DOWNLOAD PDF PERIOPERATIVE PATIENT CARE

Chapter 1 : Perioperative Patient Care Tech Jobs, Employment | www.nxgvision.com

Perioperative patient care is a variety of nursing activities carried out before, during, and after surgery. The perioperative period has three phases: (1) The preoperative phase begins with the decision that surgical intervention is necessary and ends when the patient is transferred to the operating room table.

Absence or deficiency of cognitive information related to specific topic. Correctly perform necessary procedures and explain reasons for the actions. Initiate necessary lifestyle changes and participate in treatment regimen. Facilitates planning of preoperative teaching program, identifies content needs. Review specific pathology and anticipated surgical procedure. Verify that appropriate consent has been signed. Provides knowledge base from which patient can make informed therapy choices and consent for procedure, and presents opportunity to clarify misconceptions. Use resource teaching materials, audiovisuals as available. Implement individualized preoperative teaching program: NPO time, shower or skin preparation, which routine medications to take and hold, prophylactic antibiotics , or anticoagulants , anesthesia premedication. Helps reduce the possibility of postoperative complications and promotes a rapid return to normal body function. In some instances, liquids and medications are allowed up to 2 hr before scheduled procedure. Reduced risk of complications or untoward outcomes, such as injury to the peroneal and tibial nerves with postoperative pain in the calves and feet. Expected or transient reactions low backache, localized numbness and reddening or skin indentations. Minor effects of immobilization and positioning should resolve in 24 hr. If they persist, medical evaluation is required. Discuss individual postoperative pain management plan. Identify misconceptions patient may have and provide appropriate information. Increases likelihood of successful pain management. Some patients may expect to be pain-free or fear becoming addicted to narcotic agents. Provide opportunity to practice coughing, deep-breathing, and muscular exercises. Enhances learning and continuation of activity postoperatively. Back See Also You may also like the following posts and care plans:

Chapter 2 : 13 Surgery (Perioperative Client) Nursing Care Plans â€¢ Nurseslabs

Perioperative care. Perioperative care is the care that is given before and after surgery. It takes place in hospitals, in surgical centers attached to hospitals, in freestanding surgical centers, or health care providers' offices.

Objectives After completing this course, the learner will be able to perform the following: List the two most common causes of adverse events as a it pertains to perioperative morbidity and mortality. Define poor exercise tolerance as it pertains to predicting perioperative adverse events. Describe the recommendations for the perioperative management of beta blockers in patients receiving this class of medication prior to surgery. List two most common causes of hypotension in the post-anesthesia care unit. Preoperative Evaluation In modern healthcare systems, operative treatment of disease has been on the increase in the last decades. In the United States in , it was estimated that over 1 million patients out of the 26 million who underwent a surgical procedure experienced adverse events. Traditional risk factors such as a history of tobacco use, dyslipidemia, hypertension and other comorbid conditions such as peripheral vascular disease, renal insufficiency, chronic obstructive pulmonary disease, cerebrovascular disease and cardiovascular disease are all important to document in the preoperative evaluation. Class 1 is reserved for normal healthy patients. Patients in Class 2 have mild systemic disease with no evidence of functional limitations. Class 3 patients have severe systemic disease with some degree of functional limitations. Class 4 patients have severe systemic disease with a constant threat to life. These patients are usually functionally incapacitated. Class 5 patients are moribund patients who are not expected to survive without the planned surgery. Class 6 patients are brain dead patients who are having organs removed for donor purposes. Finally, there is a separate designation; E which is used to indicate that the procedure is an emergency. When using this designation, the physical status is usually written followed by the letter E. For example, ASA class 3E. It is defined as a history of current angina, history of myocardial infarction, use of sublingual nitroglycerin, the presence of Q waves on an electrocardiogram, positive exercise test results. Cerebrovascular disease is defined as a history of a prior stroke or a prior transient ischemic attack. Some patients are at intermediate risk or high-risk for surgery and therefore require a more thorough clinical evaluation before they undergo major surgical procedures. High-risk surgical procedures are defined as intrathoracic, intraperitoneal and supra inguinal vascular procedures. Often, physicians evaluate these patients with a screening questionnaire which may then trigger a more comprehensive evaluation. Comprehensive evaluation usually involves a thorough history and physical with a specific focus on occult cardiopulmonary diseases. Worsening exercise intolerance is a good predictor of overall perioperative risk especially in patients who self-report cardiopulmonary symptoms which are exercise induced. Energy used by muscles either at rest or during activity is expressed as a function of the total body oxygen uptake VO2. VO2 has been shown to be equal to the product of the cardiac output and the oxygen extraction in the peripheral tissues. The result of this product is defined as metabolic equivalent MET levels. A MET level 1 defined as the energy expended at rest which is approximately 3. Essentially, this is a convenient way of expressing energy spent during activity compared to energy spent at rest. MET activity levels are based on age, sex, exercise habits and cardiovascular levels. Of note, the metabolic equivalent level is defined as oxygen consumption of a 70 kg man at rest. In addition, it is defined as an inability to meet a metabolic equivalent MET level of 4. Every patient who is scheduled for a major surgery does not require preoperative noninvasive cardiac evaluation. Most clinical providers use a risk stratification model based on clinical parameters. Patients with a high cardiac risk index should be sent for further evaluation, and the need for revascularization should be carefully considered. Noninvasive cardiac testing consists of a measurement of blood pressure and heart rate, electrocardiography, exercise and pharmacologic stress test. Occasionally, providers choose to use medications for preventive measures in the preoperative setting. Some examples include; statins, antiplatelet agents, beta blockers and alpha agonists with the goal being to reduce adrenergic stimulation, inflammation and ischemia in the perioperative setting. Thus, the revised cardiac risk index RCRI was created to identify patients at risk. Ideally, patients should receive the medication preoperatively on the day of the surgery and should be continued in the postoperative setting for at least 7 days, but 30 days is

