

Satisfaction of esophageal varices patients regarding quality of nursing care and associated factors

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Abstract: Esophageal varices (EV) is a potentially life-threatening complication of liver cirrhosis. **Objectives:** The current study aims to assess satisfaction of patients with esophageal varices regarding Quality of nursing care and associated factors. **Design:** A descriptive exploratory research design was used in this study. **Setting:** this study was conducted at Hematemesis Unit of Emergency Hospital in Mansoura University. **Sample:** a purposive sample of 48patients was included. **Instruments:** two tools were used for data collection, including a structured interview to assess the socio-demographic characteristics and medical history of patients with esophageal varices. The second tool was patient satisfaction with quality of nursing care scale. **Results:** the study results revealed that subscale of patients satisfaction with quality of nursing care that include communication and continuity of care, nurses skills and competencies and discharge instructions revealed that 43.8% of patients were satisfied with quality of nursing care while 56.2% were unsatisfied. Additionally, the study results found a significant association between esophageal varices patients satisfaction with quality of nursing care and their marital status, age and associated diseases other esophageal vareices with P-Value of (0.053, 0.013 and 0.003) respectively. **Conclusion:** the current study concluded that nearest half of patients were satisfied with quality of technical nursing care and more than half of studied patients have the first attack of oesophageal avarices and suffering from hepatitis C, slightly more than one third suffering from diabetes/hypertension and minority of them suffered from cardiovascular diseases. **Recommendations:** based on the current findings, activate implementation of esophageal varices manual guidelines recommended in the hospitals for both patients and nurses in a simple suitable language. Further study about the impact of implementing designed educational Program on oesophageal avarices patients' awareness and coping strategies in hospitals for increased patient's satisfaction rate.

Keywords: quality of nursing care , patient, satisfaction , factors, esophageal varices.

1. INTRODUCTION

Esophageal varices (EV) is a potentially life-threatening complication of cirrhosis[1,2,3]. Liver cirrhosis is the thirteenth leading cause of death worldwide [3,4,5]. In Egypt, the esophageal varices is the main leading cause of upper gastrointestinal bleeding, raises in about 50 to 63% of cirrhotic patients [2,3] Approximately 50% of patients at the first time of diagnosis of cirrhosis will have Gastro-esophageal varices with the strongest predictors of esophageal variceal bleeding[3,6,7]. Among 25 to 40% of people with EV will experience an attack of severe variceal haemorrhage [2,6,7,8]. Till now, the golden methods for diagnosis of Esophageal varices remain the endoscopy and the experts recommend endoscopy screening for all cirrhotic patients at the time of their diagnosis and periodical examination by endoscopy in patients with EV[1,4,5]. Many studies confirmed that acute bleeding from esophageal varices is repeatedly a remarkable event because it is too difficult and complex to treat with a mortality rate of almost 15 %. [3,8,9,10]. Therefore EV

bleeding requires immediate medical treatment to reducing the serious consequences of bleeding and the significant risk of dying[1,6,11].

Although different societies have initiate guidelines for acute management of patients present with EV bleeding, adherence to these guidelines differs in practice in different healthcare centres and within the confines of physicians and nurses [10].

Nursing care is considered as an important area of competition, nurses are an essential part of every single part of patient's care; that always offer continuous care to the patients, and they must rapidly respond to the needs of the patient. Nurses are the backbone of the healthcare team, and way performance has a valid impact on healthcare quality[12,13].

The lived experience of quality nursing care through nurse-patient interactions was consistently recognized by the nurses in their practice and in that of their peers [9,14]. A recent research is remarkable that with 2- 6 million nurses in the USA providing patient care, their daily evaluation of that care is done without a shared considerate of what quality nursing care really means. Nurses, as a caregiver, create a major healthcare contribution by assessing, planning, and evaluating patient needs; distributing treatments and medications; advocate for patients, and assure their comfort. The quality of nursing care constructs a very important difference in patient outcomes and safety [9,14,15].

The point of applying nursing intervention is to enhance the quality of care, and reducing its cost by focus on the nurses' effort toward correct goals, heightening their inspiration for goal achievement as well as eliminating unnecessary nursing activities, in which all of these can reproduce improvement of patient's outcomes especially for seriously ill patients[14,16,17].

