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Benefits of pre-operative information programmes

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Abstract

Background Thousands of patients undergo surgical procedures daily. Research has shown the benefits of giving pre-operative information to patients, which include decreased length of stay, less demand for analgesia post-operatively and increased patient satisfaction. However, despite this evidence, there are still many facilities with no formal policy or programme for giving pre-operative information.

Conclusion Nurses and managers should be made aware of the benefits and potential financial savings of pre-operative information programmes. Once education takes place, a concerted multidisciplinary effort should be made to implement a programme. This will help to ensure that patients no longer arrive at the operating theatre frightened and unaware of what will happen to them.

DESPITE ADVANCES in medicine, the need for surgical procedures persists. Each day thousands of patients undergo surgery and as part of their preparation healthcare professionals ask them for information about their medical history. Blood tests, electrocardiograms and X-rays are common, in addition to other investigations depending on the type of surgery. However, while this medical preparation might enlighten patients about the particulars of surgery, research dating back almost 50 years shows that patients also benefit from psychological preparation for surgery, and that pre-operative information can help to decrease post-operative pain, reduce length of stay, decrease anxiety and increase patient satisfaction. Yet it is claimed that patients are still arriving at operating theatres uninformed and highly anxious (Beddows 1997, Hargreaves 1992, Radcliffe 1993).

The benefits of pre-operative information

Hospitalisation can cause stress, which is increased in surgical patients (Caunt 1992, Dobree 1990, Radcliffe 1993, Swindale 1989). Beddows (1997) maintains that patients will always be anxious, but nurses should try to reduce this anxiety by addressing patients' psychological needs as well as their physical ones. Early research by Janis (1958) highlighted that giving pre-operative information to patients was beneficial. Egbert *et al* (1964) concurred, and in the same year the Ministry of Health in the UK identified the need to give pre-operative information to patients (Hargreaves 1992). Hayward's (1975) classic work showed that patients who had been given pre-operative information required less analgesia and recovered faster than those who had not. Based on this early research, it might be assumed that more information programmes would now be in place. However, this appears not to be the case, and research has continued in an attempt to further demonstrate the benefits.

Information programmes vary widely in design. The best will be structured and integral to patient care. They may involve pre-admission groups, interviews with nurses, information brochures and unit tours. However, many will be implemented on a more ad hoc basis, with nurses seeing patients as time allows, possibly using written information when time is short. What is clear though is that any information programme seems to be better than none at all.

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Key words

- Information programmes
- Patients: information
- Pre-operative care

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In this age of outcome measures, it is interesting to note that not only does patients' anxiety decrease but also satisfaction increases when they receive information from a nurse (Gammon and Mulholland 1996). Additionally, there are data supporting the fact that when pre-operative information is given, length of stay is reduced and infection rates fall (Egbert *et al* 1964, Martin 1996). Similarly, Wong (1990) describes how patients who underwent cardiothoracic surgery recovered better and had less post-operative hypertension when they had received pre-operative information. Strict regulation of cardiothoracic patients' blood pressure is an essential observation in the immediate post-operative period and, when left uncontrolled, hypertension can induce 'graft rupture' resulting in emergency re-operation. Consequently, any factor influencing blood pressure regulation is beneficial. Additionally, it is the author's experience that length of stay on the intensive care unit (ICU) is increased when patients remain on anti-hypertensive drugs, and so early termination of such drug infusions is beneficial to patients and business managers alike.

Egbert *et al* (1964), Hayward (1975) and Kanto *et al* (1990) illustrate how patients who had received pre-operative information requested fewer narcotics in the days following surgery. However, Callaghan *et al* (1998) report no decrease in the demand for analgesia, but note that patients who had received pre-operative information experienced less anxiety and increased levels of satisfaction with their stay. Moreover, in a study of elective ICU patients, Lynn-McHale *et al* (1997) found that 92 per cent felt a pre-operative tour of the unit was beneficial in alleviating anxiety.

Box 1. Responsibilities of the change agent

Stage 1: unfreezing
- Data collection regarding the area of change
- Problem diagnosis
- Ask the question: 'Is change needed?'
- Inform others of the need for change

Stage 2: movement
- Develop a plan of action
- Set goals and objectives
- Identify supportive individuals and areas of resistance
- Involve all staff
- Strategy development
- Implement change
- Offer support and encouragement to those involved
- Evaluate the change and modify as necessary

Stage 3: refreezing
- Support others so that change can be maintained

(Based on Lewin's 1951 management of change theory)

Although it may seem logical to assume that patients will experience anxiety due to hospitalisation, some argue that relatives may be more apprehensive than patients (Keegan 2003, Raleigh *et al* 1990). They claim that patients have a support network of nurses, doctors, friends and relatives, whereas relatives are often the ones supporting, without receiving any support in return. For that reason, including relatives in a pre-operative programme can lessen anxiety (Coleman and White 2001, Courtney 2000, Watts and Brooks 1997). Nonetheless, regardless of the published evidence, pre-operative information programmes are still not widespread. Therefore, it is necessary to discuss the possible reasons for this, together with suggestions for ways in which such programmes can be best implemented.

