Quality of Life among Patients with Gastroesophageal Reflux Disease

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Abstract

Background: Gastroesophageal Reflux Disease (GERD) as troublesome symptoms, it results from the retrograde flow of gastric contents into the esophagus, oropharynx, and/or respiratory tract, it sufficient to impair an individual's quality of life. **Aim:** Was to assess quality of life among patients with gastroesophageal reflux disease. **Research design:** Descriptive research design was utilized to conduct this study. **Setting:** The present study was conducted at Medicine Outpatient Clinic in Benha University Hospital. **Sampling:** Simple random sample was used for 313 patients at the previously mentioned setting. **Tools of data collection:** Three tools were used. **I:** A structured interviewing questionnaire which consisted of four parts to assess socio-demographic characteristics of patient, medical history, knowledge of patient regarding GERD and Patient reported practices regarding GERD. **II:** Frequency Scale for the Symptoms of GERD. **III:** Quality of life of patient with GERD. **Results:** 48.6% of studied patients had poor total knowledge level regarding gastroesophageal reflux disease, 64.9% of studied patients had unsatisfactory total reported practices level regarding esophageal reflux, 54.6% of studied patients had high recurrence of gastroesophageal reflux symptoms and 54.3% of studied patients had poor total QoL level regarding esophageal reflux. **Conclusion:** There was no statistically significant difference between total patients QoL and their socio-demographic characteristics except for their sex and marital status, there were highly statistically significant relation between total knowledge scores and total practices scores of studied patients. There was highly statistically significant relation between total practices scores and total quality of life scores among studied of patient. **Recommendations:** Develop and implement educational program for studied patients to improve their knowledge and practices toward coping with GERD.

Keywords: Gastroesophageal Reflux Disease, Quality of Life

Introduction

Gastroesophageal Reflux Disease (GERD) is one of the upper gastrointestinal chronic diseases in which stomach content persistently and regularly flows up into the esophagus, resulting in symptoms and/or complications. Gastroesophageal reflux disease results when the lower esophageal sphincter (the muscle that acts as a valve between the esophagus and stomach) becomes weak or relaxes when it should not, causing stomach contents to rise up into the esophagus **(Jung et al., 2021).**

Gastroesophageal reflux disease is very frequent disease worldwide with a prevalence ranging from 7.4% in Southern Asia to 19.6% in Central America, and it affects both sexes similarly. It increases in aging and obesity which are predisposing factors for GERD. The prevalence of GERD in North America and Europe is 15.4%–17.1% and affects approximately 10% of the population in Asia **(Chen et al., 2022).**

The main symptom of GERD is frequent heartburn, although some adults with GERD do not have heartburn. Other common GERD symptoms include a dry, chronic cough, wheezing, asthma and recurrent pneumonia, nausea , vomiting, a sore throat,

hoarseness, or laryngitis, swelling and irritation of the voice box, difficulty swallowing or painful swallowing, pain in the chest or the upper part of the abdomen, dental erosion and bad breath **(Patel et al., 2018).**

Untreated GERD can sometimes cause serious complications over time, including esophagitis and irritation of the esophagus from refluxed stomach acid that damages the lining and causes bleeding or ulcers. Adults who have chronic esophagitis over many years are more likely to develop precancerous changes in the esophagus. Strictures that lead to swallowing difficulties. Respiratory problems, such as trouble breathing. Barrett's esophagus, a condition in which the tissue lining the esophagus is replaced by tissue similar to the lining of the intestine. A small number of people with Barrett's esophagus develop a rare yet often deadly type of cancer of the esophagi **(Kurin & Fass, 2019).**

The diagnosis of GERD is usually made when typical symptoms are present. Reflux can be present in people without symptoms and the diagnosis requires both symptoms or complications and reflux of stomach content. Endoscopy: The examination of the stomach with a fibre-optic scope, is not routinely needed if the case is typical and responds to treatment. It is recommended when people either do not respond well to treatment or have alarm symptoms, including dysphagia, anemia, blood in the stool (detected chemically), wheezing, weight loss, or voice changes. Some physicians advocate either once-in-a-lifetime or 5- to 10-yearly endoscopy for people with longstanding GERD, to evaluate the possible presence of dysplasia or Barrett's esophagus (**Silvia et al., 2018).**

There are four approaches for gastroesophageal reflux disease (GERD) treatment, including medication and surgery. Often, patients respond well to a combination of lifestyle changes and a medication regimen. Some patients do not find satisfactory relief from those methods and require surgical intervention. **(Yadlapati et al., 2018).** Medical nutrition therapy plays an essential role in managing the symptoms of the disease by preventing reflux, preventing pain and irritation, and decreasing gastric secretions. If lifestyle and dietary changes do not work, the doctor may prescribe certain medications. There are two categories of medicines for reflux. One decreases the level of acid in your stomach, and one increases the level of motility (movement) in the upper gastrointestinal tract. Although moderate exercise may improve symptoms in people with GERD, vigorous exercise may worsen them (**Katzka & Kahrilas, 2020).**