The patient with upper gastrointestinal bleeding (UGIB) need a special nursing care, and to assure the quality of this care, it is essential to apply specific nursing intervention that can entail knowledge and practices required to carry out the care effectively, and restructure patient care, enhance the cost-effectiveness, reducing the patient's problems and complications as well as improving the patient's outcomes [14,17]. Therefore, the implementation of nursing intervention for patients with UGIB sustains in establishing the necessary quality of nursing care rendered. It also helps the nursing profession in meeting its commitment to improving its practice and guidelines[14,17,18,19].

In a healthcare surroundings patient engagement, with 'patients beneficiary' becoming more of a focus, patient satisfaction and experience became under a higher level of inquiry. [17,20]. Patient satisfaction turns out to be an essential measure of health care quality as it offering information on the provider's achievement at meeting the highest expectations of relevance to the customer and a key determinant related to patients' perspective behavioral intention [21,22,23].

Patient satisfaction regarding nursing care is a valid indicator of the measure of all satisfaction with healthcare settings. To ensure service improvement at convenient levels in the healthcare setting it is important to identify factors that affect patient satisfaction with nursing care. [14,24,25]. Evaluate patient satisfaction with nursing care is important to locate and meet the patient's needs and to appraise the quality of care provided. [14,15,24,26,27].

Patient feedback can lead to higher standards, improved performance and accountability, enhanced risk management and a higher quality of care [20, 21]. A highly satisfied patient is more likely to adhere to the therapeutic regime with the advice of the medical team, and continue to use medical services and the individual care provider. Noncompliance and change providers are often apparent between patients who are unsatisfied [14,20,21,22,26,27].

Furthermore, Patient satisfaction with care usually is viewed as the main component for assessing the quality of care. Quality of care traditionally is evaluated under the headings of process, structure, and outcomes measures [27]. Some researchers categorize patient satisfaction as a component of health outcomes; others consider it as a separate dimension. A variety of patient satisfaction dimensions have been identified, ranging from admission to discharge services, also from medical care to interpersonal communication. Well-recognized criteria contain responsiveness, communication, behaviour, clinical practice, comforting skill, entertainment, food services, etc. [14,21,22,27,28]. Therefore the current study aimed to assess the satisfaction of esophageal varices patients with Quality of nursing care and associated factors

Study objectives

1. Assess the level of esophageal varices patients satisfaction with quality of nursing care.
2. Identify factors associated with esophageal varices patients satisfaction with quality of nursing care.

Significance:

Esophageal variceal hemorrhage is the universal cause of acute upper gastrointestinal bleeding in Egypt. It incorporates a disastrous outcome of portal hypertension due to the high incidence of schistosomiasis and viral hepatitis with a high prevalence of morbidity and mortality regardless of recent therapeutic resources making the most important public health problem in Egypt. It represents 75% of all upper gastrointestinal bleeding (UGIB) and accounts for 20% of deaths amongst Egyptian clients between the ages of 35 to 75 years, whilst in the Western countries it represents 30% of all upper gastrointestinal bleeding [3]. In Egypt is approximately 100 patients per 100.000 populations per year. Bleeding from the upper gastrointestinal tract is approximately 4 times as common as bleeding from the lower GI tract. According to the statistical records of the Hematemesis Unit at the emergency hospital, Mansoura University in 2011, a mortality rate was 20 % of patients admitted to the Hematemesis Unit annually[14].

Study Questions:

1. What are the levels of esophageal varices patient's satisfaction with the quality of nursing care
2. What are factors associated with esophageal varices patients satisfaction with quality of

2. METHODOLOGY

Study design

A descriptive exploratory research design was used in this study.

Setting of the study

This study was conducted at Hematemesis Unit of Emergency Hospital in Mansoura University

Sample

Purposive samples of 48 adult patients with oesophageal varices attending the study settings in a period of six months were included in the study.

Tools for data collection

Two tools were used for data collection. The first tool was a structured interview developed by the researcher to assess patients' socio-demographic characteristics such as age, gender, educational level, occupation, and marital status was assessed. Additionally, the medical history of patients, such as associated disease other than esophageal varices was assessed. The second tool was patient satisfaction with quality of nursing care scale that was adapted from (Morsy, 2000), then translated from English into Arabic language and retranslated from Arabic to English by the researcher and juries to assess patient's satisfaction with the quality of nursing care. It included 33 close-ended questions arranged in five groups namely, communication and continuity of care (11 Question), and technical care (4 Question), consideration of patients concerns, needs and environment (7 Question), skills and competencies (10 questions) and discharge instruction (1 question). The options which were given for rating were: strongly agree, agree, strongly disagree and disagree.