Barriers to implementation

Perhaps the main reasons why pre-operative information programmes are not universal are lack of time and money. Nurses currently have more responsibility than ever, with increasing patient-to-nurse ratios (Aiken *et al* 2001), and there is little time for extra tasks unless they are essential. While it is part of the unique role of the nurse to undertake patient education in many, if not all, situations, the reality of nursing today is that this is not always possible. Consequently, what some may view as little more than sitting down with the patient for a 'chat' may be at the bottom of a long list of priorities to be tackled when the 'proper work is done' (Radcliffe 1993). Discussing the theory-practice gap, Waters (1999) claims that it is difficult to create a learning environment when people are busy, and this hypothesis can be applied to the learning and information needs of patients. Nevertheless, nurses working in hospitals that provide regular pre-operative information visits claim that they make the time, just as they would do with any other significant task (Coleman and White 2001). Financial restraints may be another barrier. To successfully implement a programme, there may be a need for additional staff, which managers may be unable to provide or afford due to budgetary constraints.

Although lack of time and financial implications may be key reasons why more information programmes are not in place, they are not the only reasons. Lack of support from nurse managers and other colleagues may hinder the progress of enthusiastic staff. Even the most conscientious nurse would encounter difficulties in trying to implement a programme without support from managers and peers. Burridge (1993) states that lack of confidence may be another reason for reluctance to participate. Responding to the psychological and information needs of patients requires self-confidence and sound clinical knowledge, and some staff may believe that they are not capable of meeting these challenges.

Furthermore, some patients may not want to know details of what will happen to them, and there will always be those who refuse to participate. This serves to illustrate why any programme needs to be tailored to the individual as much as possible. Finally, some nurses may simply be unaware of the current data on the subject and why giving information to patients is such an important element of holistic patient care, so do not see the need for a programme of this type.

Suggestions for implementation

Before embarking on implementation, it is critical that the instigator(s) has some knowledge of the principles of change, as managing change requires defined management and leadership skills (Marquis *et al* 2002). In his classic theory of change, Lewin (1951) identifies three phases of change, namely 'unfreezing', 'movement' and 'refreezing'. These phases involve specific steps such as problem diagnosis, developing plans of action and support of others (Box 1). While this change theory provides an excellent framework, several of the factors are common sense. For example, the most important elements to begin with are communication, education and planning. Communication is elementary as a means to involve and update staff. It is crucial to know the knowledge base of the staff involved, and if they are not aware of the benefits of change then they should be educated. A plan should be put in place of where to give information, when to give it, who will give it and how it will be given.

In contemplating the practical aspects of implementation it is usual to encounter resistance, although this may be lessened if individuals are motivated (Tomey 2000). Although managers cannot directly motivate staff, it is important to provide a motivating work environment. In the early stages, networking with other facilities that have successfully implemented information programmes may prove beneficial. This may encourage staff as they realise that hurdles and challenges can be

Box 2. Example of a basic patient information sheet

Welcome to the ward. We hope that this leaflet answers a few of the many questions that you may have regarding your pending surgery

1. Before your operation, you may have various tests performed. You may have blood taken, X-rays and other tests that the doctor might want you to have
2. You will be kept 'nil by mouth' from midnight on the night before your operation. This means that you will not have anything to eat or drink after this time. This is to help with any nausea during or after the operation
3. On the morning of your operation, your nurse will help you prepare. He or she will provide you with things needed, such as soap, a theatre gown, towels, etc
4. You may be given a tablet or injection to help you to relax. This is known as a pre-medication. It might make you sleepy
5. Porters will transport you to the operating theatre when it is almost time for you to have your operation
6. You will be taken to a waiting area and meet a theatre nurse. He or she will ask you some questions and look through your medical notes
7. You may have a short wait in this area. There may be other patients there
8. You may meet your anaesthetist in this room, or in another room called an anaesthetic room
9. Once you are transported to the anaesthetic room your anaesthetist will give you an anaesthetic and you will be asleep in a few seconds
10. Following your operation you will wake up and there will be a nurse near your bed space. The nurse will take your pulse and blood pressure at regular intervals and you may have an oxygen mask on your face
11. If you have pain or discomfort the nurse will give you medications that the doctor has prescribed for you
12. You will stay in the recovery ward until you are awake, and well enough to go back to the ward. This is usually about one hour, but, depending on the surgery you have had, you may return sooner, or you may stay in the recovery ward longer than one hour

This leaflet is intended to give you a very brief overview of some of the things that you will experience during your stay in hospital, but it does not cover everything. If you have any questions please do not hesitate to ask the nurse or doctor

Thank you for your time in reading this information. We hope you found it useful

overcome. In addition, it might prove helpful to involve other staff. For example, if operating theatre nurses intend to implement a programme, it would be wise to seek the collaboration of ward staff (Roberts 1991). This not only helps to foster good working relationships, but it also ensures that patients receive consistent information. There is a need to be realistic about what can be achieved. While individualisation of information is critical (Martin 1996, Watts and Brooks 1997, Wicker 1987) and patients should be told what they want to know (Courtney 2000), in reality there needs to be some standardisation.

