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BEME Spotlight 22

Features of educational interventions that lead to compliance with hand hygiene in healthcare professionals within a hospital care setting. A BEME systematic review: BEME Guide No. 22

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Review citation

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Review website

http://bemecollaboration.org/Published+Reviews/BEME+Guide+No+22/

Keywords

hand hygiene, compliance, educational intervention, infection control, healthcare professional behaviour, behaviour change

Headline conclusions

- Taking part in any structured educational intervention designed to improve hand hygiene compliance in a hospital environment is likely to be effective in improving practice.
- Combining an educational intervention with other components, such as reminders, incentives, checklists, surveillance, audit, and feedback, is the most effective way of reinforcing the educational message.
- Repeated sessions fed into daily practice will maintain compliance.
- The first step to improving hand hygiene compliance should be to target educational interventions in areas where compliance to best-practice is poorest.
- Consider using performance feedback when educating healthcare professionals; performance reports or the use of ultra violet technology is likely to increase hand hygiene compliance.
- Ensure that hand washing practices become intrinsic within professional practice by using internal teams to deliver interventions rather than external sources.

Background and context

In the United Kingdom there are at least 300,000 healthcare associated infections (HCAI) annually costing an estimated £1 billion per year (National Audit Office, 2004). Up to 30% of all HCAI are potentially preventable by better application of healthcare professionals' knowledge and adherence to infection prevention procedures (Department of Health, 1995). Implementation of Department of Health guidelines through educational interventions has resulted in significant and sustained improvements in hand hygiene compliance and reductions in HCAI. As a result both the UK Department of Health and the World Health Organisation have made hand hygiene key elements of HCAI prevention (Department of Health, 2006, World Health Organisation, 2010). Guidance for hand hygiene has been incorporated into evidence based practice and legislation for all healthcare professionals within the UK.

Review objectives

Review Aim – To identify the most effective features of educational interventions to improve compliance with hand hygiene in healthcare professionals within a hospital care setting.

Review Scope – The review outcomes included changes in hand hygiene compliance by healthcare professionals, and changes in the clinical welfare of patients involved and in service delivery, provided these could be related directly to the delivery method of the educational intervention. All types of educational intervention (a structured educational process intended to increase, improve or enhance the performance of the recipients with regards to the overall health or well being of their patients) involving healthcare professionals responsible for hand hygiene were included. Studies must have (a) used a sole participant group of healthcare professionals who had a responsibility as part of their job role to comply with aseptic hand hygiene practice, and had already been designated as 'competent' to do so by their job-role training, General review articles or editorials were excluded.

Review methodology

Assessment of outcomes was based on a modified Kirkpatrick's 1967 model of hierarchical outcomes at four levels. Sixteen relevant health and educational databases were searched electronically, using piloted search terms. High yield journals and reference lists of included papers were hand searched. 11,697 studies were retrieved, producing 8,847 once de-duplicated. Each abstract was doubly screened by two reviewers. Thirty studies, identified as fulfilling all inclusion criteria were reviewed. Quality of study was assessed using a tool adapted from Downs & Black (1998). No study was excluded based solely on quality score, rather this was considered in the analysis of studies. Each paper was coded by a member of the review team, using a tailored coding sheet.

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