Quality of life (QoL) is a concept which aims to capture the well-being, whether of a population or individual, regarding both positive and negative elements within the entirety of the existence at a specific point in time. For example, common facts of QoL include personal health (physical, psychological, and social) **(Joseph, 2021).** Typical symptoms of GERD affect quality of life in many ways, such as daily activities, human relationships, a good night sleep, eating and nutrition patterns. Another significant point in terms of quality of life is the responses of patients to the Proton Pump Inhibitors (PPI). The high number of patients with heartburn and especially those resistant to acid regurgitation reduces quality of life. Early recognition of symptoms is integral to preventing complications of GERD. Behavioral changes and advances in acid suppression remain integral to its treatment **(Hançerlioğlu et al., 2019).**

Community Health Nurses (CHNS) should assess patient's knowledge about gastroesophageal reflux disease and practices

to correct any misconceptions and provide them with adequate knowledge related to disease and its management to achieve the best outcome. CHNS also provide rehabilitation of patient who have already affected by gastroesophageal reflux disease to soften the impact of an ongoing illness that has lasting effects **(Marianne, 2021).**

Significance of the study

Gastroesophageal reflux disease is a common gastrointestinal disease has a risk of morbidity plus mortality from potential complication. GERD is common, accounting for more than 5,6 million patients visit physician each year in Egypt **(Peery etal., 2019).** There are between 8,7% to 33,1% of the population in Egypt and the Middle East suffering from the GERD. Older adults appear to be at a higher risk of morbidity from GERD due to the additional comorbidities and risk factors that play a role in the development and progression of the disease **(Naga, 2018).**

Gastroesophageal reflux disease is a very common and global clinical problem. It affects any age group, both males and females, and is seen mainly in developing countries, GERD needs to be treated to prevent discomfort symptoms and long-term complications so I conducted this study.

Aim of the study

The present study aimed to assess quality of life among patients with gastroesophageal reflux disease.

Research questions:

1. What is the level of knowledge of patients regarding gastroesophageal reflux disease?
2. What are the reported practices of patient regard gastroesophageal reflux disease?
3. What is the quality of life for patients with gastroesophageal reflux disease?
4. Is there relation between socio-demographic characteristics of GERD patient and their quality of life?
5. Is there relation between the knowledge, practices and quality of life for GERD patient?

Subjects and Method

Study design:

Descriptive research design was utilized to conduct this study.

Setting:

The present study was conducted at Medicine Outpatient Clinic in Benha University Hospital at Benha University.

Sampling:

Simple random sample was used for patient at the previously mentioned setting according to formula.

$$n = \frac{N}{1+N(e)2}$$

Where "n" is sample size**.**

N is total number of all patients at Medicine Outpatient Clinic in Benha University Hospital (2021).

N= 1440

"e" is Coefficient factor 0.05

Sample size is = 313

Tools of data collection:

Data were collected though the following three tools-

Tool I: A structured interviewing questionnaire:

This tool was developed by the researchers after reviewing related literature, and it was written in clear simple Arabic language and consisted of four parts:

First part: Was concerned with socio-demographic characteristics of patient as (age, sex, educational level, marital status, occupation, place of residence, family type and income).

Second part: Was concerned with patient medical history as (duration of disease, suffering from other medical disease, a previous GIT operation, previous GIT endoscopy and treatment for GERD).

Third part: Was be concerned with knowledge of patient regarding GERD which included 7 questions as (meaning, causes and

risk factor, manifestation, diagnosis, treatment, prevention and complication of GERD).

Scoring system of knowledge adapted as following:

The scoring system of knowledge was calculated as follows 2 score for correct and complete answer, while 1 score for correct and incomplete answer, and 0 for don't know. For each question of knowledge, the score of the items was summed-up and the total divided by the number of items. These scores were converted into a percent score.

Total knowledge scores were classified as the following:

- Good when total scores were (>75%) equal (>10 points).
- Average when the total scores were 50% to less than 75% (7-10 points).
- Poor when the total scores was less than 50% (<7points)

Fourth part: Was concerned with reported practices of patient of patient regarding GERD which included 4 items as (nutrition (13 items), exercise (5 items), daily habits (6 items), treatment and follow up (9 items).

Scoring system of reported practices

The scoring system for patient practices was calculated as the follow: Each step of the reported practices has 2 levels of answers:

Done and not done. These were respectively calculated as follow scored 1 and 0. Done and not done. These were respectively calculated as follow scored 1 and 0. The scores of the items were summed-up and the total divided by the number of the items. These scores were converted into percent score. Patient total reported practices scores were classified as following:

The total practices score consisted:

-Satisfactory practices scores when the score (>60%) equal (>19 points).

-Unsatisfactory practices scores when the score (<60%) equal (<19 points).

Tool II: It was concerned with Frequency Scale for the Symptoms of GERD (FSSG) adopted from **(Yamamichi et al., 2012)** and modified by researchers which included 10 items as (suffer from acidity, suffer from nausea after meals, feel fullness and acidity during meals, feel abdominal distention after eating foods that cause gases, suffer from reflux of bitter liquid to throat two to three times daily, burp a lot when swallowing air during eating more than once a day, rub the chest unconsciously with hand when feeling heartburn, get stuck of some things when swallowing one to three times a day, feel of heartburn that causes lack of sleep and increase at night or while lying down and feel an unusual sensation in the throat once or twice a day).

