



Assessment of Nurses' Knowledge Regarding Management of Patient's with Cholelithiasis Disease

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ABSTRACT: Cholelithiasis affects approximately 15% of the US population. Rising trends in obesity and metabolic syndrome have contributed to an increase in diagnosis of cholelithiasis. There are several risk factors for cholelithiasis, both modifiable and non modifiable. Women are more likely to experience cholelithiasis than are men. Pregnancy, increasing parity, and obesity during pregnancy further increase the risk that a woman will develop cholelithiasis. The classic presentation of persons experiencing cholelithiasis, specifically when gallstones obstruct the common bile duct, is right upper quadrant pain of the abdomen that is often elicited upon palpation during physical examination and documented as a positive Murphy's sign. Descriptive Cross-Sectional Design is adopted in the current study to achieve the early stated objectives. The study started from January 2nd, 2021 until May, 20th, 2021. A Non-Probability (Convenience Sample) of (60) nurses were including in the present study. Sample collect from 1, 3,4) and emergency department. The results of the present study indicated that the majority of the samples (93.33%) have deficit knowledge, which agree with the results of the study showed that the reasons for lack of nurses' knowledge regarding from the researchers' point of view "might be related to lack of continuing educational programs or sessions about Cholelithiasis, supervision, continuous evaluation of nurses' practice, and cooperation between multidisciplinary health care team members (nurses-physicians). Conclusions according to the present study findings, the researcher can mention the following conclusions: Most of nurses in medical units had knowledge deficit concerning management of cholelithiasis nursing management. It is found that the most of nurses are middle age group within (35-39) years old. It is concludes that the most of nurses are institute and college graduated, most of the nurses years' experience in medical wards(1-10 years). most of the sample have participating in the sessions training in medical wards but no related to cholelithiasis nursing management. Encouraging nurses to update their information by participating in training sessions and conference inside and outside Iraq to improve their knowledge regarding cholelithiasis nursing management which working in medical wards.

KEY WORDS: Assessment, Cholelithiasis, Knowledge, Nurses.

INTRODUCTION

Cholelithiasis affects approximately 15% of the US population. Rising trends in obesity and metabolic syndrome have contributed to an increase in diagnosis of cholelithiasis. There are several risk factors for cholelithiasis, both modifiable and nonmodifiable. Women are more likely to experience cholelithiasis than are men. Pregnancy, increasing parity, and obesity during pregnancy further increase the risk that a woman will develop cholelithiasis. The classic presentation of persons experiencing cholelithiasis(1).

Cholelithiasis is one of the most common biliary tract diseases worldwide in which both genetic and environmental factors have roles in its pathogenesis.(2). Gallstones are crystalline deposits and result from a misbalance in physical- chemical composition of bile. Approximately 37-86% of Chole- lithiasis patients have gallstones mainly consisting of cholesterol. Other types include pigment (2-27%) or mixed (4-16%) stones (a combination of cholesterol and pigmented stones). two- three the types of gallstone vary by their cause. (3).

Gallstones are common. 10% to 20% of Americans will develop stones at some time. The majority will not develop symptoms: up to 80% will never experience biliary pain or complications such as acute Cholecystitis, cholangitis, or pancreatitis. Hence, most gallstones are clinically "silent," an incidental finding often uncovered during abdominal ultrasound being performed for another reason. People with such asymptomatic Cholelithiasis, however, eventually may develop symptoms (biliary pain) that require treatment, but this risk is quite low averaging 2% to 3% per year,24 10% by 5 years.. An even lower proportion, 1% to 2% per year, develop major gallstone complications(4).



Gallstone-associated pain seems to follow a certain pattern in most patients. Consensus groups have attempted to establish criteria for biliary pain relative to defined characteristics (e.g., episodic, steady, severe pain located in the upper abdomen and lasting more than 30 minutes) and some accompanying features (e.g., nocturnal onset; nausea and vomiting; radiating through to the back). The importance for clarifying what constitutes true biliary pain is to better predict relief following cholecystectomy.(5).

