professional skills. (The revised ORNAC Recommended Standards will soon be in print. Within the document, competencies of the professional registered nurse are clearly outlined which may help in redefining the role and scope of the O.R. nurse).

A lot of lip service is given the term "continuity of care" but to make it a reality, we as operating room nurses, must stand up and be counted and fight for the patient's right to have a professional registered nurse provide their care while undergoing the surgical intervention.

We have a more educated public, and the standards of care have improved and are still improving and with this, our patient's expectations are increased, and rightly so.

The time has never been more critical to collectively adapt strategies which will convince administrators and government leaders that in this day of such complex and difficult procedures the person to meet the challenge of quality patient care is the qualified professional registered nurse. If we do this, then the phrase "Where are you when we need you" will not be heard.

Operating room nurses must realize that, even individually, they can be a force to be reckoned with and can play an extremely important role by keeping their eyes and ears open as one monitors what is happening in the health care field. One important role would be keeping the Executives of the Provinces informed as to concerns, suggestions, and changes occuring. There are many avenues to communicate feedback of all descriptions. Some of these avenues may be through your MP, professional registered nurses associations, operating room interest groups and the executive of the Operating Room Nurses Association of Canada. There is always a way to be heard if you truly believe in the importance of the issue.

I believe that operating room nurses in the 90's will provide more intense, expanded, and efficient delivery of care to the surgical patient. During the 90's the role of the perioperative nurse will be redefined and it is up to US if we have an active part in defining this new role and scope of nursing. I know from personal experience that O.R. nurses have the motivation, knowledge and the courage to help shape their future. All that is needed is the vision. The responsibility is yours!

Gloria Stephens is currently President of the Operating Room Nurses Association of Canada, and a Nurse Clinician/OR, St. Paul's Hospital, Vancouver, B.C.

Bursary Fund for OR Nurses

Sponsored by ORNAC and Johnson & Johnson

1. Purpose of the Fund

To financially assist ORNAC members in furthering their education.

2. Factors Influencing Assistance Available

1. Other financial assistance requested and / or granted.
2. Previous bursary funding granted by ORNAC.
3. Length, place and content of educational program.

Note: Financial assistance is not available for salary replacement.

3. Application Process

1.Fill out application form and submit an application form to ORNAC.

2.Reference letters- two, (2) from most recent employer which states the applicant's professional competence and experience, (ORNAC will request the reference).

3.Reference letter should address applicants potential to succeed in the program.

4.Submit autobiographical to include career accomplishments, education, goals.

5.Proof to be submitted of registration for the program.

4.Responsibility of Applicant Receiving Funding

1.Signed contract to be returned to ORNAC Executive within 30 days of receipt of contract, otherwise funding will be withdrawn.

Criteria For Selection

1. Applicant must be a member of a provincial group for minimum of three (3) years.
2. Primary employment focus - the Operating Room Nursing (staff,education, administration).
3. Applicant has actively participated in their respective Provincial Group and/or with ORNAC. Applicant's participation to be listed & submitted with application form.
4. References (2) indicate the applicant promotes professionalism, is responsible and accountable, and has potential to succeed.
5. Applicant's future plans at the completion of the program must include perioperative nursing.

**Perioperative nursing defined in (Rules & Regulations) Information Manual.*

For more information or to apply for the Bursary Fund please contact ORNAC''s Awards Committee Chairperson:

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Preoperative Functional Anxiety:

A Conceptual Framework

By Marie McEachern, R.N., B.Sc.N., M.S. A.

Introduction

It is widely recognized that patients who enter the hospital for surgery encounter physical and psychological stressors which elicit a response of anxiety. The ability to cope with anxiety and maintain control affects their postoperative recovery (Lindeman and Stetzer, 1973; Lindeman, 1974; Johnson, 1984).

Traditionally, health care professionals in the operating room have focused their practice on treating the "surgical procedure" and nursing groups of patients according to procedural categories. The problem arises when related physiological and psychological responses of the patient occur which impact the individuals illness and recovery. Neither the patient nor the professional may recognize these additional variables underlying the individual's capacity to cope with the reason for hospitalization.

