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Towards changing healthcare workers' behaviour: a qualitative study exploring non-compliance through appraisals of infection prevention and control practices

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SUMMARY

Background: Improving behaviour in infection prevention and control (IPC) practice remains a challenge, and understanding the determinants of healthcare workers' (HCWs) behaviour is fundamental to develop effective and sustained behaviour change interventions.

Aim: To identify behaviours of HCWs that facilitated non-compliance with IPC practices, focusing on how appraisals of IPC duties and social and environmental circumstances shaped and influenced non-compliant behaviour. This study aimed to: (1) identify how HCWs rationalized their own behaviour and the behaviour of others; (2) highlight challenging areas of IPC compliance; and (3) describe the context of the working environment that may explain inconsistencies in IPC practices.

Methods: Clinical staff at a National Health Service hospital group in London, UK were interviewed between December 2010 and July 2011 using qualitative methods. Responses were analysed using a thematic framework.

Findings: Three ways in which HCWs appraised their behaviour were identified through accounts of IPC policies and practices: (1) attribution of responsibilities, with ambiguity about responsibility for certain IPC practices; (2) prioritization and risk appraisal, which demonstrated a divergence in values attached to some IPC policies and practices; and (3) hierarchy of influence highlighted that traditional clinical roles challenged work relationships.

Conclusions: Overall, behaviours are not entirely independent of policy rules, but often an amalgamation of local normative practices, individual preferences and a degree of professional isolation.

Introduction

The prevention and management of healthcare-associated infections (HCAI) has advanced greatly over the last decade due to legislative, regulatory and organizational incentives.[1,2] However, these changes have not resolved the gap between

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Table I
Participants' demographics

Profession	Age, median (range)	Area of work	Years qualified, median (range)	Years in organization, median (range)
Pharmacists	30 (25–60)	Neonatal, Oncology, Intensive Care and Surgery, Rotational Medical, Haematology, HIV and Sexual Health, Medicine for the Elderly	7 (2–40)	4 (2–35)
Physicians, surgeons	38 (31–51)	Paediatric Intensive Care, Renal, Cancer Medicine, Microbiology, Stroke and Geriatrics, Orthopaedics, Critical Care, Children's Ambulatory Care	10 (1–32)	2 (1–10)
Nurses, midwives	40 (25–61)	Anaesthetics, Women and Children, Cardiology, Outpatient Antimicrobial Therapy, Colorectal Cancer, Education, Acute Surgery, Intensive Care, Orthopaedics, Renal, Cardiothoracic, Care of the Elderly, General Adult, Vascular Surgery	15 (2–35)	8 (1–26)

HIV, human immunodeficiency virus.

evidence base and clinical practice,[3–6] particularly in terms of healthcare workers' (HCWs) behavioural change.[7,8] Interventions aimed to improve HCWs' compliance with infection prevention and control (IPC) practices such as hand hygiene or antimicrobial stewardship have achieved varied success.[9] These interventions have focused on feedback mechanisms,[8] reminders,[9] 'champion' roles and financial incentives.[10–13] Overall, these approaches have mainly tackled memory and knowledge without acknowledgment of rational decision making.[8,10,14] However, targeting behaviours without addressing contextual influences on behaviour may divert away from the real causes of non-compliance.[15,16]

In this sense, the application of theoretical frameworks from social sciences to explain HCWs' behaviour appears to be underused.[17–20] The application of behavioural theory in intervention design and evaluation is becoming widely recognized for its potential to facilitate behavioural change in health settings.[21] Adequate compliance with IPC practices is compounded by the complexity of health care, and remains a key issue.[22–25]

The use of qualitative research allows the identification of behavioural patterns and values about IPC policies and practices.[26] Whilst HCWs' attitudes and beliefs about IPC activities have been well researched,[23] few studies have investigated simultaneous perceptions from different professional groups.[27–29] In such studies, the main focus was compliance with policies and guidelines,[4,17,22,23] with lack of teamwork and communication, competing priorities and disagreement with policies identified as barriers to compliance.[29–33] However, it is still unclear how and why these affect IPC practices.[34] Given that much behaviour results from decision making and self-regulation,[6,35] it is appropriate to consider how HCWs appraise their compliance with particular IPC practices.

This qualitative study sought to identify behaviours of HCWs that facilitated non-compliance with IPC practices, focusing on how appraisals of IPC duties and social circumstances generated, shaped and influenced non-compliant behaviour. The study aimed to: (1) identify how HCWs rationalized their own behaviour and the behaviour of others; (2) highlight challenging areas of IPC compliance; and (3) describe contextual features of the working environment that may explain inconsistencies in IPC practices.

Methods

Semi-structured interviews were conducted at three tertiary hospitals in London, UK. Eligible participants were doctors, pharmacists, nurses or midwives working in any of the hospitals, with regular contact with patients and/or prescription of antimicrobials, and who consented to participate in the study.

Recruitment and sampling

Potential participants were identified from staff lists provided by the Human Resources Department. Staff lists were used for sampling in order to achieve maximum variation. The authors wanted to include as wide a range of specialities as possible in the sample, and to do this, staff were selected from a list that did not categorize them by speciality but only by profession. Based on their job titles, staff were grouped by profession, hospital site and seniority. Study invitations were sent via e-mail, with a follow-up sent two weeks later. Recruitment and interviews took place between December 2010 and July 2011. Participants were recruited until data saturation was achieved. The final sample consisted of 10 doctors, 10 pharmacists, 18 nurses and one midwife (see Table I) out of 80 (49%) individuals invited to participate.

Interview procedure

Study procedures were approved by the UK National Research Ethics Service. Written informed consent was obtained prior to interviews. Semi-structured interview guides (Table II) were developed from meetings with key informants in IPC and following systematic reviews of the literature.[9,25] Topics included IPC, HCAIs, antimicrobial prescribing and catheter management, with questions on beliefs about HCAIs, rationalization of HCAI prevention activities, barriers encountered during practice, and definitions about the participant's role and the roles of others. The interviews were conducted outside working hours. Participants were coded using numbers, and interview data were anonymized using this coding system. All interviews were recorded and transcribed verbatim.