Priority nursing diagnoses for the patient with cholelithiasis or cholecystitis often include pain related to biliary colic or surgery, imbalanced nutrition related to the effects of altered bile flow and to nausea and anorexia, and risk for infection related to potential rupture of an acutely inflamed gallbladder. Nursing interventions for the patient who has undergone a laparoscopic or open cholecystectomy are similar to those for other patients having abdominal surgery, Place in Fowler's position. Fowler's position decreases pressure on the inflamed gallbladder. Monitor vital signs, including temperature, at least every 4 hours. Bacterial infection often is present in acute cholecystitis, and may cause an elevated temperature and respiratory rate(6).

METHODS AND MATERIALS

Design of the Study:

Descriptive Cross-Sectional Design is adopted in the current study to achieve the early stated objectives. The study started from January 2nd, 2021 until May, 20th, 2021.

Setting of the Study:

The study is conducted in Al-Najaf City/Al-Najaf Al-Ashraf Health Directorate / Al-Sadder Medical City (Medical wards that include first, third and fourth floor and surgical ward and emergency wards).

Sample of the Study:

A Non-Probability (Convenience Sample) of (60) nurses were including in the present study. Sample collect from Medical wards that include first, third and fourth floor and surgical ward and emergency wards.

Including Criteria:

The researcher used the following criteria for specifying the study subjects those who are included in the study, patients out of these criteria are basically excluded:

- 1- Criteria for Including the Sample:
- 2- 1. Nurses work at the teaching hospital.
- 3- 2. Male and female nurses.
- 4- 3. Nurses work at the morning and night shift
- 5- 4. Nurses work in the (Medical wards that include first, third and fourth floor and surgical ward and emergency wards).

Study Instrument:

An assessment tool is adopted and developed by the researcher to assess the quality of life for patients with epilepsy. The final study instrument consists of three parts:

Part I: Patients' Demographic Data.

Part II: Nurses knowledge question about cholelithiasis disease.

Data Collection:

The data collection is done by utilization of the semi-structured questionnaire and by means of self – reported technique with the object and the researcher use Arabic version of the questionnaire. The data collection process started from March, 1st, 2021 to March, 29th, 2021.

Data Analysis:

In this study the data are analyzed by using of (SPSS) program V 19 (Statistical Package for Science Service), and the Microsoft Excel (2010). Below are the statistical data analysis methods to analyze the study result:

1-Descriptive Data Analysis:

This approach includes the following measurements:

A-Frequencies and Percentages.



1-Tables (frequencies, percentages).

2-Statistical figures (pie chart).

3-Statistical mean and standard deviation.

B- Measures of central tendency: Mean, Mean of scores (MS) And the two points likert scales with two levels of assessment, poor (mean of score less than 1.5), good (mean of score more than 1.5) for Nurse's knowledge about management of cholelithiasis.

C- Pearson's Correlation Coefficients

2. Inferential Data Analysis:

•Chi-Square test (X^2) to test independency distribution of observed frequencies, and for measuring the association between the studies variables according to its type.

STUDY RESULTS AND FINDINGS

Table (1) Table (3.1) Descriptive statistics (frequency and percentage) for the demographic data of nurse.

Demographic data	Sub-groups	Frequency (N=60)	Percentage
Gender	Male	36	60.0
	Female	24	40.0
Age / years	20-24	5	8.3
	25 - 29	12	20.0
	30 - 34	12	20.0
	35 - 39	18	30.0
	≥ 40	13	21.7
Educational Status	Nursing secondary School Graduated	15	25.0
	Nursing Institute graduated	24	40.0
	Nursing College Graduated	19	31.7
	Postgraduate	2	3.3
Years of experience	1-5	18	30.0
	6-10	18	30.0
	11-15	12	20.0
	16-20	4	6.7
	≥ 21	8	13.3
Years of experience in medical ward	1-5	23	38.3
	6-10	23	38.3
	11-15	14	23.3
Training sessions related to Cholelithiasis	Yes	7	11.7
	No	53	88.3
Number of Training sessions	1-3	48	80.0
	4-6	7	11.7
	7-9	5	8.3

