

Knowledge and Practice on Dietary Management among Patients with Gallbladder Diseases

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ABSTRACT

Background: The word “Diet” means the food and drink that we habitually consume did not appear in English until thirteen century, but it also had another sense, meaning “a way of life”. The second meaning is more in line with the word’s origins, as it comes from the Greek “diaita via diaitan”. Diaita was a noun that meant a way of living, and also had a more specific meaning, signifying a way of living as advised by a physician, which could include a “food” diet and other daily habits. The literature is increasing on the dietary management for common gallbladder disease issues. Inappropriate knowledge leads to inappropriate practice of diet which increases the problems in gallbladder disease conditions.

Objective: The main objective of the study was to assess the knowledge and practice on dietary management among gallbladder disease patients.

Method: A quantitative study based on descriptive research design. Patients were recruited from hospital. 124 patients affected with gallbladder disease were included in the study. Knowledge and practice were assessed by using self structured knowledge questionnaires and practice checklist. Data was analyzed by using a thematic analysis.

Results: Poor knowledge and practice were present among the patients regarding dietary management of gallbladder diseases.

Conclusion: Patients 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.

Keywords: Knowledge, practice, dietary management, patients, gallbladder diseases.

INTRODUCTION

“Eat for the body you want not for the body you have.”

-WHO

“Your diet is a bank account, good food choices are good investments.”

-Bethenny Frankel

The gallbladder is small organ found fixed to the underside of the liver the job of which is to store and concentrate bile. Bile is produced in the liver and is responsible particularly for the efficient digestion of dietary fats. Bile is squirted in to the duodenum under the control of a hormone released into the blood stream as fats are detected in the stomach. As food leaves the stomach it passes to the duodenum and mixes with bile that has passed down through the biliary duct system.

Disease associated with the gallbladder is very common. In western society this is usually due to the development of gallstones in the gallbladder and the following conditions may often result from inflammation, infection or blockage of the gallbladder and duct system that drains it.

OBJECTIVE

To assess the knowledge regarding dietary management of patients affected with gallbladder diseases in “Sir Sunder Lal Hospital, BHU at Varanasi, U.P”

To assess the practice regarding dietary management of patients affected with gallbladder diseases in “Sir Sunder Lal Hospital, BHU at Varanasi, U.P”

To find the correlation between the knowledge and practice of patients affected with gallbladder diseases in “Sir Sunder Lal Hospital, BHU at Varanasi, U.P”

To find the association between the demographic characteristic with their knowledge of dietary management of patients affected with gallbladder diseases in “Sir Sunder Lal Hospital, BHU at Varanasi, U.P”

To find the association between the demographic characteristic with their practice of dietary management of patients affected with gallbladder diseases in “Sir Sunder Lal Hospital, BHU at Varanasi, U.P”

REVIEW OF LITERATURE

Lindseth N. Gelenda and Denny L. Dawn, (2014), together conducted a study on “Patients’ Experiences with Cholecystitis and a Cholecystectomy.” A phenomenological approach was used & was conducted at a 250 bedded hospital & purposive sampling technique was used for the selection of samples and interview was conducted with pre-operatively patient experiencing a indication of cholecystitis and post-operatively with those patients who had undergone cholecystectomy procedure. The study concluded the five out of six cases. They continued to describe their ongoing pain and patients also appear to describe the feeling of inadequacy in caring for their family.¹⁰

Hussain Muhmood Saad, (2013), conducted a study on “Quantitative analysis of chemical composition of gallbladder stones among cholecystectomy of Iraq patients.” Prospective study was used in this study in which 40 patients (8 males and 32 females) were studied. The results showed that majority of cases had mixed gallstones that involved five and four of inorganic chemicals of calcium, magnesium, uric acid and phosphate. The highest incidence was 13 gallstones in age group 40-49 years old.¹³

Misciagna Giovanni, et.al, (1998), together conducted a study on “Diet, physical activity, and gallstones-a population based, case-control study in Southern Italy.” In this study case-control method was used in which 100 patients with newly diagnosed gallstones and 290 randomly selected control subjects without gallstones were enrolled in the study. The results showed that a inactive life-style and a diet rich in animal fats and refined

sugars and poor in vegetable fats and fibers are remarkable risk factor for gallstone formation.¹¹

