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The impact of the clinical environment on family centred care in the neonatal unit: A qualitative investigation

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Abstract It has been suggested that the clinical environment has a significant impact on the wellbeing and recovery of patients. Furthermore, the design, physical environment and use of resources within the neonatal unit (NNU) is crucial to family centred care (FCC) and the provision of a supportive infrastructure for patients, families, staff and carers. It has also been claimed that poorly designed NNU can hinder the best intentioned efforts of NNU staff. This paper reports the findings of a qualitative investigation using non-participant observation and follow up interviews with key informants aimed at understanding ways in which the clinical environment might influence and impact upon the behaviour and practice of those employed within the NNU. Results indicate that topics such as noise, lighting, heating, ventilation and particularly space in which to care for patients and families are significant issues. It is concluded that poor clinical environments may impede staff in achieving improvements in care quality, and that an ergonomic, supportive environment is required within the NNU in order to enable quality care and increase efficiency. Further investigation into resource managed NNU, guided by lean thinking and the productive ward literature may provide a means of enabling improved FCC.

Introduction

It has been argued that the successful implementation of family centred care (FCC) within the neonatal unit (NNU) is aided by a supportive,

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welcoming and family friendly environment (Redshaw and Hamilton, 2010; Nichols, 2013). The significance of the clinical environment has been recognised in the United Kingdom (UK), with guidance published by NHS Estates arguing that it has an impact on the wellbeing and recovery of patients (Lawson and Phiri, 2003). Specific guidance on the neonatal environment was provided by Laing et al. (2004) which addressed aspects of the clinical, administrative and general areas of the NNU. The design, physical environment and use of resources within the NNU is crucial to the success of FCC and the provision of an infrastructure that supports the needs of patients, families, staff and carers (Redshaw and Hamilton, 2010; Nichols, 2013). The literature suggests that attention to working environments may lead to improvements in recruitment and retention of clinical staff and in the quality of the care they provide (Rochefort and Clarke, 2010). Conversely, it has also been claimed that poorly designed NNU can hinder the well-intended efforts of NNU staff (Floyd, 2005). When considering the clinical, working environment of the NNU we must consider both the concrete and physical structure e.g. space, lighting, heating, and the more abstract matters and processes carried out within that structure e.g. culture, workload, and practices (Rochefort and Clarke, 2010; Kramer et al., 2011). The investigation of and creation of improvements in aspects of the clinical environment such as heating, lighting, ventilation, space and waste management may aid the provision of FCC, improve care quality and benefit the local clinical environment (Nichols, 2013) whilst also contributing to the broader environmental and sustainable healthcare aims of the UK National Health Service (NHS) (Naylor and Appleby, 2012).

The threats and potential problems caused by climate change such as scarce and costly raw materials (Richardson et al., 2009) and the requirement for the NHS to significantly reduce its 21 million tonnes CO2e carbon footprint by 2020 (NHS Sustainable Development Unit, 2012) combine to make a strong economic case for investigating and considering ways of improving clinical environments and reducing their use of energy and other resources whilst minimising waste (Faculty of Public Health, 2008). This paper reports the findings of an investigation aimed at understanding the ways in which the clinical environment might influence and impact upon the behaviour and practice of those employed within the NNU.

Methods

The empirical research was sited in a busy NNU within a UK district general hospital. The site was selected for the research as it contained a relatively stable population of staff that would allow continuity of data gathering. All staff based within the unit and the parents/visitors of neonates cared for on the unit were provided with written information about the project. Guiding principles for designing and carrying out research were adhered to, these included respect for all individuals involved in the research, valid consent, openness, honesty, right to withdraw, and confidentiality (Nursing and Midwifery Council's Code of Professional Conduct, 2008). Written consent was obtained from research participants after they had opportunity to consider the written information and question members of the research team. Patients, their carers or families were not involved in the research, but, as NHS staff were involved, the approval and guidance of the local NHS Research Ethics Committee was obtained.

A total of 11 visits were made to the NNU beginning in January 2013 and ending in May 2013. Of these, 8 visits were used for non-participant observation of research participants. These visits were of around 4 h duration, during which time 2 research participants were observed individually and consecutively in practice, each for 2 hours. Participants were purposively sampled to obtain a breadth and depth of knowledge and opinion from staff employed on the unit. Participants were recruited from domestic, medical and nursing staff. Empirical data was gathered through the use of non-participant observation of research participants within clinical practice, with follow up semi structured interviews carried out with key informants. The primary purpose of the observation was to witness the behaviour and practices of staff in a clinical environment. It was important to remember that the researcher might have affected the behaviour of the people observed because of his/her presence and this was reflected upon during the process of observation and during analysis of the results (Alvesson and Skoldberg, 2000). Following the observational visits, three further visits to the NNU took place during which 6 semi structured interviews with key informants selected from those that had previously observed in practice were carried out, in private, on the neonatal unit; each interview was typically around 40 minutes in duration. These interviews enabled further investigation of themes, notions and questions identified during the observational