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#### UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

# PATIENT KNOWLEDGE ABOUT DISEASE SELF-MANAGEMENT OF CIRRHOSIS

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science

Trinh Xuan Thuy

College of Natural and Health Sciences School of Nursing Advanced Nurse Generalist

December, 2019

This Thesis by: Trinh Xuan Thuy

Entitled: Patient Knowledge about Disease Self-Management of Cirrhosis

Has been approved as meeting the requirement for the Degree of Master of Science in College of Natural and Health Sciences in the School of Nursing, Advanced Nurse Generalist program.

Accepted by the Thesis Committee:

Jeanette McNeill, DrPH, RN, CNE, ANEF. Research Advisor

Faye Hummel, RN, Ph.D., CTN-A, ANEF, Committee Member

Accepted by the Graduate School

Cindy Wesley, Ph.D.
Interim Associate Provost and Dean
Graduate School and International Admissions

#### **ABSTRACT**

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This study aimed to define the level of understanding of self-management for patients with liver cirrhosis. A descriptive cross-sectional study was conducted. Thirty cirrhotic patients (14 females and 16 males) in the Gastroenterology Department of University Medical Center, Ho Chi Minh City in Vietnam participated in answering the questionnaire to evaluate their knowledge about liver disease self-management. The majority of cirrhotic patients had an unsatisfactory level of knowledge regarding self-management of their disease, particularly in terms of recognizing and preventing complications from hepatic encephalopathy, monitoring for liver cancer, and awareness of medications they should not use.

Implications of the study for nursing practice would be to enhance the quality of patient knowledge about self-management disease in the setting and in Vietnam by providing a specialized guideline handbook for each patient with important terms about cirrhosis, self-care information, and ways to prevent and minimize the complications of cirrhosis. Further research with larger samples regarding self-management knowledge and effective ways to better prepare cirrhosis patients for self-care is needed to improve the education for these patients.

**Keywords**: knowledge, liver cirrhosis, patients, self-management.

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#### **CHAPTER I**

#### **INTRODUCTION**

#### **Background and Significance of Problem**

Cirrhosis is the result of all chronic liver diseases, causing mortality of approximately 5 of 10 per 100,000 persons a year worldwide (Bosetti et al., 2007). In 2010, it was the 12<sup>th</sup> leading cause of mortality worldwide (Muir, 2015) and the 10th leading cause of death in lower-middle income countries (World Health Organization, 2012). Two billion people consume alcohol worldwide and upwards of 75 million are diagnosed with alcohol-use disorders and are at risk of alcohol-associated liver disease. Approximately two billion adults are obese or overweight and over 400 million have diabetes; both are risk factors for non-alcoholic fatty liver disease and hepatocellular carcinoma (Asrani, Devarbhavi, Eaton, & Kamath, 2019). A high prevalence of liver cirrhosis in Vietnam results from preventable causes including hepatitis B viruses, hepatitis C virus, and heavy drinking among men (Gish et al., 2012). A large study estimated liver disease from cirrhosis and chronic hepatitis B would be an enormous burden in Vietnam in the next 15 years (Nguyen, Law, & Dore, 2008). As the result of the complications of liver failure and an increase of numbers of people living with other forms of liver disease, this burden will be increased greatly by the loss of many years of healthy life and monetary costs related to the disease. To be more specific, a study analyzing the treatment costs of liver cirrhosis found an average number of days in hospital was  $8.29 \pm 6.19$  days (Nguyen, Nguyen, & Pho, 2017). Additionally, the median cost of treatment per session has been estimated at  $7,439,527.40 \pm 5,251,403.97$  VND, which is roughly in \$328USD  $\pm$  \$232USD. The cost of liver medication constituted 44.52% of the aforementioned treatment expenses, whereas the cost of clinical screening was approximately 21.67% (Nguyen et al., 2017). Contributing cost factors included the patient's place of residence, the number of days in the hospital, the stage, and the complications of cirrhosis. Thus, due to the surge of cases of liver cirrhosis and the high cost of treatment in Vietnam, more medical programs about liver cirrhosis should be considered.

#### **Problem Statement**

According to Volk, Fisher, and Fontana (2013), 90% of treatment and care of lifelong illnesses was conducted outside of hospital settings. Additionally, the researchers stated that due to this situation, patients might not be receiving proper care or receiving incomplete treatment (Volk et al., 2013). Frequent hospital readmissions for management of fluid overload, hepatic encephalopathy, and/or gastrointestinal hemorrhage are common among patients with cirrhosis (Volk, 2012). A study conducted in 2017 by Saberifiroozi stated that adherence rate to guidelines was related to outcome measures. He also reported that the adherence rate to doctor's recommendation was between 30 and 90%. The adherence rate for treatment for variceal bleeding and hepatic encephalopathy was higher than for other complications (Saberifiroozi, 2017). Delivery of care from physicians and nurses was correlated with higher adherence rates.

Therefore, the strategy of management of patients with cirrhosis should be based on preventing cirrhosis progression (i.e., further decompensation) rather than treating complications as they occur (Bernardi et al., 2018).

There exists a general lack of patient understanding of long-term management of liver cirrhosis and insufficient training of medical personnel providing treatment to patients with this disease in Vietnam. Despite the fact that physicians or nurses can make recommendations and the delivery of care by physicians was associated with higher adherence rate, it is up to the patients to implement all necessary treatment steps (Gish et al., 2012). In addition, according to Gray (2004), promoting self-management of chronic diseases means increasing patients' knowledge and attitudes about their condition. Patients' knowledge is thus described as facts about the disease and its management that patients need to understand to enable them to perform complex self-management activities. Therefore, to efficiently control their disease, cirrhosis patients must take their medications properly, titrate their lactulose, watch their diet, and consult their doctors regularly. Moreover, a successful disease management routine is when patients are educated on how to function with their illness, to address the simple but unpleasant symptoms, and how to perform necessary duties to maintain their wellbeing. Specific skills that are taught might include routine follow-up appointments, adherence to prescribed regimens, and communication with health professionals regarding complications (Fowler, 2013).

Further studies have shown that cirrhosis patients with inadequate knowledge of liver cirrhosis presented with more complications compared with liver cirrhosis patients with a better knowledge level (Beg, Curtis, & Shariff, 2016; Volk et al., 2013). Currently, very few studies in Vietnam have focused on self-management of cirrhosis patients and no data exist on patient knowledge like diet or health maintenance activities about cirrhosis management. Therefore, it was necessary to consider the context of

patient's management to measure levels of understanding and correlate it to patient knowledge regarding cirrhosis self-management among Vietnamese patients.

#### **Purpose of the Study**

This study aimed to measure knowledge of self-management behaviors of patients with liver cirrhosis.