Kuwabara Kazuaki, et.al, (2011), together conducted a study on “Relationship of age, cholecystectomy approach and timing outcomes of elderly patients with cholecystitis.” In this, cohort study was used with total 2552 patients. The results showed that octogenarians were likely to have open cholecystectomy and functional decline. Since open cholecystectomy was a prediction of resource use and complications, procedures to complete earlier laparoscopic cholecystectomy and prevent complications are required for octogenarians.¹⁵

Haq Mujibal, et.al, (2015), conducted a study on “Effect of cholecystectomy on lipid profile in Bangladeshi patients with cholecystectomy.” The study was quantitative study in which 44 adult patients were studied. The results showed that alterations in lipid profile in which cholelithiasis were significant but complex and cholecystectomy had extreme effect suggesting a critical role of gallbladder.¹⁶

METHODOLOGY

A quantitative research approach was used in the present study and descriptive survey research design was adopted to assess the knowledge and practice regarding dietary management of patients affected with gallbladder diseases due to the nature of the study.

Non-probability sampling technique- purposive sampling technique was used for selecting the sample in this study because this study was adopted with the specific purpose in mind. In this study, sample size was 124 gallbladder disease patients and the data was collected with the help of structured questionnaires for the knowledge and checklist for the practice from the Government hospital.

FINDINGS OF THE STUDY

The present study was reported on knowledge and practice of patients regarding dietary management of patients affected with common gallbladder diseases. The main purpose of this study is to identify the knowledge and practice of patients regarding dietary management of patients affected with common gallbladder diseases. Total 124 patients were involved in this study. In the present study, majority 28 (23%) of the patients belongs to the age group of 40-50 years, majority 86 (69%)

of the patients were female, majority 74 (60%) of the patients belongs to hindu religion, majority 59 (48%) of the patients were having only primary education, majority 75 (61%) of the patients were unemployed, majority 74 (60%) of the patients were having income of Rs <5000, majority 81 (65%) of the patients belongs to joint family, majority 66 (53%) of the patients were vegetarian, majority 88 (71%) of the patients got the information from health personnel. The findings of the present study were based on objectives and theoretical based literature. Most of the studies revealed that having a good knowledge and practice regarding the dietary management will reduce the gallbladder disease and also in prevention of reoccurrence of the gallbladder diseases again in future.

DISCUSSION

Present Study: The present study revealed that level of knowledge score of gallbladder disease patients regarding dietary management was poor, i.e. 66% and practice score was also poor, i.e. 52%. Overall, correlation between knowledge and practice 0.49 after calculating mean and standard deviation. For knowledge mean was 5.14 and SD was 2.57 & for practice mean was 3.73 and SD was 2.04. Hence, there was poor knowledge and practice regarding dietary management among gallbladder disease patients.

Comparative Study: Sachdeva Sandeep, et.al (2011), conducted a study on "Lifestyle and gallstones disease: scope for primary prevention", with the aim quantifying the socio-demographic and lifestyle risk factors for gallstones diseases among age- and sex-matched cases and controls. The study revealed that the difference in the prevalence of gallstones among the two sexes was statistically significant ($P < 0.01$). **Large proportions of cases were asymptomatic (47%) or remained largely subclinical as chronic cholecystitis or early malignancy with nonspecific symptoms (29%).** Interestingly, intake of less protein in diet was significantly associated with cholelithiasis. A higher prevalence of cholelithiasis among females, observed in the present study. Low fiber intake and high refined sugars were similarly associated with tendency to gallstones.⁸

CONCLUSION

In the present study the patients had poor knowledge regarding the dietary management for gallbladder disease

conditions. There was a significant association between the level of knowledge with educational status, occupational status, income per month and dietary pattern.

Ethical Consideration: This study is ethically considered by the panel of Teerthanker Mahaveer College of Nursing, Teerthanker Mahaveer University after discussing with each and every point of this study.