Scoring system of recurrence of reflux symptoms:

The scoring system for patient frequency of symptoms was calculated as the follow: Each step has 3 levels of answers: Always, some time, and never. These were respectively calculated as follow scored 0, 1 and 2. The scores of the items were summed-up and the total divided by the number of the items. These scores were converted into percent score. Recurrence symptoms total reported scores were classified as following

10points:

-High recurrences if the total scores (>75%) equal (>15points).

-Moderate recurrences if total score equal 50-75% equal (11-15 points).

- Low recurrences if total score equal less than 50% (<11 points).

Tool III: It was concerned which scale for measuring quality of life of patient with GERD adopted from **(World Health Organization (WHO),1995)** and modified by researchers, it included physical status (9

items), psychological status (13 items) and social status (11 items).

Scoring system of quality of life:

Each response had three levels of answers, always, sometimes and never. These were respectively scored 2, 1 and 0. The scores of the item were summed-up and the total divided by the number of the items, giving a mean score. These scores were converted into a percent score.

Total scores of quality of life = 34points.

- Good if the total score (> 75%) equal (>51 points).
- Moderate if total score equals 50-75% (35-51 points).
- Poor if it equals less than 50% (<35 points).

Content validity of tools:

Tools validity was done through five expertise of Community Health Nursing Department Staff, Faculty of Nursing, Benha University who reviewed the tools for clarity, relevance, comprehensiveness, and applicability.

Reliability of tools:

Reliability of tools was applied by researchers for testing the internal consistency of the tool, by administration of the same tools to the same subjects under similar condition on one or more occasion. Answers from repeated testing were compared (Cronbach's Alpha coefficient) equal 0.784 for knowledge, 0.731 for practice, 0.746 for recurrence of symptoms 2
and 0.639 for quality of life**.**

Ethical consideration:

Approval and an informed consent from all study patients were obtained after explaining the purpose of the study to gain their trust and cooperation. Each patient had a choice to continue or withdraw from the study. Privacy and confidentiality was assured. Ethics, values, culture, and beliefs was respected.

Pilot study:

The pilot study was carried out on 31patientswho presented 10% of the studied sample size of total number and chosen randomly before embarking on the data collection to test the tool feasibility according to the results obtained from data. The pilot study was aimed to assess the tool clarity and time needed to fill each sheet as well as to identify any possible obstacles that may hinder the data collection. No modification done in the pilot study sample so this sample of patient included in this study sample.

Field work:

The study was carried out through a period of six months from the beginning of July 2022 to the end of December 2022. The researchers visited Medicine Outpatient Clinic in Benha City three days weekly (Saturday, Mondays and Wednesdays) from 9:00 am to 12:00 mid-day till covering whole sample from Medicine outpatient Clinic. The researchers met (4-5patients) per visit for data collection and introducing herself and took their consent to be recruited in the study after explaining the aim of the study and then distributed the questionnaire sheet after clear explanations of the way to fill out and in the presence of the researchers. Each sheet took about 30minutes to answer from each patient. During the interview the researchers read each item/ question on data collection sheet and explains its meaning to the patient.

Statistical analysis:

The collected data was analyzed, tabulated and presented in figures by using the suitable statistical methods as number and percentage distribution by Statistical Package for Social Science (SPSS) version 21. Data were presented by using proper statistical tests that were used to determine whether there was significant relation or not as follows:

- P value > 0.05 is non- statistically significant difference.
- P value< 0.05 is statistically significant difference.
- P value < 0.001 is highly statistically significant difference.

Results:

Table (1): Shows that 25.9% of studied patients aged more than 51 years with mean +SD 42.21±10.51, and 50.2% of them were males. Regarding their educational level, 42.2% of studied patients had primary education. 54.3% of studied patients were married. Concerning their occupation 53.7% of studied patients were employee. In addition, 60.1% of studied patients were from rural areas, 58.1% of them had nuclear family and 59.1% of studied patient had sufficient income.

Table (2): Shows that 47.3% of studied patients had the disease for 1< 3 years and 30.4% of them suffered from hypertension as medical disease. Regarding previous gastrointestinal operations, 62.8% of studied patients had gastric operations in addition, 53.0% of them had gastric endoscopy, moreover 75.1% of them treated by Proton inhibitors medications.

Figure (1): Illustrates that, 48.6% of studied patients had poor total knowledge level regarding gastroesophageal reflux disease, 38% of them had average total knowledge and only 13.4% of patients had good total knowledge level about gastroesophageal reflux disease.

Figure (2): Illustrates that 64.9% of studied patients had unsatisfactory total reported practices level regarding esophageal reflux whenever, 35.1% of them had satisfactory total practices level.

Figure (3): Illustrates that 54.6% of studied patients had high recurrence of gastroesophageal reflux symptoms whenever, 29.7% of them had moderate recurrence and 15.7% of studied patients had low recurrence.

Figure (4): Reveals that 54.3% of studied patients had poor total QOL level regarding esophageal reflux whenever, 29.4% of them had average total quality of life and only 16.3% of them had good total quality of life.

Table (3): Reveals that, there was no statistically significant relation between total patients QOL and their socio-demographic characteristics except for their sex and marital status.

Table (4): Shows that there were highly statistically significant relation between total knowledge scores and total practices score of studied patient and there were no statistically significant relation between total knowledge scores and total quality of life scores among studied patient.

