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Nurses' Knowledge Regarding Laparoscopic Cholecystectomy

Pengetahuan Perawat Mengenai Kolesistektomi Laparoskopi

Adil Atiyah Mohammed Al-Tameemi , Kiaadel1971@gmail.com, (1)

Al-Faw General Hospital, Basrah Health Directorate, University of Health, Al-Faw, Iraq, Iraq

(1) Corresponding author

Abstract

Background: The most effective treatment for gallstones is laparoscopic cholecystectomy due to the many benefits of open surgery, including fewer incisions, shorter hospital stays, the elimination of the need for a stomach tube and drainage tube, fewer analgesics, and fewer problems. Objectives: To identify nurses' knowledge regarding laparoscopic cholecystectomy. Methods: A descriptive investigation was conducted between September 15, 2022, and July 20, 2023. The Al-Sader Teaching Hospital and the Basrah Teaching Hospital in Basrah City are the sites of the investigation. A deliberate non-probability sample of surgical ward nurses was chosen. Two hundred nurses make up the sample. A panel of specialists assessed the questionnaire's validity, and a pilot study proved its dependability. Data was gathered using the questionnaire, and the findings were analyzed using both descriptive and inferential statistics. Results: According to the table's findings, the majority of nurses (76%) have little understanding of cholecystectomy, 20% have medium knowledge, and 4% have strong knowledge, with a mean score and standard level deviation of 1.59+0.709. Conclusion: This study concluded, most of the study sample have low knowledge about cholecystectomy.

Highlights:

1. Laparoscopic cholecystectomy offers advantages over open surgery
2. Assess nurses' knowledge on laparoscopic cholecystectomy
3. Most nurses have low knowledge about cholecystectomy.

Keywords: Nurses, Knowledge, Laparoscopic, Cholecystectomy

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Introduction

On the right side of the upper abdomen, or stomach, the gallbladder is a pear-shaped organ that rests beneath the liver (1-3). The liver produces bile, which is digested and aids in the digestion of meals. The bile duct transports bile to the intestines (1, 4). A cholecystectomy involves removing the gallbladder surgically using laparoscopy and open surgery. Cholecystitis and cholelithiasis are common diseases that might lead to this surgery. One minimally invasive procedure for removing a diseased gallbladder is laparoscopic cholecystectomy (5, 6).

The expertise and procedures of healthcare professionals are essential when treating patients undergoing the treatment of biliary dyskinesia, calculus cholecystitis, pancreatitis of the gallstone, polyps or gallbladder masses, symptomatic cholelithiasis, and acute or chronic cholecystitis, laparoscopic cholecystectomy is now advised (7-9).

The patient's primary advocate during the procedure is the nurse. As long as the surgical operation is scheduled and recommended during the immediate preoperative phase, the surgical stage, and the anesthetic recovery time, the nurse will continue to provide care for the patient. Given that surgery is typically a traumatic procedure, the patient wants to ensure that someone is anesthetized and provides protection during the procedure (10-12).

When the patient is transferred to the recovery area or post-anesthesia care unit, returns to the surgical unit, and is discharged from the hospital until the completion of the follow-up therapy, the postoperative phase of the surgical experience begins (13-15). Surgical nurses are crucial to the preoperative and postoperative care of patients having cholecystectomy. Additionally, they must be knowledgeable on how to deliver appropriate nursing care, avoid difficulties, and lower the appropriate cost of therapy (16-18).

Improving nurses' skills and knowledge will aid in creating a nursing care plan that will improve patients' health (19-21). For better, problem-free recovery, shorter hospital stays, and cost reduction, preoperative and postoperative care are essential. Pre-surgical services departments are available in many facilities to help with thorough examinations and start the nursing assessment procedure, which might focus on laparoscopic cholecystectomy procedures. This has led to patients undergoing cholecystectomy preoperative preparation and readmission testing before hospital admission (22, 23).

Methods

A descriptive cross-sectional study on the attitudes and knowledge of nurses in Basrah City regarding laparoscopic cholecystectomy. It was decided to prolong the study period from September 15, 2022, and July 20, 2023. Before their involvement, the researcher explained the goals of the study to each nurse. It was established that the study sample would not suffer any real or possible harm as a result of the study maneuver. Before data collection, each nurse gave their oral consent.

The study was carried out in Basrah City's Al-Sader Teaching Hospital and Basrah Teaching Hospital's surgical wards, operating rooms, emergency rooms, and medical wards. Two hundred nurses who work in emergency departments, operating rooms, medical wards, and surgical wards make up the purposeful (non-probability) sample. (20) Pilot study nurses were not included in the study.