#### **Research Question**

The following research question guided this study:

Q1 What is the level of patient knowledge about cirrhosis and disease selfmanagement in Gastroenterology Department at University Medical Center Ho Chi Minh City, Vietnam?

#### **Theoretical Framework**

The concept of self-efficacy was originally proposed by Bandura in 1986. Self-efficacy is a person's confidence in his/her own abilities to complete necessary tasks to reach set goals (Bandura, 1986). Self-efficacy is also considered an important concept in the assessment and improvement of chronic conditions (self-management, quality of life, behavioral modifications, hopefulness, lifestyle modification, physical and mental health, and disease prevention). Gerald and Mangan (2008) notes that together with knowledge, self-efficacy is also a useful measure. They stated information does not necessarily assure behavioral change. Further, they suggested self-efficacy could be predictive of a patient's transition to self-management after an educational program.

Patients with greater self-efficacy were shown to practice more self-management behaviors, leading to better disease control, better physical function, and better quality of life (Tsay & Halstead, 2002; Weng, Dai, Huang, & Chiang, 2010). Liver cirrhosis patients' self-management behaviors included nutritional intake to stay healthy, medical

management, symptom monitoring, and the relationships among self-management knowledge and patients' behaviors (Dong et al., 2018).

#### Conclusion

This chapter provided an overview of the background and the problem statement about liver cirrhosis as well as the importance of self-management for cirrhosis patients. This information serves the basis for the development of this paper to survey the level of knowledge and self-management of this type of patient. In addition, the context of the study as well as the research objectives were also provided. Bandura's concept (1986) was analyzed to demonstrate suitability to support the development of research.

#### **CHAPTER II**

#### LITERATURE REVIEW

#### Introduction

Literature review is an essential chapter of a thesis paper as it provides a comprehensive analysis of related research on the topic to identify existing knowledge and potential gaps (Morehead State University, 2018). It is a summary of study topics, results, and a review of various research sources. Evidence from these studies might be complementary or in contrast to each other, which might require further research (Morehead State University, 2018).

This chapter provides a basic discussion of issues related to self-management behaviors in cirrhosis patients and a collection of valuable medical literature that provides necessary background for the current study. To achieve this task, only reliable sources of information were selected including the largest medical and nursing websites:

Cumulative Index to Nursing and Allied Health Literature (CINAHL), MEDLINE,

Cochrane Library, NCBI, and others. The following key phrases were used to locate related studies for this chapter: *liver cirrhosis, patient knowledge, self-management*.

Only relevant and current research studies were selected to be analyzed in this chapter. The literature search produced numerous studies from various countries including

Vietnam. These articles included multi-method studies, systematic reviews, qualitative research, quantitative studies, randomized controlled trials, and cross-sectional studies.

The variety of related sources presented a broader picture of the study problem and its variations from country to country.

#### **Historical Background**

Self-management is the competence of the individual in partnership with family, community, and healthcare professionals to manage treatments, lifestyle changes, as well as psychosocial, cultural, and spiritual consequences related to a chronic disease (National Institutes of Health [NIH], 2018). However, it was challenging to determine proper self-management methods due to significant variations among people of different ages and cultures. Thus, a comprehensive disease self-management plan should include age and cultural variables as well as be inclusive of people with chronic cirrhosis (NIH, 2018). Improving patients' self-care practices should ultimately lead to a decreased rate of hospitalization and other involvement of health care services (NIH, 2018).

In addition, self-management encourages patients to take an active role in their own healthcare. Individuals who "self-manage" tend to also make informed decisions regarding possible diagnostic and treatment options as well as follow prescribed treatment plans. Consequently, self-management encourages adherence to treatment plans, improves interaction between patients and caregivers, reduces the use of medical specialists and medical costs, and advances clinical outcomes across the lifespan (NIH, 2018). People have been progressively focusing not simply on living longer but on maintaining or even improving their wellness during their entire lives. However, an appropriate self-care plan has to be based on understanding the person's day-to-day routines, past medical interventions, and involvement of necessary medical technology. Finally, it is also important to establish the level of existing healthcare support available

to the patient and their family and community involvement in their treatment (NIH, 2018). Unfortunately, some patients with cirrhosis lack the necessary knowledge to manage their disease effectively. This could pose barriers for doctors and nurses who are trying to bring about the best results for their patients (Volk, 2012).

#### **Clinical Stakeholders**

In 2018, Low et al. reviewed 19 studies from Medline, Embase and CINAHL databases that were predominantly from high-income Western countries. The authors found patients and family members had limited understanding of cirrhosis or its impact. Additionally, these patients wanted better information about their disease, its treatment, and help with psychological and practical demands. Moreover, healthcare providers had difficulty in communicating these concerns to patients and their family (Low et al., 2018). Thus, the role of improving knowledge in cirrhosis patients was recognized as important in delivering care for them.

In addition, according to Volk, Tocco, Bazick, Rakoski, and Lok (2011), readmission of 402 cirrhosis patients discharged after complications of cirrhosis was common, expensive, predictable, preventable, and associated with mortality. After reviewing many randomized trials related to multidisciplinary management of cirrhosis patients, Mellinger and Volk (2012) stated the current care of patients with cirrhosis was poorly coordinated. Additionally, Kanwal et al. (2012) indicated patients with cirrhosis had not been provided proper care, which ideally should have been based on accepted guidelines. Therefore, it is crucial that nurses promote their skills in giving accurate nursing diagnoses and identifying suitable nursing interventions to provide the best care. The diagnosis of proper and valid nursing care improves a patient's results, thus avoiding

re-hospitalization due to inadequate nursing care management (Gimenes et al., 2017). To test an intervention, Morando et al. (2013) conducted a study to show a new model of support for specialty care based on group activity in outpatient hospitals including consultant hepatologists, dedicated nurses, and training doctors to help improve ability to survive 12 months in patients with cirrhosis and ascites.

#### Patient's Knowledge Regarding Liver Cirrhosis

According to Runyon in 2004, the main activity in the initial treatment of patients with cirrhosis and ascites included education about limiting sodium in the diet (2000 mg per day [88 mmol per day]) and oral diuretics. Limiting sodium in the diet might speed up the mobilization of ascites. Liquid loss and weight changes are directly related to sodium balance in ascites patients associated with hypertension (Runyon, 2004). Comprehensive patient education is needed to ensure they understand that diets and diuretics could be effective and worth the effort. Nutrient intake and physical activity are common barriers in cirrhosis and should be assessed and treated in cirrhosis patients. Simple screening questions in clinic and referring patients at risk to specialist hospitals should be used to address these barriers.