Table (1) A total of 60 nurses were included in the study sample ,their demographic data arepresented in **table (3.1)**,this table shows that the majority of the study sample is male (60%) ; those with ages ranging between 35-39 years (30%). Also, the result in this table above showed that the majority of nurses graduated from nursing institutes (40%). Moreover, (30%) have (1-5) and (6-10) years of experience respectively , while (38.3%)have (1-5) and (6-10) years of experierespectively and (80%) of them have (1-3) training sessions



Table (2). Frequency and percentage of nurses' subgroups according to their knowledge assessment about management of Patient's with Cholelithiasis disease

Nurses' subgroups	Poor	Moderate	Good
Frequency	56	3	1
Percentage	93.33	5.00	1.67

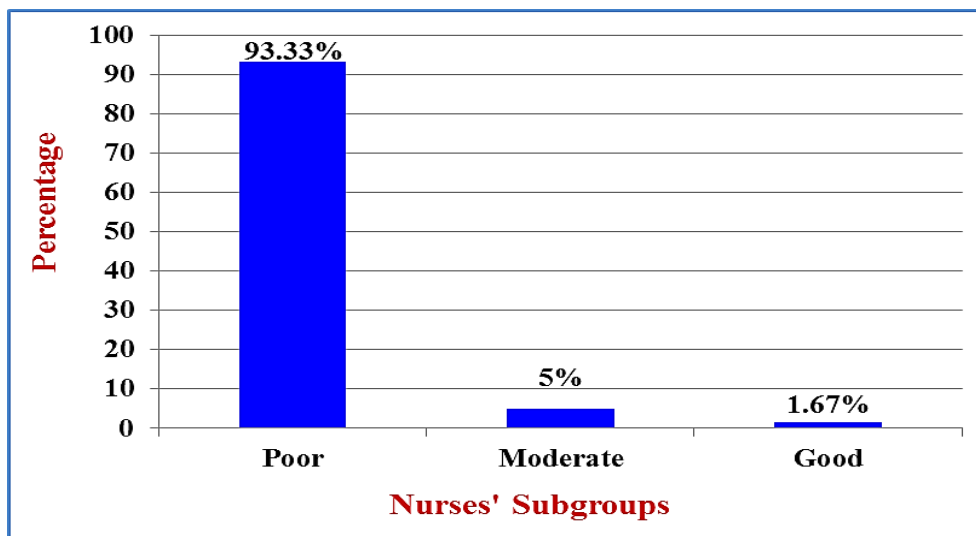


Table (2) and figure (1) are about percentage of nurses' subgroups according to their overall knowledge assessment about management of Patient's with Cholelithiasis disease, it shows that about (1.67%) of the nurses have good knowledge, (5 %) of them have moderate knowledge ; while (93.33 %) have poor knowledge.

Table (3): Association between the overall Assessment of Nurses' Knowledge Regarding management of Patient's with Cholelithiasis disease and their demographic data

Demographic data	ChiSquare	df	P value	Sig.
Gender	5.81	1	0.008	HS
Age / Years	2.13	4	0.78	NS
Educational Status	30.61	2	0.001	NS
Years of Experience	0.94	5	0.62	NS
Years of experience in medical ward	0.25	2	0.35	NS
Training sessions related to Cholelithiasis	11.25	1	0.002	HS
No. of Training sessions	1.24	5	0.32	NS

df= degree of freedom ; NS: Non-significant at P value <0.05 ; S : Significant at P≤0.05 ; HS : HighSignificant at P value ≤0.01

Concerning table (3) is about the association between the overall assessment of nurses' knowledge regarding management of Patient's with Cholelithiasis disease and their demographic data there is a non-significant difference association (P>0.05) between the overall assessment of nurses' knowledge regarding management of Patient's with Cholelithiasis disease and their demographic data, except for gender, Training sessions related to cholelithiasis in which there is a significant (P <0.05) association between the overall assessment of nurses' knowledge regarding management of Patient's with Cholelithiasis disease.



DISCUSSION

Out of 60 nurses participated in this study aged 35-39 years old and composed 60%. This results is supported by (7), reported in their findings that 60% of nurses were age more than 30 years old. Due to nurses need to be young adults because that the majority of the nurses they dealing directly with the patients are from those with this age group because the action with the patients require a high physical activity and the nurses who are advanced age fail to dealing with the patients.

