A patient-centred approach to day surgery nursing


Summary
The pursuit of greater efficiency in modern day surgery has led to the adoption and development of many new and extended nursing roles. Such roles often focus on physiological measurement to ensure patient safety before and during surgery. However, studies suggest that patients require considerable care in relation to the social and psychological effect of hospital admission, general anaesthesia, surgery and discharge. This article discusses the effect of modern day surgery on nurses’ practice and concludes by outlining the psychological care need of patients undergoing elective day and short stay surgery.

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The amount of day surgery undertaken throughout the world continues to rise (Toftgaaard 2007). The economic benefits in terms of quality and efficiency (Jarrett and Stansiszewski 2006) and patient benefits, such as rapid recovery and reduced hospital stay (Jakobsen et al 2003), will ensure its continued growth. However, such dramatic changes have permanently transformed the face of surgical nursing. Lord Darzi stated: ‘In recent years we have seen the biggest changes to surgical practice since its inception as a medical and scientific discipline in the 19th century’ (Department of Health (DH) 2007a).

Surgical nursing interventions in previous decades were dominated by the physical care and attention required by patients. This approach was appropriate because patients remained in hospital for many days and weeks as a direct result of surgery. The development of day and short-stay surgery has led to changes in surgical nursing practice. In the pursuit of improved efficiency, many new nursing roles frequently involve a range of skills and responsibilities (McNeil 2008), although such roles are not necessarily based on nursing evidence derived from care of surgical patients undergoing minimal hospital stays. Nurse-led pre-assessment clinics continue to be common, and extended nursing roles, such as the anaesthetic nurse, nurse surgeon and endoscopic nurse, are now prevalent (Rai and Pandit 2003). Many such roles have evolved to help augment safe and efficient day surgery practices.

While the adoption of extended roles – some of which may be termed devolved medical tasks – may be vital to ensure the safe and efficient throughput of day surgery patients (Lewis et al 2009), they may detract somewhat from the creation, development and implementation of contemporary nursing knowledge fit for minimal-stay surgical practice. Indeed, there appears to have been little innovation in nursing-based practice in day surgery since Gilbert (1989) first described the day surgery nurse’s role as that of pre-assessment using a medically derived pro forma and ensuring the patient’s progress through the unit.

Without an evidence-based approach, nursing care in the modern surgical environment is in danger of becoming mechanistic – that is, determined by procedurally-based interventions alone, where the efficient running of the operating schedule becomes the most important consideration (Rogan Foy and Timmins 2004). There is a tendency in this mechanistic approach for the patient to become transformed into a biological entity on whom tasks must be performed to ensure the individual’s timely delivery to theatre (Fitzpatrick and Hyde 2006). This approach does not encourage nurses to employ evidence-based practice.

In one inpatient study of 85 women undergoing major gynaecological surgery, patient anxiety...
was observed by nurses, although little intervention was undertaken to lessen it; nor was there an acknowledgement in the nursing notes about the psychological effect of surgery (Carr et al 2005). The importance of a patient-centred approach to modern surgical nursing care may therefore become lost (Flanagan 2009), even though interaction with the nurse is often a key factor in patient satisfaction levels (Mottram 2009).

Both medical and social insights are important features of nursing knowledge (May 1992), but in the limited time available in day surgery settings, the psychosocial aspects of care are becoming marginalised (Majasaari et al 2007). The mechanistic processing approach and the dominance of the surgical schedule, not only limits effective communication (Suhonen et al 2007) and reduces patient satisfaction (Freeman and Denham 2008). A healthcare environment ‘assembly line’ approach, in which productivity, cost effectiveness and efficiency are major concerns, constrains nurses’ ability to deliver professional care (Weinberg 2003).

Stomberg et al (2008) suggested that, with an increasing amount of day surgery, greater numbers of patients with comorbidities and more complex procedures, nurses will have a more active role and greater responsibility for patient education, discharge and home recovery. Further, a growing trend in modern surgery is the ‘fast tracking’ of patients (Gatt et al 2005), that is ensuring a high level of physiological and psychological stability to help minimise the impact of surgery on the body and decrease hospital stay (Wilmore 2002). Fast tracking or ‘optimisation’ is now extending into day surgery (Awad and Chung 2006), and good psychological support is increasingly being recognised as an essential component of care (Anderson et al 2003). However, such intervention is seldom implemented in practice.

This mechanistic approach to caring for patients undergoing modern elective surgery can, in part, be attributed to two main nursing issues: the limited inclusion of contemporary surgical practices in pre-registration nurse education and a lack of research into modern surgical nursing.