Volk et al. (2013) surveyed 150 outpatients who had been diagnosed with cirrhosis and were undergoing treatment in a tertiary hepatology clinic to measure their disease self-management knowledge. Only 53% of the survey items were answered correctly. Questions related to diet were most often missed. Some of the frequently missed questions were related to sodium content in sea salt and the safety of drugs such as acetaminophen and statins (Volk et al., 2013). The findings indicated the level of cirrhotic patient understanding of self-management was not related to age, gender, and

cause or severity of liver disease. However, after the patients were educated using a comprehensive booklet, 115 of 150 (77%) of them returned the next survey. The average score improved from 53% to 67% (p <0.001) and this improvement occurred across all questions. A simple educational intervention to provide-basic knowledge and emphasize its importance was reported to improve knowledge of cirrhosis self-management strategies (Volk et al., 2013).

In another study by Jehan and Inshrah (2017), findings indicated the majority of cirrhosis patients with ascites had many complications and possessed unsatisfactory levels of knowledge regarding cirrhosis. Patients also demonstrated poor practical skills to manage ascites. Eighty-three percent of cirrhotic patients with more than a five-year duration of ascites had never had any training regarding ascites management and its complications (Jehan & Inshrah, 2017). To relieve their dyspnea, nearly three-quarters of patients from the study chose to change their position. In terms of skin care, the study also showed most patients did not use any skin care products. However, the percentages of patients who had consumed less protein and salt in their food were 71.7% and 78.3%, respectively (Jehan & Inshrah, 2017).

Garrido et al. (2017) conducted a study that included 39 cirrhotic outpatients with a history of hepatic encephalopathy (HE). The patients were randomly assigned to an intervention (Group A; n = 20) or control group (Group B; n = 19). A 15 minute educational session was then provided to patients in Group A including basic information on the pathophysiology, hygiene, and medical management of HE. Thirty of the 39 patients (77%, 95% CI 62 to 87) were aware of previous HE: 16 in Group A (80%, 95% CI 58 to 92) and 14 in Group B (74%, 95% CI 51 to 88). However, only three

patients in Group A (15%, 95% CI, 5 to 36) and two in Group B (11%, 95% CI, 3 to 31) were able to correctly identify the medication used to treat/prevent HE (Garrido et al., 2017). Furthermore, only one patient in Group A (5%, 95% CI, 1 to 24) and two in Group B (11%, 95% CI, 3 to 31) had adequate understanding of the expected treatment effects. The intervention was highly effective in increasing patients' understanding of treatment of the condition (from 5% to 80%). The educational intervention showed the poor knowledge of patients with HE about their condition and served as a tool to increase patient awareness (Garrido et al., 2017).

Furthermore, Kadokawa et al. (2017) evaluated the effectiveness of educational classes for 80 patients with liver cirrhosis and their families. The researchers conducted a survey for the patients and family members attending class, which was offered three times in 2012. The content of the classes focused on the following areas: prevention of liver cancer, treatment of liver cancer, iron-restricted diet for hepatitis C patients, and the importance of amino acid preparations. A comparison of the levels of knowledge between patients and their family members showed no statistically significant differences. The study outcomes indicated the more patients and their families attended, the more knowledge they accumulated (Kruskal-Wallis test: p < .0001, p = .0368, p = .0021, and p < .0001). In addition, the results of the pre and post surveys showed significant improvement in participants' knowledge of liver disease (Kadokawa et al., 2017). These results confirmed the authors' liver disease education class was effective to enhance the knowledge levels of patients and their families.

In addition, in a pilot study of patient education and its effect on self-management in cirrhosis, Beg et al. (2016) recruited 39 patients with clinically stable cirrhosis into the

study. These patients were assessed before and after the intervention. The study instrument was a phone-based interview and information leaflet. All participants had a phone interview and were provided with a pre-intervention questionnaire. Some participants received an informational leaflet directly. Two months later, all participants were asked to complete a questionnaire. The questionnaire indicated the participants' basic knowledge and understanding of liver disease were poor with an average score of 3.4 out of 9 points. However, there was a statistically significant improvement in scores to 7.5 in those who had been provided with the leaflets (Wilcoxon's signed-ranked test, p = .0006). The mean score of those who received the direct leaflet was 6.8, significantly higher than those of the participants before reading the leaflet (Wilcoxon's rank-sum test, p = .001; Beg et al., 2016). Outcomes from this study demonstrated a poor level of knowledge of liver disease in cirrhotic patients and an information leaflet could cause a change in level of knowledge.

#### **Summary**

The review of the literature in this chapter provided evidence that the self-management perception of cirrhosis patients is considered necessary to manage the condition. Most studies showed patients with liver disease lacked important knowledge about disease self-management. This lack of understanding might pose a barrier to nurses and physicians attempting to give optimal care for their patients. Since liver disease in Vietnam has been increasing, there is a significant need to investigate patients' level of knowledge regarding the disease. It is possible even a simple educational intervention might improve patient knowledge. Building an ideal clinical education environment for cirrhotic patients should not be limited to an individual or an

organization's mission; it requires collaboration among relevant team members such as physicians, patients' families, and other stakeholders.

#### **CHAPTER III**

#### **METHODOLOGY**

#### Introduction

This chapter describes the methods and tools for implementing this study. The purpose of this section is to present how the research was conducted to answer the research question. The research methodology and instrument used, the information on the data collection, and the entire analysis process to complete this study are also presented. Finally, the procedure and necessary steps to protect human subjects are provided.

#### **Research Design**

Study design determines population, sampling procedures, research instruments, and data collection and analysis techniques (Grove, Burns, & Gray, 2012). The selection of appropriate research methods is extremely necessary to be able to obtain adequate research data to answer the research question. This research was a descriptive study. This type of research is usually conducted within a limited amount of time and is ideal for investigating participants' beliefs and aptitudes as well as level of awareness regarding certain phenomena (Levin, 2006). Thus, this methodology was chosen to investigate the issues in this research. The main goal of the study was to understand the level of knowledge of patients with cirrhosis regarding appropriate and vital disease self-management practices.

#### **Population Sample**

The population of this study was Vietnamese adults (18 years and older) who had been diagnosed with cirrhosis at least one year ago. Convenience sampling procedures were utilized to obtain the study sample. Participants in the study were 30 patients with cirrhosis who were being treated in the Gastroenterology Department at University Medical Center, Ho Chi Minh City, Vietnam.

#### **Inclusion Criteria**

Clinically stable Vietnamese patients who had been diagnosed with cirrhosis at least a year prior to the study were recruited. The diagnosis of cirrhosis was based on clinical, radiological, and biochemical features. Participants were provided information about the study and signed an informed consent.

#### **Exclusion Criteria**

The study excluded patients who were clinically unstable, confused, or with any degree of encephalopathy. In addition, those patients who did not provide the written consent to participate in the study were also excluded.

