Reflective thinking: turning a critical incident into a topic for research

Clinical nurses encounter critical incidents every day. While these may be a source of frustration they also have the potential to be turned into research projects so that problems can be examined and others can learn from them. This paper describes the reflective process used to generate a research project from a critical incident encountered in the clinical area

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CRITICAL INCIDENT, REFLECTION

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Box 1. The benefits of reflective practice

Benefits include:
- Improvement of clinical skills
- Assisting practitioners in applying theory to practice and practice to theory
- Leading practitioners into identifying and justifying their own theories and/or creating a new defensible knowledge
- An enhanced focus on gaining further knowledge to improve practice
- Increased self-awareness.

Source: Baker, 1996; Davies, 1995; Ghaye and Lillyman, 1997; Jay, 1995; Hendricks et al, 1996; Johns, 1995; Mallik, 1998

A critical incident is one which causes a person to pause and contemplate the events that have occurred to try to give them some meaning. This may be a positive experience or a negative one. Using a critical incident as a way of reflecting involves the identification of behaviour deemed to have been particularly helpful or unhelpful in a given situation (Hannigan, 2001).

In nursing, for example, a critical incident could take the form of a medication error, a nosocomial infection or helping a patient achieve a comfortable, dignified death. These events might be labelled as 'critical incidents' because they encourage nurses to reflect on what has happened, to challenge their practice or to resolve to do better next time. Identifying the nature and sources of critical incidents presents the opportunity to raise the educational profile of the skills needed to address these issues (Perry, 1997).

Critical incidents can also be used as a basis for clinical research projects. According to Hagland (1998), almost everyone at some time considers how things could have been avoided, overcome or improved. Good research projects often start with the identification of a problem and those projects which solve or eliminate clinical problems are the most worthwhile. And, as Polit and Hungler conclude, the answers to nursing research questions help nurses provide more effective nursing care and document the unique role nursing plays in the health-care system (1993).

The path, however, from critical incident to a researchable question is not an easy one. Many nurses are intimidated by the thought of carrying out research because they have not done it before, the research process is foreign to them or because they feel they do not have a topic or question than needs answering.

Page and Meerabeau (2000) believe that if the reflector perceives themselves to be in a powerless position to orchestrate changes or suffers from professional apathy, learning and practice are unlikely to be advanced. Thus successful reflection is as much about the attitude of the clinician as the topic or theme being explored.

Reid (1993) defined reflection as a process of reviewing an experience of practice in order to describe, analyse, evaluate and so inform learning about practice. There are a number of benefits of reflective practice (Box 1).

Reid (1993) adds that reflective practice is potentially both a way of learning and a mode of survival and development once formal education ceases. In fact it challenges the concept of education as a once-and-for-all experience. It is an effective self-learning and teaching tool for professional growth and is a key way of improving nurses' professional standing (Lian, 2001).

Taking critical incidents further

The aim of this paper is to describe the process a clinical nurse, who might be an inexperienced researcher, can use to create researchable questions from clinical incidents. This aim will be achieved by describing the critical process used by the author to generate potential research questions from an incident. The paper will conclude by describing the advantages of the reflective process in generating research questions.

Reflection

Reflection on action (rather than in action) was used to examine this event. One of the main criticisms of this type of reflection is that, because the outcome is known, the development of practical knowledge may actually be inhibited by its influence (Page and Meerabeau, 2000).

The validity of this criticism depends very much on the specific nature of the incident being reflected upon. It will be seen from the incident ▷

Box 2. Issues for reflection

- Causes and risk factors for readmission
- Effects of nursing shortages
- Impact of nursing skill mix and nurses' workloads on patient care
- Scope of practice
- Continuity of care
- Length of stay
- Choice of discharge ward
- Communication
- Ward nurses' thoughts and feelings
- Patients' experiences.

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described here that the outcome does not affect the development of knowledge but in fact raises or highlights many researchable topics.

When asked to think of a critical incident, there is the temptation to try to think of an experience in which one 'saved the world' or alternatively 'negative' incidents in which one has been involved.

Students in a study by Smith and Russell (1991) experienced such difficulties. An easy trap to fall into when trying to identify a critical incident is to focus on one's negative experiences, make broad generalisations from them and to try to use these as a basis for research. Although this can generate researchable questions, it is probably easier to develop questions and a research project through passion and enthusiasm rather than anger and bitterness. It is for this reason that one must be objective when reflecting on a subjective incident.

To consider what to research, the author reflected on incidents in which he had been involved and had strong feelings about or which were a source of great frustration. This opened the door to many incidents. The incident chosen for further exploration was the readmission of a patient to the intensive care unit (ICU) soon after he had been discharged to a general ward.

A suitable critical incident

The next step in the reflective process is to write a description of the incident selected in an attempt to identify some themes.

The patient concerned was a man in his fifties who was struck by a car. Although he had no injuries to the head, chest or spine, he was in ICU because of hypovolaemic shock related to abdominal bleeding. His major injuries were orthopaedic, involving extensive fractures to both of his legs and significant tendon damage.

The author first encountered the patient when he was in the high-dependency unit (HDU) attached to the ICU. He had been in the ICU for about three months due to complications related to an exploratory laparotomy performed to find a source of his bleeding. Although no major abdominal injuries were found, his abdomen became a source of sepsis and, ultimately, septic shock postoperatively.

The day the author cared for him, the patient had a tracheostomy *in situ*. He was breathing spontaneously but his airway required regular suctioning. He was conscious and able to communicate but at times seemed withdrawn and unresponsive to the environment he was in. He had significantly reduced movement and sensation in both of his legs, obviously related to the trauma.