Source of Funding: Self

Conflict of Interest: Nil

REFERENCES

1. Gonzalez-Hita M, Batis-Ruvalcaba C, Sanchez-Enriquez S. Diet and Nutritional Factors Related to Symptomatic Gallstone Disease in Women. *J Clin Case Rep.* 2014;4(458):2.
2. LIMA H, MENEZES TA, FIREMAN PA, WANDERLEY VE, CANUTO ÂM. Randomized study for assessment of hypolipidic diet in digestive symptoms immediately following laparoscopic cholecystectomy. *Rev. Col. Bras. Cir.* 2012;40(3):203-7.
3. Johansson K, Sundström J, Marcus C, Hemmingsson E, Neovius M. Risk of symptomatic gallstones and cholecystectomy after a very-low-calorie diet or low-calorie diet in a commercial weight loss program: 1-year matched cohort study. *International journal of obesity.* 2014 Feb;38(2):279.
4. Tsai CJ, Leitzmann MF, Willett WC, Giovannucci EL. Dietary protein and the risk of cholecystectomy in a cohort of US women: the Nurses' Health Study. *American journal of epidemiology.* 2004 Jul 1;160(1):11-8.
5. Jessri M, Rashidkhani B. Dietary patterns and risk of gallbladder disease: a hospital-based case-control study in adult women. *Journal of health, population, and nutrition.* 2015 Mar;33(1):39.
6. Kim E, Lee Y. A Descriptive Study of Gall Stone Patient's Dietary Habits and Nutritional Status. *Korean Journal of Community Nutrition.* 2007 Dec 1;12(6):826-37.
7. Jayant M, Kaushik R. Presentation and management of gallbladder remnant after partial

- cholecystectomy. *Tropical Gastroenterology*. 2013 Sep 26;34(2):99-103.
8. Sachdeva S, Khan Z, Ansari MA, Khalique N, Anees A. Lifestyle and gallstone disease: scope for primary prevention. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*. 2011 Oct;36(4):263.
 9. Vaidya P, Vaidya KA, Hubli P. A study on operative complications associated with laproscopic cholecystectomy. *Int J Intg Med Sci*. 2015;2(1):49-54.
 10. Lindseth GN, Denny DL. Patients' experiences with cholecystitis and a cholecystectomy. *Gastroenterology nursing: the official journal of the Society of Gastroenterology Nurses and Associates*. 2014 Nov;37(6):407.
 11. Misciagna G, Centonze S, Leoci C, Guerra V, Cisternino AM, Ceo R, Trevisan M. Diet, physical activity, and gallstones—a population-based, case-control study in southern Italy. *The American journal of clinical nutrition*. 1999 Jan 1;69(1):120-6.
 12. Narwade N, Shaikh T, Jain R, Khan N, Ghosalkar M, Ansari S, Sharma Y. The study of laparoscopic cholecystectomy and its conversion to open cholecystectomy: analysis of 100 cases in Navi Mumbai, India. *International Journal of Research in Medical Sciences*. 2017 Jan 17;3(12):3586-90.
 13. Hussain SM. Quantitative analysis of chemical composition of gallbladder stones among cholecystectomy of Iraqi patients. *surgery*. 2013;1:1.
 14. Ahmed MA, Das BB, kumar Das S, Sahoo N, Padhy L, Rath SK. Quantitative analysis of serum lipid profile in patients with gallstone disease. *J Evid Based Med Healthc*. 2015;2:2058-69.
 15. Kuwabara K, Matsuda S, Fushimi K, Ishikawa KB, Horiguchi H, Fujimori K. Relationships of age, cholecystectomy approach and timing with the surgical and functional outcomes of elderly patients with cholecystitis. *International Journal of Surgery*. 2011 Jan 1;9(5):392-9.
 16. Haq M, Giasuddin AS, Jhuma KA, Choudhury MA. Effect of Cholecystectomy on Lipid Profile in Bangladeshi Patients with Cholelithiasis. *J Metabolic Syndr*. 2015;5(192):2167-0943.
 17. Polit DF, Beck CT. *Nursing research: Principles and methods*. Lippincott Williams & Wilkins; 2004.