POSTER PRESENTATION
PP6

Work-Related Musculoskeletal Disorders and Levels of Ergonomic Awareness Among Healthcare Professionals: A Scoping Review

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ABSTRACT

Background and objective: Work-related musculoskeletal disorders (WMSDs) are an occupational health concern among healthcare professionals. Although ergonomic awareness supports prevention, its measurement and application remain inconsistent. This scoping review mapped evidence on WMSD prevalence and patterns, levels of ergonomic awareness, workplace risk factors, ergonomic interventions, and associations between awareness and WMSDs among healthcare professionals. **Methods:** Following JBI methodology and PRISMA-ScR, PubMed, the Cochrane Library, and Embase were searched to August 2025. Eligible peer-reviewed studies involved healthcare professionals and reported WMSDs, ergonomic awareness or practices, or ergonomic interventions. Findings were synthesised descriptively and thematically. **Results:** Thirty-two studies were included. WMSD prevalence estimates ranged from 31.6% to 91.9%, although heterogeneity in populations, recall periods, definitions, and measurement methods limited comparison. The lower back, neck, shoulders, and upper limbs were commonly affected. Reported factors included awkward postures, repetitive movements, prolonged standing or static postures, patient handling, high workload, and poor workstation design. Ergonomic awareness was assessed inconsistently and in a minority of studies. Evidence directly linking awareness with WMSD outcomes was limited and inconclusive, indicating a gap between knowledge and sustained practice. Education, posture training, exercise, equipment adjustment, and workplace modification were associated with reported improvements, but long-term sustainability remained uncertain. **Conclusion:** WMSDs represent an occupational burden across healthcare professions. Awareness alone appears insufficient when workplace and organisational constraints limit its application. Integrated strategies combining education, workplace modification, equipment, organisational support, and reinforcement are needed. Research should use standardised awareness measures, stronger designs, diverse samples, and longer follow-up.

Keywords: work-related musculoskeletal disorders; ergonomic awareness; healthcare professionals; occupational health; workplace ergonomics; scoping review.

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