preferable. Providers should avoid abrupt beta blocker withdrawal due to the increased risk of angina and myocardial infarction. In general, high-risk patients are defined as patients with a RCRI greater than or equal to 2. Additionally, they also agree on a reasonable recommendation for high-risk patients or patients with known coronary artery disease who undergo an intermediate risk surgery. Lastly, their recommendation is a contraindication for non-titrated administration of high dose beta blockers in patients who have never been treated with a beta blocker. Statins are felt to be valuable besides just lowering the cholesterol. It is also useful in other regards such as decreasing new thrombus formation as well as stabilizing plaque by decreasing inflammation. Currently, the indication is to continue statin therapy if the patient is already on statins or if there is a clear indication for statin therapy based on their history. Perioperative Management of Pulmonary Risk It has been shown that postoperative pulmonary complications are just as prevalent as postoperative cardiac complications in terms of the length of the hospital stay, morbidity and mortality. There are several factors which increase the risk of postoperative pulmonary complications which are; age older than 60 years, functional dependence, congestive heart failure, chronic obstructive pulmonary disease and American Society of Anesthesiologists ASA class II or greater. The exception is patients undergoing lung reduction surgery or other intrathoracic procedures. Some interventions have been shown to be helpful in decreasing perioperative pulmonary complications such as incentive spirometers, selective use of a nasogastric tube for gastric decompression if necessary and deep breathing exercises. It has also been associated with increased critical care unit admissions. These are usually linked to increased rates of pneumonia and respiratory collapse. Obstructive sleep apnea is considered at least a moderate risk of postoperative complications as such patients not diagnosed with obstructive sleep apnea but with at least 2 clinical signs and symptoms of the disease. Symptoms of obstructive sleep apnea include snoring, witnessed daytime apnea or a crowded oropharynx. Venous thromboembolism prophylaxis has been shown to improve patient outcomes and decrease hospital costs. Consequently, clinicians must seriously consider the risk of venous thromboembolism in every surgical patient. Postoperative deep vein thrombosis DVT is usually asymptomatic, and sometimes the first sign may be a massive pulmonary embolism. Screening all preoperative patients for a DVT is not practical and, in asymptomatic patients, it will have a low sensitivity for detecting clot. Ideally, all patients should receive VTE prophylaxis and interventions based on the procedure-related risks and the individual patient-related risks. Pharmacologic interventions include aspirin, low molecular weight heparin, heparin and warfarin. Additionally, patients can have an inferior vena cava filter. Perioperative Management of Medications In general, medications with a significant withdrawal potential that are unlikely to affect the planned surgery or administration of anesthesia should not be discontinued in the perioperative period. These include medications such as alpha blockers and beta blockers. Conversely, medications which increased perioperative risk and are not essential for short-term quality of life can be discontinued. Providers should weigh in individually on medications which do not fall in this category. Angiotensin receptor antagonists and angiotensin converting enzyme inhibitors are associated with profound hypotension with the induction of anesthesia usually requiring pressor support. Aspirin and clopidogrel are used in patients who have preexisting cerebral, peripheral vascular or coronary vascular disease. Although the use of these agents decreases inflammatory events, they also come at the risk of increased bleeding intraoperatively or in the postoperative setting. It has been shown that stopping these medications for the short term in the perioperative setting does not lead to adverse side effects. Currently, the recommendation is to discontinue these anti-inflammatory agents 7 to 10 days before an elective surgical procedure. An exception to discontinue these medications is in patients who had a drug-eluting stent placed recently in a coronary artery since this can cause thrombosis of the stent. It is estimated that approximately half of the dose of insulin is used for non-nutrient metabolic needs. Currently, the recommendation to patients taking intermediate-acting insulin such as NPH insulin is to take at least half to two-thirds of their evening dose on the morning of their surgery. Clinicians should consider administering the full dose of long-acting insulin to patients on the day of surgery. Insulin sliding scales use is usually associated with several episodes of hypoglycemia and hyperglycemia which is less conducive to good perioperative outcomes. Perioperative Management of Psychiatric Medications Psychiatric medications should be continued in the perioperative setting in order to prevent a decompensation of psychiatric conditions which

may increase perioperative morbidity. Surgical site infections are associated with increased hospitalization by 7 or more days. However, the main determinant of a surgical site infection is the surgical site. The use of prophylactic antibiotics has been shown to reduce the incidence of surgical site infections. Additionally, in the use of preoperative antibiotics within 2 hours of surgery has been shown to decrease the day mortality amongst Medicare patients by up to two-fold. Nasal colonization with Staphylococcus aureus has been linked to an increased risk of surgical site infections. Currently, the American Academy of Orthopedic Surgeons recommends against antibiotic prophylaxis before prosthetic joint procedures. In addition, the American Dental Association recommends against the use of antibiotics prior to dental procedures. Most SSIs occur at 5 to 10 days after the procedure. Usually, antibiotics are not needed for simple wounds which are drained. On the contrary, SSI in deep spaces require both surgical drainage as well as systemic antibiotics. Clinical signs and symptoms of a wound infection include, pain, purulent drainage from the site and fevers. Most postoperative leaks occur between days 5 and 7. In this section, we will review the common used surgical drains and their indications. It is important for nurses to understand the purpose and location of all surgical drains in the patients they are caring for as well as how the drains should be manipulated with guidance from the primary surgical team. Chest Tubes These are placed in the pleural space and are usually used to drain pleural effusions, pneumothoraces or hemothoraces. In general, these are used during cardiothoracic surgery, trauma and in cases of infection. Chest tubes come in varied sizes and are typically placed in the fourth or fifth intercostal space in the midaxillary line or along the anterior axillary line. The tubes are then connected to a three-chamber drainage system. The water chamber is used to prevent air from being sucked into the pleural space as the patient inhales. The suction chamber is usually attached to continuous wall suction which helps clear the pleural space from air or fluid. The last chamber which is the drainage chamber is used to collect the fluid draining from the pleural space.

