

## Quality of life in peptic ulcer patients referring to Al-Zahra hospital of Isfahan, Iran

Asghar Ashrafi Hafez<sup>1</sup>, Elahe Tavassoli<sup>2</sup>, Akbar Hasanzadeh<sup>3</sup>, Mahnoush Reisi<sup>4</sup>, Seyed Homamodin Javadzade<sup>4</sup>, Masoumeh Imanzad<sup>5</sup>

<sup>1</sup> Proteomics Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

<sup>2</sup> The Student's Research Committee, Department of Public Health, Faculty of Health, Shahid Beheshti University of Medical Sciences, Tehran, Iran

<sup>3</sup> Department of Biostatistics, Faculty of Health, Isfahan University of Medical Sciences, Isfahan, Iran

<sup>4</sup> Department of Health Education, Bushehr University of Medical Sciences, Bushehr, Iran

<sup>5</sup> Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran

### ABSTRACT

**Aim:** The purpose of this study was to determine quality of life in peptic ulcer patients referring to Al-Zahra hospital of Isfahan.

**Background:** Peptic ulcer disease (PUD) is one of the most prevalent diseases. Its prevalence is 6-15% and about 10% of people experience its symptom in their life. PUD can have a considerable impact on patients' quality of life (QOL).

**Patients and methods:** This descriptive- analytic survey was done on 93 randomly patients referred to Al-Zahra hospital of Isfahan city in Iran. Data gathering was done via questionnaire including five domains: physical, psychological, social, behavioral and economical. For data analysis, t-test, Pearson correlation and ANOVA test were used.

**Results:** 93 patients with mean age of 38.54 years, including 43 (46.2%) women and 54 (53.8%) men, were studied. There was a negative significant between quality of life and age and between disease duration and psychological, economical domains and between the mean of QOL scores in physical and social domains with the number of cigarette per day, also there was significant relation between social domain and gender, and physical, psychological and behavioral domains with marital status; Physical, social domains with smoking. Also there was a negative significant between physical, social and behavioral domains with years of smoking.

**Conclusion:** Study results showed that quality of life is in a relatively good level among patients, thus some diseases such as peptic ulcer can effect on quality of life. So, treatment and prevention of these diseases may improve their quality of life.

**Keywords:** Quality of life, Peptic ulcer, Patients.

(Please site as: Ashrafi Hafez A, tavassoli E, Hasanzadeh A, Reisi M, Javadzade H, Imanzad M. Quality of life in peptic ulcer patients referring to Al-Zahra hospital of Isfahan, Iran. *Gastroenterol Hepatol Bed Bench* 2013;6(Suppl.1):S87-S92).

### Introduction

Within the last few decades the concept of "good health" has moved from the "absence of

disease or illness" to a more positive concept which embraces the subjective experience of well being and quality of life (1). A quality of life perspective can identify sensitive adults issues that may be affected by illness or disability of treatment (2,3). Definition of quality of life: The term QOL (quality of life), health and functional

Received: 28 April 2013 Accepted: 8 June 2013

**Reprint or Correspondence:** Elahe Tavassoli, PhD Candidate. The Student's Research Committee, Shahid Beheshti University of Medical Sciences, Iran

**E-mail:** tavassoli.eb@gmail.com

status are not interchangeable, nor are the instruments used to assess them (4, 5). WHO definition of health: "A state of complete physical, mental, social well being, not merely absence of disease or infirmity" (6).

Quality of life has emerged as an important concept and outcome in health and health care (7). In public health and in medicine, the concept of health-related quality of life refers to a person or groups perceived physical and mental health over time. Physicians have often used health-related quality of life to measure the effect of chronic illness in their patients in order to better understand how an illness interferes with a person's day-to-day life. Similarly, public health professionals use health-related quality of life to measure the effects of numerous disorders, short and long-term disabilities, and disease in different populations. Tracking health-related quality of life in different populations can identify subgroups with poor physical or mental health and can help guide policies or interventions to improve their health (8).

WHO definition of QOL (1993): Individual perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns (9, 10). Assessment of QOL can help the physicians in better understanding the results of their treatment not only in dimension of physical well being but also in spirit of treatment or QOL. During the past two decades, psychological status and quality of life of one very important clinical research and is emphasized as one of the aspects of effective patient care and has used its review of the existing differences between patients diagnosed, forecast consequences of disease treatment interventions and evaluation (11), has been on for a goal to improve the daily functioning and quality of life in patients with chronic diseases (12).

