Pre and Post Operative Nursing Management
LEARNING OBJECTIVES

On completion of this chapter, the learner will be able to:
1. Define the three phases of the perioperative period.
2. Describe a comprehensive preoperative assessment to identify surgical risk factors.
3. Identify the causes of preoperative anxiety and describe nursing measures to alleviate it.
4. Identify legal and ethical considerations related to informed consent.
5. Describe preoperative nursing measures that decrease the risk for infection and other postoperative complications.
6. Describe the immediate preoperative preparation of the patient.
7. Develop a preoperative teaching plan designed to promote the patient’s recovery from anesthesia and surgery, thus preventing postoperative complications.
Preoperative Phase: The period of time from when decision for surgical intervention is made to when the patient is transferred to the operating room table.

Intraoperative Phase: Period of time from when the patient is transferred to the operating room table to when he or she is admitted to the postanesthesia care unit.

Postoperative Phase: Period of time that begins with the admission of the patient to the postanesthesia care unit and ends after follow-up evaluation in the clinical setting or home.

Perioperative Period: Period of the time that constitute the surgical experience, include the preoperative, intraoperative, postoperative phases.
Preoperative Phase

- Begins with decision to proceed with surgical intervention
- Baseline evaluation
- Preparatory education
1. Patient’s name: ___________________________ Date: ___________________________ Height: ___________________________ Weight: ___________________________

2. Informed consent signed: ___________________________ Special permits signed: ___________________________

3. Surgical site: ___________________________ (Ex: Sterilization) Date: ___________________________

4. History & physical examination report present: ___________________________ Date: ___________________________

5. Laboratory records present:______________  CBC: ___________________________ Hgb: ___________________________ Urinalysis: ___________________________  Hct: ___________________________

6. Item
   a. Natural teeth
   b. Dentures; upper, lower, partial
   c. Bridge, fixed; crown
   d. Contact lenses
   e. Other protheses—type: ___________________________
   f. Jewelry:
      - Wedding band (taped/tied)
      - Rings
      - Earrings: pierced, clip-on
      - Neck chains
      - Any other body piercings
   g. Make-up
   h. Jewelry:
      - Nail polish

7. Clothing
   a. Clean patient gown
   b. Cap
   c. Sanitary pad, etc.

8. Family instructed where to wait? ___________________________


11. Preanesthetic medication given: ___________________________ Type: ___________________________ Time: ___________________________


13. Mouth care given:
    - Type: ___________________________ Time: ___________________________


15. Special problems/precautions: (Allergies, deafness, etc.): ___________________________

16. Area of skin preparation: ___________________________

Signature: Nurse releasing patient
Intraoperative Phase

- Begins when patient is transferred to operating room table
- Provide for patient safety
- Maintain aseptic environment
- Provide surgeon with supplies and instruments
- Documentation
Postoperative Phase

- Admission to PACU
- Maintain airway
- Monitor vital signs
- Assess effects of anesthesia
- Assess for complications of surgery
- Provide comfort and pain relief
- Ends with follow-up evaluation in clinical setting or home
Preoperative Nursing Management:

I- Patient Education:

* Teaching deep breathing and coughing exercises.
* Encouraging mobility and active body movement.
  
  e.g. Turning (change position), foot and leg exercise.
* Explaining pain management.
* Teaching cognitive coping strategies.
Preoperative Nursing Management:

* Managing nutrition and fluids.
  – The major purpose of withholding food and fluid before surgery is to prevent aspiration.
  – A fasting period of 8 hours or more is recommended for a meal that includes fried or fatty foods or meat.

* Preparing the bowel for surgery.
  – Enema is not commonly ordered, unless the patient is undergoing abdomen or pelvic surgery, e.g. (cleansing enema, laxative).

* Preparing the skin.
  – The goal of preoperative skin preparation is to decrease bacteria without injuring the skin.
Preoperative Nursing Management:

III- Immediate preoperative nursing intervention:

* Administering preanesthetic medication.
* Maintaining the preoperative record.
  e.g. Final checklist, consent form, identification.
Nursing management in the post anesthesia care unit:

I-Assessing the patient:

- Frequent assessment of the patient oxygen saturation, pulse volume and regularity, depth and nature of respiration, skin color, depth of consciousness.

II- Maintaining a patent airway:

- The primary objectives are to maintain pulmonary ventilation and prevent hypoxia and hypercapenia.
- The nurse applies oxygen, and assesses respiratory rate and depth, oxygen saturation.
Nursing management in the post anesthesia care unit:

III- Maintaining cardiovascular stability:

- The nurse assesses the patient’s mental status, vital signs, cardiac rhythm, skin temperature, color and urine output.
- Central venous pressure, arterial lines and pulmonary artery pressure.
- The primary cardiovascular complications include hypotension, shock, hemorrhage, hypertension and dysrhythmias.
Nursing management in the post anesthesia care unit:

**IV- Relieving pain and anxiety:**
- Opioid analgesic.

**V- Assessing and managing the surgical site:**
- The surgical site is observed for bleeding, type and integrity of dressing and drains.

**VI- Assessing and managing gastrointestinal function:**
- Nausea and vomiting are common after anesthesia.
- Check of peristalsis movement.
Nursing management in the post anesthesia care unit:

VII- Assessing and managing voluntary voiding:
   - Urine retention after surgery can occur for a variety of reasons. Opioids and anesthesia interfere with the perception of bladder fullness.
   - Abdominal, pelvic, hip may increase the likelihood of retention secondary to pain.

VIII- Encourage activity:
   - Most surgical are encouraged to be out of bed as soon as possible. Early ambulation reduces the incidence of post operative complication as atelectasis, pneumonia, gastrointestinal discomfort and circulatory problem.
Post Operative Complication:

1- Shock:
Is the response of the body to a decrease in the circulating volume of blood, tissue perfusion impaired, cellular hypoxia and death.

2- Hemorrhage:
Is the escape of blood from a blood vessel.

3- Deep vein thrombosis. (DVT):
Occur in pelvic vein or in lower extremities, and it’s common after hip surgery.
Post Operative Complication:

4- **Pulmonary embolism.**

It’s the obstruction of one or more pulmonary arterioles by an embolus originating some where in the venous system or in the right side of heart.

5- **Urinary Retention.**

6- **Intestinal obstruction.**

Result in partial or complete impairment to the forward flow of intestinal content.
Potential Intraoperative complication:

- Nausea and vomiting
- Anaphylaxis
- Hypoxia and other respiratory complication
- Hypothermia