#### Instrument

The study used the *Modified Self-Management Knowledge Questionnaire* (Dong et al., 2018) as the main instrument for data collection. Content validity of the questionnaire was confirmed by having three medical and two nursing experts (all of whom had been working with patients with liver diseases for more than 15 years) read the items and ensure their consistency with the study topic. The total number of items on the questionnaire was 13. The questions covered the following areas: diet, medication use, and self-monitoring activities. The study instrument was also designed to address the

following elements: socio demographic data for patient as age, sex, occupation, living area, level of education, duration of the disease, etiology of cirrhosis, alcohol drinking habits, other diseases, and having previously had the liver disease education class. It was translated into Vietnamese and then translated back into English. The two English versions were compared for accuracy of the translation during which an insignificant amount of differences between them was identified.

Scoring of the items on the questionnaire was conducted in the following manner: one point was given for a correct answer and zero for incorrect or "do not know." The highest possible total score was 13. The content validity index of the other 13 questions was 1.00. Cronbach's alpha coefficient was .72 in the Dong et al. (2018) study.

Then the tool was pilot-tested with five cirrhosis patients. This process was used to test the translations for equivalence and clarity and establish the time to complete the questions. Participants spent 8 to 10 minutes to complete all questions.

#### **Procedure for Data Collection**

This researcher worked with the Gastroenterology Department regarding inviting patients to participate in the study. After securing written permission to ask patients with cirrhosis to participate in the study from the Director of University Medical Center (see Appendix A) and obtaining approval to conduct the study from the University of Northern Colorado's Institutional Review Board (see Appendix B), the researcher met with potential participants to introduce the purpose and content of the study. During the meeting, the participants were asked to sign the consent forms (see Appendix C).

After the consent forms were collected, each participant in the study was given a questionnaire, which measured their knowledge of disease self-management in cirrhosis

(see Appendix D). The completed questionnaires were returned to the researcher after 8 or 10 minutes.

#### **Data Analysis**

After the data collection process was completed, the researcher checked to make sure all the required data had been collected fully and accurately. Further, the researcher performed the data analysis using the SPSS (Statistical Package for the Social Sciences) software. The findings were presented using descriptive statistics (percentage, mean, frequency). Higher scores on the questionnaire indicated a higher level of knowledge regarding disease self-management in cirrhosis.

#### **Research Ethics**

The study was conducted with the permission of Institutional Review Board of University of Northern Colorado and Hong Bang International University. At no point during the implementation of the study were participants pressured into taking part in the research; all participated voluntarily. Participants were able to withdraw from the study at any point. Additionally, data acquired in the study were kept in strict confidentiality. Specifically, the data were stored on the researcher's computer, which was protected by a password. Finally, no identifying information about the participants was used in the publication of the result; the study findings were presented as group data only. Moreover, all study participants were monitored and taken care of equally.

#### **Summary**

In this chapter, the study design and procedures of data collection were presented.

In addition, the research instrument and data analysis techniques were described. Finally,

several ethical considerations were mentioned to emphasize the importance of following proper techniques of protecting the identity of the participants in the study.

#### **CHAPTER IV**

#### **RESULTS**

#### Introduction

This study was conducted to explore patients' knowledge about self-management of cirrhosis disease. Therefore, results of this study played a significant part in finding knowledge deficits that existed in cirrhosis patients. This chapter presents and describes the results obtained after data collection and the analysis process including demographic statistics, results of measuring the reliability of this questionnaire to measure patients' knowledge, as well as the statistical analysis.

#### **Demographic Characteristics**

In this research, 30 patients were diagnosed with cirrhosis by the Gastroenterology Department and were invited to participate. All 30 patients agreed to take part in this survey and all questionnaires were completed. As a result, the mean age was 50.53 years (SD = 13.41 years). Ages ranged from 23 to 72 years. There was a slightly higher proportion of male participants than female (53.3% and 46.7%, respectively). Most of the participants lived in suburban areas (60%). Some of them completed secondary school (40%) while 20% had a university and above education. Most of the participants worked in the business area (26.7%). Sixty percent of the participants used to drink alcohol while only 1% were still drinking at the time of the study. The majority of liver cirrhosis (56.7%) for the participants was caused by hepatitis A, B, or C. The average duration of liver cirrhosis was 5.24 years (SD = 4.65 years and

range from 1 to 17 years). In addition, 23.3% of the patients had diabetes, 6.7% had hypertension, 13.3% had heart disease, 6.7% had renal disease, and 13.3% patients had at least two other diseases. Eighty-seven percent of patients had not attended or received any health teaching methods regarding self-management of liver cirrhosis (see Table 1).

Table 1

Demographic Characteristics

Characteristics		n	%	M(SD)	
Gender	Female	14	46.7		
	Male	16	53.3		
Age	Range: from 23 to 72 years			50.53(13.41)	
Living area	Urban	12	40.0		
_	Suburban	18	60.0		
Occupation	Business	8	26.7		
-	Farmer	7	23.3		
	Retired & Older	6	20.0		
	Staff	5	16.7		
	Housewife	1	3.3		
	Policeman	1	3.3		
	Teacher	1	3.3		
	Student	1	3.3		
Education level	Secondary school	12	40.0		
	High school	2	6.7		
	Middle school	5	16.7		
	College	5	16.7		
	University and above	6	20.0		
Time disease Range: from 1 to 17 years				5.24(4.65)	
Cause	Alcohol	8	26.7		
	Hepatitis (A, B&C)	17	56.7		
	Others	5	16.7		
Other diseases	Hypertension	2	6.7		
	Diabetes	7	23.3		
	Heart disease	4	13.3		
	Renal disease	2	6.7		
Alcohol habit	Still drinking	1	3.3		
	Used to drink	18	60.0		
	Never drank	11	36.7		
Received health	Yes	4	13.3		
education	No	26	86.7		

#### **Quantitative Findings**

The research question was

What is the level of patient knowledge about cirrhosis and self-management in gastroenterology department at University of Medical Center, Ho Chi Minh City, Vietnam?

The mean score for self-management knowledge was 7.93 (SD = 3.56) out of a total possible score of 13; actual scores ranged from 4 to 12. Table 2 displays the percentage of participants who answered each individual question correctly. All of the participants knew liver cirrhosis patients should consume a low-salt diet and abstain from alcohol after being diagnosed. Sixty-seven percent knew liver cirrhosis patients not caused by viral hepatitis B should be vaccinated against viral hepatitis A and B and 93.3% of study participants knew liver cirrhosis caused by viral hepatitis B or C should be treated by using anti-viral medications after consulting a doctor. Similarly, most participants (63.3%) knew if they had esophagogastric varices bleeding, they should notice their stool color and 86.7% patients answered they would contact their health providers immediately if their stool turned black. In terms of diet, the majority of the participants (66.7%) chose healthy food but avoided roughage and dense items for liver cirrhosis patients with esophagogastric varices. Most of them (86.7%) had knowledge of reducing intake of animal protein with hepatic encephalopathy. However, only 36.7% patients knew they should produce stools every day to prevent hepatic encephalopathy and only 46.7% stated lactulose should be titrated to produce two to three bowel movements daily. Over half of study participants (56.7%) thought they should selfmonitor if they had any odd behaviors. However, only 3.3% patients knew which

medicines were restricted for them and only 36.7% reported that an ultrasound test should be conducted every six months to determine liver function.