A team of 12 experts has assessed the instrument (questionnaire) to determine its content validity. The University of Basrah is home to these specialists. A copy of the research tool was provided to these specialists, who were asked to evaluate it for material clarity and suitability for examining the questionnaire's content. The researcher followed both experts' recommendations. After taking into account all of the comments and recommendations, some components were omitted. The questionnaire was judged accurate once the required adjustments were made in light of their responses.

Result and Discussion

Result

Percent	Frequent	Classes	Variables
40	80	Male	Sex
60	120	Female	
100 %	200	Total	
80.5	161	20-39	Age
19.5	39	40-59	
100 %	200	Total	

45.5	91	Secondary School of Nursing	Level of Education
47	94	Diploma	
7.5	15	Bachelorette	
100 %	200	Total	
71	142	1-10	Years of experience
29	58	More than 10	
100 %	200	Total	
42.5	85	Surgical Wards	Place of Work
17.5	35	Operating Room	
23.5	47	Emergency	
16.5	33	Medical Wards	
8	16	Yes	Training Course
92	184	No	

Table 1. *Socio-demographic Data of the Sample*

The sociodemographic details of the nurses in this study are displayed in the table. Of them, sixty percent were female, and most of the nurses 80.5% were in the 20–39 age range. In terms of educational levels, most nurses have diplomas (47.5%). In terms of years of experience, those with 1–10 years have the biggest number (71%). Most of the nurses are employed in the surgical wards (42.5%). Ninety-two percent of the nurses had never taken a cholecystectomy course.

Assesment	Fequency	Percent	Scale	Total		
76%	152	Low	1 – 1.66	MS	Sd	Assessment
20%	40	Fair	1.67 – 2.33	1.59	0.709	Low
4%	8	High	2.34 – 3			
100 %	200	Total				

Table 2. *Level of Nurses' Knowledge*

According to the table's findings, the majority of nurses (76%) have little understanding of cholecystectomy, 20% have medium knowledge, and 4% have strong knowledge, with a mean score and standard level deviation of 1.59+0.709.

Variables	Classes	Knowledge			Significant
		Low	Fair	High	
Sex	Male	63	12	5	Chi-Square= 3.633 Degree of freedom = 2 P-Value= 0.134 Non-Significant
	Female	89	28	3	
Age	20-39	127	23	6	Chi-Square= 3.342 Degree of freedom = 3 P-Value= 0.327 Non-Significant
	40-59	27	7	5	
Level of Education	Secondary School	90	1	0	Chi-Square= 120.764 Degree of freedom = 4 P-Value= 0.000 Significant
	Diploma	64	30	0	
	Bachelorette	0	10	5	
Years of Experience	1-10	115	22	5	Chi-Square= 4.678 Degree of freedom = 3 P-Value= 0.736 Non-Significant
	More than 10	51	5	2	
Place of Work	Surgical Wards	67	15	3	Chi-Square= 2.031 Degree of freedom = 6 P-Value= 0.917 Non-Significant
	Operating Room	24	9	2	
	Emergency	37	9	1	
	Medical Wards	26	6	1	
Training Course	Yes	0	10	6	Chi-Square= 86.324 Df= 2 P-Value= 0.000 S
	No	154	28	2	

Figure 1. *Correlation between Nurses' Knowledge and Demographic Variables*

This table shows a substantial link between nurses' education and training programs and their understanding of cholecystectomy (P-value < 0.05).

Additionally, the findings in this table indicate that there is no significant correlation (P-value > 0.05) between nurses' knowledge of cholecystectomy and their sex, age, years of experience, or place of employment.

Discussion

The study's findings indicate that the majority of the nurses were female. These findings were consistent with numerous (24-26) according to the research, women made up the majority of the study sample.

In terms of the participants' ages, the bulk of the sample was in the 20–39 age range. These results are consistent with other studies (27-29) which stated most of the participants were between 20-39 years old.

In terms of educational attainment, the majority of participants hold diplomas. These findings concurred with several investigations (30-32) which demonstrated a majority of the participants have diplomas.

The majority of the nurses have 1 and 10 years of experience. These results concurred with several investigations (33-36) which demonstrated that the majority of the nurses have one to ten years.

The vast majority of nurses do not take part in educational programs. These results agreed with many studies (37-39) which claimed that most nurses don't take part in training programs.

The results of this study show that the majority of nurses (76%) had very limited knowledge of laparoscopic cholecystectomy.

The results of this investigation aligned with the conclusions of the (40) which stated the majority of nurses (81.7%) lacked sufficient information about nursing care during laparoscopic cholecystectomy.

The findings of this investigation concurred with a study (41) that found that over two-thirds of the nurses in their study lacked sufficient knowledge.

The study found no significant correlation between the demographics of the study group (gender, age, years of experience, and place of employment) and nurses' expertise.

The present study's findings concurred with a study (42) that discovered no connection between nurses' age and gender and their level of experience.

Conclusion

Most of the nurses who took part in this study knew very little about laparoscopic cholecystectomy.

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