

A Comprehensive Nursing Approach in Pre and Post-Operative Management

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Abstract

Surgery, whether elective or emergent, is a stressful, complex event. Today, as a result of advances in surgical techniques and instrumentation as well in anesthesia, many surgical procedures that were once performed in an inpatient setting now takes place in an ambulatory or outpatient setting. A comprehensive approach in Pre and Post-Operative Management helps in bringing out the surgery successful with no or less complication. The Interventions involved should be beneficial in both physical and psychological aspects. Both the patient and the family should need guidance and counseling before and after surgery. Nurses play a major role in giving Pre and Post-Operative Care to the patient who is undergoing surgery.

Keywords: Nursing intervention, post-operative care, pre-operative care

PRE-OPERATIVE CARE

Pre-operative care begins as soon as the surgeon makes a diagnosis and decide that an operation is necessary for the patient and ends with the transfer of the patient into the operating room (Table 1).

Assessment

Assessment starts with history collection and physical examination. History collection involves patient personal data, past and present medical history, past surgical history. Vital signs to be noted. General health status regarding nutrition, drug and alcohol usage, respiratory problems, cardio vascular problems, liver problems, endocrine dysfunctions and immune function are to be collected and assessed [1]. Information regarding health status can also be obtained from blood test, X-ray and other diagnostic test. The above assessment helps in planning intervention in the Pre and Post-Operative care.

Psychological Preparation

Anxiety, fear and hope [2] are the major psychological problems present with the patient in the pre-operative period. Nurses'

role involves in reducing those psychological problems by giving orientation to the Ward, ICU and psychological support.

Providing proper explanation regarding surgery by doctors, encouraging the patient to clarify his queries and doubts, allowing the patient to talk with the patient in recovery period with same condition helps in decreasing the fear and Anxiety of the patient. Also take steps to motivate the patient towards positive attitude which helps faster recovery in post-operative period.

The written consent to be obtained from the patient by the physician. Before taking consent, the surgeon should explain the procedure/surgery in detail and the complication also need to explain. It also helps in reducing fear and anxiety and to gain confidence. Nurses only have to witness the consent taking.

Pre-Operative Teaching

Pre-operative teaching is the important tool for the successful recovery of the patient in the post-operative period. The teaching involves deep breathing and coughing exercise, respiratory muscle training [3], early mobilization and active body movement, pain management (selection of pain management technique) and cognitive coping strategies. The reason for giving the teaching in the pre-operative period itself is due to pain, sedation and other distraction in the post-operative period, the patient will not be in a mood to hear all those things.

Pre-Operative Nursing Intervention

Pre-operative nursing intervention involves pre-medication, skin preparation, bowel preparation [1]. Hair clipping to be done if advised and advise the patient to take bath as a part of skin preparation. Nil per oral from what time has to be explained to the patient. Pre-medication to be given at proper time as advised by the Surgeon/Anesthetist. Patient to be changed to Hospital gown, long hair to be tied up, hairpins to be removed and head to be completely covered with a disposable paper cap. Ask the patient to empty the bladder. Remove all the jewelry. Denture and rope around the waist to be checked for and to be removed. Before shifting the patient to the surgery, checklist to be checked and signed. Then shift the patient to OT in the trolley with all the patients' record. For each and every intervention, we have to explain the rational to the patient to reduce the anxiety.

POST-OPERATIVE CARE

Post-operative care depends on the type of anesthesia given to the patient. Post-operative care begins once the surgery got over and transfer from the operation table.

Immediate Post-Operative Care

For some patients, underwent minor procedure under local anesthesia or sedation can go home at the day itself after

some time of observation. While going home, we have to explain in detail about the home management and follow up care.

The patient who underwent minor surgery may shift to the surgical unit after the surgery got over. They can be looked after in the ward itself.

The patient with major surgery while receiving in the ICU, we have to check for conscious of the patient by calling the patient with his name. Oxygen to be connected immediately. Supplemental oxygenation helps in reducing the risk of infection [4]. Some patient may receive with brain circuit ventilation, immediately we have to connect the patient to the ventilator to prevent hypoxemia. Connect the patient to the continuous cardiac monitor. Temperature probe has to be fixed on the patient to see for hypothermia. Vital signs to be monitored. Intravenous fluids to be started as per the physician order.

Drainages to be assessed for oozing, bleeding and it to be hanged down. Output to be monitored if urinary catheter is present. Blood sugar to be monitored. Pain to be assessed and necessary intervention should be done. Provide a safe environment by providing side rails to the bed. Patient anxiety about the outcome of the surgery to be reduced by explaining the surgery outcome. Orientation to be given to the patient, once the patient recovers from anesthesia.

Post-Operative Management in General

Vital signs to be monitored. Patients level of consciousness to be assessed. Oral clear fluids can be started, once the recommended period of Nil per oral got over. Assess for bowel movement, then start with solid diet. We have to encourage the patient to do deep breathing and coughing exercises and incentive spirometer is used as early as possible to prevent respiratory complications. Chest

physiotherapy and steam inhalation also can be given to loosen the secretion, collected due to anesthesia effect. Pain can be reduced by giving comfort measures and analgesics. Patient controlled analgesia helps more in reducing the pain to good extent. Pain management helps the patient to do effective breathing exercise and early ambulation.

Cardiac complication should be avoided or minimized by ensuring adequate intravenous fluid in fusion. Intake and output also to be monitored strictly to know the functions of the kidney. Hemoglobin and blood sugar to be monitored to control the post-operative infection [5, 6]. Early ambulation to be encouraged and thus helps in preventing venous stasis, circulation impairment and pain reduction and promoting bowel function. If not able to ambulate early, arm exercise, hand and finger exercise, foot exercise, leg flexion and leg lifting exercise, abdominal and gluteal contraction exercises to be encouraged [2].

Surgical wound to be assessed for any infection, oozing. Proper hand hygiene helps in preventing and reducing the risk of wound infection. Urinary retention to be assessed and necessary intervention to be taken. If the bowel not moved after 2-3 days of surgery, it should be notified to physician for laxative. Complications to be assessed earlier and necessary management to be taken. Emotional support also to be given to the family members.

ROLE OF THE NURSE IN PRE AND POST-OPERATIVE MANAGEMENT

The nurse should have the knowledge and skill in the Pre and Post-operative care. Nurse is the mediator for patient and physician. She has to take necessary arrangement for the other health professionals like dieticians, therapists, Lab Technicians in providing Pre and Post-operative care. Nursing intervention

to be given with rational and explain the rational to the patient while giving intervention. It helps the patients in reducing anxiety, fear and provide comfortable environment makes the patient to relax. The presence of a pre-operative nurse is calming, prevents feeling of loneliness and promotes well-being which may speed up recovery and being closed to and being touched by the pre-operative nurse during surgery [7].

CONCLUSION

In conclusion, Pre-operative and Post-operative care helps in the good outcome of the surgery. It is a team work involved by nurses, doctors, patients, family members and other health professionals. Nurses are the one who plays a major role in the pre and post-operative management. Good, effective and comprehensive care by nurses helps the surgery success with minimal or no complications. It also helps the patient to go home from hospital early. It helps the patient protecting from nosocomial infection.

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