Table 2

Results for Each Question

Question	n	%	M	SD
1	30	100.0	1.0000	.00000
2	30	100.0	1.0000	.00000
3	20	66.7	1.6667	.95893
4	19	63.3	1.6333	.88992
5	28	93.3	1.1333	.50742
6	26	86.7	1.2667	.78492
7	20	66.7	2.0333	.66868
8	11	36.7	2.6667	1.42232
9	14	46.7	2.4000	.62146
10	17	56.7	1.7667	.93526
11	26	86.7	1.2667	.69149
12	11	36.7	2.3000	1.02217
13	1	3.3	3.8667	.43417

## Reliability

Validity and reliability are two basic factors in evaluating measurement tools (Tavakol & Dennick, 2011). A research tool is considered valuable and appreciated

when the two factors are strong. Cronbach's alpha is a method of measuring the reliability of a research tool (Tavakol & Dennick, 2011). The greater the Cronbach's  $\alpha$  index, the higher the reliability of the questionnaire. However, Cronbach's  $\alpha$  must be at least 0.60 to be considered acceptable (Ursachi, Horodnic, & Zait, 2015).

The questionnaire in this study was translated into Vietnamese and tested for reliability. In Dong et al.'s study (2018), the Cronbach's  $\alpha$  was 0.72, which indicated the questionnaire was highly reliable. However, in the current study, the overall Cronbach's  $\alpha$  for the 13 items of the questionnaire was equal to 0.68. Although this rate was lower than Dong et al.'s study, it still achieved acceptable reliability when performed on cirrhotic patients.

#### Summary

Chapter IV provided an overview of the findings of the demographic statistics as well as the reliability of the scale. In addition, general descriptions of the data collected about knowledge assessed in each question were presented. These results reflected patient knowledge in terms of self-management of cirrhosis disease.

#### **CHAPTER V**

#### **DISCUSSION**

#### Introduction

The findings presented in Chapter IV provided a general description of the answers to the research question. This chapter presents an examination and discussion of the results, which helped to answer the question about the level of patient's knowledge about liver cirrhosis. The demographic characteristics of the sample and the quantitative results reflect the knowledge level of patients in self-management of their disease.

Additionally, the limitations of this study, implications, and recommendations for practice, education, and further research are provided to improve patient knowledge at University Medical Center, in particular, and Vietnam in general.

#### **Demographic Findings**

The majority of the patients in this study were males. This finding was supported by Jehan and Inshrah (2017) who reported the percentage of liver cirrhosis was higher among male patients in Egypt. Similarly, other studies found liver cirrhosis was twice as common in men than in women and it was especially prevalent among malnourished patients over 50 years of age (Gines & Dataller, 2005; Linton & Maebius, 2012).

This study demonstrated that more than a half of the study patients were residing in suburban areas and had less than a 12<sup>th</sup> grade education. These findings were consistent with Scaglione et al. (2015) who reported the prevalence of liver cirrhosis was higher in non-Hispanic blacks and Mexican Americans, those living below the poverty

level, and those with less than a 12<sup>th</sup> grade education. Similarly, Vanderplas et al. (2003) reported the majority of the participants had only a secondary school education. In addition, in 2000, Frank et al.'s results showed most of the study patients were illiterate and lived in rural areas. The results of this study were consistent with a study conducted by Rao et al. (2002) who reported liver cirrhosis and ascites were more common in rural areas versus urban because rural areas have a more conducive environment to developing schistosomal infection due to exposure to contaminated water.

Further, the total study sample had had liver cirrhosis for more than one year and most of them (86.7%) had not attended or received any health teaching regarding liver disease. This was consistent with a study by Jehan and Inshrah (2017) who stated 83.3% of their 60 study participants did not have any health education about ascites self-management. They also concluded this was related to patients dwelling in rural areas with inadequate healthcare services.

Regarding the cause of cirrhosis disease, about a half of participants in this study had liver cirrhosis due to hepatitis A, B or C, and nearly one-third of the cirrhotic disease in the patients was caused by alcohol. These results were congruent with most of the studies that showed alcoholic liver disease and chronic viral hepatitis such as hepatitis C and B were the leading risk factors for liver cirrhosis around the world. In a qualitative study conducted among 820 Saudi participants who were assessed about their knowledge related to cirrhosis disease, Ghaedaa, Alzahrani, and Saja (2018) found younger age and higher education level were significantly associated with good knowledge. However, a relationship between good knowledge and participants' education levels or age was not found in this study.

#### **Quantitative Findings**

All study patients were aware of low salt in their diets. This was similar to the Dong et al. (2018) study result where participants reported they adhered to low-salt diets. However, Dong et al. found patients rarely managed the input of sodium level to less than two grams per day and they could not refuse salty food after discharge from hospital. This result was predicted because cirrhosis patients often have less appetite and salty foods appeal to them more than foods in a low-salt diet (Dong et al., 2018). In addition, in a study conducted in 120 outpatients with cirrhosis and ascites, Morando et al. (2013) found only 37 patients (31%) followed a moderately low-salt diet; instead, they lowered sodium in their diet by reducing their overall daily food intake.

Moreover, Dong and et al. (2018) supposed patients followed the medication schedule more strongly than the diet because medicine could directly and clearly control the symptoms of liver disease while the diet did not. They found nearly 40% patients adhered to the right medicine regimen but this might not be unique to cirrhosis patients (Dong et al., 2018). Similarly, more than half of participants in Volk et al.'s (2011) study knew NSAIDs were safer than acetaminophen. These proportions were much higher than in this study's result of only 3.3% patients. Thus, in this population, nurses should add specific instructions about appropriate medicine to take for those with liver disease (Volk et al., 2011).