Chapter 3 : Perioperative Assistant Duties | www.nxgvision.com

Anesthesiologists are in midstream of perioperative care and can make significant contributions to patient safety and patient outcomes. This article reviews recent research results outlining the current trends of perioperative patient harm and summarizes the evidence in favor of patient safety practices.

It is at this moment when the nurse becomes the eyes, ears, and voice for the patient. Care needs to be specific to and focused only on the patient being cared for. One patient â€¦ one unique perioperative journey. So how do you, as a circulating nurse, make certain you deliver the care each patient needs? How is it made unique to the patient? Let me use surgical skin prep to illustrate. We know the surgical skin prep is a critical step in reducing the risk of a surgical site infection for patients undergoing surgery. The circulating nurse is responsible for knowing the fundamentals of selecting and appropriately applying the surgical skin prep. Manufacturers provide instruction for use which include application method, contraindications and warnings for their surgical skin prep products. This is the best resource for learning about the surgical skin prep products used in your facility. Here are 7 basic considerations to personalize the prep selection for your patient: Does your patient have allergies and sensitivities? Check for patient allergies or sensitivities to the ingredients contained in the surgical skin preparation products used in your institution 2. Is your patient less than two months of age? Certain skin preps are not recommended for patients under two months of age due to the risk of excessive skin irritation or absorption of the active ingredient. What is the surgical procedure site? If it is near the eyes: CHG products should be used with caution If the skin is not intact: If the site includes a lumbar puncture or contact with the meninges: CHG preps would not be appropriate due to the risk of neurotoxicity 4. What challenges will your surgical site face? Does the procedure involve large amounts of fluids e. If so, select a prep that is resistant to being washed off when challenged with irrigation solution, blood or sponges that come in contact with the prepped skin. You want a prep that will continue to work throughout the procedure into the post procedure phase. Does the procedure involve the use of an incise drape? Select a prep that enhances drape adhesion so that once you create that sterile field with an incise drape there is a reduced incidence of drape lift. Does the procedure involve prepping a large surface area or include prepping an area of high microbial counts e. When using a single use applicator it is important to select the appropriate size for the location you are prepping. Single use applicators specify the coverage area on the package insert. More than one applicator may be required. Using a single use applicator to cover an area greater then specified area can impact the efficacy of the prep. Conversely, using a larger volume of prep than is needed for a small area increases the potential for pooling of solution which poses a risk for skin irritation and fire if the pooled solution or solution-soaked materials are not removed after the prep is complete. Are you using a prep that contains alcohol? If so, to reduce the risk of fire, you should adhere to the specified dry times. The minimum dry time for a prep containing alcohol is 3 minutes on hairless skin and up to an hour in hair. Following dry time ensures prep efficacy, patient safety and minimizes skin irritation. When you know the answers to these questions and have selected the appropriate prep for your patient and their procedure, the next step will be to apply the prep. To provide your patient with quality care, it is important to understand and follow the Instructions for Use IFU specific to the chosen prep. Here are 4 factors to consider: The application method for a surgical skin prep is critical for the prep to achieve its efficacy. Instructions for use IFU are based on the product application used during testing to meet the FDA efficacy requirements. Even if the skin antiseptic active ingredients are the same between manufacturers, the application methods utilized for their clinical studies and the resultant efficacy findings may vary based on product formulation and applicator design. Application methods range from being painted on, scrubbed on, or applied in gentle back- and- forth stokes. Application can vary in terms of contact time. For example; solutions that combine alcohol and another active ingredient e. Application time may vary dependent upon intended use. For example, prior to surgery, prior to inserting a vascular catheter or prior to performing an injection. If the application times are different, the different times and indications must be identified on the product label or in the IFU. Application time may vary depending on the site being prepped. If you are prepping a dry site e. As you can see, even one of the

most seemingly routine tasks in preparing your patient for surgery is anything but routine. The ability of the circulating nurse to customize the care for each patient is critical to keeping the patient safe throughout the perioperative journey.

Chapter 4 : Perioperative - Wikipedia

and provide care within the context of the healthcare system so as to achieve desirable patient outcomes (AORN, a, pp.). Perioperative nurses provide patient care within.

