

Quality of Life among Adult Patients with Peptic Ulcer in the City of Sulaimani

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المستخلص

الهدف: تحديد نوعية حياة المرضى البالغين المصابين بالقرحة الهضمية في مدينة السليمانية.
المنهجية: أجريت دراسة وصفية استعمل فيها أسلوب التقييم والذي طُبّق على المرضى البالغين المصابين بالقرحة الهضمية للمُدّة من الثاني عشر من كانون الثاني، ٢٠٠٩ ولغاية الثلاثين من أيلول، ٢٠٠٩ وذلك لتقييم نوعية حياة المرضى البالغين المصابين بالقرحة الهضمية في مدينة السليمانية. أُختيرت عينة غرضية "غير احتمالية" مكوّنة من (١٠٠) مريض (ذكور وإناث) والذين راجعوا مركز كردستان للجهاز الهضمي والكبد وذلك لإجراء الدراسة. طوّرت استمارة الاستبانة من استمارة الاستبانة لمنظمة الصحة العالمية، ١٩٩٨ لغرض الدراسة. تضمّنت ثلاثة أجزاء لها علاقة بالصفات الديموغرافية للمرضى والمعلومات الطبية لهم ومحاور نوعية حياة المرضى. تمّ إجراء دراسة تجريبية على (١٠) مرضى للمُدّة من الثاني عشر ولغاية الثامن والعشرين من كانون الثاني ٢٠٠٩ لتحديد ثبات استمارة الاستبانة باستعمال طريقة الاختبار الأول وإعادة الاختبار، كما تمّ شمول (١٤) خبير لتحديد مصداقية محتوى الاستمارة. تمّ تحليل البيانات من خلال تطبيق أسلوب التحليل الإحصائي الوصفي للبيانات (التكرارات، النسب المئوية، الوسط الحسابي) كما استعمل أسلوب التحليل الإحصائي الإستنتاجي للبيانات (معامل الارتباط بيرسون ومربع كاي).

النتائج: أشارت نتائج الدراسة إلى أنّ نوعية حياة المرضى تأثرت في المحور الجسمي، كما أظهرت الدراسة بؤى للعمر، الجنس، الحالة الزوجية والحالة المادية تأثير على نوعية حياة هؤلاء المرضى.

التوصيات: توصي الدراسة بتجنب عوامل الخطورة للإصابة بالمرض. كذلك توصي الدراسة بتوفير التأمين الصحي وإجراء دراسات إضافية في عدّة مراكز مشابهة لشرح الاختلافات في نتائج نوعية حياة المرضى المصابين بالقرحة الهضمية.

Abstract

Objectives: To assess the quality of life for adult patients with peptic ulcers in the city of Sulaimani.

Methodology: A descriptive study, using the assessment approach was conducted on patients with peptic ulcer disease from January 12th, 2009 to September 30th, 2009. A purposive "non-probability" sample of (100) patients (males and females) with peptic ulcers who attended Kurdistan Center for Gastroenterology and Hepatology were selected for the study. A questionnaire was adapted from the World Health Organization quality of life questionnaire (1998) for the purpose of the study. It is comprised of (3) parts that included sociodemographic characteristics form, medical history form and adult peptic ulcers patients' quality of life (QoL) questionnaire. A pilot study was carried out on (10) patients for the period of January 12th through January 28th, 2009 to determine the study questionnaire's reliability through the use of stability (test-retest method). A panel of (14) experts was involved in the determination of the questionnaire's content validity. Data were analyzed through the application of the descriptive statistical data analysis approach (frequency, percentage, mean of scores) and inferential statistical data analysis approach (Pearson correlation coefficient and chi-square).

Results: The findings of the study indicated that quality of life was affected in physical domain and that age, gender, marital status, and monthly income had significant relationship with quality of life domains.

Recommendations: The study recommends that young adults, particularly Individuals with blood group (O) should be highly aware from gastrointestinal (GI) symptoms and avoids risk factors for the development of peptic ulcer disease (PUD). Also, the study recommends providing health assurance and conducting further multi centers studies in order to demonstrate the differences in QoL issues for PUD patients.