The incident occurred when the author returned to work for a morning shift after having a few days of annual leave. The patient was no longer in the HDU. He had been sent to the orthopaedic ward the previous afternoon. However, a few hours later on that same morning shift, the patient was readmitted to the ICU after experiencing a respiratory arrest in the ward.

This was a critical incident for a number of reasons. First, there was anger because the hard work of the ICU and HDU staff appeared to have been wasted. The ICU staff had spent weeks weaning the patient off the ventilator and giving him intensive nursing and medical care, and now he was back where he started. Also, although his condition had been stable for a number of days before discharge, there was concern that his family might feel that we had discharged him prematurely and thus mismanaged or neglected him.

There was the desire as well to blame someone and the ward staff were an easy target. Page and Meerabeau (2000) warn that: 'The whole business of reflection carries the potential for harm for the reflector as they may have to confront challenges to cherished beliefs and ideals, or come into conflict with peers as a result of the new insight reflection has afforded them.' This may in fact be an advantage because, by challenging the way we practise our craft, the potential for better quality care or improved outcomes can be reached.

One or two negative clinical experiences such as the above incident can easily make one frustrated and angry at the health-care system and its inability to meet the needs of the people it is designed to serve. In reality, the effectiveness of the system is probably related to the abilities of the clinicians that work in it and particularly their ability to work as a team.

It is also possible to be influenced by the 'blame culture' in nursing, in which we do not hesitate to blame each other for complications a patient experiences even though it may be our own fault.

The next step in the reflective process is to identify some themes or issues that the incident 'created' or highlighted. Box 2 lists some of the these. The list is far from exhaustive and each theme is complex and has various questions associated with it.

Literature review

The next step in the reflective process is to review the literature, with the hope of acquiring insight

into the incident and its themes. Two main databases were used: CINAHL and Medline. The world wide web was also searched. Search terms used were 'readmission', 'intensive care', 'critical care', 'high-dependency' and 'bounce back'.

Readmission rates From wards to ICU readmission rates are between 5 and 10% (Chen et al, 1998; Cooper et al, 1999; Durbin and Kopel, 1993; Snow et al, 1985), though some literature cited rates between 10 and 19% (Baigelman et al, 1983; Franklin and Jackson, 1983; Levy et al, 2001). Of significance is that published readmission rates have not changed much in the past 20 years.

Reasons for readmission Common reasons for readmission to ICU are cardiovascular or cardiopulmonary dysfunction, which includes aspiration or bacterial pneumonia, pulmonary oedema, respiratory failure, sputum retention and respiratory arrest (Chen et al, 1998; Cooper et al, 1999; Levy et al, 2001; Russell, 1998; Wallis et al, 1997).

Gaps in the literature The actual or specific causes of these clinical problems were often missing, suggesting new areas for research. Other gaps in the literature included:

- What factors influence the care patients discharged from ICU receive in general wards?
- Is a breakdown in continuity of care responsible for patients being readmitted to ICU?
- What are clinicians' opinions on why patients are readmitted to ICU?

This list is certainly not complete and does not address every potential question arising from the literature review.

A literature review must also examine the methodology used in the studies reviewed. Most of the studies were performed by medical researchers and were retrospective reviews of either medical databases or patients' medical records. There were few studies performed by nurse researchers that addressed the readmission theme. Mostly these studies examined issues such as ward nurses' experiences of caring for patients transferred from ICU or their thoughts and opinions about caring for these patients. Data were collected through questionnaires or surveys. The literature provided insight into some of the themes listed earlier. However, many remained unexplored and it also raised questions for future research.

Choosing a theme for research

The next stage after the literature review is to choose the direction to take: to explore issues arising from critical reflection of the nurse's own experience or tackle one of the questions from the studies already published. The author has chosen to explore issues arising from his own experience, to give him ownership of the project.

The aim of the proposed research study will be to explore why patients are readmitted to ICU from general wards, specifically by asking clinicians their opinions. Clinicians include registered nurses who work in general wards and ICU, and senior medical staff who work in ICU. Obviously there are many other questions or themes that could be explored, but a sound research project needs to have a very specific focus. The methodology of the study will include semi-structured interviews of clinicians. Recruitment is ongoing.

Conclusion

As can be seen, the path from a critical incident to a researchable topic need not be complex. Nurses frequently experience critical incidents in their professional practice. These incidents can be a source of great frustration because, by their complex nature, their meaning or significance is not obvious. However, these incidents also provide a wealth of learning opportunities as well as potential research projects.

Nurses can use the reflective process to identify the underlying themes of these incidents, which may then serve as the basis for a research proposal.

There are numerous benefits to using the reflective process in this way. One of the main ones is that with a little time, effort and minimal expense, the nursing workforce can advance its practice and become knowledgeable doers who deliver quality care by virtue of the critical insights gained through reflection (Page and Meerabeau, 2000).

Although the reflective process described here was performed under supervision as part of a postgraduate nursing course, such supervision is not necessary, even for the inexperienced reflector, to produce worthwhile researchable topics.

Nurses probably use the reflective process in their everyday practice without being consciously aware that they are doing so. By formalising or structuring their thought processes, not only is fresh or new insight obtained, but specific researchable questions can be formulated.

This paper has provided on overview of what a critical incident is and what the reflective process involves. It has described how the author applied the reflective process to a critical incident and by doing so was able to generate a researchable topic. □

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