Submit manuscript at https: The journal publishes reviews, updates and feature articles in addition to original papers and significant preliminary communications. Articles may deal with any part of practice including relevant clinical, research, educational, psychological and technological aspects. Perioperative Nursing Perioperative nursing includes those activities performed by the professional registered nurse in the preoperative, intraoperative and postoperative phases of surgery. Perioperative nurses provide care for patients in the period prior to and right after surgery or intervention procedures. Perioperative nursing encompasses a variety of specialty roles including holding bay, circulating, anaesthetic, Instrument or scrub nurse, and recovery room. Critical Care Nursing Critical care nursing is that specialty within nursing that deals specifically with human responses to life-threatening problems. A critical care nurse is a licensed professional nurse who is responsible for ensuring that acutely and critically ill patients and their families receive optimal care. It focus on the utmost care of the critically ill or unstable patients. Critical care nurses can be found working in a wide variety of environments and specialties, such as general intensive care units, medical intensive care units, surgical intensive care units, trauma intensive care units, coronary care units, cardiothoracic intensive care units, and some trauma center emergency departments. They treat patients who are chronically ill or at risk for deadly illnesses. ICU nurse apply their specialized knowledge base to care for and maintain the life support of critically ill patients who are often on the verge of death. Perioperative care Perioperative care is the care that is given earlier, throughout and later surgery. Perioperative care is mostly seen in hospitals, in surgical centers which are close to hospitals , in self-supporting operating centers or medical care providers. Perioperative care period is used to make the patient physically and mentally ready for the operating procedure and after the surgical treatment. In case of emergency operations this phase can be short and even unaware to the patient and for optional surgeries perioperative care can be relatively long. Info attained throughout preoperative valuation is used as a source for the care strategy for the patient. This usually comprises hospital ward admission, anesthesia, operation, and retrieval. Perioperative period commonly mentions the three stages of operation such as preoperative, intraoperative, and postoperative. The objective of perioperative care is to offer healthier surroundings for patients before the operation, during the operation, and after the operation. Nursing process The nursing process is a improved systematic technique. The Nursing practice was chiefly designated as a four phase nursing process by Ida Jean Orlando in the year Nursing process must not be jumbled with nursing theories or the Health informatics. The analysis stage was added later. Nursing procedure uses the medical judgement to raid a stability of epistemology among individual elucidation and study evidence in which serious thinking might play a share to classify the customers problem and progress of the action. Nursing offers different configurations of knowing. Nursing information has encompassed diversity since the s. Nursing diagnosis A nursing diagnosis might be part of the treatment procedure and it is a medical decision about individual person, family, or communal involvements or replies to genuine or possible health complications or life procedures. Nursing analyzes are developed based on statistics acquired throughout the nursing valuation. While a therapeutic diagnosis recognizes a illness, a treatment analysis recognizes complications that result from that illness. An actual treatment diagnosis presents a problem response existing at period of calculation. A nursing diagnosis is a declaration prepared by a Registered Nurse that statement the attention of treatment care to be provided to a patient. The patient is generally denotes to an specific individual but might also be used in respect to a family or a community. Postoperative care Postoperative care is the care which is given to the patient after the operating process. Postoperative care might consist of pain supervision and wound care. The kind of postoperative care you need depends on the type of operation you have undergone. Postoperative care is started instantly after the operation , for the period of your hospice stay, and might last after your release from the hospital. Portion of postoperative care is consciousness of the possible side effects and problems of your process. Postoperative

care initiates at the end of the surgery and carry on in the rescue room and all over the hospitalization and casualty period. Serious instant worries are airline safety, pain control, psychological position, and wound healing. Additional main worries are stopping urinary retention, constipation, deep venous thrombosis, and BP inconsistency whether it is high or low. For the patients with diabetes, blood and glucose levels are checked carefully by finger stick test. This testing is done every 1 to 4 hours till patients are conscious and eating because better glycemic control increases result. British Journal of Anaesthesia. Operating room nursing care Nurses play an significant part in preserving the health and wellbeing of the patients. Single kind of nurse in specific is the perioperative nurse which is generally mentioned to as the operating room nurse. These nurses are the registered nurses who will take care of patients earlier, later and throughout operation. The subsequent will deliver a explanation of the roles and everyday jobs of perioperative nurses, the threats and safety measures they face and the trainings needed to practice this division of nursing. Operating room nurses carry on to draw disparagement concerning the suitability of a nursing existence in the operating area. The technical emphasis of the theatre and the techniques in which nurses in the theatre have formed and reformed their training in reaction to technical modification have produced individuals inside and outside the nursing career to inquiry whether operating room treatment is a technical slightly than treatment undertaking. This paper information results from an ethnographic study that was performed in an Australian operating unit. The study observed the involvement of nurses to the work of the operating room through rigorous observation and ethnographic discussions. This paper uses particular results from the study to explore the methods in which nurses in theatre understand their character in terms of caring in a technological atmosphere. Standards of care A standard of care is a therapeutic or psychological cure parameter and can be general or definite. It specifies suitable action based on scientific confirmation and association between medical or psychological specialists involved in the treatment of a known illness. The requirements of the standard are diligently dependent on situations. Whether the standard of care has been a break through is determined by the tester of statistic , and is generally expressed in terms of the reasonable individual. Standards of care was well described in Vaughn v. Menlove as whether the individual continue with such reasonable care as a practical man would have trained under such conditions. In definite businesses and professions. The standard of care is determined by the standard that would be trained by the practically judicious producer of a product or the reasonably prudent expert in that track of effort. Such a test is known as the Bolam Test and it is used to conclude whether a specialist is legally responsible for medical misconduct. The standard of care is significant because it determines the level of carelessness required to state a effective source of action. In the commercial world the standard of care taken can be defined as Due Diligence or carrying out a Channel Check. Nursing workload Nursing workload measures can be divided into four levels of categories. They are unit level, job level, patient level and situation level. These following measures can be systematized into a hierarchy. The situation level and patient level workloads are inserted in the job level workload and the job level workload is inserted in the unit level workload. In a clinical unit several treatment responsibilities need to be completed by a group of nurses throughout a specific shift which is a unit level workload. The type and extent of workload of nurses is partially determined by the kind of unit and department like intensive care unit [ICU] nurse versus general floor nurse which is the job level workload. While execution of their job the nurses come across several conditions and patients which are factors of the situation and patient level workloads. Perioperative nurses Perioperative nurses are the registered nurses. They work carefully with the surgical patient , family members and other health care specialists to help plan, implement and assess treatment. In the operating area the perioperative nurse might assist as a scrub nurse who will select and pass instruments and supplies which are used for the procedure, and a circulating nurse who will manage the complete nursing care in the operating room and serving to continue a safe and relaxed environment. Using a complete and multidisciplinary method to patient care the perioperative nurse works closely with the total surgical team.