Key word: Quality of Life; Peptic Ulcer

Introduction

Peptic Ulcer disease (PUD) is a disruption of the mucosal integrity of the stomach and/or duodenum leading to local defect or excavation due to active inflammation, ulcers occur within the stomach and/or duodenum and are often chronic in nature ⁽¹⁾. It occurs in the jejunum after surgical anastomosis to the stomach, or rarely in the ileum adjacent to a meckel's diverticulum ⁽²⁾. Although often considered together, gastric and duodenal ulcers differ in pathogenesis, clinical characteristics and management ⁽³⁾. For more patients peptic ulcer disease is a chronic relapsing disorder, especially in the first year of initial disease ⁽⁴⁾. In the past, stress and anxiety were thought to be the causes of ulcers. Recent researches documented that peptic ulcer results from infection with the gram negative bacteria (*Helicobacter pylori*) which may be acquired through ingestion of food and water. Person to person transmission of the bacteria also occurs. Although *H. pylori* infection is common in United States, most infected people do not develop ulcers ⁽⁵⁾. Each year, there is at least 7 million patients around the world who are affected by this disease leads to hundreds of thousands of deaths ⁽⁶⁾. Peptic ulcer is a major problem of modern society. In the United States of America, there are about 500,000 new cases per year of peptic ulcer and 4 million ulcer recurrences ⁽⁷⁾. Over 40,000 people annually in the USA have surgery each year because of persistent symptoms of problem and 6,000 people die from related complication ⁽⁸⁾. Peptic ulcer disease occurs with greatest frequency in people between (40–60) years of age ⁽⁵⁾. Men are affected three times as often as women, duodenal ulcers are ten times more common than gastric ulcers in young patients, but in the older age groups the frequency is about equal ⁽²⁾. Quality of life is "the individual's perception of his/her position in life in the context of the culture and value system in which he/she lives and in relation to his/her goals, expectations, standards and concerns"⁽⁹⁾. Peptic ulcer invariably affects the (QoL) of the effected individuals through changing in daily routine and results in an inability to maintain an active and productive employment ⁽¹⁰⁾. QoL relates to internal phenomena that determine health matters or external phenomena such as social conditions and environmental influences on human life. A high quality of life is evident when community members have the prerequisites for good health

and happiness in their daily lives ⁽¹¹⁾. Peptic Ulcer (PU) is one of the common gastrointestinal disorders which have wide range of presentation. It is necessary to document exactly how illness affects vocational, social, and personal activities, as well as the general activities of daily living, provides an important basis for interventions designed to improve Quality of life ⁽¹²⁻¹³⁾. Measurement of quality of life is very important in order to be able to compare different population, different groups of people under certain condition with healthy population ⁽¹⁴⁾.

Methodology

The present study was carried out through the application of quantitative design of a descriptive study which uses the assessment approach, and it was conducted on patients with Peptic Ulcer disease (PU) at Kurdistan Center for Gastroenterology and Hepatology (KCGH) in the City of Sulaimani from January 18th to September 30th, 2009. A purposive "non-probability" sample of (100) subjects (male and female nurses) who attended to (KCGH) was selected. A questionnaire was adopted and developed from the (WHOQOL) scale (1998) according to (PUD) for the purpose of the study. It was comprised of three parts which include the patients' demographic characteristics, medical Information and quality of life domains. A pilot study was carried out for the period of January 18th, 2009, to February 2nd, 2009 to determine the reliability of the questionnaire through the use of (test – retest). A panel of (19) experts was involved in the determination of the questionnaire content validity. The questionnaire was measured on a Likert type scale of (always, sometimes and never) and it was rated as (3) for always, (2) for sometimes, and (1) for never. Data were analyzed through the application of the descriptive statistical data analysis approach such as (frequency, percentage, mean of scores and), and inferential data analysis approach such as (chi-square).

Results

Table 1. Distribution of the subjects by their sociodemographic characteristics

Age (years)	Frequency	Percent
(21–25)	7	7.0
(26–30)	12	12.0
(31–35)	23	23.0
(36–40)	15	15.0
(41–45)	10	10.0
(46–50)	8	8.0
(51–55)	6	6.0
(56–60)	9	9.0
(61–65)	10	10.0
Total	100	100.0
Gender		
Male	58	58.0
Female	42	42.0
Total	100	100.0
Educational Status		
Unable to read and write	33	33.0
Able to read and write	26	26.0
Primary School Graduate	7	7.0
Intermediate School Graduate	7	7.0
Secondary School Graduate	13	13.0
Institute Graduate	5	5.0
College and Postgraduate	9	9.0
Total	100	100.0
Type of Ulcer		
Gastric	24	24.0
Duodenal	76	76.0
Total	100	100.0

Table 2. Distribution of QoL domains of peptic ulcer patients according to the level of effect

List	Domains	Always (3)		Sometimes (2)		Never (1)		Total
		f	%	f	%	f	%	
1.	Physical Domain	749	28.8	919	35.4	932	35.8	2600
2.	Psychological Domain	512	34.2	519	34.6	469	31.2	1500
3.	Level of Independence Domain	535	53.5	326	32.6	139	13.9	1000
4.	Social Domain	460	65.5	204	29.0	38	5.5	702
5.	Environmental Domain	635	48.8	403	31.0	262	20.2	1300
6.	Spiritual Domain	220	55.0	103	25.75	77	19.25	400
	Total	3111	41.5	2474	33.0	1917	25.5	7502

f=Frequency; %= Percent

Table 3. Relationship between the age of Peptic Ulcer patients and the QoL domains

