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Implementing best practice in infection prevention and control. A realist evaluation of the role of intermediaries

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ABSTRACT

Background: Implementing best practice in healthcare is complex. There is evidence to suggest that certain individuals, collectively termed 'intermediaries', can contribute to implementation processes, but understanding exactly what happens and how intermediaries promote best practice is unclear.
Objectives: The aim of this study was to evaluate the role of intermediaries in promoting infection prevention, and provide an explanation about what works, for whom, how, and under which conditions.
Methods: Realist methodology was used as the underpinning explanatory framework for the study. From a concept mining of the existing literature, a set of hypothetical statements about the plausible range of context–mechanism–outcome propositions that postulate how intermediaries can contribute to promoting best practice were developed and evaluated.
Design: Case studies were conducted consecutively to refine and test the propositions. Data included semi-structured interviews ($n = 32$), non-participant observations ($n = 5$) and documentation review. Data were analysed by open coding, content and pattern matching.
Settings: Case studies were undertaken in two hospitals within the United Kingdom.
Participants: Purposive sampling was used to identify individuals within the organisations who had professional or organisational responsibilities for infection prevention. The inclusion criteria were; employees of the chosen organisations who would consent to take part in the study, participants with infection prevention responsibilities, adults over 18 years with the capacity to consent. The exclusion criteria were; participants outside of the chosen organisation, participants under 18 years of age, and participants who lacked the capacity to consent.
Results: Four context–mechanism–outcome configurations contribute to advancing our understanding about the potential of intermediaries to promote best practice. Findings showed that the ways in which intermediaries watch over practice (their human surveillance), promoted better adherence with infection control practices. Particular styles and approaches used by intermediaries led to individual staff feeling personally supported. Distinct ways of providing performance feedback for staff together with the policy discourse promoted good habitual behaviours. Practice-based teaching heightened awareness of individuals' own practice and made learning more real.

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Conclusions: Findings offer a new lens on the role of intermediaries in bridging the evidence to practice gap. As such they could be considered when reviewing or developing new interventions/programmes that use intermediaries to plug the gap between theory and practice. The findings could also be used to guide the design and development of new intermediary models in healthcare, to promote best practice and support the quality of patient care.

What is already known about the topic?

- The ways in which best practice in healthcare can be achieved remain poorly understood and changing individuals' behaviours or practice is often challenging.
- There is growing recognition of the potential of certain individuals, collectively termed 'intermediaries', and their contribution to changing individuals' practice or behaviours.

What this paper adds

- This paper adds a new lens on the role of intermediaries in bridging the evidence to practice gap, and how new or existing role holders can be more aware of the mechanisms that can influence change.
- The paper adds insight into how intermediaries watch over practice, use particular styles and approaches, and approaches to performance feedback and practice-based teaching to promote best practice in infection prevention and control.
- The paper adds findings which contribute to reviewing or developing new interventions/programmes that use intermediaries to plug the gap between theory and practice.

1. Background

Understanding and influencing the processes of implementing best practice in healthcare is a challenge (Grol and Grimshaw, 2003; Ploeg et al., 2007). Factors that support implementation include the use of facilitative and interactive approaches (Wheller and Morris, 2010), which has led to an interest in the potential of certain individuals, collectively called 'intermediaries,' to contribute to this process (Ferguson et al., 2004; Milner et al., 2006; Thompson et al., 2006). It is known that interpersonal contact can facilitate knowledge exchange, especially through the use of the expertise and influence of certain individuals (Milner et al., 2006; Thompson et al., 2006). 'Intermediary' is an umbrella term, representing a spectrum of interchangeable function which sit between those who produce and those who use evidence (Hoong Sin, 2008). For example, 'opinion leaders' are described as individuals who may favourably and consistently influence another person's behaviour or attitudes (Rogers, 1995). Similarly, a 'champion' may have specialist knowledge, and can promote a new idea with enthusiasm and determination and passion (Thompson et al., 2006). Intermediaries are also described in the literature as third party, bridgers and brokers (Howells, 2006), and are used to bridge research and clinical practice (Milner et al., 2005). There has been recent interest about 'knowledge brokers' in the knowledge translation literature as individuals who act as the human link between research and practice (Ward et al., 2009; Wright, 2013) and 'boundary spanners' who facilitate communication across physical, cognitive or cultural barriers (Long et al., 2013). However, the terms used to describe intermediaries are often used interchangeably, for example, change agents are often described as opinion leaders (Stetler et al., 2006), or opinion leaders described as product champions (Locock et al., 2001) leading to lack of clarity about intermediaries' functions.

In healthcare, the term intermediary has been used to refer to individuals ''within the practice environment who can influence nurses towards specific goals'' (Ferguson et al., 2004), role-holders who are used as part of the overarching efforts to translate evidence into everyday practice (Chew, 2013), for example, clinical nurse educators, clinical nurse specialists (or advanced practice registered nurse), practice developers (Milner et al., 2005), champions, facilitators, opinion leaders, change agents, and linking agents (Ferguson et al., 2004).

Intermediary functions have been described as use of expertise, information source, education and teaching (Doumit et al., 2007; Milner et al., 2006; Thompson et al., 2006) and use of interpersonal skills to influence or change the behaviour of others (Doumit et al., 2007; Locock et al., 2001; Milner et al., 2006). Intermediary qualities range from trust, neutrality, transparency, collegiality and enthusiasm (Biebel et al., 2013); innovation, credibility, and proficiency (Ferguson et al., 2004; Lyons et al., 2006; Thompson et al., 2006) and technical competence and knowledge (Northouse, 2004). Intermediaries are thought to contribute to multifaceted approaches to promoting best practice (Chew, 2013), promote knowledge transfer in practice, and support practice change (Hoong Sin, 2008; Soo et al., 2009). However, there is a lack of common understanding about the exact contribution intermediaries make (Biebel et al., 2013), what influences their role and function, and ''it seems unlikely that a consistent evidence base on the effectiveness of intermediary interventions will emerge, given the breadth of the concept, its context-dependent and contingent nature, and the complexity of the social processes involved – all of which will confound experimental research approaches'' (Chew, 2013). Further research is needed to enable the development of evidence-based recommendations for healthcare practice about intermediaries (Biebel et al., 2013). This study was designed to help fill this gap.