Chapter 5 : Surgical Skin Prep - Perioperative Patient Care Fundamentals

When evaluating a patient for perioperative risk, their prior history should be completely evaluated including the patient's functional capacity, the past medical history, the risk of the proposed surgery and the patient's individual risk profile as it pertains to the specific surgery.

Plan in place to meet needs after discharge. Preoperative Phase Main Article: Preoperative Phase The preoperative phase begins when the decision for surgical intervention is made and ends when the patient is transferred from the operating room. Responsibilities included during the preoperative phase are: Pre-admission Testing Initiates teaching appropriate to patients to patients needs. Verifies completion of preoperative testing. Verifies understanding of surgeon-specific preoperative orders e. Admission to Surgical Center or Unit Completes preoperative assessment. Assess for risk for postoperative complications. Reports unexpected findings or any deviation from normal. Verifies that operative consent has been signed. Explain phase in perioperative period and expectation. Develop a plan of care. Verifies surgical site and marks site per institutional policy. Intraoperative Phase Main Article: Intraoperative Phase The intraoperative phase begins when the patient is admitted or transferred to the surgery department and ends when he or she is admitted to the recovery area. Maintenance of Safety Effectively manages human resources, equipment, and supplies for individualized patient care. Transfer patient to operating room bed or table. Applies grounding device to patient. Ensure that the sponge, needle, and instrument counts are correct. Calculates effect on patient of excessive fluid loss or gain. Distinguishes normal from abnormal cardiopulmonary data. Postoperative Phase Main Article: Postoperative Phase The postoperative phase begins with the admission of the patient to the recovery area and ends with a follow-up evaluation in the clinical setting or at home. Some of the responsibilities entailed during postoperative phase are: Communicates intraoperative information States type of surgery performed. Identifies type of anesthetic used. Describes intraoperative factors e. Provides teaching to patient during immediate recovery period. Assist patient in recovery and preparation for discharge home.

Chapter 6 : Perioperative Nursing â€¢ Nurseslabs

Description Caring for the Perioperative Patient is a practical, evidence-based and innovative book that identifies and discusses the essential core skills and knowledge required by perioperative practitioners to care for their patients.

I Conception and design: All authors; II Administrative support: None; III Provision of study materials or patients: All authors; IV Collection and assembly of data: All authors; V Data analysis and interpretation: All authors; VI Manuscript writing: All authors; VII Final approval of manuscript: The use of robotic-assisted bariatric surgery has recently gained an increased amount of positive reception. From to , there were patients who underwent robotic-assisted bariatric surgery by a single bariatric surgeon and his team. Of the patients involved their average age was The average operating room times includes 60â€”80 mins of anesthesia time and patient positioning time were There have not been any complications concerning the patients. Only four patients were converted to open. On average, the post-op hospital stay was 3. The robotic-assisted bariatric surgery is safe and feasible as opposed to an open approach despite it requiring a greater operative timespan. It is a well-known fact that obesity contributes to various complications such as non-insulin-dependent diabetes, hypertension, and hypercholesterolemia 2. In the s, the first laparoscopic RYGB was performed by Wittgrove and Clark 3 and the laparoscopic sleeve gastrectomy was initially performed in having been reported by Ren et al. Within the last 20 years, the arrival of robotic surgery systems has enabled many complex minimally invasive procedures to be performed in several surgical specialties, including bariatric surgery 5. In September of , Horgan and his colleagues performed the first robot-assisted gastric bypass 6. Since, the robotic-assisted bariatric surgery has gained wider acceptance due to the advantages of using the robot for the bariatric procedure including 3-D vision, freedom of movement of Endowrist instruments, and surgical precision. In the interest of safer care for the patient s involved, the operating room requires surgical staff with special robotics training to set up the operative suite and maintain the surgical robotic equipment. The purpose of this article is to inform nursing staff of the sequence of events as well as to have special considerations for specific robotic bariatric surgery. It also aims to outline the role of the surgical team members within this particular setting. Patients and results From to , there were patients who underwent robotic-assisted bariatric surgery by a single bariatric surgeon and his team. One arm holds the camera and scope; the other twoâ€”or three if necessaryâ€”arms control the robotic instruments. With a thorough understanding of how the robotic system works, surgical staff can provide the most valuable assistance to the surgeon during the procedures and be key players in this cutting edge of robotic surgical care 7. After intubation, the surgical team will move the patient to the edge of the right side of the operating table. If the patient has excess axillary fat, the circulator will need to remember to pad that area when the instrument is attached to the operating table. The right arm is left extended on the arm board to allow space for the liver retractor system Figure 1. The patient will be supine with mild reverse Trendelenburg. The cradle is secured with a chin strap fashioned out of 3-inch silk tape Figure 2. Figure 1 Positioning with right arm on arm board. Figure 2 Head padding and chin strap. The anesthesia provider should also be aware that the procedure requires rotating the operating table almost degrees, and they will therefore need several IV extensions. After the head wrap is applied, the bougie or gastric lavage tube should be inserted up to about 50 to 55 centimeters from the front teeth. Operative sequence for robotic RYGB and VSG After prepping the skin, draping the patient, and performing the timeout, the surgeon will mark anatomical landmarks and the incision sites for trocars. During this step, the sterile team members and the circulator must be aware of the sterile robotic arms in relation to unsterile equipment. Once the robot is positioned, robotic arms will be secured to the robotic trocars and instruments will be inserted. The robotic fenestrated bipolar forceps, Maryland bipolar forceps, Cadiere forceps, Cautery scissors, Cautery hook and double fenestrated forceps were used in robotic RYGB. And only fenestrated bipolar forceps, Cautery hook and double fenestrated forceps were used in robotic VSG. Figure 3 Trocar placement. Figure 4 Robot in place over head of patient. Figure 5 shows anatomy pictures of gastric bypass left and sleeve gastrectomy right after they were done. After the procedures, the intralumen anastomosis is insufflated using a gastroscope under extralumen irrigation to verify the absence of leakage. All the robotic