Ages \ Items	(21-25)	(26-30)	(31-35)	(36-40)	(41-45)	(46-50)	(51-55)	(56-60)	(61-65)	Total
	f*	f	f	f	f	f	f	f	f	
Always	233	371	779	528	235	168	231	279	287	3111
Sometimes	193	276	516	352	192	160	207	286	292	2474
Never	136	223	442	323	174	142	118	177	182	1917
Total	562	870	1737	1203	601	470	556	742	761	7502
χ^2 obs.=120 df=16 χ^2 crit.=26.30 P≤0.05										

df = degree of freedom; f= frequency, %= percentage; P= level of probability; χ^2 crit = critical chi square; χ^2 obs = observed chi square, * = Accumulative frequency

Table 4. Relationship between the gender of the sample and the QoL domain

Items \ Gender	Male	Female	Total
	f*	f	
Always	1904	1207	3111
Sometimes	1406	1068	2474
Never	1042	875	1917
Total	4352	3150	7502
χ^2 obs.=25.2 df=2 χ^2 crit.=5.99 P≤0.05			

df = degree of freedom; f= frequency, %= percentage; P= level of probability; χ^2 crit = critical chi square; χ^2 obs = observed chi square, * = Accumulative frequency

Table 5. Relationship between the marital status of the sample and the QoL domains

Items \ Marital Status	Single	Married	Separated	Divorced	widowed	Total
	f*	f	f	f	f	
Always	716	1729	39	153	474	3111
Sometimes	481	1202	66	112	613	2474
Never	357	945	43	105	467	1917
Total	1554	3876	148	370	1554	7502
χ^2 obs.=124 df=8 χ^2 crit.=15.50 P≤0.05						

df = degree of freedom; f= frequency, %= percentage; P= level of probability; χ^2 crit = critical chi square; χ^2 obs = observed chi square, * = Accumulative frequency

Table 6. Relationship between the monthly income of the sample and the QoL domains

Items \ Monthly income	Sufficient	Barely sufficient	Insufficient	Total
	f*	f	f	
Always	838	1357	916	3111
Sometimes	683	1015	776	2474
Never	489	718	710	1917
Total	2010	3090	2402	7502
χ^2 obs.=34.9 df=4 χ^2 crit.=9.49 P≤0.05				

df = degree of freedom; f= frequency, %= percentage; P= level of probability; χ^2 crit = critical chi square; χ^2 obs = observed chi square, * = Accumulative frequency

Discussion

The finding of (table 1) revealed that greater percentage of the patients' ages was between (31-35) years which constitute (23.0%), the incidence of duodenal ulcer is in age between (30–39), while in gastric ulcer the incidence is usually 50 years and older⁽⁵⁾.

Relative to their gender, more than half of them were males (58%) and the remaining were females, peptic ulcers are appearing in men more often than women⁽²⁾. Concerning to the The results of (table 2) indicates that the higher percentage in the physical domain (35.8) were accounted for never which indicates that this domain was affected by the disease (PU). This result disagreed with other study who conducted that dyspepsia affects mental but not physical health related QoL⁽¹⁶⁾. Furthermore, a study reported that quality of life is significantly impaired among unselected arthritis patients who used NSAIDs with gastro-intestinal symptoms especially dyspepsia and upper abdominal pain⁽¹⁷⁾.

The finding of the study shows that there is a significant relationship between quality of life

level of education, one third of the patients (33%) were unable to read and write, while other study was done in Baghdad was reported that the majority of (PU) patients were college graduate⁽¹⁵⁾, this may be due to that Baghdad is the capital in which large number of citizen are living, and in addition to that (51%) of the patient in this study are living in sub urban and rural areas in which usually they did not attend or leave their schools.

and the patients' age group, Age was one of the factors most strongly related to deterioration in the physical area of sickness impact profile. Other studies also showed that QoL deteriorates with age in both chronic gastric and duodenal ulcers⁽¹⁸⁾.

The gender of the patients (table 4) has affected their quality of life. Older women with GI disorders were more disadvantaged in activities of daily living than men (19). This may due to that female usually have lower hemoglobin because of menstrual cycle in addition to the aggravating of symptoms and complications like bleeding which makes the condition worse.

Furthermore, marital status has an impact on patients' quality of life (table 5). Other study disagreed with this result when they reported in a study that race, marital status, and number of persons in the household has not statistically significant predictors of QoL for patients with dyspepsia⁽²⁰⁾, this may be due to that married individuals hold wide responsibilities and tasks which increase their stress.

A significant relationship has been found between quality of life and the patients' monthly income (table 6). Other study stated that there was an association between the prevalence of

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