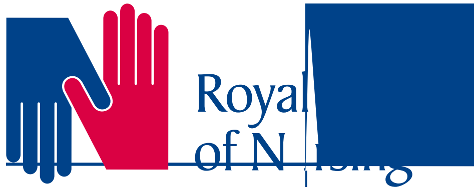

Understanding Aseptic Technique

REPORT

This document has been designed in collaboration with our members to ensure it meets most

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The Royal College of Nursing (RCN) has undertaken a programme of work in response to members' concerns about the conduct of aseptic technique. These relate to reports of wide and unwarranted variation in clinical practice and education. The findings from this work support the RCN's vision to lead and influence clinical nursing practice through health education, learning and development.

This report adds to the profession's education journey to enhance nursing practice

Research design and methods

Qualitative telephone interviews were undertaken with 20 nurses working in health and social care between September 2021-January 2022. A grounded theory approach to sampling and analysis was adopted (Strauss et al., 1997). Participants were recruited from across the UK and were considered eligible to take part if they were registered nurses who regularly undertake aseptic technique as part of clinical practice or supervise other staff undertaking aseptic technique (eg clinical managers, educators). Each interview was recorded, transcribed and analysed immediately. Further details of the methodology can be found in Gould et al., 2022.

Ethical approval

Ethical approval to undertake the study was granted by Cardiff University. Those taking part received verbal and written information about the research and assurance that their identity and the identity of their employing organisation would not be disclosed in the project report or any publications arising from it.

Summary of findings

Interviews were conducted with qualified nurses in a range of acute and non-acute care settings throughout the UK. Participants worked in the NHS and private sector. Data collection was drawn to a close after 20 interviews had been conducted because no new information was emerging ('saturation').

Key findings

Four themes emerged in analysis:

- understandings and beliefs about aseptic technique
- the importance of understanding the principles of asepsis
- deficiencies in teaching and updating
- the need for improved guidelines.

Each theme will be discussed briefly in turn.

reported that maintaining high standards was an important part of their role and often very difficult to achieve, especially during episodes of care delivered by junior nurses and junior doctors.

The importance of understanding the principles of asepsis

Being able to undertake aseptic technique in different circumstances and in different clinical settings was believed to depend on understanding the principles underpinning asepsis and adapting the specific procedure according to the environment in which it was being undertaken. Failure to understand the principles of asepsis was reported to endanger patient safety. It was also reported to promote the inappropriate use of consumables and inability to adjust when new equipment was introduced.

Deficiencies in teaching and updating

Carelessness and failure to grasp the principles of asepsis were attributed to shortcomings in pre-registration nursing education and the reported inability of many nurses to access continuing professional development (CPD) once qualified. Participants thought that aseptic technique was introduced too early in undergraduate courses, was demonstrated in relation to straightforward procedures (eg removing sutures, administering injections) rather than reflecting the types of situations likely to be encountered during real clinical practice and that opportunities for assessment were limited. Much seemed to depend on the type of clinical placements provided for individual student nurses, the enthusiasm of qualified staff offering mentorship and how busy they were. Participants who had been qualified since the 1980s described the old competency assessment previously undertaken by all student nurses and suggested that it had been valuable as a means of upholding standards. Universal competency assessment for aseptic technique was phased out in the mid-1990s when nursing entered mainstream university education and each organisation was permitted to make its own arrangements. Opportunities for CPD were reported to vary. In intensive therapy units, (ITUs) provision was consistently reported as good. In community settings, provision was patchy despite caseloads that included acutely sick patients who had invasive, indwelling devices. In primary care, non-clinical practice managers were in charge of training budgets, constraining opportunities for CPD.

The need for improved guidelines

Participants were keen to remain abreast of changes in clinical practice and wanted to feel confident of their ability to adapt aseptic technique safely when new equipment and procedures were introduced. They wanted greater clarification concerning ‘clean’ technique and when it could safely replace aseptic technique, how frequently dressings needed to be changed, the use of sterile gloves and the management of indwelling lines (eg how to disinfect hubs and bungs). All participants suggested that there was a need for new and better clinical guidelines. Senior staff responsible for service management suggested that the same guidelines should meet all circumstances, but frontline nurses favoured the creation of guidelines that could be adapted to meet specific need.

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