Abstract

Preoperative functional anxiety is an important phenomenon for the patient undergoing surgical intervention. Functional anxiety facilitates the patient's ability to cope with surgery. Personal control enhances the patient's coping and modifies anxiety to a functional level. The phenomenon of preoperative functional anxiety and related concepts of coping and locus of control have a direct effect on the concept of postoperative recovery. Current research is focusing primarily on preoperative anxiety levels and postoperative recovery. There is a need for further nursing research to develop nursing theory about the concepts of coping and personal control as they relate to preoperative functional anxiety and postoperative recovery. This paper focuses on the development of a conceptual framework for understanding the biopsychosocial phenomenon of preoperative functional anxiety.

Nurses can predict the degree of anxiety for the majority of patients based on the predicted outcome of surgery. These can be listed categorically for nursing according to the impact of the surgery on the person and their response. The following is a proposed list of surgical categories for nursing in order of decreasing anxiety based on the author's experience:

1. loss of body part
2. loss of function
3. diagnostic
4. curative
5. cosmetic

Each of these categories potentially elicit a lesser or greater degree of anxiety from the patient depending upon the impact of the surgery on the patient's lifestyle. This will enable nurses to predict the majority of patients who will have a higher level of anxiety preoperatively and consequently a poorer postoperative recovery (Janis, 1958).

In this paper, the author will develop a conceptual framework for understanding the biopsychosocial phenomena of preoperative functional anxiety and the related concepts of coping, personal control and postoperative recovery.

The Phenomenon of Functional Preoperative Anxiety

Nursing literature defines anxiety as a natural response to certain environmental and psychological factors. It is a feeling of apprehension or dread felt in response to a threatening situation or loss (Carriera, Lindsey and West, 1986). Clinical nursing researchers

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have re-examined sources of preoperative anxiety. The major concerns expressed by individuals about to experience surgical intervention are: fear of death, pain and discomfort, the unknown, destruction of body image, separation from their normal environment, loss of control and feelings of helplessness (Carnevali, 1966).

Anxiety is the psychological response to a specific stress or (surgery) while stress is the non specific response of the entire person to any stressor (Jasmin & Trygstad, 1979). The individuals perception of surgery creates anxiety which will activate physiological responses.

Functional anxiety leads to learning and an improved ability to cope. Disfunctional anxiety leads to illness, undesirable behavioural changes or death (Clarke, 1984).

Janis (1958) conducted intensive research on the psychological effects of surgery. His findings indicate that more than 75% of patients expressed a moderate to high degree of preoperative anxiety which increased as the time for surgery approached and peaked in the operating room. One of the most significant findings relates to the relationship between preoperative anxiety and postoperative behaviour. Patients with a moderate amount of preoperative anxiety (functional) developed fewer postoperative emotional symptoms. Patients who manifested high or low preoperative anxiety (disfunctional) displayed postoperative emotional disturbances. As the anxiety level increases, panic may be produced and the individuals attention is so scattered that goal directed activity is impossible.

Anxiety as a Physiologic Response

Anxiety as a physiological response to hospitalization and surgery is important to acknowledge due to its potential impact on the individuals ability to cope with surgery and on the postoperative recovery.

The physiological response of anxiety is similar to the stress response and activates the nervous and endocrine systems to maintain a stable internal environment. Perception of stressors causes activation of the sympathetic - adrenal medullary mechanism, the pituitary - adrenocortical mechanism, and the renin-angiotensin mechanism (Boore, 1978; Carriera et al 1986; McConnell, 1987).

The sympathic response to anxiety causes increased cardiac output, arterial blood pressure, blood glucose concentration, cellular metabolic rate, blood coagulation, lipolysis and mental arousal (Ramsey, 1982). The anterior pituitary releases adrenocorticotrophic hormone (ACTH) which stimulates production of adrenal corticosteroids; glucosteroids, mineral corticoids and sex hormones. The main effects of glucocorticoids are impairment of glucose metabolism, a decreased immune response resulting in decreased resistance to infection, and altered blood coagulation. The mineral corticoid response creates excessive secretion of aldosterone consequently increasing retention of sodium and water. This increases blood volume and results in hypertension (Boore, 1978; Ramsey, 1982).

Application

Stress threshold and tolerance varies with each individual and depends on the psychologic and physiologic state, past experience, culture, the ability to cope and other factors. Nurses must know the point at which functional anxiety becomes disfunctional stress. This is facilitated by the ability to recognize and assess physical and behavioural responses.

