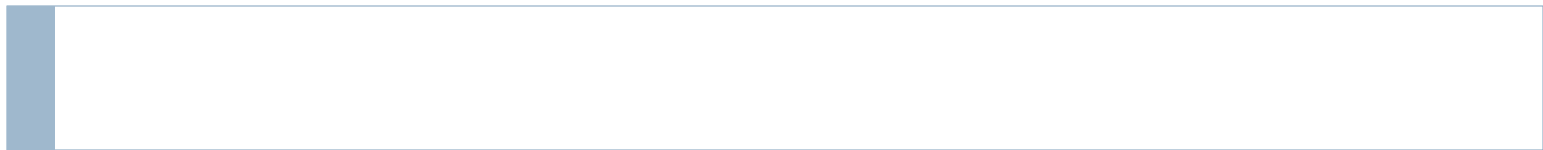


Perioperative nursing care





Caring for perioperative clients

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Caring for perioperative clients

Objectives:

At the end of this lecture, the student must be able to:

- 1. Differentiate the phases of perioperative care.**
- 2. Define the types and categories of surgery.**
- 3. Identify the preoperative assessments.**
- 4. Develop a preoperative teaching plan.**
- 5. Identify surgical risk factors.**
- 6. Describe the preoperative preparation.**
- 7. Discuss assessments needed in immediate and later postoperative period.**
- 8. Identify the postoperative complications.**

What is meant by perioperative?

Perioperative is a term used to describe the entire span of surgery, including what occurs before, during, and after the actual operation.

Phases of perioperative care

Preoperative: begins with the decision to perform surgery and continues until the client has reached the operating area.

Intraoperative: includes the entire duration of the surgical procedure, until transfer of the client to the recovery area.

Postoperative: begins with admission to the recovery area and continues until the client receives a follow up evaluation at home, or is discharged to a rehabilitation unit.

Classification of surgical procedure

1. According to purpose:

- a. **Diagnostic** – to establish the presence of a disease condition. (e.g biopsy)
- b. **Exploratory**- to determine the extent of disease condition (e.g Ex – Lap)
- c. **Curative** - to treat the disease condition(removal or replacement of defective tissue to restore function(joint)).
 - ◆ **Ablative** – removal of an organ((ectomy))
 - ◆ **Constructive**- repair of congenitally defective Organ((plasty, oorrhaphy, pexy))
 - ◆ **Reconstructive**- repair of damage organ
- a. **Palliative** – to relieve distressing sign and symptoms, not necessarily to cure the disease



Types of surgery

- **Diagnostic** → Removal and study of tissue to make a diagnosis. (Pathology)
- **Exploratory** → Most extensive means to involve exploration of a body cavity or use of scopes inserted through small incision.
- **Curative** → Removal or replacement of defective tissue to restore function. (Joint)
- **Palliative** → Relief of symptoms or enhancement of function without cure. (Thyroidectomy)
- **Cosmetic** → Correction of defects, improvement of appearance, or change to a physical feature.

According to Urgency

Classification	Indication for surgery	Example
Emergent – patient requires immediate attention, life threatening condition	Without delay	sever bleeding gun shout/ stab wounds
Urgent / imperative – patient requires prompt attention	Within 24 to 30 hours	Kidney / ureteral stones
Required – patient needs to have surgery	Plan within few weeks or months	cataract thyroid d/o
Elective – patient should have surgery	Failure to have surgery not catastrophic	Repair of scar
Optional – patient's decision	Personal preference	Cosmetic surgery

According to degree of risk

1. **Major surgery**

- High risk / greater risk for infection
- Extensive
- Prolonged
- Large amount of blood loss
- Vital organ may be handled or removed

1. **Minor surgery**

- Generally not prolonged
 - Leads to few serious complication
 - Involves less risk
-



Categories of Surgery

Emergency

Urgent

Required

Elective

Optional



Assessment



- **Client assessment varies depending on the urgency of the surgery.**
- **Time for preoperative assessment, nursing diagnosis, and evaluation of the nursing management may be limited when a client is admitted for ambulatory surgery or admitted shortly before surgery.**
- **Recognition of the client's immediate preoperative needs is important.**
- **When the client is admitted, the nurse review preoperative instructions, such as *diet restriction, skin preparation*, to ensure the client has followed them.**
- **The nurse immediately notifies the surgeon if the client has not carried out a specific portion of the instruction.**

Preoperative Assessment

I. Review preoperative laboratory and diagnostic studies

II. Review the client's health history and preparation for surgery

III. Assess physical needs

IV. Assess psychological needs

V. Assess cultural needs



I. Review preoperative laboratory and diagnostic studies:

- Complete blood count.
- Blood type and cross match.
- Serum electrolytes.
- Urinalysis.
- Chest X-rays.
- Electrocardiogram.
- Other tests related to procedure or client's medical condition, such as: prothrombin time, partial thromboplastin time, blood urea nitrogen, creatinine, and other radiographic studies.