A peptic ulcer is a breach in the gastric or duodenal mucosa down to the sub mucosa. Small

or shallow breaches are termed 'erosions'; whilst sometimes insignificant, these may herald ulcers. Worldwide, the two most common causes of peptic ulceration are *Helicobacter pylori* infection and non-steroidal anti-inflammatory drugs (NSAIDs), including aspirin ibuprofen, naproxen, Smoking cigarettes or using tobacco (13, 14). The lifetime risk for developing a peptic ulcer is approximately 10% (15). Before the twentieth century, gastric ulceration constituted the bulk of peptic ulcer disease and duodenal ulcers were quite rare (16), the incidence of duodenal ulcers increased progressively, reaching a peak in the 1950s. The cause of this rise is unclear, because *H. pylori* are thought to have been ubiquitous in the human Population for thousands of years (16). The present investigation was conducted to survey quality of life in peptic ulcer patients referring to Al-Zahra hospital affiliated to Isfahan University of Medical Sciences.

## Patients and Methods

This was a cross-sectional survey performed during 2010 in Isfahan city, Iran. The population under study consisted of 93 patients referred to Al-Zahra hospital affiliated to Isfahan University of Medical Sciences who recruited randomly. All subjects provided their written informed consent to participate in the study.

Data gathering was done with standard questionnaire (demographic data and information about quality of life); they were ranked according to Lickert classification. Data gathering was done via standard questionnaire including five domains: physical, psychological, social, behavioral and economical. Reliability was confirmed by krunbach alpha test with 95% confidence interval ( $\alpha=0.86$ ). Lickert classification of 0 to 4 was used for each question and total score was between 0 and 100: scores less than 33 for poor quality of life, scores 33-63 for relatively good quality of life status and scores more than 66 for favorable quality of life.

Data analysis was done with SPSS15 software using ANOVA, t-test and Pearson correlation test. P- value <0.05 was considered significant.

## Results

93 patients with mean age of 38.54 years, including 43 (46.2%) women and 54 (53.8%) men, were studied. Among the participant, 60.2% were 30-60 years, 67.7% married, 53% had disease duration of 1-5 years, 69.9% non smoker, and 19.4% had history of smoking between 1 and 5 years. The majority of participants in this study (69.9%) evaluated their current quality of life as relatively good (Table 1).

**Table 1.** Frequency distribution of quality of life status in various domains of studied patients

Quality of life domains	Quality of life status		
	good	relatively good	poor
Physical	12(12.9)*	60(64.5)	21(22.6)
Social	10(10.8)	64(68.8)	19(20.4)
Psychological	57(61.3)	29(31.2)	7(7.5)
Behavioral	8(8.6)	54(58.1)	31(33.3)
Economical	4(4.3)	68(73.1)	21(22.6)
Total score	19(20.4)	65(69.9)	9(9.7)

\* Number (percent)

There was a negative significant between quality of life and age ( $p=0.001$ ,  $r=-0.28$ ), and between disease duration and psychological ( $p<0.05$ ,  $r=-0.23$ ), economical ( $p<0.05$ ,  $r=-0.24$ ) domains and between and also between the mean of QOL scores in physical ( $p<0.001$ ,  $r=-.39$ ) and social ( $p<0.001$ ,  $r=-.39$ ) domains with the number of cigarette per day (Table 2), also there was significant relation between social domain and gender ( $p<0.05$ ), and physical ( $p<0.05$ ), psychological ( $p<0.05$ ) and behavioral ( $p<0.001$ ) domains with marital status (Table 3). Also,

physical ( $p=0.001$ ), social ( $p<0.05$ ) domains with smoking. Also there was a negative significant between physical ( $p<0.001$ ,  $r=-0.39$ ), social ( $p=0.001$ ,  $r=-0.33$ ) and behavioral ( $p<0.05$ ,  $r=-0.23$ ) domains with years of smoking (Table 3).

## Discussion

This study was conducted to determine the relationship between individual characteristics of patients and quality of life. The results indicated that 69.9% of the patients had relatively good quality of life. This finding is consistent with the results of studies Verma, Shojaei and colleagues (17, 18) but inconsistent with the results of studies Zboralski, Entezari and colleagues and tabari and colleagues (19, 20, and 21). The results of present study showed that, There was a negative significant between quality of life and age ( $p=0.001$ ,  $r=-0.28$ ), on the other hand reduced quality of life of patients with increasing age.

In studies done by Entezari and colleagues and Shojaei and colleagues, there is a significant relationship between quality of life with age (18, 20).

