

PLENARIES

PLENARY 15: Ergonomic Risk Assessment by Physiotherapists in the Workplace: A Preventive Approach

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Workplace ergonomic risks arising from awkward postures, sustained or static postures, forceful exertion, and repetitive tasks can contribute to musculoskeletal disorders and reduced work performance. Physiotherapists, with expertise in human anatomy, biomechanics, kinesiology and functional movement, are well positioned to contribute to workplace ergonomic risk prevention.

This initiative aimed to establish a systematic ergonomic risk assessment approach led by physiotherapists to identify workplace risk factors and facilitate appropriate preventive interventions.

An Initial Ergonomic Risk Assessment was conducted to identify ergonomic hazards associated with awkward posture, sustained or static posture, forceful exertion involving lifting, carrying, pushing and pulling and repetitive tasks. Where the initial assessment indicated risk scores exceeding the established thresholds, an Advanced Ergonomic Risk Assessment was conducted using validated assessment tools, including the Rapid Upper Limb Assessment (RULA), Rapid Entire Body Assessment (REBA), Rapid Office Strain Assessment (ROSA), Manual Handling Assessment Charts (MAC), Risk Assessment of Pushing and Pulling (RAPP) and Assessment Repetitive Task (ART). Based on the assessment findings, physiotherapists recommended appropriate measures according to the hierarchy of controls, including elimination, substitution, isolation, engineering controls, administrative controls and personal protective equipment.

Physiotherapist-led ergonomic risk assessment provides a structured and preventive approach to identifying and managing workplace ergonomic hazards. Integrating physiotherapists' expertise in movement science with systematic ergonomic assessment may support early risk identification, targeted workplace interventions and reduction of work-related musculoskeletal risks. This approach highlights the important role of physiotherapists in promoting safer, healthier and more sustainable workplaces.