Lactulose is the first-line treatment in almost 70%-80% of hepatic encephalopathy patients (Nusrat, Khan, Fazili, & Madhoun, 2014). In a qualitative study by James and Liou (2015), when liver cirrhosis patients diagnosed with hepatic encephalopathy were given instructions from physicians, they knew to adjust lactulose dose according to

consistency and frequency of their stool. By contrast, this study found patients had a lower knowledge of how to titrate lactulose daily (46.7%) and the purpose of producing a stool (36.7%). Similarly, patients in Dong et al.'s (2018) study had lower knowledge of these two areas with 11.2% and 18.7%, respectively. Previous research on the assessment of cognitive liver disease complications in decompensated hepatitis B liver disease patients in China showed only 12.3% of patients were aware that lactulose should be used for preventing hepatic encephalopathy (Zhang et al., 2015). Another study (Goldsworthy et al., 2017) was conducted in a United Kingdom tertiary liver center. The authors found only 17% of patients were aware of developing hepatic encephalopathy due to impaired clearance of toxins and only 8% understood laxatives were prescribed to help eliminate those toxins through the intestine. However, patients in this study had a higher knowledge of how to reduce intake of animal protein when hepatic encephalopathy started (83.3%) as well as how to self-monitor if they had abnormal behaviors (56.7%).

Gastroesophageal varices exist in half of cirrhotic patients (Nusrat et al., 2014). The incidence of varices is directly proportional to the severity of liver disease. Variceal hemorrhage is the most dangerous complication of cirrhosis (Nusrat et al., 2014). In the Gastrointestinal Department of University Medical Center, nurses and physicians instruct these patients and their families to monitor their stool every day. This might lead to the very adequate knowledge about information needed to self-manage their disease. For instance, 63.3% of patients knew they should pay attention to their stool and 86.7% knew to see a doctor immediately if their stool changed to black due to esophagogastric varice bleeding.

Liver ultrasound is considered to be a valuable first-line examination technique for tumor detection and has been accepted by all guidelines. About one-third of patients with cirrhosis progress to hepatocellular carcinoma (HCC) during their lifetime, which is equivalent to a risk of about 1% to 8% per year (Purcell et al., 2019). In research conducted on 753 patients by Farvardin et al. (2017), the proportion of respondents who thought ultrasound was the primary recommended modality for HCC surveillance and that cirrhotic patients should have HCC surveillance performed at least once per year were 85.4% and 88.4%, respectively. By contrast, this study found only 36.7% of respondents thought they should have an ultrasound test twice a year to detect live cancer. For these reasons, health education materials should be well designed for the needs of cirrhotic patients. Since nurses spend most of their time caring for patients, they could provide information and knowledge about medications as well as low-sodium diets and tracking complications.

#### **Application to the Theoretical Framework**

This study partly supported the elements of Bandura's (1986) theory, which was described in previous chapters. This study clearly showed patients should be included in the decision-making process in the progress of care plan. For instance, when arranging exercise, healthcare providers need to determine what kind of exercise patients want to do and then discover which barriers might prevent patients from doing those exercises so those barriers could be removed (Dong et al., 2018). The severity of the disease should be evaluated before planning to help patients meet their daily needs. Above all, as the disease progresses, patients need to know how to readjust their daily activities. Some patients might also have special dietary needs. For example, patients who frequently

undergo severe hepatic encephalopathy might find the right balance between getting enough protein and calories while they can still enjoy the meal. In addition, selfmanagement should be incorporated in learning strategies. Multidisciplinary learning should be involved to bring about more effective self-management behaviors. Goldsworthy et al. (2017) concluded the knowledge of cirrhotic patients was essentially enhanced following the use of a simple, low-cost, multimedia resource that aided in selfmanagement. Some specific strategies were providing sources of data for patients such as patient associations, the media, and the Internet. Associations aim to provide books and hold meetings to educate and convey disease knowledge to patients. Media, by broadcasting a wide variety of health-related programs, provide people with the opportunity to take part in these programs directly and indirectly. The Internet provides ways to gather information about health and caring. Another way to improve patient's knowledge would be to set up protocols for continuous management of patients between visits. According to Volk (2012), his institution enrolled patients in a cirrhosis registry with periodic performance assessment and reminders for scheduled testing. By doing so, rates of screening hepatocellular carcinoma improved from 74% to 93%.

#### Limitations

There were several limitations to this study. First, the number of participants might not have been sufficient to achieve high validity and reliability (N = 30). Secondly, this study was conducted in one of the biggest hospitals in an urban area in Vietnam where patients might have a chance to access better healthcare services and their economic status might be better compared with cirrhotic patients in other resource-limited areas. Thus, this research could not represent the overall context of cirrhotic

patients' knowledge in Vietnam. Finally, data regarding liver cirrhosis symptoms were not collected in this study as some authors identified patients' dietary behaviors were related to cirrhosis symptoms (Ney et al., 2017).

#### Recommendations for Practice, Education, and Research

Some recommendations are given to enhance the quality of patient knowledge about self-management disease at the University of Medical Center in particular and Vietnam in general. It could be recommended that to provide liver cirrhosis and liver disease care, a guideline, handbook, or leaflet should be provided for each patient. This handbook should include simple terms about cirrhosis to prevent and minimize the complications of cirrhosis. Furthermore, leaders, nurses, physicians and healthcare providers need to discuss and come up with specific educational methods to deliver this knowledge to patients. For example, in the Gastroenterology Department in University Medical Center, cirrhosis patients and their families were instructed daily in terms of what kind of food they could and could not have, how to recognize abnormal symptoms, and how to protect skin in decompensated cirrhosis or ascites patients. This type of education helped patients participate in their decision-making progress. Finally, this study could be conducted in a larger population, in other centers, or in different geographical areas in Vietnam to provide unbiased results and try to examine the essential aspects of this problem.

#### Conclusion

Although the results showed patients had a higher level of basic knowledge of cirrhosis than in previous studies, liver cirrhosis patients in this study still lacked important understanding about self-management of their disease. This lack of

understanding might pose an obstacle to healthcare providers who are trying to boost outcomes for their patients. This research was the foundation for conducting further study to develop education programs that could improve the level of knowledge in cirrhosis patients about self-management of their disease.

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#### APPENDIX A

# PERMISSION FROM UNIVERSITY MEDICAL CENTER, HO CHI MINH CITY TO CONDUCT STUDY



Ho Chi Minh City, 02 July, 2019

#### LETTER OF APPROVAL

Dear RN. Trinh Xuan Thuy,

This letter is to response to your request for approval to collect data for research entitled "Patient Knowledge about Disease Self-management in Cirrhosis" at the University Medical Center, Ho Chi Minh City, Vietnam (UMC). We are pleased to inform you that the application has been approved and data collection could be started at UMC in according to the following details:

- Study subject: Cirrhosis Patient

- Sample size: 30

- Department: Gastroenterolody Department

- Duration: 03/Jul/2019 - 15/Jul/2019

- Authorized personnel: RN. Trinh Xuan Thuy

The researchers are required to comply with all conditions and regulations in data collection at University Medical Center, Ho Chi Minh City, Vietnam.

Sincerely yours,

DATHOCY DUDIC

NGUYEN HUU THINH, MD PhD.