In the present study, there was significant relation between social domain and gender ( $p<0.05$ ), Quality of life is higher in women than men, which conform to the results of study Shojaei and colleagues (18). Also there was significant relation between social domain and gender ( $p<0.05$ ), and physical ( $p<0.05$ ), psychological ( $p<0.05$ ) and behavioral ( $p<0.001$ ) domains with marital status. In the physical domain, singles has a better quality of life, and in the psychological domain, married participants have better quality of life, perhaps receive more support from their family. This finding is consistent with the results of study Shojaei and colleagues (18) but inconsistent with the results of study Entezari and colleagues (20).

**Table 2.** Pearson test's correlation coefficients (r) between quality of life domains and age, disease duration, years of smoking and number of cigarette per day in studied patients

Quality of life domains scores	Age		Disease duration		years of smoking		number of cigarette per day	
	p-value	*r	p-value	*r	p-value	*r	p-value	*r
physical	0.001	-0.337	0.271	-0.115	0.001	-0.392	0.001	-0.390
social	0.090	-0.177	0.192	0.013	0.001	-0.335	0.001	-0.374
psychological	0.223	-0.128	0.026	-0.231	0.828	-0.023	0.832	-0.022
behavioral	0.001	0.388	0.035	-0.219	0.023	-0.235	0.132	-0.158
economical	0.011	-0.263	0.020	-0.249	0.744	-0.034	0.483	-0.074
Total score	0.006	-0.280	0.037	-0.230	0.096	-0.174	0.110	-0.174

**Table 3.** Mean and standard deviation of quality of life domains scores in studied patients

QOL domains Variables		Physical		Social		Psychological		Behavioral		Economical		total	
		Mean±SD	p.value	Mean±SD	p.value	Mean±SD	p.value	Mean±SD	p.value	Mean±SD	p.value	Mean±SD	p.value
gender			0.269		0.030		0.249		0.648		0.818		0.674
male	54	45.6±23.1		38.8±16.3		68.1±16.7		40±20.5		41.2±16.6		54.8±14.4	
female	43	50.4±17.9		46.3±16.3		63.6±20.60		37.9±24.3		40.2±23.6		53.5±15.5	
Marital status			0.008		0.613		0.009		<0.001		0.100		0.004
single	23	59±21.8		45.3±17.4		65.8±22.4		46±24.4		46.5±22.3		57.2±15.1	
married	63	44.9±19.2		41.3±16.2		68.3±15.3		39.9±19.5		40±17.9		55.1±13.7	
widow	7	38.4±20.6		41.7±19.8		46±23		8.2±13.3		28.6±26.7		36.9±14.6	
smoking			0.001		0.003		.995		0.567				0.261
yes	28	38.8±16		34.5±16.6		66±13.4		37±22.6		37.86±17.07	0.363	51.6±13.1	
no	65	52.6±21		45.6±15.6		66±20.6		39.9±22.2		42.00±21.15		55.4±15.5	
total	93	47.9±20.8		42.3±16.6		66±18.6		39±22.2		40.8±20		54.2±14.8	

There was a negative significant between disease duration and psychological ( $p<0.05$ ,  $r=-0.23$ ), economical ( $p<0.05$ ,  $r=-0.24$ ) domains. Perhaps, affect stress and anxiety and costs resulting from long-term illness on quality of life in patients that consistent with the results of study Shojaei and colleagues (18).also there was significant relation between physical ( $p=0.001$ ), social( $p<0.05$ ) domains with smoking.

In other words, quality of life is worse in smokers in physical and social domain. This finding can be due to health status and support received from others. There was a negative significant between quality of life and between the mean of QOL scores in physical ( $p<0.001$ ,  $r=-.39$ ) and social ( $p<0.001$ ,  $r=-.39$ ) domains with the number of cigarette per day, and between physical ( $p<0.001$ ,  $r=-0.39$ ), social ( $p=0.001$ ,  $r=-0.33$ ) and

behavioral ( $p<0.05$ ,  $r=-0.23$ ) domains with years of smoking. A similar result was not found in other studies.

Our findings showed the necessity of determining the usefulness of different methods and implementation of appropriate training program for patients suffering from peptic ulcer, in order to improve their quality of life, promote level of health, alleviate anxiety, reduce complications, cut expenses and decrease mortality. Also, we know that Health and quality of life are vital social reflections. The way a society distributes resources amongst its population tells us a great deal about the society itself. This unique volume unites readings that explore the integral link between quality of life and public policy choices. We suggest education on disease related factors, techniques for patients'

education in hospital wards, improvement of effect and applicability of educational programs content, by using health education and medical students, residents, nurses and by improving their skills and capabilities regarding their communication with the patients. The patients must have enough information about their disease. Based on the results it is suggested to increase financial help and social support for vulnerable patients in a serious way socially and economically screening of the society is recommended.