instruments were removed and robot was moved away from patients. Then all the ports are removed and the skin incisions are sutured closed. Figure 5 Picture of Roux-en-Y gastric bypass and sleeve gastrectomy. Discussion The operative cares for robotic procedures are the same as for traditional laparoscopic procedures, and patient education is a key component to recovery for both styles. For intra-operative patient care, the robotic surgery requires more staff than most other surgical procedures, and, in hopes of keeping a safe and orderly work place, the operating room requires highly trained staff to prepare the surgical robot and ensure its appropriate maintenance 12 , In many institutions, specialized teams work with robotic surgeons on a regular basis 13 and many hospitals are requiring that the nurse coordinator of any given robotics program become as specialized as the doctors doing the actual surgery The expertise of a seasoned coordinating nurse, circulating nurses, surgical technologists, and surgical assistants puts the surgeon more at ease and provides for better, consistent results for the patients we serve. The robot would generally be prepared before the patient arrives to the operating room. The bedside staff should understand how to install instruments and remove them from the robotic arm ports. Perioperative nurses must be proficient in positioning the robot components in relation to the patient and all other equipment in the room. The nurse sustains vigilance regarding all aspects of the procedure. Prior to admitting the patient into the operating room suite, the nurse should make sure that the staff has any necessary information about the patient. This is to insure that all aspects of the surgery are progressing smoothly and to anticipate needs for the remainder of the procedure, retrieving any items that may be required by other team members. The nurse also communicates with the anesthesiologist to assure that the vital signs are satisfactory, that the patient is achieving adequate respiratory excursion 14 and that intravenous lines are running well; this is a task that begins during the positioning stage until the patient leaves the operating room. Most importantly, though, the nurse will keep careful watch over the patient which includes: Conclusions The robotic-assisted bariatric surgery is safe and feasible over open approach even more time in the operating. Acknowledgements Footnote Conflicts of Interest: The authors have no conflicts of interest to declare. This study did not require any approval by institutional ethical committee or informed consent. Prevalence of obesity and trends in body mass index among US children and adolescents, Prevalence of obesity, type II diabetes mellitus, hyperlipidemia, and hypertension in the United States: Popul Health Manag ; Early results of laparoscopic biliopancreatic diversion with duodenal switch: Robots in laparoscopic surgery. On the cutting edge of robotic surgery. Robot-assisted versus laparoscopic Roux-en-Y gastric bypass: World J Surg ; The role of robotic surgery in morbid obesity. Sleeve Gastrectomy for Morbid Obesity: World J Lap Surg ;7: Robot-assisted sleeve gastrectomy for super-morbidly obese patients. Totally robotic laparoscopic Roux-en-Y Gastric bypass: Evolution of robotics in surgery and implementing a perioperative robotics nurse specialist role. Perioperative nursing care of the patient undergoing bariatric revision surgery. Perioperative patient care involved with robotic-assisted bariatric surgery. Ann Laparosc Endosc Surg ;2:

Chapter 7 : Perioperative nursing - Wikipedia

1 Improving Perioperative Patient Safety Through the Use of Information Technology Paul J. St. Jacques, MD; Michael N. Minear. Abstract The perioperative care process is a unique and challenging environment.

Significant Experiences of Nurses in the Operating Room 1. Introduction The operating room OR , also known as operating room complex or surgical theatre, is a unit within a hospital which is designed and equipped to provide care to patients with range of conditions. It is a sterile environment where surgical procedure is carried out. The operating room is considered as one of the most complex department of the hospital, as it requires sensitive, intensive and critical inter-departmental interaction. The surgical team is composed mainly of the chief surgeon, the assistant surgeon, the anesthesiologist, co-management doctors only if necessary , the perioperative nurses and various support staff. The operating room works closely with post-anesthesia care unit PACU also known as recovery room RR unit and is typically located near or just within the OR. This serves as an interim station for patients Abramovitch et al. The perioperative phases of surgical care process include management preoperative before , intraoperative during and postoperative after phases of surgery. OR nurses are referred to as perioperative nurses to precisely reflect their specific duties. The OR nurses renders sustained care during the perioperative phase guided by acceptable norms and practices with the goal of addressing the needs of the patient who undergoes surgical intervention. To be an OR nurse in the Philippines, one must obtain a license as a Registered Nurse RN and perform within the legislation of professional regulation relevant in the perioperative setting. The OR nurse should demonstrate and apply an accurate and comprehensive understanding of the core domains competencies and ethical principles within the scope of nursing practice, especially in the delivery of perioperative nursing care Buhat, They must have the ability to perform the core domains of competencies for the perioperative nurses: At all professional levels, a successful OR nurse should be physically fit to adapt to the environment including the chance of standing for long periods Brannagan, A nurse partakes in the mission of transforming lives, for both ill and well. This is illustrated by the OR nurses who perform both sterile and unsterile tasks inside the operating room Lewis et al. OR nurses act as the scrub nurse, circulating nurse, and recovery room nurse according to their respective function in the surgery. He or she assists the surgeon in the sterile field when using instruments, scrubbers, and other items required during the surgical operation. The circulating nurse works outside the sterile field and manages the nursing care within the OR through observation and creation and maintenance of a safe and comfortable environment. At the recovery room or also called post anaesthesia care, nurses cares for the patient after the surgery and ensures that the patient is stable and free from surgical complications before transfer to room. In the nursing profession, competency is described as the ability to successfully apply professional knowledge, skills and attitude to new situations as well as the unfamiliar ones. Competency identifies the gap between education and practice. In the OR context, competency means the ability to perform required tasks as safe practitioners with an adequate knowledge, skills and attitude to render quality perioperative nursing care. Thus, the perioperative area is in many ways a world unto itself. The operating room unit in nature is a special area that is highly complicated and intensely technical in which a fundamentally competent and skilled efforts from the surgical staff is a prerequisite. The OR nurses must be able to assimilate in their duties and responsibilities leadership, teamwork, communication and conflict resolution. It is in this context that this study was conducted. It aims to explore the experiences of promoting quality perioperative patient care by OR nurses. These experiences were derived from their encounters with difficulties and problems as OR nurses during perioperative nursing care. Their most significant experiences of as OR nurses were also examined. Results of the study can be used as bases for competency review in the perioperative nursing which is crucial in identifying and guiding clinical and professional behaviours to uphold and preserve quality and safe perioperative nursing care. A total of 23 OR nurses were asked to participate in the study. These OR nurses are permanent or regular hired nursing employee in the OR for no less than 6 months. They had equally rotated as a scrub, circulating and recovery room nurses who performs the perioperative roles and responsibilities. Supervisor of the unit were not included in the study due to the