Table (1): Frequency distribution of studied patients regarding their socio-demographic characteristics (n=313).

Socio-demographic characteristics	No.	%
Age		
<20 years	14	4.5
20-30 years	72	23.0
31-40 years	81	25.8
41-50 years	65	20.8
≥51 years	81	25.9
Mean ±SD 42.21±10.51		
Sex		
Male	157	50.2
Female	156	49.8
Educational level		
Can't read or write	38	12.1
Primary education	132	42.2
Secondary education	108	34.5
University education	35	11.2
Marital status		
Single	18	5.8
Married	170	54.3
Divorced	70	22.4
Widow	55	17.5
Occupation		
Employee	168	53.7
Free works	117	37.4
Not work	28	8.9
Place of residence		
Rural area	188	60.1
Urban area	125	39.9
Family type		
Nuclear family	183	58.1
Extended family	130	41.9
Income		
Sufficient and saving	85	27.2
Sufficient	185	59.1
Insufficient	43	13.7

Table (2): Frequency distribution of studied patients regarding their medical history (n=313).

Medical history	No	%
Duration of the disease		
< 1 year	91	29.1
1<3 years	148	47.3
≥3 years	74	23.6
***Suffering from other medical disease**		
DM	25	7.6
Hypertension	95	30.4
Cardiovascular disease	64	19
Anemia	29	9.0
Liver disease	28	7.0
Renal disease	32	10.0
Gastritis	59	17.0
***Previous gastrointestinal tract operations**		
Esophageal operation	16	37.2
Gastric operation	27	62.8
Previous gastrointestinal tract endoscope		
Esophageal endoscope	103	44.8
Gastric endoscope	122	53.0
Duodenal endoscope	5	2.2
***Treatment for GERD**		
Proton inhibitors medications	235	75.1
Antiacid drugs	132	42.2
H2 receptors inhibitors	66	21.1
Analgesics	151	48.2

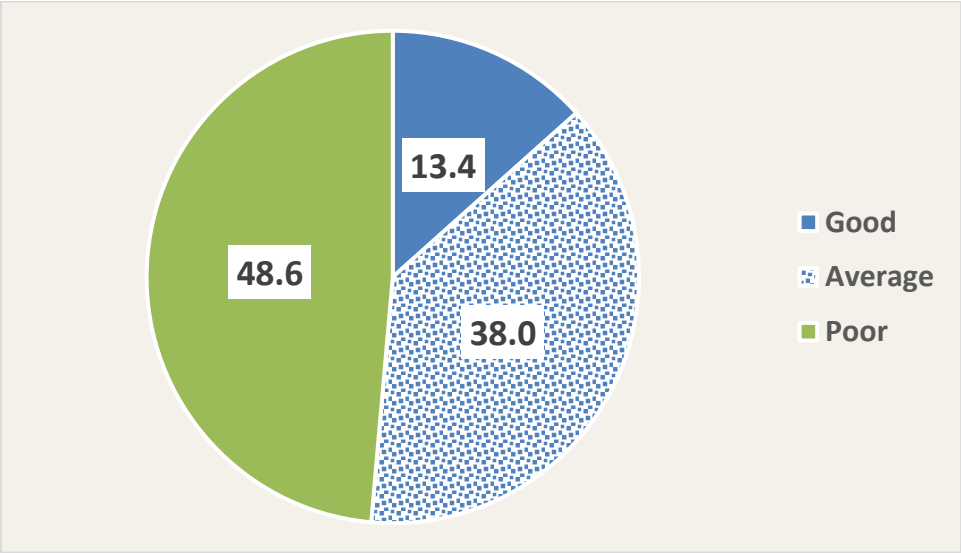

Figure (1): Percentage distribution of studied patient regarding esophageal reflux disease (n=313).

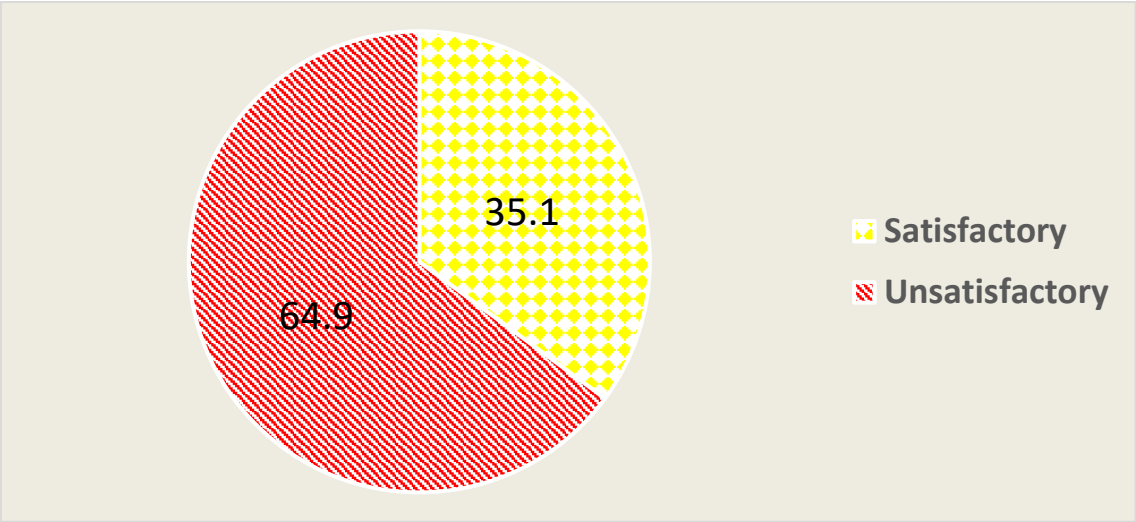

Figure (2): Percentage distribution of studied patients total practices level about GERD (n=313).

