efficiency in patient care.