In the case of an operating theatre-based programme, Johnson (1990) suggests employing nursing assistants to perform non-nursing duties to free up time for the staff nurse to visit the patient on the ward. Many duties performed in the operating theatre, such as cleaning floors and equipment and restocking shelves, do not require a trained nurse and so valuable time could be freed up to provide patient information.

The heart centre programme at Cleveland Clinic in the United States is the largest and busiest cardiac care facility in the country, with approximately 20 open heart procedures performed each day (USNews.com 2004). Here, nurses are employed specifically to maintain a programme of pre- and post-operative information for patients and relatives. It can be argued that if the busiest cardiac care facility in the US can maintain a pre-operative programme, then other smaller facilities could too. However, it is likely that in many facilities there will be times when a visit will not be possible. In such circumstances, back-up information can be used. Written information can prove a useful addition to or a basic substitution for a programme of information, as there are claims that only 35-40 per cent of verbal information will be retained in times of stress (Franklin 1974).

Written information could be provided in the form of an information sheet (Box 2), a ward display or video (Mitchell 2000). Although not the ideal method to provide information in the absence of an actual visit, it is better for patients that they receive something rather than nothing. Patients were shown to be more active in their recovery when they had received written information about their impending surgery (Dobree 1990). Therefore, written information may be something to use even if one is working with a fully implemented programme.

In the absence of a structured information programme, or perhaps when a theatre nurse does not have the time to visit on a particular day, ward nurses can be instrumental in keeping a programme running and maintaining quality care. For example, ward nurses will be better able to use a 15-minute period of time (in relation to pre-operative information) than theatre nurses, simply because they are present on the ward (Radcliffe 1993). A ward nurse can determine patient fears and give information during a bed bath or during another period of contact. He or she also has the advantage of a continuing relationship with the patient, and consequently patients may be more likely to voice their concerns to a nurse with whom they are familiar. Ward nurses are also likely to have built up relationships with family members and loved ones, and, again, information and fears may be more likely to be shared with them than with a 'stranger' from the operating theatre.

In terms of the actual information to give to patients, this can and will vary. However, some suggestions for the basic structure of an information session are shown in Box 3. Finally, and perhaps most importantly, the relatives and loved ones of a patient should always be included in any information programme. Relatives are perhaps the biggest support group that a patient has. They can help with comprehension, information retention and post-operative recovery – if they have first been forewarned what to expect.

Box 3. Essential information for a pre-operative information session

Introduction:
- Type of surgery
- Length of operation
- Length of stay in hospital

Morning of surgery:
- Preparation
- Pre-medications
- Checking the notes
- Transfer to operating theatre

Forward waiting:
- Meeting the theatre nurse
- Checking the notes
- Short wait

Anaesthetic room:
- Meet anaesthetist
- Nurse present
- Routine procedures
- Type of anaesthetic

Recovery ward:
- Waking up
- Regular observations
- Analgesia and comfort
- Transfer to ward

Ward:
- Comfort and safety
- Regular observations

(Radcliffe 1993)

Conclusion

Surgery remains a constant factor in the treatment of patients, with thousands undergoing surgical procedures daily. Over the years, medical and nursing research have promoted the benefits of giving pre-operative information to patients. This research has shown that the advantages include a decreased length of stay, less demand for analgesia post-operatively and increased patient satisfaction. However, despite this evidence, there are still many facilities with no formal policy or programme for giving pre-operative information. It is evident that a theory-practice gap in this area exists and, to close this gap, several issues need to be addressed.

Nurses and managers need to be educated on the topic, and made aware of the benefits and potential financial savings of such programmes. Once education takes place, a concerted multidisciplinary effort needs to be made to implement even the most basic programme to ensure that patients no longer arrive at the operating theatre doors frightened and unaware of what will happen to them. Nurses need to collaborate and work towards a higher standard, for only then will they truly be providing holistic patient care: 'The nurse who informs the patient about the imminent experience of surgery... has a clear understanding of her role and professional responsibilities in the pursuit of excellence in clinical practice' (Swindale 1989)

Implications for practice

- The evidence for the benefits of giving pre-operative information spans almost 50 years
- Psychological preparation for surgery may alleviate post-operative complications, reduce length of stay and improve patient satisfaction
- Senior nurses need to be aware of the fundamental principles of change before embarking on implementation of a pre-operative information programme
- Implementing a programme may cost money in the short term, but can save even more long term
- When nurses inform patients of the particulars of their surgery, they are providing holistic care and adhering to the code of conduct

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