

## **Musculoskeletal discomfort (msd) among firefighters: An exploratory investigation in Kota Kinabalu, Sabah**

### **ABSTRACT**

Previous studies have associated musculoskeletal discomfort (MSD) with decreased productivity at the workplace and affected workers in various occupations. Evidence suggests a multi-factorial nature of MSD in terms of its development and exacerbation including physical, psychosocial, and individual factors. In addition, studies in both developed and developing countries also differ concerning the prevalence rate of MSD across countries. Hence, the present study aimed to examine the prevalence rate of MSD among female office workers in public organizations. A questionnaire survey was distributed to four fire stations in Kota Kinabalu Zone in Sabah and 130 firefighters participated in the study. The questionnaire consists of demographical aspects, task characteristics, physical demands, mental health, and musculoskeletal discomfort (MSD) levels. The 6 months MSD prevalence was 32.3% (95%CI = 30.9%-35.3%). The majority of the firefighters experienced MSD moderately in various body regions - lower extremity (14.6%), neck/shoulder (16.9%), hand/fingers (17.7%), arms (17.7%), and lower back (20%). The results reported the experience of firefighters with MSD highlighted the need to develop MSD risk management at the workplace. In addition, further examination of MSD among firefighters in Malaysia should be conducted to minimise MSD in the workplace.