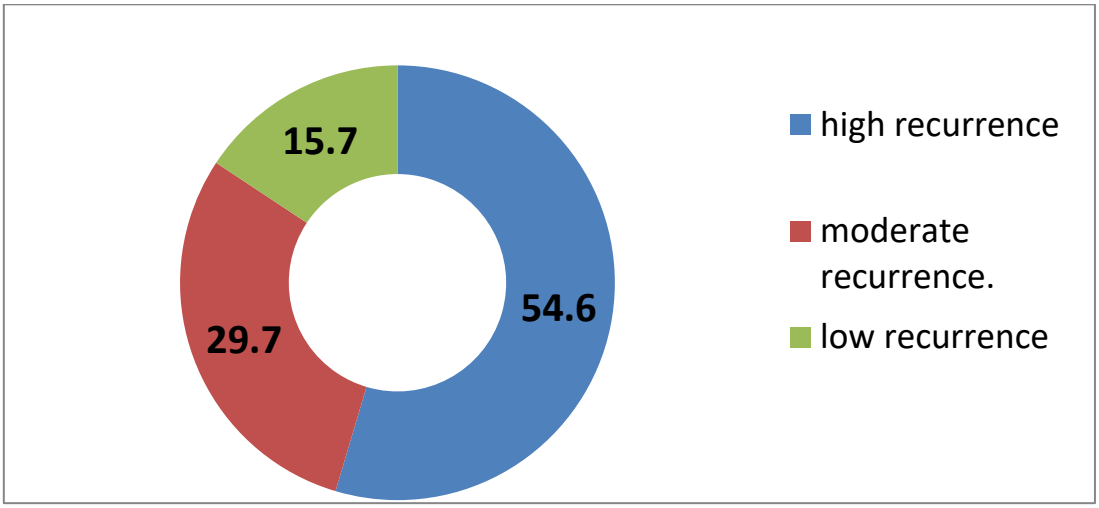

Figure (3): Percentage distribution of studied patient regarding their frequancey of esophageal reflux symptoms (n=313).

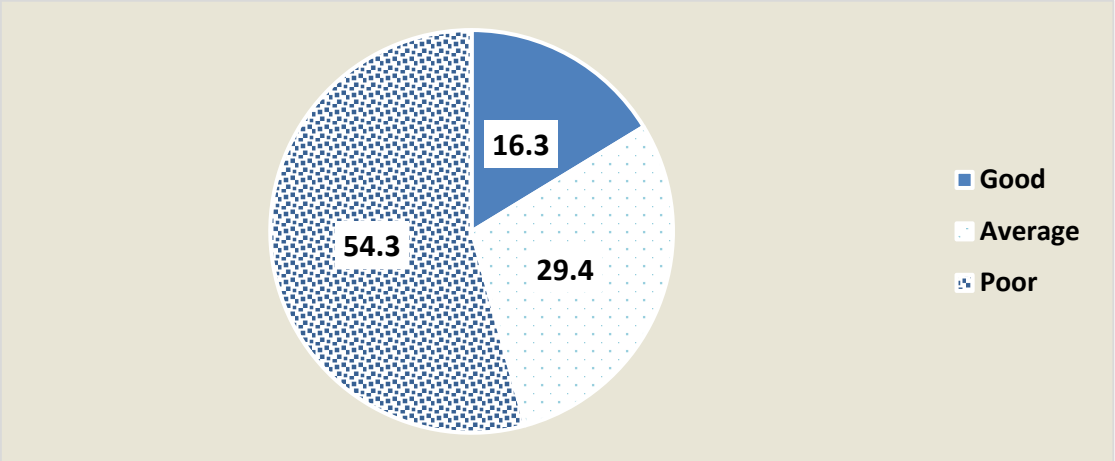

Figure (4): Percentage distribution of studied patient regarding their total quality of life level (n=313).

Table (3): Statistically relation between total quality of life score and socio-demographic characteristics among studied patient (n=313)