### Acknowledgements

Authors would like to thank Isfahan University of Medical Sciences and Al-Zahra hospital senior managers and employees, because this survey would not have been possible without their assistance. This research has been supported by Isfahan University of Medical Sciences.

### References

1. Juniper EF, Guyatt GH, William A, Griffith LE. Determining a minimal important change in a disease-specific quality of life questionnaire. *J Clin Epidemiol* 2000; 47:81-87.
2. Vogels T, Verrips G HW, Verloove-Vanhorick SP, Fekkes Kamphuis RP, Koopman HM. Measuring health – related quality of life in children: the development of the TACQOL parent form. *OQL Res* 1998; 7: 457-65.
3. Raphael D, Rukholm E, Brown I, Hill–Bailey P, Donatol E. The quality of life profile – Adolescent Version: background, description and initial validation. *J Adolesc Health* 2000; 19:366-75.
4. Eisen M, Ware JA, Donald CA, Brook RH. Measuring components of children's health status. *Med Care* 1979; 17; 902-21.
5. Hunt SM, Editor. Cross-cultural issues in the use of quality of life measures in randomized controlled trials. Oxford, UK: Oxford University Press; 1999. P.51-68.
6. Landgraft J, Abetz L. Influences of sociodemographic characteristics on parental reports of children's physical and psychosocial well– being: early experiences with the child health questionnaire. In: Drotar D, Editor. Measuring health related quality of life in children and adolescents. Mahwah, New Jersey: Lawrence Erlbaum Associated; 1998. P.105-30.
7. Babae G, Keshvarz M, Shaigan M. Effect of health education program on quality of life in patients undergoing coronary artery bypass surgery. *Acta Medica Iranica* 2007; 45:69-75.
8. Centers for Disease Control and Prevention. Health-related quality of life? 2007. Available at: [www.cdc.gov/nccdphp/hrqol](http://www.cdc.gov/nccdphp/hrqol) [Accessed 3 Jan, 2011].
9. Guyatt GH, Kinshel B, Jaeschke R. Measuring health status: what are the necessary measurement properties? *J Clin Epidemiol* 2000; 45:1341-45.
10. Malo JL, Archeveque J, Trudeau C, Aquino C, Cartier A. Should we monitor peak expiratory flow rates or record symptoms with a simple diary in the management of asthma ? *J Allergy Clin Immunol* 1993; 91:702-709.
11. Ashwill J, Droskes. Nursing care of children principles and practice .philadelp0hia:W.B. Saunders Co, 2001: 128.
12. Bagheri H, Memarian R, Alhani F. Survey the effect of group counseling on quality of life in myocardial infarction patients who have been referred to the clinics of Imam Khomeini and Shariati hospitals in Tehran. *Hakim J* 2004;6. [In Persian]
13. Majumdar D, Bebb J, Atherton J. Helicobacter pylori infection and peptic ulcers. *Medicine* 2007; 35: 204-209.
14. AARP. Peptic ulcer. 2008. Available at: <http://healthtools.aarp.org/adamcontent/peptic-ulcer>. [Accessed 3 Jan, 2010].
15. Wikipedia. Peptic ulcer. 3 Jan 2010. Available at: [http://en.wikipedia.org/wiki/Peptic\\_ulcer](http://en.wikipedia.org/wiki/Peptic_ulcer) [Accessed 3 Jan, 2010].
16. Susser M, Stein Z. Civilization and peptic ulcer. *Lancet* 2000; 1: 115–17.
17. Verma S, Giaffer MH. *Helicobacter pylori* eradication ameliorates symptoms and improves quality of life in patients on long-term acid suppression: a large prospective study in primary care. *Dig Dis Sci* 2002; 47:1567-74.
18. Shojaei F. Quality of life in patients with heart failure. *The Journal of Faculty of Nursing & Midwifery* 2008; 2: 5-13. [In Persian]
19. Zboralski K, Florkowski A, Talarowska-Bogusz M, Macander M, Gałeczki P. Quality of life and emotional functioning in selected psychosomatic diseases. *Postepy Hig Med Dosw* 2008;62: 36-41.

20. Entezari A, Nabaei L, Moravvej Farshchi H, Meshkat Razavi G, Tousi P. Quality of life in outpatients dermatologic clients. Pajoohandeh Journal 2008; 13: 65-69. [In Persian]

21. Tabari F, Zakeri Moghadam M, Bahrani N, Monjamed Z. Evaluation of the quality of life in newly recognized cancer patients. The Journal of Faculty of Nursing & Midwifery 2007; 2: 5-12. [In Persian]