Nurse education has failed thus far to adequately equip nurses with the new skills and knowledge required in contemporary surgery (Gilmartin and Wright 2008). Pre-operative nursing intervention teaching appears to involve mainly traditional inpatient surgical nursing skills. Moreover, in a survey by Mitchell (2006), the vast majority of nurses receive no additional planned programme of study for their new role in day surgery once qualified.

Nurse educators and, indeed, hospital managers have not responded to the challenge of modern surgical practices, as the focus is predominately towards inpatient surgery (Institute for Innovation and Improvement 2008). The psychosocial aspects of surgical care require considerable expansion in nurse education and should be targeted at displacing the largely redundant physical intervention approach to surgical nursing (Nilsson et al 2006).

The level of nursing research undertaken into modern surgical practices is limited (Mitchell 2007). Many physical aspects of care that were once an integral part of surgical nursing, such as hygiene and elimination needs, or care of the unconscious patient, are largely superfluous in modern day surgery (Timmins 2009). The surgical patient now requires greater intervention over a short period, with regard to anxiety management, rapid and continued pain relief, management of nausea and vomiting, assistance with planning and home support for the first 24 to 48 hours (Gilmartin and Wright 2008). Greater emphasis must therefore be placed on surgical nursing practices where patient stay in the acute setting is minimal and on short-stay surgical nursing research, together with its effective clinical application.

### Psychological management in minimal stay elective surgery

The majority of day surgery patients are anxious on the day of surgery (Mitchell 2008, 2009), however, anxiety management in minimal-stay elective surgery has remained informal, marginalised and, when initiated, largely pharmacological (Jakobsson et al 2008). Five simple steps to help alleviate patient anxiety are briefly explained and summarised in Table 1 and the rationale discussed below (Mitchell 2005).

**Information provision** Patients have historically been most anxious about anaesthesia, possible pain, the operation and being unconscious (McGaw and Hanna 1998). However, with the advent of minimal-stay elective surgery, the ‘wait’ for surgery has also become an anxiety-provoking factor (Pearson et al 2004). Planned provision of information is essential for effective anxiety management (Castoro et al 2006), as is delivering the desired level of information before the day of surgery (Stoddard et al 2005).

It is important to note that not all patients require the same level of information (Castoro et al 2006). Many patients may not wish to discuss aspects of their surgery or anaesthesia before the day. Attempting to limit anxiety by informing patients that the procedure...
is only ‘a minor, quick and simple surgery’, for example, may prove ineffective and can even have a detrimental effect on recovery at home. Patients may worry when they remain unwell at 48 hours after ‘quick and simple’ surgery (Flanagan 2009). **Personal control** Targeted communication is required to compensate for the time patients spend in an unfamiliar hospital environment, in the hands of perceived powerful, uniformed strangers, who enforce rigid schedules, determine complex medical events and render them unconscious. Increased personal control can help dissipate some of these feelings (Shaw et al 2003).

Day surgery units are obliged to meet political and professional targets. Much surgery must be undertaken within a limited time frame (DH 2007b, British Association of Day Surgery 2009). Such an environment may negate a patient’s attempts to establish a semblance of personal control, which may be minor, real or perceived. Patients may feel they have some control even when this is limited to choosing which bed or trolley on the ward they would prefer or which method of induction of anaesthesia is preferable (Lorenz 2007, Ward et al 2007).

Nurses should endeavour to identify simple aspects of care that can bestow a perception of control (Table 1). Waiting on the day for the surgery to take place has become a major source of patient anxiety (Pearson et al 2004) and simple measures such as those outlined in Table 1 have