Socio-demographic characteristics	Total quality of life score						X^2	p-value
	Poor(n=170)		Average (n=92)		Good(n=51)			
	No	%	No	%	No	%		
Age								
<20 years old	6	3.5	6	6.5	2	3.9	3.701	0.883
20-30 years old	41	24.1	20	21.7	11	21.6		
31-40 years old	44	25.9	25	27.2	12	23.5		
41-50 years old	39	22.9	15	16.3	11	21.6		
≥51 years old	40	23.5	26	28.3	15	29.4		
Sex								
Male	76	44.7	57	62.0	24	47.1	7.34	≤0.05*
female	94	55.3	35	38.0	27	52.9		
Educational level								
Can't read or write	18	10.6	16	17.4	4	7.8	7.529	0.275
Primary education	81	47.6	32	34.8	19	37.3		
Secondary education	54	31.8	33	35.9	21	41.2		
University education	17	10.0	11	12.0	7	13.7		
Marital status								
Single	11	6.5	4	4.3	3	5.9	13.51	≤0.05*
Married	91	53.5	52	56.5	27	52.9		
Divorced	48	28.2	14	15.2	8	15.7		
Widow	20	11.8	22	23.9	13	25.5		
Occupation								
Employee	93	54.7	47	51.1	28	54.9	1.357	0.852
Free works	60	35.3	37	40.2	20	39.2		
Not work	17	10.0	8	8.7	3	5.9		
Place of residence								
Rural area	103	60.6	53	57.6	32	62.7	0.404	0.817
Urban area	67	39.4	39	42.4	19	37.3		
Family type								
Nuclear family	64	37.6	29	31.5	20	39.2	4.461	0.347
Participated family	74	43.5	48	52.2	18	35.3		
Extended family	32	18.8	15	16.3	13	25.5		
Income								
Sufficient and saving	49	28.8	22	23.9	14	27.5	0.828	0.935
Sufficient	99	58.2	56	60.9	30	58.8		
Insufficient	22	12.9	14	15.2	7	13.7		

Table (4): Statistically relation between total knowledge score, total practices score and total quality of life score among studied patient

	Total knowledge scores						X^2	p-value
	Poor (n=152)		Average (n=119)		Good (n=42)			
	No	%	No	%	No	%		
Total practices scores								
Unsatisfactory	**111**	**73.0**	**74**	**62.2**	**18**	**42.9**	**13.74**	**0.001****
Satisfactory	**41**	**27.0**	**45**	**37.8**	**24**	**57.1**		
Total quality of life scores								
Poor	**84**	**55.3**	**69**	**58.0**	**17**	**40.5**	**4.638**	**0.326**
Average	**46**	**30.3**	**30**	**25.2**	**16**	**38.1**		
Good	**22**	**14.5**	**20**	**16.8**	**9**	**21.4**		

Discussion

Gastroesophageal reflux disease is a common digestive disorder in the general population that primarily affects the esophagus and gastro-duodenum. Due to its prevalence, GERD has a significant impact on quality of life and healthcare costs. Gastroesophageal reflux disease is a common gastrointestinal disorder with an increasing prevalence. GERD develops when the reflux of stomach contents causes troublesome typical and atypical symptoms and/or complications (**Cheng & Ouwehand, 2020).**

Regarding to socio-demographic characteristics of the studied patient, the present study showed that one quarter of studied patient their age was more than ≥51years with mean age was of 42.21±10.51, half of them were male and two fifth of them had primary education. Regarding material status more than half of them were married. More than half of studied patient were employee and three fifth of them were from rural areas. Slightly less than three fifth of studied patient had sufficient income.

Regarding to medical history of the studied patient the present study showed that; more than one fifth of studied patient had the disease for more than 3years. This finding agreed with **Domakunti & Lamture, (2022),** who studied" The correlation between endoscopic findings and symptoms of gastroesophageal reflux disease (GERD)" in India (n =100), who found that slightly less than three fifth of studied sample had the duration of the disease for 5years.

The present study showed that; minority of studied patient suffered from diabetes mellitus as medical disease. This finding was in the same line with **Lail et al. (2019),** who studied "the factors influencing quality of life in patients with gastroesophageal reflux disease in a tertiary care hospital" in Pakistan (n = 782), who found that about tenth of the studied sample were suffering from diabetes mellitus.

The present study showed that; less than third of studied patient suffered from hypertension as medical disease. This finding agreed with **Lei et al. (2019),** who studied" predicting factors of recurrence in patients, with gastroesophageal reflux disease: A prospective follow-up analysis" in China (n=499), who found less than fifth of studied sample were suffering from hypertension. This might be due to quarter of studied patients aged more than51 years and the incidence of high blood pressure increases with age.

The present study showed that; three quarters of studied patient treated by proton inhibitors medications. This finding was in the same line with **Patel et al. (2018),** who studied" genetic risk factors for perception of symptoms in GERD: An observational cohort study" in American (n =193), who found that majority of studied sample treated by proton pump inhibitor. This might be due to proton pump inhibitors are the most powerful drugs that reduce acid production.

The present study showed that; less than half of studied patient take analgesics treatment for GERD. This finding agreed with **Kariri et al. (2020),** who studied" prevalence and risk factors of gastroesophageal reflux disease in Southwestern" in Saudi Arabia (n =853), who found that approximately two fifth of studied sample had taken analgesics. This might be due to patients need to decrease heartburn or pain from GERD.

The present study revealed that; less than half of studied patient had poor total knowledge level regarding GERD. This finding disagreed with **Bert et al. (2021),** who reported that third of studied sample had never knowledge of GERD. This might be due to approximately two fifth of studied patient had primary education which effect on acquiring knowledge on disease.

The present study showed that; more than three fifth of studied patient had unsatisfactory total reported practices level regarding GERD. According with **Isshi et al., (2021),** who studied" effects of coexisting upper gastrointestinal symptoms on daily life and quality of life in patients with gastroesophageal reflux disease symptoms" in Japan (n=113), who reported that approximately two fifth of studied sample had unsatisfactory of practices regarding GERD. This might be due to there is no awareness of ways to prevent of GERD so that affect patients practices.