scope of responsibilities they handle. Nurse trainees were not also included as participants in the study. The first hospital is a bed capacity with a total of 7 operating theatres: Fourteen 14 nurses from this hospital participated in the study, ten of them are senior nurses and four are junior nurses. They are rotated respectively in early shift 7am to 3pm , afternoon shift 3pm to 11pm , night shift 11pm to 7pm. They have direct interaction with the surgical patients and work in collaboration with the surgeons, doctors, nurses and ancillary personnel and other members of the health care team. The second hospital is a bed private hospital with a total of three operating theatres: Likewise, their post- operative care management is transferred to the post-anaesthesia care unit PACU adjacent to the OR unit. A total of nine OR nurses from the second hospital participated in the study. The nine nurses are all senior nurses who rotated respectively in early shift 6am to 2pm , afternoon shift 2pm to 10pm , night shift 10pm to 6pm. Accordingly, these OR nurses have direct interaction with the surgical patients and work in collaboration with the surgeons, doctors, nurses, ancillary personnel and other members of the health care team. Research Instrument Semi-structured interview was used to collect the needed data. An interview protocol which composed of ten open-ended questions was formulated for the research. Five questions were asked regarding the perceived problems and difficulties OR nurse in providing perioperative nursing care: What are the common problems you encounter as you provide preoperative care? How do you feel about these? Describe your experience working together with the members of the surgical team surgeon, anesthesiologist, nurse, etc. What are the common problems you encounter as you provide intraoperative care? What are the common problems you encounter as you provide postoperative care? How do you address or solve these problems? Five questions were asked regarding the significant experiences of as an OR nurse: Describe your experience after the 8 hours of rendering perioperative nursing care to your patient. What do you think is the implication of these experiences to your own personal and professional growth as a nurse? What is the most difficult part of being an Operating Room nurse? What recommendations can you suggest addressing these problems? Have you ever been burned- out? If yes, what led you to it? What did you do about it? Ethical Considerations Permission and clearance was secured to conduct the study from the Nursing Service authorities of the hospitals. Basic principles guiding ethical considerations for research were explained to the respondents to fully inform them about the aims, methods and benefits of the research and to secure their consent to participate in the study. A invitation letter explaining the aim and objectives of the research was provided. Anonymity and confidentiality with regards to the information to be obtained was distinctly emphasized. Respondents were informed that they may decline or withdraw from participating at any time, and that responses will not be in any way linked with them as an individual or as an employee of the institution they are working for. They were asked to affix signature over their print name to signify their informed consent as participants of the study. Data Analysis Methods of qualitative data analysis described by Polit and Beck and Bernard and Ryan were used to analyze the qualitative data from the semi-structured interviews. The whole process which involved coding and bottom-up approach of analysis and constant comparative method were used to determine data saturation and identify core categories and central themes. The third author conducted the audit trail of the data as a form of validation. Problems and Difficulties of the Operating Room Nurses in the Perioperative Phases of Care Figures 1 and 2 show the overall summary of the results of the qualitative study. Three themes emerged from the data also called Level II Codes: Significant Experiences of Nurses in the Operating Room Figure 2 shows the collapsed thematic analysis of the significant experiences of an operating room nurses. Overall, the themes that emerged include: Problems and difficulties of the Operating Room nurses in perioperative phases Figure 2. Significant experiences of operating room nurses Table 1. These incidents caused feelings of frustration, disappointment and inconvenience on their part as OR nurses. However, anticipation is a daily essential part of skilled nursing care. Over the years, the significance of nurses anticipating for the needs of the patients raises the idea that the focus should be about excellent care of patient from the very beginning, especially on the phase wherein necessary preoperative preparations must be completed before the patient is wheeled in the operating room. Martinez, stressed that it is a disappointment when professional nurses have not fully acquired skills that will allow them to provide effective nursing care. Since patients typically are dependent on their daily activities due to their medical conditions, nurses who attend to the patients before operation should