Scoring system of patient' satisfaction scale:

All questions in the patients' satisfaction were scored on four points Likert Rating Scale whereas (strongly agree=4, agree=3, disagree =2, strongly disagree=1). For analysis patient's responses were plotted under two main categories (satisfied and unsatisfied), whereas patient response was (strongly agree or agree= satisfied) and (strongly disagree or disagree=unsatisfied). The total score of all questions was 132 grades and the total score of the tool was classified as Satisfactory level that considered when it was $\geq 75\%$ and unsatisfied when it was $< 75\%$.

Content validity:

Validity was used for the modified tool to assure that it cover the objectives. The phase developed by a Jury of seven experts from medical and nursing staff; two professors of internal medicine at Faculty of Medicine, Mansoura University and five lecturers of Medical-Surgical Nursing at Faculty of Nursing, Port Said University. The reliability of the proposed tool was done by Cronbach's alpha test which showed high reliability for the final version of the patients' satisfaction tool (.930).

Pilot study:

The pilot study was applied to 10% of the study sample with the selected criteria to test the applicability of the tools, arrangement of items, and to estimate the time needed for each tool. Patients who included in the pilot study were excluded from the study sample.

Data collection

Data were collected one time using the previous mentioned study tools as possible time for patients.

Ethical considerations

An approval was acquired from the directors of hospitals included in the study after a comprehensive explanation of study aim, benefits, and processes. Additionally, before data collection, oral consent was acquired from each patient after explaining the study aim and process.

3. RESULTS

The current study was conducted on 48 patients with esophageal varices, 77.1% of whom are female. Moreover, 89.6% of patients were married, and 8.3% were divorced. On the other hand, the mean age of study patients was 58.5 ± 9.29 years old. Otherwise, only 18.9% have enough income. Additionally, 41.7% of patients were illiterate and only 10.4% graduate from universities. The study results revealed also that 43.8% of patients are farmers and 18.8% are housewife (see table 1)

Furthermore, a subscale of patients satisfaction with the quality of nursing care that include communication and continuity of care, nurses skills and competencies and discharge instructions revealed that 43.8% of patients were satisfied with the quality of nursing care while 56.2% were unsatisfied. However, 50% of the patients satisfied with the technical care of nurses (see table 2). Additionally, the study results found a significant association between esophageal varices patients satisfaction with quality of nursing care and their marital status, age and associated diseases other esophageal varices with P-Value of (0.053, 0.013 and 0.003) respectively (See table 3). Moreover, the present results found that 54.2% of study patients have the first attack of esophageal varices (see figure 1). On the other hand, 64.6% of study patients suffering from hepatitis C, 33.3% suffering from diabetes/hypertension and only 2.1% suffering from cardiovascular diseases(see Figure 2).

Table 1: Socio-demographic characteristics of the study sample (n=48) patients)

Socio-demographic characteristics		N (%)
Gender	Male	37 (77.1%)
	Female	11 (22.9%)
Age	Mean age \pmSD	58.5\pm 9.29 Years old
Education	Illiterate	20 (41.7%)
	Ability to read and write	15 (31.3%)
	Secondary school	8 (16.7%)
	University	5 (10.4%)
Marital status	Married	43 (89.6%)
	Divorced	4 (8.3%)
	Widow	1 (2.1%)
Working:	Worker	7(14.6%)
	Employee	7(14.6%)
	Farmer	21 (43.8%)
	Housewife	9 (18.8%)
	Retired	4 (8.3%)
Income:	Enough	9 (18.8%)
	Not enough	39 (81.3%)

Table 2: Patients Satisfaction with Quality of Nursing Care (n= 48)

Patient Satisfaction scale issues	Satisfaction	Un-satisfaction
Communication and continuity of care	21 (43.8%)	27 (56.2%)
Technical care	20 (41.7%)	28 (58.3%)
Patients concern, needs and environment	24 (50%)	24 (50%)
Nurses skills and competencies	21 (43.8%)	27 (56.2%)
Discharge instructions	21 (43.8%)	27 (56.2%)
Total Quality of Nursing Care	20 (41.7%)	28 (58.3%)

Table 3: Factors associated with Esophageal Varices Patients' satisfaction with Quality of care

Patients characteristics	Socio-demographic	Sum Squares	of Mean Square	F	Sig.
Marital status		1.205	1.205	3.930	0.053
Educational level		.288	.288	.278	0.600
Occupation		3.438	3.438	2.813	0.100
Associated diagnosis		1.548	1.548	6.616	0.013
Age				r = 0.424	0.003

Significant level considered when P value ≤ 0.05, F, ANOVA, r, Pearson correlation