The present study showed that; more than half of studied patient had high recurrence of GERD symptoms, more than quarter of them had moderate recurrence and less than fifth of them had low recurrence. According to **Domakunti & Lamture (2022),** who found less than fifth of studied sample had high recurrence of symptoms, more than one fifth of them had moderate recurrence symptoms and more than half of them had low recurrence symptoms. This might be due to more than half of studied patient didn't know prevention of manifestation of GERD.

The present study showed that; less than fifth of studied patient had good total quality of life and more than half of them had poor total quality of life level. These findings disagreed with **Alshammari et al. (2020),** who found that more than half of studied sample had good total quality of life and approximately two fifth of them had poor quality of life. This might be due to the problem of GERD may generally affect the patient's quality of life over time, due to the complications and physical symptoms it may cause, which may have many psychological consequences, especially the physical symptoms.

The present study showed that there was no statistically significant relation between total patients QOL and their socio-demographic characteristics except sex and marital status. This finding agreed with **Alsuwat et al. (2018) and** found that there were no statistically significant differences between patients QOL and their socio-demographic. This might be due to GERD is not related to age it affects all age groups or no gender and not related to any socio-demographic.

The present study showed that there was no statistically significant relation between total knowledge scores and total

quality of life scores of studied patients. This finding agreed with **Alshammari et al. (2020),** who found there were no statistically significant relation between total knowledge scores and total quality of life scores among studied sample. The present study showed that there was highly statistically significant relation between total practices scores and total quality of life scores among studied of patient. This might be due to follow healthy practices will lead to better quality of life among patients.

Conclusion:

Less than half of studied patients had poor total knowledge level regarding gastroesophageal reflux disease and only more than tenth of patients had good total knowledge level about gastroesophageal reflux disease. Also, more than three-fifths of studied patients had unsatisfactory total reported practices level regarding esophageal reflux whenever and more than one-third of them had satisfactory total practices level. Moreover, more than half of studied patients had poor total QoL level regarding esophageal reflux and only less than one-fifth of them had good total quality of life.

Finally, there was no statistically significant relation between total patients QoL and their socio-demographic characteristics except for their sex and marital status and there was highly statistically significant relation between total knowledge scores and total practices scores of studied patients and there were no statistically significant relation between total knowledge scores and total quality of life of studied patient.

Recommendations:

- Develop and implement educational program for studied patients to improve their knowledge and practice toward coping with GERD.
- A colored illustrated booklet should be available and distributed to each patient about GERD, healthy diet, exercise, daily habits and lifestyle.
- Further studies need to be applied on the large sample size of patients among GERD to improve quality of their life.

References:

Alshammari, A., Alabdulkareem, M., Aloqeely, K., Alhumud, I., Alghufaily, A., Al-Dossare, I., and Alrashdan, O. (2020). The determinants of the quality of life of gastroesophageal reflux disease patients attending King Saud University Medical City. Cureus; 12(8).

Alsuwat, B., Alzahrani, A., Alzhrani, A., Alkhathami, M. and Mahfouz, M. (2018). Prevalence of gastroesophageal reflux disease in Saudi Arabia. Journal of clinical medicine research; 10(3). 221.

Bert, F., Pompili, E., Lo Moro, G., Corradi, A., Sagrawa Caro, A., Gualano, R. and Siliquini, R. (2021). Prevalence of gastro-oesophageal reflux symptoms: An Italian cross-sectional survey focusing on knowledge and attitudes towards lifestyle and nutrition. International Journal of Clinical Practice; 75(3). e13758.

Chen, Y., Chen, C., Ouyang, Z., Duan, C., Liu, J., Hou, X., and Bai, T. (2022). Prevalence and beverage-related risk factors of gastroesophageal reflux disease: An original study in Chinese college freshmen, a systemic review and meta-analysis. Neurogastroenterology & Motility; 34(5). e14266.

Cheng, J. and Ouwehand, C. (2020). Gastroesophageal reflux disease and probiotics: A systematic review. Nutrients; 12(1). 132.

Domakunti, R. and Lamture, R. (2022). A study on the correlation between endoscopic findings and symptoms of gastroesophageal reflux disease. Cureus; 14(4).

Hançerlioğlu, S., Yıldırım, Y. and Bor, S. (2019). Validity and reliability of the Quality of Life in Reflux and Dyspepsia (QoLRAD)

questionnaire in patients with gastroesophageal reflux disease for the Turkish population. The Turkish Journal of Gastroenterology; 30(6). 511.

Isshi, K., Furuhashi, H., Koizumi, A. and Nakada, K. (2021). Effects of coexisting upper gastrointestinal symptoms on daily life and quality of life in patients with gastroesophageal reflux disease symptoms. Esophagus; 18(3).684-692.

Joseph, S., (2021). the psychology of quality of life, chapter 1,3rd ed, USA, Springer Nature Switzerland, P5.

Jung, K., Tae, H., Song, K., Kang, S., Park, J. , Gong, E. and Lee, K. (2021). Seoul consensus on the diagnosis and management of gastroesophageal reflux disease. Journal of Neurogastroenterology and Motility; 27(4). 453.

