Behavioural Factors that Influence Healthcare Workers' Infection Control Practices in Acute Healthcare Settings: An Integrative Review

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Introduction

Healthcare-associated infections (HAIs) are a leading cause of complications in hospitalised patients, leading to increased morbidity, mortality, and costs to the health system. The World Health Organization highlights that effective infection prevention and control (IPC) measures can significantly reduce HAIs; however, healthcare worker behaviour plays a crucial role. The actions of healthcare workers and their commitment to following infection control practices, along with their level of knowledge, are critical in preventing HAIs and enhancing patient safety. Recognising the modifiable factors that influence healthcare workers' compliance with IPC practices is crucial for enhancing patient safety and minimising the potential for patient harm caused by HAIs.

Aim

This review aimed to consolidate evidence on behavioural factors affecting healthcare workers' adherence to IPC practices and identify modifiable aspects influencing compliance levels and perceptions of risk, while exploring the motivations behind adherence to essential IPC practices.

Methodology

- An integrated review of literature was conducted using the methodology described by Whittemore and Knafl (2005).
- Databases searched were Embase, Ovid MEDLINE, Emcare and CINAHL using the following search terms: healthcare workers, infection control practices, adherence, self-reported practices and hospital.
- Inclusion criteria included studies conducted between 2014 and 2024, were undertaken in an acute care or hospital setting in countries with comparable healthcare systems to NZ, and have human ethics approval.

Results

Fig 1. PRISMA Flow Diagram of Literature Search

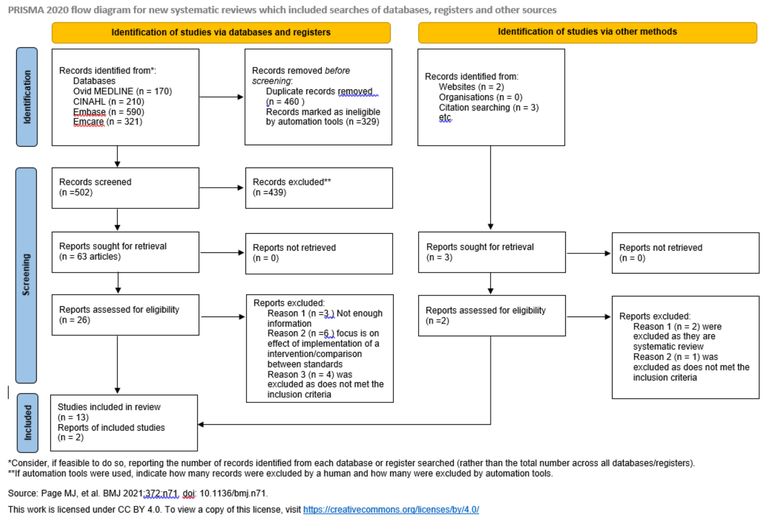
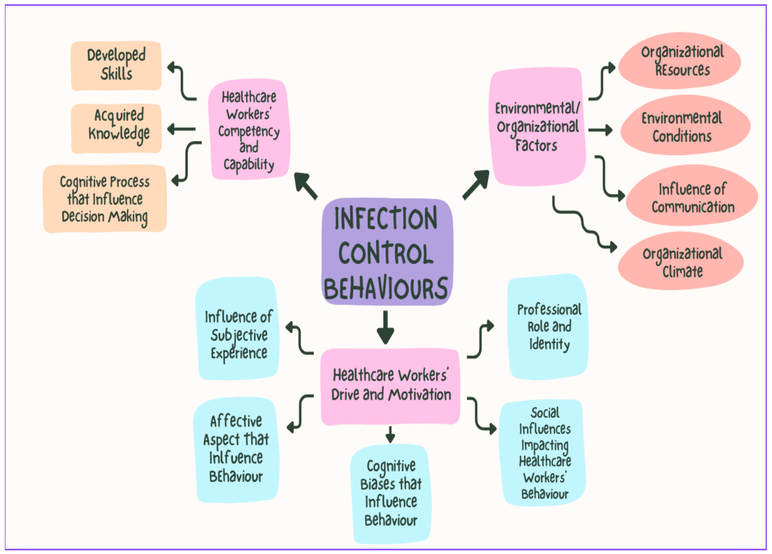


Fig 2. Graphic depiction of themes and subthemes



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Results

- Fifteen articles were reviewed, with all articles achieving the quality appraisal criteria of more than 70% rating.
- The studies included topics related to healthcare workers' (HCW) behaviours, knowledge, and attitude related to infection prevention, their adherence to standard precautions, usage of personal protective equipment (PPE) , hand hygiene compliance and pandemic experience.
- Studies were conducted in a range of hospital settings, including tertiary and university-affiliated hospitals. Participants were predominantly nurses and doctors, with several studies also including pharmacists, allied health professionals, and radiographers.

Discussion

- Education has a significant impact on healthcare workers' behaviour with its lasting effect dependent on factors such as availability, breadth, and method of delivery.
- Adherence to IPC protocols was influenced by beliefs, attitudes, cognitive biases, social influences and resources and organisational support available in the workplace.
- Patients' engagement potential as a method to enhance healthcare workers' compliance with IPC protocols requires further exploration.
- While behavioural change frameworks have been proposed to facilitate practice improvement, use of these frameworks in infection control studies are limited.

Implications for Practice

- ❖ Findings from this review provide IPC professionals in New Zealand with insight into the behavioural factors influencing healthcare workers' IPC practices in hospital settings.
- ❖ The findings support the development of future studies exploring how cultural factors unique to New Zealand hospitals may affect healthcare workers' behaviour. It provides insights to guide future research on the impact of Māori beliefs on infection control practices and the behavioural variables among nurses of ethnic background.
- ❖ This review identified a gap in the literature regarding the role and influence of patient participation in infection control, despite existing evidence supporting its benefits for patient outcomes. This is pertinent to IPC professionals in New Zealand, where enhancing whānau-centred initiatives is crucial for improving Māori health and achieving equitable healthcare access.