Coping as a Concept

Coping potentially reduces anxiety either by enabling the individual to deal with the stressor, or to deal with the effects on the individual (Clarke, 1984). The desired outcomes of coping strategies are to regulate emotional responses and promote goal-directed or problem-solving behaviours thus minimizing negative effects (Lazarus, 1977). For the individual who is about to experience surgery, an increased ability to cope will minimize the negative impact of the stress on their psychological and physical well-being (Johnson, 1984).

Definition

Monat and Lazarus (1977) define coping as "efforts to master conditions of harm, threat or challenge when a routine or automatic response is not readily available" (p.8). The individual will select one response from a repertoire of coping responses based on the perception of the situation and past experience.

Some authors have classified types of coping strategies based on Lazarus's work (Clarke, 1984; McConnell, 1987). There appear to be four major coping strategies. They are: information seeking, direct action, inhibition of action and intrapsychic (Clarke, 1984; McConnell, 1987).

Information seeking provides the patient with information which may give a feeling of control (Thompson, 1981; McConnell, 1987). Direct action can change the patient, the situation or one's interaction with the situation (McConnell, 1987). Inhibition of action is a tendency to take no action. According to McConnell this occurs when the patient believes there is no way of changing the situation or preventing surgery. Intrapsychic modes are cognitive processes that control the patient's emotions by making him feel more comfortable (McConnell, 1987).

Any mode may be used by the individual to cope with surgery and to decrease anxiety. The individuals' selection and use of a coping strategy will be influenced by a number of factors including previous experience, knowledge, physiologic and psychologic status, culture, beliefs, age, the expected outcome of surgery and which modes were successful in the past.

Application

Nurses, as the prime caregivers, are in the best position to assess and facilitate the preoperative patient's coping strategies. The majority of nursing research to date has focused on providing information in the form of preoperative visits by operating room nurses to decrease the patient's anxiety to a functional level and consequently increase the ability to cope with the impending surgery (Lindeman and Stetzer, 1973; Lindeman, 1974; Dziurbejko and Larkin, 1978). These studies, however, do not directly measure the patient's coping activity (Johnson, 1984).

The application of coping theory will enable nurses to enhance and facilitate the patient's own ability to cope (Clarke, 1984). Johnson, Christman and Stitt, 1985 propose that for preoperative patients there is a direct relationship between coping strategies and personal control which impact the postoperative outcome.

Limitations

Nursing research has used outcome measures such as length of hospitalization and analgesia requirements which were not linked to theoretical explanations of coping (Johnson, 1984). Therefore, it is not possible to conclude whether the interventions used in the research have an effect on coping. More research is needed which develops a nursing theory and description of coping with surgery to enhance the care of the preoperative individual.

Personal Control as a Concept

Personal control has been indicated as a factor which modifies anxiety. It is also believed to enhance the patient's coping strategies (Johnson, Christman and Stitt, 1985).

Definition

Perceived control is defined as a general expectancy for internal as opposed to external control of reinforcements. Internal control refers to the perception of events as being a result of one's own actions and therefore, under personal control. External control refers to the perception of events as being unrelated to one's own behaviour and therefore, beyond personal control (Lefcourt, 1976).

Thompson, 1981, defines three types of control; behavioural, cognitive and information. Behavioural control is defined as the belief that behaviour can affect the aversiveness of an event. Cognitive control is the belief that a cognitive strategy can affect the aversiveness of an event. Information about the aversive event can be a warning, or information about sensations, procedures or causes. She believes that cognitive control strategies are the most beneficial.

Application

Focus of control theory implies that individuals have a choice in how they behave, deal with and react to the surgical experience. Unfortunately, there is a minimal amount of nursing research which tests locus of control theory for surgical patients. Johnson, Christman and Stitt, 1985 conducted a study which focused on the relationship between specific means of achieving personal control and indicators of coping. In this study, concrete sensory information provided to the patient preoperatively increased the patient's perception of control and ability to deal with the postoperative experience. Thompson, 1981, supports this by stating that information may engender feelings of control. Furthermore, information about sensations one will experience will decrease disfunctional anxiety to a functional level while information about procedures will have no effect.