optimize the functions of the patients. When the patient before the operation are not trained to maximize their functions, the OR nurses are usually blamed. In general, patients have needs, and anticipating for them is a key for their positive therapeutic experience. Anticipating their needs is like minding the gap on their health experience prior to it taking place at all. There are situations where patients complain or do not complain, even if they are physically and emotionally crashing. However, if nurses give very close attention to themâ€" really stopping, looking and listening to their needs, it will be unlikely that things will not go well with the administration of perioperative nursing care. The problems and difficulties that the OR nurses encounter intraoperatively are clustered into the theme: Intraoperative phase is the critical period where the surgery is being performed. It is a must for an OR nurse to accomplish tasks skillfully and efficiently. In this crucial perioperative phase, best effort is expected for everyone involved. These findings support the study of Vera which showed that OR nurses recognize the needs, demands and expectations of the entire surgical team yet there are times when the demands and needs of the patient, doctors, colleagues and situations change. This change considerably affects their performance in the intraoperative work. Challenges and stressors may arise especially when technical resources fail and errors occur. Hence, OR nurses feel the need to work hard and succeed in these trying times to keep up with the surgical team and the responsibilities excellently. On the other hand, the findings of the study somehow differ from the results of Greenwood which demonstrated that OR nurses are expected to possess a comprehensive understanding of the fundamental principles of the surgery, perioperative nursing, scrub and circulating activities, sterile technique, patient safety, accountability and documentation. These are the events in the operating room that at times are affected by the unexpected circumstances and scenarios that may occur. Overall, in the intraoperative phase, OR nurses are challenged, pressured, frustrated and exhausted but they thrive to end successful in these. It is the period where all the hard part of the surgical process is shifted to waiting for the best result.

Chapter 8 : Experiences of Operating Room Nurses in Promoting Quality Perioperative Patient Care

The nurse is entrusted to know how to care for the patient, to understand, guide and deliver this care with competence throughout the patient's perioperative journey. Care needs to be specific to and focused only on the patient being cared for.

The desire to understand the home and caregiver situation becomes more immediate: Taking the Extra Step Perioperative nurses are routinely confronted with integrating and reconciling data from diverse sources. Providers are confronted with caring for patients with multiple risk factors in a complex environment. The perioperative environment is dominated by competing tasks being carried out by multiple disciplines that rely on how well information is communicated among and between them. In this study, understanding existing patient vulnerabilities was important to the nurses who were interviewed. The pre-operative assessment was viewed as helpful in identifying the red flags for both preoperative and postoperative nurse providers. They emphasized the critical importance of establishing an accurate baseline for the patient. However, they noted that the nature of that baseline information varies according to the provider and the condition of the patient. The nurses in this study cite the lack of communication between the primary care team and the preoperative team as an important contributor to gaps in transitions into the preoperative environment. The quality of care provided to patients depends on the ability of nurses to respond to the ambiguity inherent in transitions in care. The nurses in this study noted the dismay of patients whose expectations were not met. They identified the need for frequent nursing interventions used to redefine and clarify expectations. With transitions viewed as a process, anticipating points of vulnerabilities guide us in providing nursing care. Nurses work with the uncertainty of shifting patient care needs as patients transfer between sites of care in the perioperative environment. Future research should include intraoperative nurses, surgeons, anesthesia providers, and patients. The experience level in the postsurgical groups had a wider range of nursing experience two to 30 years than the preoperative group 10 to 35 years. Also, this study was conducted in a single academic center in the Northeast with only 24 participants. Findings may not be transferable to other health care settings. One assumption going into the study was that gaps in communication exist in the perioperative environment. Based on these preliminary findings, we recommend further research to determine whether the preoperative assessment should be more than a simple clearance for surgery, but a means to identify and communicate the different ways in which vulnerabilities may manifest as a product of the transitions in care in the perioperative environment. Others have demonstrated improved quality and cost outcomes with the implementation of a transitional care model for at-risk chronically ill older adults as they transition out of hospitals. A rigorous analysis of the process of transitions with attention to the gaps that occur will inform nursing interventions. Inquiry is needed to discover whether the course of care can be altered by process changes during transitions in care. Additionally, future studies that include anesthesia providers who assess patients in their transitions should be considered. The assumption that communication gaps exist was supported by the research findings. Communication of patient risk factors and vulnerabilities to the entire perioperative team is critical for a successful transition through the perioperative environment to occur. Early transitions in care in the preoperative environment set the stage for the entire perioperative care trajectory. Further empirical work is needed to determine the potential impact of inadequate early transitions on the care trajectory and ultimately on patient outcomes. Perioperative team members should focus on the preoperative assessment not just as a clearance for surgery, but also for managing the transitions of patient care throughout the perioperative experience. The role of the nurse and the preoperative assessment in patient transitions. Dr Malley has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article. Dr Kenner has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article. Dr Kim has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article. Ms Blakeney has no declared affiliation that could be perceived as posing a potential conflict of interest in the publication of this article. Pre-operative risk assessment and risk reduction before surgery. J Am Coll Cardiol. N Engl J Med. The Clavien-Dindo

classification of surgical complications: A prospective study of patient safety in the operating room. The Care Transitions Project Team. Association between quality improvement for care transitions in communities and rehospitalizations among Medicare beneficiaries. The Joint Commission; [Accessed May 22,]. Hot Topics in Health Care. An effectiveness and cost-benefit analysis of a hospital-based discharge transition program for elderly Medicare recipients. J Am Geriatr Soc. Ong MS, Coiera E. A systematic review of failures in handoff communication during intrahospital transfers. Advancing high value transitional care: Deficits in communication and information transfer between hospital-based and primary care physicians: The incidence and severity of adverse events affecting patients after discharge from the hospital. Falling through the cracks: The effect of the WHO surgical safety checklist on complication rate and communication. A qualitative analysis of an advanced practice nurse-directed transitional care model intervention. A systematic quantitative assessment of risks associated with poor communication in surgical care. Exploring care transitions from patient, caregiver, and health-care provider perspectives. An evaluation of information transfer through the continuum of surgical care: Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Interprofessional handover and patient safety in anaesthesia: Assessing the quality of patient handoffs at care transitions. Qual Safe Health Care. Chick N, Meleis AI. Aspen Publications; Boulder, CO: Qualitative Research in Nursing: Advancing the Humanistic Imperative. Getting the focus and the group: Lessons learned from testing the quality cost model of advanced practice nursing APN transitional care.

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ST A Patient Centered The patient is at the center of the Model, which clearly represents the true focus of perioperative patient care.