The male nurses were predominated (n=36; 60%) compared to those who are female nurses (n=24; 40%). Rustles come with Al-Khawaldeh et al., (8), who stated in their findings that most of nurses were male. Due to the nature of the nursing profession, male nurses were accounted for most of the nursing staff, and all nurses who need to be young to cover all duties in this units. Also, this may be due to the fact that males cover night duties while females does not.

With respect to education level, nurses express a institute graduated (n=24; 40%). This results com in the same line with findings of (9) who reported the most are diploma graduated. As being the diploma degree were considered the major proportion of staff nurses in health organization, due to the large number of institutions that graduate such degrees.

Experiences related findings, (30%) have (1-5) and (6-10) years of experience respectively, while (38.3%) have (1-5) and (6-10) years of experience respectively and (80%) of them have (1-3) training sessions. The few years of nursing experience in critical care unit could be explained by the fact that have a frequent rotating from one unit to another within the hospital.

The above findings come in line with findings of study findings of study conducted in Zagazig University Hospitals and deals with nurses' competency level regarding patients undergoing cholecystectomy. Their findings demonstrated that the male adults nurses diploma graduated with inadequately experience (10).

The knowledge of nurses about management of patient's with Cholelithiasis disease, it shows that about (1.67%) of the nurses have good knowledge, (5 %) of them have moderate knowledge ; while (93.33 %) have poor knowledge. this findings come consisting with findings of AbdElgilil et al., (11), who confirmed in their results most of the nurses included in the study had unsatisfactory level of knowledge, incompetent practice and negative attitude toward care of patient undergoing Laparoscopic cholecystectomy, due to low level of educational attainment and lack of training.

Nurses were having low knowledge regarding dietary management for gallbladder diseases which leads them to poor practice. Although they were aware that proper diets give them proper health but they are unaware with the appropriate diet used during gallbladder disease conditions (12).

More than two thirds of the studied nurses had unsatisfactory knowledge, 83.6% of studied nurses had unsatisfactory practice regarding patients undergoing cholecystectomy. In-service training programs are recommended to improve nursing performance regarding care for patients undergoing cholecystectomy (13).

There is a non-significant difference association ($P>0.05$) between the overall assessment of nurses' knowledge regarding management of Patient's with Cholelithiasis disease and their demographic data, except for gender, Training sessions related to cholelithiasis in which there is a significant ($P<0.05$) association between the overall assessment of nurses' knowledge regarding management of Patient's with Cholelithiasis disease. More training the staff significantly related to good level of knowledge. findings come with Elsayed et al., (13), who found that unsatisfactory knowledge associated with lack of training.

This findings is supported by studies revealed that there is a significant association between training education and studied sample knowledge at p value 0.05 (Najm et al., 2020). There were nurses knowledge significantly associated with their training and experiences, it demonstrated that the nurses with a more than two training sessions had a correct knowledge than those who untrained; the nurses with 6-10 years of experience had, on the other hand, higher correct knowledge rates than other groups, in terms of some items (14).

CONCLUSION

Based on the study results, the study concludes the following:

- 1- Most of nurses in medical units had knowledge deficit concerning of Cholelithiasis management in medical wards
2. It is found that the most of nurses are middle age group within (35-39) years old. It is concludes that the most of nurses are institute and college graduated, most of the nurses years' experience in medical wards(1-10 years). Most of the sample have participating in the sessions training in medical wards but no related to Cholelithiasis management.
3. The medical nurses have inadequate knowledge in some aspects for management of patients' with Cholelithiasis disease.



4. There is no relation between knowledge and demographical data (educational level, years of experience, number of training related to Cholelithiasis management) of the nurses have no effects on knowledge with Cholelithiasis management.

RECOMMENDATIONS

Based on the study results, discussions, and conclusions the study recommended:

1. Encouraging nurses to update their information by participating in training sessions and conference inside and outside Iraq to improve their knowledge regarding Cholelithiasis management in work field in the hospital and medical wards.
2. Nurses must have continuous reassessment and follow-up to identify how much they need reinforcement of knowledge or practice, to promote them.

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