Developing Nurses` Performance Guidelines for Patients Undergoing Cholecystectomy Based on Needs Assessment

Thesis

Submitted for Partial Fulfillment of Master Degree in Nursing science
(Medical – Surgical Nursing)

By

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Abb.	Full term
ABGs	Arterial Blood Gases
AST	Aspartate aminotransferase
BMI	Body mass index
BP	Blood Pressure
CT	Computed Tomography
DVT	Deep Venous Thrombosis
ERCP	Endoscopic Retrograde Cholangiopancreatography
ESWL	Extracorporeal Shock-Wave Lithotripsy
Hct	Hematocrit
Hgb	Hemoglobin
HIDA	Hepatobiliary Imino Diacetic Acid
IV	Intravenous
Lap	Laparscopic
LC	Laparoscopic Cholecystectomy
LDH	Lactate dehydrogenase
MRCP	Magnetic Resonance Cholangiopancreatography
MTBE	Methyl Tertiary-Butyl Ether
NG	Nasogastric tube
NPO	Nothing by mouth
NSAIDs	Non steroidal Anti inflammatory drugs
PCA	Patient Controlled Analgesia
RUQ	Right upper quadrant
SPSS	Statistical Package for Social Sciences
TV	Television
UDCA	Ursodeoxycholic acid
URSO	Ursodiol
WBC	White blood cells

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ABSTRACT

Cholecystectomy surgery was and still one of the favorite cures for symptomatic cholecystolithiasis. **Aim:** The present study aimed at developing nurses` performance guidelines for patients undergoing cholecystectomy based on needs assessment. **Methods:** A descriptive exploratory design was utilized for the conduction of this study. This study was conducted in the surgical departments at El demerdash surgical Hospital, affiliated to Ain Shams University. **Sample**: A convenient sample of 50 nurses from both genders in the surgical wards working with patients undergoing (open and laparscopic) cholecystectomy. They were recruited from the above mentioned settings. **Tools: 1)** Self administered questionnaire to assess nurses' knowledge for patients undergoing open and laparscopic) cholecystectomy. **2)** An observational checklist to evaluate nurses' practices for patients undergoing (open and laparscopic) cholecystectomy at pre / postoperative period. **Results:** The mean age of the studied nurses was 43.25 ± 11.01. There was a highly positive relation between studied nurses total levels of practices and knowledge. There was a statistical significant relation between nurses` knowledge and practices as regards their demographic characteristics. **Conclusion**: Nearly two thirds of the studied nurses had unsatisfactory level of knowledge and practices in relation to caring of patients undergoing cholecystectomy. On the same line **a** statistical significant relation was indicated as regards their demographic characteristics and cholecystectomy surgery. **Recommendations:** Further research studies are needed to identify the effect of implementing the developed guidelines on performance of nurses caring for patients undergoing cholecystectomy.

Keywords: Cholecystectomy, Nurses` knowledge and practices, Nursing performance guidelines, Needs assessment.

INTRODUCTION

Gallstone is the most common biliary pathology. Patients with symptomatic gallstones are most commonly presented with biliary colic and its signs and symptoms include episodic severe pain in right upper quadrant region, nausea, vomiting and distention especially after eating heavy meals ***(Miller, 2012)***.

Most gallstones are asymptomatic and its complications are sometimes life threatening. A gallstone disease typically affects fertile women aged 40-60 years and over weight ***(Dewit et al., 2016)***. Laparoscopic cholecystectomy (LC) needs only a small incisions ranges from (3-5) small incisions which causes less pain, allows early ambulation, shorter hospital stay and early return of intestinal movement and no occurrence of incisional hernia as its occurrence in open cholecystectomy ***(Kennedy-Malone et al., 2014).***

Available statistics indicated that approximately 700,000 of cholecystectomy procedures are performed annually in the United States and 80% to 90% of them are candidates for laparoscopic cholecystectomy ***(Nathanson, Shimi & Cuschieri, 2010).*** In Egypt, the incidence of laparoscopic Cholecystectomy procedures in Gastroenterology Surgical Center at Mansura University were approximately 796 procedures through the year 2013 ***(Mostafa, 2014). Statistical Department at El demerdash***

Surgical Hospital (2014) reported that, approximately 1200 Cholecystectomy procedures were done through the year 2014.