II. Review the client's health history and preparation for surgery:

- History of present illness and reason for surgery
- Past medical history
- Medical conditions (acute and chronic)
- Previous hospitalization and surgeries
- History of any past problem with anesthesia
- Allergies
- Present medications
- Substance use: alcohol, tobacco, street drugs
- Review of system

III. *Assess physical needs:*

- Ability to communicate
- Vital signs
- Level of consciousness
 - Confusion
 - Drowsiness
 - Unresponsiveness
- Weight and height
- Skin integrity
- Ability to move/ ambulate
- Level of exercise
- Prostheses
- Circulatory status

IV. Assess psychological needs:

- Emotional state
- Level of understanding of surgical procedure, preoperative and postoperative instruction
- Coping strategies
- Support system
- Roles and responsibilities

V. Assess cultural needs:

- Language-need for interpreter

SURGICAL CONSENT

- **Before surgery, the client must sign a surgical consent form or operative permit.**
- **Clients must sign a consent form for any procedure that requires anesthesia and has risks of complications.**
- **If an adult client is confused, unconscious, a family member or guardian must sign the consent form.**
- **If the client is younger than 18 years of age, a parent or legal guardian must sign the consent form.**
- **In an emergency, the surgeon may have to operate without consent, health care personnel, however, makes every effort to obtain consent by telephone, or fax.**
- **Each nurse must be familiar with agency policies and state laws regarding surgical consent forms.**
- **Clients must sign the consent form before receiving any preoperative sedatives.**
- **The nurse is responsible for ensuring that all necessary parties have signed the consent form and that it is in the client's chart before the client goes to the operating room (OR).**



PREOPERATIVE TEACHING

- └ Teaching clients about their surgical procedure and expectations before and after surgery is best done during the preoperative period.
- └ Clients are more alert and free of pain at this time.
- └ Clients and family members can better participate in recovery if they know what to expect.
- └ The nurse adapts instructions and expectations to the client's ability to understand.
- └ Information in a preoperative teaching plan varies with the type of surgery and the length of the hospitalization.

- Information about intravenous (IV) fluids and other lines and tubes such as nasogastric tubes.
- Preoperative teaching time also gives the client the chance to express any anxieties and fears and for the nurse to provide explanations that will help alleviate those fears.
- When clients are admitted for emergency surgery, time for explanation is unavailable; explanations will be more complete during the postoperative period.

PREOPERATIVE TEACHING PLAN INCLUDES:

- └ Preoperative medication- when they are given and their effects.
- └ Post operative pain control.
- └ Explanation and description of the post anesthesia recovery room or post surgical area.
- └ Discussion of the frequency of assessing vital signs and use of monitoring equipment.
- └ Explanation and demonstration deep breathing and coughing exercises, use of incentive spirometry, how to support the incision for breathing exercises and moving, position changes, and feet and leg exercises.

Surgical Risk Factors:

- Age → Very young – Elderly
- Nutritional Status → Malnourished – Low weight – Obese
- Medical Problems → Acute and chronic respiratory problems – Hypertension – Liver dysfunction – Renal failure – Diabetes

Preoperative Preparation:

▮ **Physical Preparation.**

- Skin preparation
- Elimination
- Food and fluids
- Care of valuables
- clothing/ grooming
- Prostheses

▮ **Psychosocial Preparation.**

- Careful preoperative teaching can reduce fear and anxiety of the clients.

Nursing Diagnosis

- ***Anxiety** related to results of surgery and postoperative pain.*
- ***Knowledge deficit** related to preoperative procedures and postoperative expectations.*

Postoperative Care:

Immediate postoperative period.

Initial Assessment

- Airway patency
- Effectiveness of respiration
- Presence of artificial airways
- Mechanical ventilation, or supplemental oxygen
- Circulatory status, vital signs
- Wound condition, including dressings and drains
- Fluid balance, including IV fluids, output from catheters and drains and ability to void
- Level of consciousness and pain



Postoperative Care:

Later postoperative period

Ongoing Assessment

- Respiratory function
- General condition
- Vital signs
- Cardiovascular function
- Fluid status
- Pain level
- Bowel and urinary elimination
- Dressings, tubes, drains, and IV lines

Nursing Diagnosis

- Risk for **altered respiratory function** related to immobility, effects of anesthesia, analgesics and pain.
- **Pain** related to surgical incision and manipulation of body structures.
- **Altered Comfort** (nausea and vomiting) related to effects of anesthesia or side effects of narcotics.
- Risk for **Infection** related to break in skin integrity (surgical incision, wound drainage devices).
- **Activity Intolerance** related to decreased mobility and weakness secondary to anesthesia and surgery.

Nurse's Responsibilities in Postoperative Phase

- Ensures a patent airway
- Helps maintain adequate circulation
- Prevents or assist with the treatment of shock
- Maintains proper position and function of drain tubes and IV infusion
- Monitor for potential complications

Postoperative Complications

1. Hemorrhage
2. Shock
3. Hypoxia
4. Aspiration