Manager, Training and Scientific Research Department University Medical Center, Ho Chi Minh City

# APPENDIX B INSTITUTIONAL REVIEW BOARD APPROVAL



#### Institutional Review Board

DATE: August 7, 2019

TO: Trinh Xuan Thuy, BSN

FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [1452390-1] Patient Knowledge about Self-management Disease in Cirrhosis

SUBMISSION TYPE: New Project

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS

DECISION DATE: August 7, 2019 EXPIRATION DATE: August 7, 2023

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Nicole Morse at 970-351-1910 or <a href="mailto:nicole.morse@unco.edu">nicole.morse@unco.edu</a>. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

#### **APPENDIX C**

#### CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH: ENGLISH AND VIETNAMESE VERSIONS



#### CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH

## UNIVERSITY OF NORTHERN COLORADO HONG BANG INTERNATIONAL UNIVERSITY

**Project Title**: Patient knowledge about disease self-management in cirrhosis

Researcher: Trinh Xuan Thuy

Research Advisor: Jeanette. McNeill, DrPH, RN, ANEF, CNE Professor University of

Northern Colorado, School of Nursing, Greeley, CO

You are invited to participate in a research study conducted by Trinh Xuan Thuy. The purpose of this research is to gather information about patient knowledge and awareness in self-management liver cirrhosis. This research is conducted with the approval of University Medical Center HCMC, Ho Chi Minh city, Vietnam, and the University of Northern Colorado, Greeley, Colorado, USA.

Your participation will involve answering questions in the survey to give your knowledge about liver cirrhosis. Estimated time to complete the survey is about 8 to 10 minutes.

#### Risks and discomforts

There are no known risks associated with this research. The survey does not include the names of participants. The results of this study will be kept confidential and will not affect participant's treatment in University Medical Center HCMC.

#### **Potential benefits**

There are no known economic benefits to you that would result from your participation in this research.

#### **Protection of confidentiality**

Protection of confidentiality for the subjects: Surveys will use coding information to identify the participants; names will not be used. Identifying information about the participants will not be used in any publication of the results; results will be reported as group data only.

#### **Voluntary participation**

Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of

this form will be given to you. If you have any questions about your selection or treatment as a research participant, please contact the Office of Research, Kepner Hall, University of Northern Colorado, Greeley, Colorado, 80639, 970-351-1910. Please give this informed consent and the completed questionnaire to the researcher (the one who gave you the form).

#### **Committee Contact information:**

Student Researcher: Trinh Xuan Thuy Email: trin7457@bears.unco.edu

Research Advisor: Jeanette. McNeill, DrPH, RN, ANEF, CNE Professor, University of

Northern Colorado, School of Nursing, Greeley, CO

Email: Jeanette.McNeill@unco.edu

Participant Signature	Date
Researcher Signature	Date



#### MẪU ĐỒNG Ý CHO NGƯỜI THAM GIA NGHIÊN CỨU TRƯỜNG ĐẠI HỌC BẮC COLORADO TRƯỜNG ĐẠI HỌC QUỐC TẾ HỒNG BÀNG

Tên đề tài: Kiến thức người bệnh về tự quản lý bệnh xơ gan

Người nghiên cứu: Trịnh Xuân Thủy, Bệnh viện Đại học Y được thành phố Hồ Chí Minh

Số điện thoại: +8436 555 1994 Email: trin7457@bears.unco.edu

#### Mục đích và mô tả:

Mời anh/chị tham gia vào một nghiên cứu được thực hiện bởi Trịnh Xuân Thủy. Mục đích của nghiên cứu này là thu thập thông tin về kiến thức tự quản lý bệnh ở những bệnh nhân xơ gan.

Nghiên cứu này được thực hiện với sự chấp thuận của bệnh viện Đại học Y dược thành phố Hồ Chí Minh, Việt Nam.

Sự tham gia của anh/chị sẽ liên quan đến việc trả lời các câu hỏi trong khảo sát để người nghiên cứu tiến hành đánh giá mức độ kiến thức của bệnh nhân xơ gan. Thời gian dự kiến để hoàn thành khảo sát khoảng 8 đến 10 phút.

#### Sự rủi ro và khó chịu

Không có rủi ro được biết đến liên quan đến nghiên cứu này. Cuộc khảo sát không yêu cầu nêu tên của người tham gia. Kết quả của nghiên cứu này sẽ được giữ bí mật và sẽ không ảnh hưởng đến tình trang bênh của bênh nhân.

#### Lơi ích

Không có lợi ích kinh tế nào đối với những bệnh nhân xơ gan khi tham gia vào nghiên cứu này.

Chất lượng giáo dục sức khỏe cho bệnh nhân xơ gan có thể được hưởng lợi ích từ ý kiến của anh/chị.

#### Bảo mật thông tin

Bảo vệ thông tin cho người tham gia: Các cuộc khảo sát sẽ sử dụng thông tin mã hóa để xác định người tham gia; tên sẽ không được sử dụng. Thông tin về những người tham gia sẽ không được sử dụng trong bất kỳ công bố kết quả nào; kết quả sẽ chỉ được báo cáo dưới dạng dữ liệu nhóm.

#### Tự nguyện tham gia

Sự tham gia của anh/chị trong nghiên cứu này là tự nguyện. Anh/chị có thể không tham gia hoặc rút lại sự đồng ý tham gia bất cứ lúc nào. Anh/chị sẽ không bị phạt khi từ chối tham gia hoặc rút khỏi nghiên cứu này. Quyết định của anh/chị sẽ được tôn trọng và sẽ không làm mất lợi ích mà anh/chị được hưởng. Nếu không có bất kỳ câu hỏi nào, vui lòng ký tên bên dưới nếu anh/chị muốn tham gia vào nghiên cứu này. Một bản sao của mẫu này sẽ được trao cho anh/chị. Nếu anh/chị có bất kỳ câu hỏi nào về việc tham gia

nghiên cứu, vui lòng liên hệ với Văn phòng Nghiên cứu, Kepner Hall, Đại học Bắc Colorado, Greeley, Colorado, 80639, 970-351-1910

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Thông	tın	lien	ne

Thông tin liên hệ: Nếu anh/chị có bất kỳ câu hỏi hoặc quan tâm về nghiên cứu này hoặc nếu có bất kỳ vấn đề phát sinh, xin vui lòng liên hệ:

Người nghiên cứu: Trịnh Xuân Thủy Email: trin7457@bears.unco.edu
Cố vấn: Giáo sư Jeanette, McNeill Email: Jeanette.McNeill@unco.edu