Cholecystectomy is surgical removal of the gall bladder as a result of inflammation of gallbladder or gallstones existence. It is one of the most worldwide operations in the past and till now. It becomes now the gold standard for treatment of symptomatic gall bladder diseases and it is one of the most suitable management for gall bladder problems ***(Christensen & Kockrow, 2011)***. Surgery usually relieves the symptoms that patients suffer from. The technique of this surgery is preferable in patient with advance cholecystitis allied with gangrenous perforation ***(O'Meara & Nagarsheth, 2015).***

Cholecystectomy operation has two types which are: open or laparoscopic. The first LC was performed by Pillipe Mouret in France in 1987 ***(Smeltzer et al., 2010)***. In Western countries, more than 75% of patients who have cholelithiasis associated with acute or chronic cholecystitis perform LC surgery. Today, this surgery is the most suitable treatment for cholelithiasis because it has many advantages over open cholecystectomy ***(Hsueh et al., 2011).***

Laparoscopic cholecystectomy is defined as amputation of the gallbladder using a laparoscopic instruments and technique. The majority of patients are suffering from choledocholithiasis (gallstones in the bile duct), cholelithiasis

(cholesterol stones), or acute cholecystitis (inflammation of the gallbladder wall) ***(Osborn et al., 2010).*** The major gallbladder disorder is acute cholecystitis and about 90% of patients who have acute cholecystitis also suffering from cholelithiasis. In the United States, laparoscopic cholecystectomy is the second most regularly performed general surgery procedure. The laparoscopic approach is minimally invasive and minimizes risk of infection, length of surgical and recovery time ***(Brenner & Kautz, 2015).***

Laparoscopic cholecystectomy has many complications which include: hemorrhage, bile duct injury, or bile leak, retained stones, pancreatitis. Trocar related complications like bleeding and visceral injury ***(Suh et al., 2012)***. Open cholecystectomy has complications like wound infection and incisional hernia. Pulmonary infection and deep venous thrombosis is common complications for both of them ***(Booij et al., 2014).***

Traditional / open cholecystectomy is described as the surgical incision with several inches long in the right quadrant which produces considerable discomfort and results in many weeks of recovery time ***(Pellico, 2013)***. Most common in this surgery, the drainage tube which is inserted and secured with a purse-string suture. The disadvantage of open cholecystectomy include high mortality rate, long hospital stay, recovery and

return to normal activities of daily living ***(Halilovic et al., 2011).***

Biliary tract injuries represent the most serious and potentially life-threatening complication of cholecystectomy ***(Lahane et al., 2012).*** During open cholecystectomy, the prevalence of bile duct injuries has been estimated at only 0.1% but a high rate of incidence during laparoscopic cholecystectomy ***(Parmeggiani et al., 2010)***.

The surgical nurses play an important role in caring of patients undergoing cholecystectomy during pre / postoperative time. They should also have proper knowledge and practices to provide proper nursing care, prevent complications and decrease cost of treatment ***(Brady & Cummings, 2010).*** Developing nurses` knowledge and practices will help to prepare a planned nursing care for improving patients` health condition ***(Williams & Hopper, 2015).***

Significance of the study:

Cholecystectomy surgery was and still the best medical treatment for symptomatic cholecystolithiasis and one of the most spread as well as frequently performed surgeries. Until the late of 1980s, the traditional open cholecystectomy was the gold standard for treatment of symptomatic cholecystolithiasis ***(Markar et al., 2012).***

Nursing guidelines are important documents to improve knowledge and practice of nurses and this will improve quality of services which rendered to customers in all health care organizations ***(Brenner & Kautz, 2015).*** They contains detailed and concise, clear, measurable information and nursing practices or knowledge ***(Arifulla et al., 2016 & Pahwa et al., 2013).*** Moreover, improving quality of patients` care and decrease cost of treatment was the cause for implementing this study. So, aim of the current study is to develop nurses` performance guidelines for patients undergoing cholecystectomy based on needs assessment.