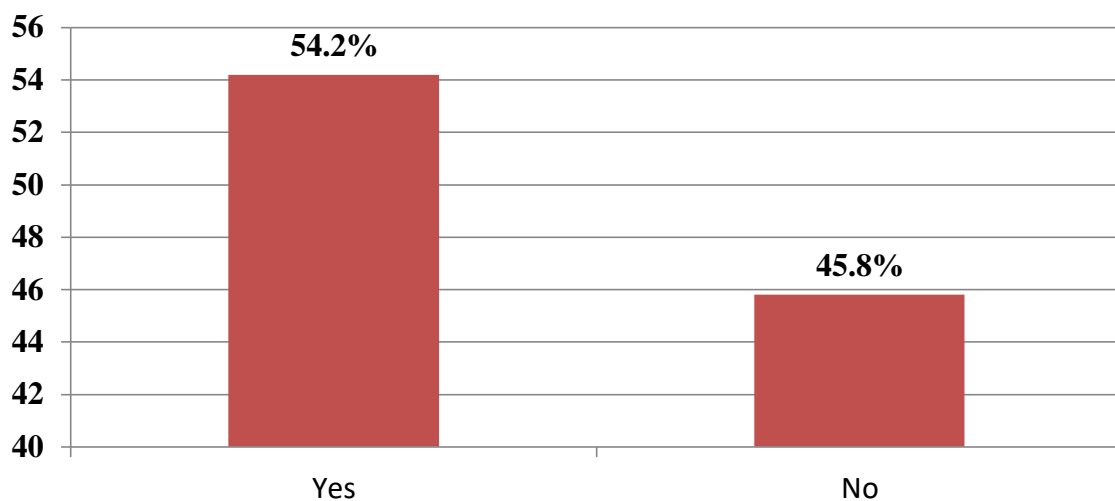


Figure 1: Distribution of first attack of Esophageal Varices

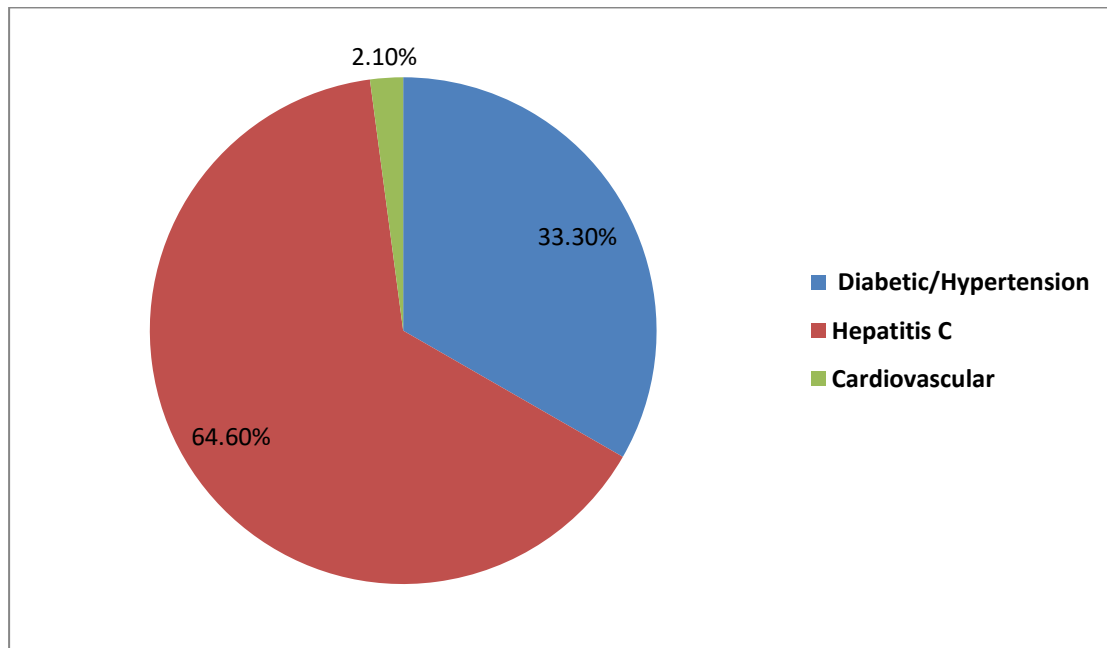


Figure 2: distribution of associated diseases other than EsophagealVarices

4. DISCUSSION

Upper gastrointestinal bleed is one of the most common serious medical conditions which needs immediate interventions to prevent patients from serious complications and is associated with high health and economic burden. Nurses and physicians neglect gastrointestinal bleed pathway documentation which results in improper patient care management[10, 29]. Thus, there is an increasing emphasis on quality in health care and recognition of inconsistencies in the management of patients with non variceal upper gastrointestinal haemorrhage (NVUGIH), it is critical to establish a set of explicit quality indicators (QIs) in NVUGIH[30].