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**TABLE 1**

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Action</th>
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<tr>
<td>Information provision</td>
<td>Patients require information on their surgery, anaesthesia and post-discharge management. Formal delivery of information in advance of the day of surgery, emphasising the notion of ‘controlled unconsciousness’ and dispelling common misconceptions associated with general anaesthesia, may help in limiting anxiety.</td>
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<td>Personal control</td>
<td>A planned programme of enhancing personal control over healthcare considerations is essential. The provision of minor choices or overt involvement in the decision-making process – asking whether patients wish to remain dressed if they are due to be operated on later in the day, or whether they wish a relative to stay with them, for example – can help increase patients’ sense of perceived control (Rhodes et al 2006).</td>
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<tr>
<td>Self-efficacy</td>
<td>Simple interventions can enhance patients’ self-efficacy, for example providing information on pain management, the recovery trajectory, nurse-initiated post-operative telephone calls and discharge (for example, wound management, dressings, medication) (Flanagan and Jones 2009). Stating ‘you will be safe at home because the pain relief prescribed is effective, the written information we provide will give insight into your pattern of recovery and we have a next-day nurse-initiated telephone call support system’ will promote patients’ ability to cope.</td>
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<tr>
<td>Therapeutic use of self</td>
<td>The intervention is categorised into the following:</td>
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<td>• Social support: the close physical presence of the nurse may be one of the most effective methods of managing pre-operative anxiety. Likewise, many patients desire a friend or relative to remain with them whenever possible.</td>
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<td>• Optimism enhancement: in the day surgery environment, where the opportunity to discuss fears is often minimal, emphasis can be placed on using phrases such as ‘safe and controlled unconsciousness’, ‘reliable effective drugs’ and ‘many patients have this procedure undertaken and are safe and well’. Encouraging statements from relatives are also useful.</td>
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<td>• Cognitive coping strategies: the use of phrases to engender a realistic impression of safety is vital. For example, ‘you will be monitored continually while asleep’ and ‘the drugs used are safe and effective’. Such information may lessen negative thoughts.</td>
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<tr>
<td>Environmental considerations</td>
<td>The provision of simple explanations can have a considerable effect on patient anxiety. For example, briefly stating aspects of safe, effective equipment, policies and procedures, stringent checking, identifying personnel, providing feedback on the operating schedule, and reinforcing the expert ability of nurses, surgeons and anaesthetists. Other simple measures to limit the environment’s effect may include holding the patient’s hand, brushing teeth when the patient is nil by mouth and reducing the sterile appearance of the clinical environment through décor, music and aromatherapy vaporisers (McKenna 1997).</td>
</tr>
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</table>

(Mitchell 2005)
The potential to help patients pass the time in a more positive manner.

**Self-efficacy** This is a belief in one’s ability to cope with a stressful situation or a challenging demand (Bandura 1982). Self-efficacy enhancement can have a positive influence on recovery from surgery (Moon and Backer 2000). A patient’s stay in the day or short-stay unit is brief, and the greater part of the surgical experience involves self-care, thus patients require optimistic self-efficacy beliefs to assist their recovery (Mitchell 2005).

In elective surgery, where much recovery occurs at home, a planned programme of self-efficacy enhancement by nursing staff can boost a patient’s outlook (Flanagan and Jones 2009).

**Therapeutic use of self** The use of self can have a positive influence on recovery from surgery (Krohne and Slangen 2005). Table 1 categorises this intervention by the following modes of action:

- Social support.
- Optimism enhancement.
- Cognitive coping strategies.

The Royal College of Anaesthetists and the Association of Anaesthetists of Great Britain and Ireland (2008) support the use of positive statements about an anaesthetic, for example ‘the drugs used are safe and effective’. Brief statements on the safety and efficacy of equipment can also be reassuring (Table 1). The presence of a nurse or relative employing these simple techniques can provide social support in stressful or unpleasant circumstances, much like the way a parent or guardian does for a young child (Li et al 2007).

Increasing the amount of time nurses spend with each patient while in the day or short-stay unit before surgery has proven to be beneficial in improving patients’ outlook (Lemos et al 2009). Through the use of such strategies, a positive, therapeutic relationship between the nurse and patient can be established in a short period of time (Mottram 2009).

Anaesthetic ‘catastrophising’ may be a problem for patients undergoing general anaesthesia (Mitchell 2010). Patients may be frequently preoccupied with the thought of dying while anaesthetised, not waking up afterwards or waking up during surgery. Such misconceptions may be minimised by explaining the safety measures and emphasising the notion of ‘safe and controlled unconsciousness’. The imminence of approaching surgery and an individual’s place on the operating schedule can generate much anxiety, patients may find constant updating of progress with the surgical list helpful.

**Environmental considerations** Factors related to the environment can affect anxiety. In a survey involving 460 patients, most wanted to spend time waiting with a partner or friend (71%), talking with a nurse (71%), listening to music or reading magazines (76%) within a modern-looking clinical environment (70%) (Mitchell 2010). In paediatric day surgery, simple measures such as colourful uniforms have proven beneficial (Roohafza et al 2009).

With little insight into medical and nursing practices, patients may evaluate the cleanliness of the building, their comfort and the waiting rooms as a measure of quality that not only reflects commitment to the patient, but also is an indicator of the managerial focus on quality (Kaldenberg and Becker 1999).

