

Prevalence and contributing factors of musculoskeletal discomfort among operation theatre nurses in the National Hospital, Sri Lanka

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Musculoskeletal discomfort is highly prevalent among nurses, especially those working in the operating theatres, who are exposed to prolonged standing, awkward static postures, repetitive tasks, handling patients and equipment, all of which contribute to the development of musculoskeletal discomfort. This study aimed to assess the prevalence of musculoskeletal discomfort and identify key occupational and demographic factors among theatre nurses at the National Hospital of Sri Lanka. A cross-sectional descriptive study was conducted among 153 theatre nurses using the standardized Nordic musculoskeletal questionnaire and a structured demographic questionnaire. Descriptive statistics were used to calculate the prevalence, and contributing factors were examined using the chi-square test and the Mann-Whitney test. The sample consisted of 140 females (91.5%) and 13 males (8.5%). The majority of the theatre nurses (43.15%) were aged between 21 and 30 years. The prevalence of MSD was considerably high, with 80.4% of participants reporting discomfort in two or more joints. The most affected areas were the lower back (64.1%), the ankles (56.9%), the knees (52.3%), and the right shoulder (41.8%). Significant associations were found between continuous working hours and ankle ($p=0.029$) and knee discomfort ($p=0.0000$). Age was significantly associated with the right shoulder ($p=0.006$). The study revealed a high prevalence of musculoskeletal discomfort among theatre nurses. Prolonged working hours and age were identified as key contributing factors. These findings highlight the urgent need for ergonomics interventions and schedule adjustments to reduce musculoskeletal discomfort risk in the theatre nurses and workforce.

Keywords: *Musculoskeletal discomfort, Theatre nurses, Prevalence, Contributing factors*