When surgical patients are given a general anaesthetic, they loose personal control. Their body will take over physiologic control but even this is regulated and monitored by others, the anaesthetist and nurse. Drugs are used to paralyse the patient, he is intubated and respirations are regulated and maintained with a mechanical respirator. The physiologic response of the body is monitored with a variety of instruments including ECG, pulse oximeter, dynamap, oxygen analyser and other. Despite this, the individual's body

ultimately controls the physiologic response to drugs and surgery.

Limitations

Arakelian (1980) suggests use of the locus of control concept in health care is problematic due to the fact that health behaviours are complex and affected by other factors including support systems, symptoms, costs and accessibility to health care. For the surgical patient, many factors have the potential to influence their sense of personal control. These include past health history, reasons for surgical intervention, physiological manifestations of the illness and anxiety, and personal history.

There is a need for further nursing research to identify coping processes which promote personal control and descriptive studies of personal control in the surgical patient.

Postoperative Recovery

Coping with surgery involves facing a threat and is facilitated by using information and resources to alleviate anxiety. Janis (1958) observed that patients with high or low levels of anxiety preoperatively (disfunctional) had a poorer recovery compared to patients with moderate levels of anxiety (functional). However, Wolfer and Davis (1970) concluded in their research that there was no substantial relationship between patient's preoperative level of anxiety and any aspect of their postoperative recovery. They attribute this to the possibility of unreliable and invalid measures. Patient self-ratings were used which are subject to respondent bias and influenced by differences in coping ability.

Failure to cope with surgery may lead to a complicated recovery (Wilson-Barnett & Fordham, 1982). The function of coping focuses on goal directed behaviour. It is assumed that the surgical patient's goal is resumption of usual activities reflected by hospital discharge and resumption of usual activity (Johnson, 1984). However, Johnson believes length of hospitalization may not be a useful measure for coping because of hospital policies and procedures which dictate when patients are discharged.

Interventions which enable the patients to cope with surgery are believed to increase their feelings of personal control. Johnson (1984) argues that some interventions aimed at instructing patients to use specific coping strategies may reduce their sense of personal control by undermining their confidence in coping strategies which were effective in the past.

A finding among some nursing research studies is that concrete sensory information provided to the patient preoperatively decreased the level of anxiety, improved the ability to cope postoperatively and increased feelings of personal control (Langer, Janis and Wolfer, 1975; Christopherson and Pfeiffer, 1980; Wallace, 1985).

There are other variables which have the potential to affect postoperative recovery. These include the effects of the surgical procedure, i.e. trauma to tissue and the related physiologic response, presence and degree of postoperative complications, the nutritional status of the individual and support systems.

Implications for Nursing Interventions

Perioperative nursing practice focuses on the individual experiencing surgical intervention. It considers the physiological, social and behavioural variables which affect the individual's response to surgical intervention (McConnell, 1987).

The physiological and psychological concept of preoperative functional anxiety has a major effect on the individual's response to surgery and postoperative recovery. The concepts of coping and personal control are closely linked to preoperative anxiety and also affect the patient's postoperative recovery. Knowledge of these concepts will influence nursing interventions in terms of patient teaching, goal setting, problem solving and communication.

Conclusion

Research indicates that a patient's ability to cope with surgery is related to anxiety. Patients who have low or high levels of preoperative anxiety (disfunctional) have a decreased ability to cope, have less sense of personal control and have a poorer postoperative recovery (Janis, 1958) as compared to patients with moderate levels of preoperative anxiety (functional). A moderate degree of preoperative anxiety is followed by absence of, or minimal postoperative emotional disturbance (Lindeman, 1974; Ziemer, 1983; Wallace, 1985).

The operating room is a cold, technical environment. The presence of machines creates an atmosphere of high tech and often low touch as the patient is viewed by some as an object. "The body first has to be entrusted to the professional in order for care to proceed. And the professional, even while reducing the person to an object, redeems the reduction by restoring a level of function consonant with the patient's own values and purposes... emphatic touch is a means of continually re-establishing the mutuality in which patients are affirmed as persons rather than objects," (Gadow, 1984, p.69).

The conceptual framework developed in this paper provides the nurse with the means to predict the human response to surgery and interrelated concepts associated with the response. This will enable nurses to understand the biophychosocial phenomena of preoperative functional anxiety.

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