Many factors may add to the anxiety of patients undergoing surgery while conscious, including the possibility of the procedure being more painful because they are awake, requiring more local anaesthetic injections, seeing the body ‘cut open’, numbness ‘wearing off’ too soon and hearing the proceedings (Mitchell 2008, 2009). Medical and nursing staff realise that such incidents do not occur, or do so only rarely, but patients may not (Farboud et al 2009). Interventions that may reduce anxiety include talking to the patient immediately before local or regional anaesthesia, providing the option of some physical contact throughout the procedure, limiting the effect of the environment (sight, smells, noise) and allowing the presence of an accompanying person during and/or immediately after surgery.

### Discharge planning

Once discharged, the patient’s formal psychological management plan can be continued in the form of nurse-initiated telephone support at 24 and 48 hours. Post-operative telephone calls following minimal-stay elective surgery have been evaluated positively (Blatt and Chen 2003, Flanagan 2009). Many patients benefit from the advice provided (Dewar et al 2003). In some rural areas, and in other European countries, a hospital-at-home service is provided. This includes regular telephone calls and/or a day surgery nurse visiting patients in the home the following day (Marin et al 1995).

Bringman et al (2001) investigated this approach in 100 patients undergoing laparoscopic cholecystectomy. A nurse from the day surgery unit was on-call via a mobile telephone during the first evening and night of surgery. The nurse telephoned patients during the evening and the following morning to ask about their recovery, which was appreciated by the patients (Bringman et al 2001).

Day surgery staff contacting patients by telephone may benefit from the use of an adapted form of the Post-Anaesthesia Discharge Score.
(PADS) system developed by Chung (1995) and modified by Mitchell (2005) (Figure 1). The modified version includes four questions not in the original PADS and is not primarily concerned with physical fitness for discharge (Mitchell 2005).

A post-discharge telephone support form, such as the one shown in Figure 1, could help medical and nursing staff evaluate practice to gain valuable insight into the post-operative recovery trajectory of patients and the care provided during their admission. During the telephone call, it may be necessary to provide additional information or suggestions about the degree and duration of pain, practical pain management, and mobilisation and mobility issues (Donoghue et al. 2002).

Contacting all the patients from a previous day’s surgical list would require an experienced nurse and the expenditure of much time.

**Conclusion**

As a result of advances in techniques, surgical nursing has changed considerably in the last

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**FIGURE 1**

Post-discharge telephone support form

<table>
<thead>
<tr>
<th>Experience of pain</th>
<th>None</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Worst imaginable</th>
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<tr>
<td></td>
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<tr>
<td>Experience of nausea and vomiting</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Management of wound</td>
<td>Very good</td>
<td>Good</td>
<td>Uncertain</td>
<td>Poor</td>
<td>Very poor</td>
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<td></td>
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</tr>
<tr>
<td>Activity level</td>
<td>Very good</td>
<td>Good</td>
<td>Uncertain</td>
<td>Poor</td>
<td>Very poor</td>
</tr>
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<td></td>
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<td></td>
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<tr>
<td>Level of carer support required</td>
<td>Very small amount</td>
<td>Small amount</td>
<td>Moderate</td>
<td>Large amount</td>
<td>Very large amount</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Current level of anxiety</td>
<td>Extremely anxious</td>
<td>Very anxious</td>
<td>Quite anxious</td>
<td>A little anxious</td>
<td>Not anxious</td>
</tr>
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<td></td>
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</tr>
<tr>
<td>Level of satisfaction with care</td>
<td>Not satisfied</td>
<td>Quite satisfied</td>
<td>A little satisfied</td>
<td>Very satisfied</td>
<td>Extremely satisfied</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Additional information required</td>
<td>None required</td>
<td>Some required</td>
<td>Medium amount required</td>
<td>Much required</td>
<td>Great deal required</td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nursing notes</td>
<td></td>
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(Mitchell 2009)
20-25 years. The level of physical nursing intervention, once an essential aspect of elective surgical nursing, has diminished. Much psychosocial nursing care is still provided, although it is not often explicitly taught, universally pursued, or widely documented. Extended nursing roles have made a positive contribution to the efficiency of modern elective surgery. However, to continue with this process it may be necessary for pre-registration nurse education programme leaders to examine their course content in relation to elective surgery practices. Research studies examining contemporary surgical nursing practices should also be encouraged and expanded.

To ensure a patient-centred approach to care, a balance between extended nursing practices and the application of interventions rooted in nursing knowledge must be achieved. Surgical nursing knowledge should focus more on the total patient experience of the surgical episode and not solely the brief time spent in the acute setting. The formal psychological management of patients is a fundamental aspect of care in minimal stay elective surgery, and one at which nurses can excel NS

References


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