

## THE 4TH MULAWARMAN INTERNATIONAL CONFERENCE ON TROPICAL PUBLIC HEALTH (MICTOPH) 2025



## **ABSTRACT**

Title of Abstract : Protecting Nurses from Musculoskeletal Disorders: A Decade Review

of Ergonomic Practices

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Background: Nursing is a physically demanding profession, exposing nurses to high risks of work-related musculoskeletal disorders (MSDs). Ergonomic interventions are considered essential for preventing these disorders and improving occupational health.

Objective: This literature review aims to examine the role of ergonomics in nursing practice and evaluate its effectiveness in reducing MSD prevalence, improving posture, reducing fatigue, and enhancing job performance.

Research Methods/ Implementation Methods: A narrative literature review was conducted on 10 peer-reviewed articles published between 2015 and 2025, focusing on ergonomic interventions for nurses in hospital and clinical settings. Data on study objectives, interventions, outcomes, and key findings were extracted and synthesized narratively.

Results: The reviewed studies consistently show that ergonomic interventions, including educational programs, posture regulation training, participatory ergonomics, assistive devices, and multifaceted workplace strategies, effectively reduce MSD risks, improve posture, decrease fatigue, and enhance work performance. However, hospital-level policies alone, such as safe patient handling legislation, did not always lead to improved nurse-level outcomes, highlighting a gap between policy, equipment availability, and actual practice.

Conclusion/Lesson Learned: Ergonomic strategies are crucial for protecting nurses from MSDs and improving occupational health. Effective interventions combine knowledge, practical application, continuous training, and supportive organizational policies to bridge the gap between institutional programs and daily nursing practices, ultimately promoting safer, healthier, and more productive work environments.

Keyword: Ergonomics: musculoskeletal disorders: nurses: occupational health