Kariri, M., Darraj, A., Wassly, A., Arishi, H., Lughbi, M., Kariri, A. and Khawaji, B. (2020). Prevalence and risk factors of gastroesophageal reflux disease in Southwestern Saudi Arabia. Cureus; 12(1).

Katzka, A., and Kahrilas, J. (2020). Advances in the diagnosis and management of gastroesophageal reflux disease. Bmj; 371.

Kurin, M., and Fass, R. (2019). Management of gastroesophageal reflux disease in the elderly patient. Drugs & aging; 36 (12). 1073-1081.

Marianne, B. (2021). Gastroesophageal Reflux nursing care management. Available at: (**https:// nurseslabs. com/ gastroesophageal-reflux/**) Accessed 26 February 2023 at 2:00 Pm.

Naga. M. (2018). New drugs to treat gastroesophageal reflux disease neglect causes tumors. Available at:(https://gate.ahram.org.eg/daily/News/540385.aspx) Accessd 16 march 2022 at 6:00 Am.

Lail, G., Hanif, M., Lail, A., Haque, M., Tasneem, A. & Luck, H. (2019). Factors influencing quality of life in patients with gastroesophageal reflux disease in a tertiary care hospital in Pakistan. Journal of the College of Physicians and Surgeons Pakistan; 29(9).882-885.

Lei, Y., Chang, W. , Wen, H., Liu, T., Hung, S. and Chen, L. (2019). Predicting factors of recurrence in patients with gastroesophageal reflux disease: A prospective follow-up analysis. Therapeutic Advances in Gastroenterology; 12. 1756284819864549.

Patel, A., Hasak, S., Nix, D., Sayuk, S., Newberry, D. and Gyawali, P. (2018). Genetic risk factors for perception of symptoms in GERD: An observational cohort study. Alimentary pharmacology & therapeutics; 47(2). 289-297.

Peery, F., Crockett, S., &Murphy, C. (2019). Burden and cost of gastrointestinal, liver, and pancreatic disease in the United States: update 2018.Gastroenterology 2019; 156(1):254-272.e11.doi:10.1053\j.gastro.2018.08.063.

Silvia, C., Serena, S., Chiara, M., Alberto, B., Antonio, N., Gioacchino, L. and Gian, A. (2018). Diagnosis of GERD in typical and atypical manifestations. Acta Bio Medica: Atenei Parmensis; 89(8). 33.

Yadlapati, R., Vaezi, F., Vela, M., Spechler, S., Shaheen, J., Richter, J., and Yamamichi, N., Mochizuki, S., Asada-Hirayama, I., Mikami-Matsuda, R., Shimamoto, T., Konno-Shimizu, M. (2012). Lifestyle factors affecting gastroesophageal reflux disease symptoms: a cross-sectional study of healthy 19864 adults using FSSG scores. BMC medicine; 10(1): 1. doi: 10.1186/1741-7015-10-45. PMID: 22554226, PMCID: PMC3353848.

World Health Organization (WHO). (1995). Division of mental health world health organization geneva. Avaliable at: (https://www.who.int › mental_health) Accessed 26 march 2022 at 4 Am.

جودة حياة المرضى المصابين بمرض إرتجاع المرىء

هبه ماهر نجيب- هديه فتحى محى الدين- تيسير حميدو ابوسريع

يعد مرض إرتجاع المرىء مشكلة صحية وإجتماعية خطيرة ، نظرًا لتكرار الأعراض ونوعيتها. يعاني الكثير من الناس من ارتداد الحمض من وقت لآخر. ومع ذلك ، عندما يحدث إرتداد الحمض بشكل متكرر بمرور الوقت ، يمكن أن يسبب إرتجاع المريء. لذا هدفت الدراسة إلى تقييم جودة الحياة بين مرضى إرتجاع المرىء. وقد أجريت الدراسة في عيادة الباطنة بالعيادات الخارجية بمستشفى بنها الجامعي .تم استخدام عينة عشوائية بسيطة للمرضى في الإعداد المذكور مسبقًا حيث بلغ العدد الإجمالي للعينة ٣١٣ مريض. كشفت الدراسة الحالية عن النتائج التالية: ٦٤,٩٪ من المرضى الذين خضعوا للدراسة لديهم مستوى إجمالي غير مُرضي من الممارسات المبلغ عنها فيما يتعلق بالارتجاع المريئي في حين أن ٣٥,١٪ منهم لديهم مستوى إجمالي مُرضٍ. ٥٤,٣٪ من المرضى الذين خضعوا للدراسة لديهم مستوى منخفض من جودة الحياة فيما يتعلق بإرتجاع المريئ ، ٢٩,٤٪ منهم لديهم متوسط جودة حياة و ١٦,٣٪ منهم فقط يتمتعون بجودة حياة جيدة. توجد علاقة ذات دلالة إحصائية عالية بين مجموع الممارسات ونوعية الحياة الكلية للمريض المدروس. كما اوصت الدراسة بتطوير وتنفيذ برنامج تعليمي للمرضى الذين خضعوا للدراسة لتحسين معلوماتهم وممارستهم للتعامل مع إرتجاع المرىء.