The current study revealed that more than two-thirds of the study sample were female, most of them were married, and the minority of them were divorced, housewives, graduate from universities and have enough income whereas the nearest half of them were illiterate. On the other hand, the mean age of study patients was 58.5 ± 9.29 years old. Concerning, patient satisfaction with the quality of nursing care including communication and continuity of care, nurse's skills, and competencies and discharge instructions the current study revealed that the nearest half of patients were satisfied with quality technical nursing care. These finding goes in the same line with the developed an explicit set of evidence-based QIs in NVUGIH, providing physicians and institutions with a tool to identify processes amenable to quality improvement. This tool is intended to be applicable in all institutions providing care for non-variceal upper gastrointestinal haemorrhage patients[30].

In contrast, in Pakistan, Pirani,2013revealed that there is a gap in literature regarding physicians and nurses practice towards documentation of gastrointestinal bleed pathway. It is recommended that a baseline study is needed to overcome the issue of managing gastrointestinal bleed patients and to improve patients' quality of care[29].

In Egypt, Shebl et al.,2013recommended that a delivering of nursing intervention for patients with upper gastrointestinal bleeding had been proven to have a positive effect on the expected clinical outcomes and reflected on the improvement of patients' clinical outcomes and their satisfaction. Also, updated service training program and posted annual guideline for nurses regarding care of patients with upper gastrointestinal tract bleeding is very important[14].In the USA , Issak et al, 2016 Major inconsistencies with adherence to guidelines for upper gastrointestinal bleeding were identified in this study. Practice and implementation of established guidelines at the patient level continues to lag behind research and ideal standard of care based on recommendations of expert panels[10].

Regarding the association between oesophageal varices patients satisfaction and their associated factors, the present results revealed that more than half of studied patients have the first attack of oesophageal a varices. More than half of them suffering from hepatitis C, slightly more than one-third suffering from diabetes/hypertension and minority of them suffered cardiovascular diseases. these findings go in the same way with Qureshi et al,2013 from Pakistan who stated that Patient satisfaction is a cognitive and emotional evaluation by the patient on the performance of health care staff and is based on relevant aspects of their experience in healthcare. Compliance of patients with the health care system is better if they are satisfied with caregivers. In order to gain patient satisfaction, not only sets-up performance standards but also increases the responsibility of physicians and staff can lead to improvement in the quality of care. [31] Additionally, Factors that have been appreciably and positively associated with patient satisfaction included a respectful personal manner of nurses, a patient positive insight of endoscopist's technical skills, a pleasant physical environment in the endoscopy unit, and sufficient time spent for increasing awareness through explaining the procedure. From another point of view, in Pakistan, Rasool et al.,2010 mentioned that Quality of endoscopic procedures is considered as good patient satisfaction associated with applying an international standard with acceptable complication rate [32]. In contrast, Windish, 2011 highlighted on patient recognition of providers was not associated with their knowledge, satisfaction, or readmission[33].

While, Isacc et al, 2010 stated that patient experiences of care were related to measures of technical quality of care, supporting their validity as summary measures of hospital quality[34]. Generally, In critical care settings Clark et al., 2016 mentioned that although patients' family members reported being satisfied with their experience in the intensive care unit, there is room for improvement. Effective communication among the health care team, patients' families, and patients will be targeted for quality improvement initiatives[35]. Finally, Loftus et al, 2013 clarified that to facilitate patient return for needed endoscopy, it is important to assess patients' willingness to return because positive behavioural intent is not simply a function of satisfaction with the visit[20].

Conclusion: the current study concluded that the nearest half of patients were satisfied with quality technical nursing care and more than half of studied patients have the first attack of oesophageal varices and suffering from hepatitis C, slightly more than one-third suffering from diabetes/hypertension and the minority of them suffered cardiovascular diseases.

5. RECOMMENDATIONS

Based on the current findings, activate the implementation of oesophageal varices manual guidelines recommended in the hospitals for both patients and nurses in a simple suitable language. Further study about the impact of implementing a designed educational program on oesophageal varices awareness and coping strategies in hospitals for increased patient's satisfaction rate is needed.

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