Ngày
Ngày

#### APPENDIX D

#### MODIFIED SELF-MANAGEMENT KNOWLEDGE QUESTIONNAIRE: ENGLISH AND VIETNAMESE VERSIONS

### MODIFIED SELF-MANAGEMENT KNOWLEDGE QUESTIONNAIRE

1.	Which diet should (a) less salt	(b) more salt	ow? (c) do not know			
2.	What is the recom (a) <b>abstinence fro</b> (b) without restric (c) do not know	om alcohol	eekly alcohol use in cirrhotic pati	ents?		
3.	Patients with cirrh vaccine?	osis (not caused from	hepatitis B) should get hepatitis	A and B		
	(a) true	(b) false	(c) do not know			
4.	Patients with cirrh pay attention to yo (a) true	· ·	gogastric varices bleeding, so yo (c) do not know	u should		
5.	How should cirrhosis caused by hepatitis B or hepatitis C be treated?  (a) using antiviral medication after consulting a doctor  (b) do not need to use any antiviral medication  (c) do not know					
6.	(a) you may be bl	black and tarry, what leeding from the inte ich meat in the diet, ac	stine, see a doctor immediately			
7.	(a) normal diet	esophageal cirrhosis  but avoid rough and	-			
8.		•	tools every day for prevention  oma related to cirrhosis)			
9.	(a) at a fixed dose	lac) should be taken every day usted to soft stool fo	2 to 3 times a day			

10.		Patients with cirrhosis should self-monitor their condition if they have abnormal sleep cycles, weaken thinking, odd behavior, etc.			
	(a) true	(b) false	(c) do not know		
11.	Patients with he reduce the amou (a) animal prot (b) plant protein (c) do not know	int of ein	(hepatic coma related to cirrhosi	s) should	
12.	Patients with cir (a) detect liver (b) detect gallston (c) determine liv (d) do not know	cancer ones ver function	n ultrasound every 6 months to		
13.	Which medicine (a) morphine (b) omeprazole (c) ibuprofen	•	d to cirrhotic patients?		

(d) do not know

# VIETNAMESE VERSION OF SELF-MANAGEMENT QUESTIONNAIRE PHIÉU KHẢO SÁT

## KIẾN THỰC NGƯỜI BỆNH VỀ TỰ QUẢN LÝ BỆNH XO GAN

### I. THÔNG TIN CHUNG:

<b>Hướng dẫn:</b> Anh	/chị đọc kỹ	các thông	g tin bên	dưới,	sau đớ	điền	vào	chỗ	()	và	đánh
dấu X vào ô thích	hop:										

vào ô th	hích hợp:				
1.	Giới tính: ☐ Nam ☐ Nữ				
2.	Năm sinh:				
3.	Nơi ở:				
	☐ Thành phố ☐ Nông thôn				
4.	Nghề nghiệp:				
5.	Trình độ:				
	□ Cấp 2				
	□ Cấp 3				
	☐ Trung cấp				
	□ Cao đẳng				
	☐ Đại học và sau đại học				
6.	Thời gian phát hiện bệnh:				
7.	Nguyên nhân gây bệnh:				
	☐ Rượu ☐ Viêm gan siêu vi (A, B & C) ☐ Khác				
8.	Bệnh lý khác (nếu có):				
	☐ Tiểu đường ☐ Cao huyết áp				
	☐ Bệnh tim mạch ☐ Bệnh thận				
9.	Thói quen uống rượu:				
	□ Vẫn đang uống				
	☐ Đã từng uống				
	☐ Chưa bao giờ uống				

	10.	Đã từng được tư vấn về kiến thức tự quản lý bệnh xơ gan ?			
		□ Có	☐ Không		
II. KII	ÉN TH	ÚC NGƯỜI BỆNH V	VỀ TỰ QUẢN LÝ BỆNH XO	O'GAN:	
Hướng	g dẫn: 🛭	Anh/chị vui lòng đọc k	ỹ các câu hỏi bên dưới và kho	anh tròn đáp án	
anh/ch	ị thấy đ	đúng nhất:			
	1.	Bệnh nhân mắc bệnh	xơ gan nên tuân thủ chế độ ăi	n kiêng nào?	
	2.	<ul><li>(a) ít muối</li><li>Mức độ sử dụng rượt</li><li>là?</li></ul>	(b) nhiều muối 1 hàng tuần được khuyên dùng	(c) không biết g ở bệnh nhân xơ gan	
	3.		(b) không hạn chế (không phải do viêm gan siêu i A và B không?		
	4.	(a) đúng (b) sai Bệnh nhân xơ gan có bạn nên chú ý đến mà	thể bị chảy máu do giãn tĩnh	mạch thực quản, do đó	
	5.	(a) đúng (b) sai Bệnh xơ gan do viêm thế nào?	(c) không biết ngan siêu vi B hay viêm gan C	C nên được điều trị như	
	6.	<ul><li>(b) không cần sử dụn</li><li>(c) không biết</li></ul>	ống vi-rút sau khi tham khảo ý g bất kỳ loại thuốc chống vi-r uyển sang màu đen và màu hắ	út nào	
	7.	<ul><li>(b) có quá nhiều thịt t</li><li>(c) điều này là bình tl</li><li>(d) không biết</li></ul>	v máu từ ruột, đi khám bác sĩ r trong chế độ ăn, điều chỉnh ch nường bệnh nhân xơ gan do giãn tĩnh	ế độ ăn	
		<ul> <li>(a) chế độ ăn uống bì</li> <li>(b) thực phẩm lành m</li> <li>(c) chế độ ăn nhiều ch</li> <li>(d) không biết</li> </ul>	nạnh, nhưng tránh thức ăn thô	và dày	

- Bệnh nhân xơ gan nên đi tiêu phân mỗi ngày để phòng ngừa 8. (a) bênh não gan (hôn mê gan liên quan đến xơ gan) (b) cổ trướng (c) bệnh trĩ (d) không biết 9. Lactulose (Duphalac) nên được thực hiện (a) với liều cố định mỗi ngày (b) hàng ngày, được điều chỉnh để có thể tiêu phân mềm 2 đến 3 lần mỗi ngàv (c) không biết 10. Bệnh nhân xơ gan nên tự theo dõi tình trạng bệnh nếu họ có chu kỳ ngủ bất thường, suy nghĩ sút kém, hành vi kỳ quặc, v.v. (c) không biết (a) đúng (b) sai Bệnh nhân mắc bệnh não gan (hôn mê gan liên quan đến xơ gan) nên giảm 11. lượng (a) protein động vật (b) protein thực vật (c) không biết Bệnh nhân bị xơ gan nên siêu âm 6 tháng một lần để 12. (a) tìm ung thư gan (b) tìm sỏi mật (c) xác định chức năng gan (d) không biết Thuốc nào có thể không bị hạn chế với bệnh nhân xơ gan? 13.
  - (a) morphin
  - (b) omeprazole
  - (c) ibuprofen
  - (d) không biết