

Systematic review

Organisational support improves adherence to infection prevention and control guidelines

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Commentary on: Houghton C, Meskell P, Delaney H, *et al.* Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis (Review) *Cochrane Database of Systematic Reviews* 2020, Issue 4. Art. No: CD013582. DOI: 10.1002/14651858.CD013582.

Implications for practice and research

- ▶ Healthcare workers find it easier to implement infection prevention and control guidelines when they have easy access to personal protective equipment; mandatory training is in place for all staff; and they find the workplace culture supportive.
- ▶ More research in non-hospital settings is needed.

Context

COVID-19 is a respiratory pathogen estimated to be 30–60 times more lethal than typical annual influenza. The current outbreak is globally distributed and has been characterised as a pandemic by the WHO since March 2020. Rigorous infection control practices are essential to reducing transmission rates.¹ This review focused on factors which affect how closely healthcare workers (HCWs) follow infection prevention and control (IPC) guidelines for infectious respiratory diseases. These include the use of personal protective equipment (PPE) (masks, face shields, gloves and gowns), the isolation of patients and cleaning routines.

Methods

Houghton *et al*² searched the Ovid MEDLINE database for research into the factors which affect HCWs' ability to adhere to IPC guidelines for SARS, H1N1, Middle East respiratory syndrome, tuberculosis or seasonal influenza. The reference lists of key papers were also searched for appropriate studies. Twenty qualitative and mixed method studies from 2002 onwards were found to meet the selection criteria. The main data collection methods used were individual and focus group interviews. Four reviewers worked independently to extract relevant data and to analyse the selected texts using the Critical Appraisal Skills Programme tool. Moore's 2005 'Theoretical Model to Explain Self-Protection Behaviour at Work' was used as a thematic framework to organise the research findings. A large number of themes were identified, and the Grading of Recommendations Assessment, Development and Evaluation Working Group's Confidence in the Evidence from Reviews of Qualitative Research assessment was used to grade the findings as high, medium or low confidence. Recommendations were then developed based on the identified themes.

Findings

HCWs reported that they were more likely to follow IPC guidelines when they felt supported by their management teams, received clear communication

about IPC, understood the value of the guidelines and when all the staff in their workplaces participated in mandatory training. Discrepancies between different sets of guidelines and frequent changes to local policies caused uncertainty.

Workers reported that they needed resources to implement IPC guidelines, including space to isolate patients, easy access to handwashing facilities and the provision of appropriate and well-fitting PPE. Masks and other equipment were described as tiring and uncomfortable. HCWs also said they sometimes avoided using PPE because it made patients feel isolated, frightened or stigmatised.

Commentary

This review provides a relatively comprehensive summary of the available literature. The findings are consistent with previous research, which has identified perceived organisational commitments to safety; heavy workloads; physical discomfort associated with PPE; and individual attitudes as factors which affect IPC adherence during infectious respiratory disease outbreaks in healthcare settings.³

Houghton *et al* acknowledge several pertinent limitations, including the under-representation of non-hospital settings and some geographical regions. Qualitative research exploring the experiences of IPC nurses in Scottish NHS hospitals⁴ indicates that many of the findings are transferable to UK hospitals. Ovid MEDLINE was the only database searched and there was no subgroup analysis.

Houghton *et al*'s review was focused on the experiences of HCWs and did not include any observational studies which could identify unconscious behaviours or factors that HCWs are unwilling to report to researchers.

HCWs reported concerns that IPC precautions could make patients, particularly children, feel frightened or stigmatised. Similar concerns have been documented since at least 2005.³ Strategies to manage these reactions have rarely been included in IPC guidance or training—this may provide an opportunity for improvement.

Previous research has also recommended that guidelines account for the negotiation of responsibilities between different professions.⁵

This review explores how adherence to IPC guidelines is achievable to better safeguard healthcare workers and their patients.

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