

Systematic scoping review of occupation health injuries and illnesses among Indigenous workers.

Dr Brett Shannon MBBS, MAE 1,2,3, Dr Warren Jennings MBBS 1, 4 and Dr Lee Friedman PhD 2

1. School of Medicine, The University of Queensland, Herston, QLD, Australia
2. Environmental and Occupational Health Sciences, School of Public Health, University of Illinois – Chicago, Illinois, USA
3. LIME Medicolegal and Phoenix Occupational Medicine, Level 15, 100 Edward St, Brisbane City, QLD, Australia
4. Southern Queensland Centre of Excellence in Aboriginal and Torres Strait Islander Primary Health Care, Queensland

Background: Injury is a leading cause of excess morbidity and mortality globally. Disparities between injury rates experienced by Indigenous populations and non-Indigenous populations have been well documented internationally, particularly in Australia, New Zealand, United States of America (USA) and Canada.(1-4) Despite the knowledge of injury affecting Indigenous populations worldwide, and the greatest disparity occurring in working age populations, little is known regarding the disparity between Indigenous and non-Indigenous workplace injuries and the linked causation and injury outcomes. Worldwide workplace injuries are emerging as a major threat to health and productivity and reveal a trend that is rapidly increasing.

Aim: To provide a comprehensive review of all studies dealing with occupational injuries and illness among Indigenous populations in Australia, New Zealand, USA and Canada and identify future directions for research.

Methods: A systematic scoping review was undertaken using the methodological framework initially proposed by Arksey and O'Malley.(5) Country, Indigenous participants, study type, exposure, adverse health outcome, occupation and industry were identified for each paper. Study quality was assessed using the relevant Joanna Briggs Institute or Newcastle Ottawa Scale checklist depending on study design, which enabled assessment of included studies in relation to risk of bias, rigor, and transparency

Results: 1272 research papers were identified: 51 citations were included in this scoping review. The United States of America (USA) produced the most literature (n=32, 62.7%) and approximately half of included studies (n=25, 49%) were published after 2010. Physical trauma was the most common occupational exposure (n=23, 45.1%) followed by all occupational exposures (n=11, 21.6%) and uranium and other mining exposures (n=10, 19.6%). Generally, the quality of the full texts reviewed was poor and the rigor of epidemiological methods was not ideal. The authors acknowledge there was a substantial variation in methods used, outcomes and exposures examined and small sample sizes in majority of studies which likely contributes to the underestimate of occupational injuries and illnesses in Indigenous populations.

Conclusion(s): Given the paucity of research an immediate requirement is ensuring Indigenous status is reported on occupational health surveillance and workers compensation records with encouragement of reporting by health professionals and separate analysis in surveillance reporting to develop an adequate baseline dataset for targeted future interventions. More research is required to address the occupational health needs for Indigenous populations. Increased funding quarantined for Indigenous occupational health research, coupled with self-determination of the research agenda will develop evidence-based approaches in occupational health research ensuring effective and sustained growth of a healthy and fit workforce and institutional practices that support safe and ongoing employment for Indigenous populations.

References

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