

# Quality of life of older patients attending a general hospital in Baghdad/Iraq

**Maha Sulaiman Younis (1)**  
**Batool Issa Omran (2)**  
**Mahir Khalil Ibrahim (3)**

(1) Professor of psychiatry, College of Medicine-Baghdad University, Senior consultant, Department of Psychiatry, Medical City Teaching Hospital, Baghdad, Iraq

(2) Psychiatric Registrar, Medical City Teaching Hospital, Baghdad, Iraq.  
 Candidate of Iraqi Fellowship in Psychiatry, Baghdad, Iraq.

(3) Clinical Professor of Medicine - Department of Clinical Sciences - College of Medicine - Gulf Medical University, UAE.

## Corresponding author:

Maha Sulaiman Younis, MD, FIMS P, CABP  
 Professor of psychiatry, College of Medicine-Baghdad University  
 Senior consultant, Department of Psychiatry, Medical City Teaching Hospital, Baghdad, Iraq  
 Medical City Post Office ,12114, PoB : 16082  
 Bab–Al Moadham, Baghdad, Iraq  
**Email:** Maha.younis@gmail.com

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## Abstract

**Background:** The older population in Iraq is under researched and studies about quality of life (QoL) are not available. The attitude of older people towards their QoL is individualistic and can be influenced by cognitive and emotional factors within the social and cultural context.

**Objectives:** To assess the QoL of a group of 60+years old outpatients and identify its association with socio-demographic and clinical variables

**Methods:** A cross-sectional study was conducted on 300 consenting male and female outpatients in Medical City Hospital, Baghdad 2019, through a direct interview using the Arabic modified version of the World Health Organization Quality of Life (WHO-QOL-BREF). The association of QoL with the socio-demographic and clinical variables were tested. Data were statistically analyzed using tools for the mean score, variance analysis, t-test, and chi-square test. The results were discussed accordingly.

**Results & Conclusion:** The participants' mean age was 67.2±6.3 years, with a comparable male to female ratio. Most of the patients were married, educated, financially independent. Chronic medical disorders affected around half of the patients, 15% of them had psychiatric disorders. More than half of the patients showed a moderate (acceptable) level of subjective satisfaction with their QoL. The QoL was significantly affected by the gender, level of education, occupation, socioeconomic status, and with joint and respiratory problems. This study emphasized the decisive role of family confinement, social support, and autonomy in promoting QoL and mitigating the adverse effect of aging through adaptation and resilience. Future studies are called for to fill the data gap and help in developing better health and a social care system for older people in Iraq.

**Key words:** Quality of Life, older patients, Iraq

## Introduction

According to the World Health Organization (WHO), most developed countries have accepted the chronological age of 65+ years as a definition of 'elderly.' The United Nations (U.N.) agreed cutoff is 60+ years to refer to the older population since it represented a more accurate portrayal of significant life changes like retirement from work, loss of one's spouse, and social isolation[1]. The number of older people is increasing worldwide due to the improvement in health care services, even in developing countries. The World Bank reported that life expectancy at birth in high-income countries was 81 years and in the low-income countries 64 years and 72 years in the Arab world countries during 2018 [2]. At 1998, life expectancy at birth in Iraq was 71.7 years for females and 66.5 years for males and within two decades ; 2018 has risen to 72.4 years for females, 68.4 years for males (3). Although age-related disabilities may cause loss of social role and marginalization, many studies have indicated that aging alone does not necessarily impact the QoL negatively. Many elderly can enjoy a state of physical and mental well-being. The mechanism of how older adults evaluate their QoL can be highly individualistic, subjective, and inconclusive [4]. Garcia et al. have commented that "the individual opinion about well-being is the best means of knowledge"[5]. The older people are expressing their satisfaction with their lifestyle and differ in their mindset. Due to the global demographic changes, a heightened interest in researching the elderly's welfare through the bio-psycho-social approach using multiple tools for assessment of different dimensions of QoL using generic and specific instruments to measure health-related QoL.[6,7]. In 1993, the WHO invented the WHOQOL-100 instrument. It was employed and proven valid in hundreds of studies on broad sectors of the population, and modified to many languages and versions [8]. The WHO defines QoL as an individual's perception of their position in life in the context of the culture and value systems they live in, in consideration of their goals and expectations. This broad concept incorporates an individual's physical health, psychological state, social relationships and correlations to the environment .The WHOQOL scale serves different purposes and helps in formulating comprehensive health policies; its use in clinical and non-clinical settings involves study groups from the elderly population [9]. Like other Arab countries, religious and cultural traditions and beliefs in Iraq ensure respect and protection to the elderly. Their family members (spouse, son, or daughter) are entitled to look after them prudently. Abyad, Ashour, and Abou-Saleh (2001), stated that sending older parents to nursing homes is perceived as immoral behavior and an unwelcome step[10]; in contrast, a loving and respectful attitude toward the older people enhances their subjective and objective dimensions of QoL. Many previous studies employed the original WHOQOL-100, WHOQOL-BREF, and the modified WHOQOL-OLD in Western countries. However, such studies are not much available in Iraq, where people of 56+ years old constituted 3.55% of the general population in 2018 [11]. The QoL of older people in Iraq warrants further study to fill the data gap and formulate a proper geriatric health care system.

## Methods

### Study setting

This study is a part of a research project submitted to the Iraqi Council of Medical Specializations (ICMS) to fulfill the fellowship requirements in psychiatry. Formal and ethical approval was granted by the Scientific and Ethics Committee of the ICMS. This work was carried out at the Geriatric Outpatient Clinic in the Medical City Teaching Hospital, Baghdad. Usually, about 20 patients 60+ years old attend the clinic daily seen by two specialized doctors who book them for follow-up. The patients were offered the option to register in this study and signed a statement of consent. The participants were directly interviewed privately for 20 minutes using the Arabic version of the WHOQOL-BREF instrument, along with a separate form of sociodemographic and clinical characteristics. Enrolled patients were also subjected to the Mini-Mental State Examination to assess cognitive functioning . Patients with hearing or speech disabilities were excluded. 300 male and female patients participated in this study and completed the questionnaire forms from 1st March to 31st July 2019. Patients with psychiatric disorders were referred to the consultant psychiatrist for diagnosis following the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) guidelines.

### Study tools

The WHOQOL-BREF questionnaire consists of 26 scored items distributed in four domains: 1-physical health, 2-psychological health, 3-social, and 4-environment. The mean score of each domain is a result of cumulative scores of included items rating the subjective satisfaction of QoL in a positive direction (i.e., the higher the score, the better QoL). The raw data was submitted for statistical analysis using the Statistical Package for Social Scientific, version 25 (SPSS-25). Simple measures of frequency analyzed data, percentage, range (minimum-maximum values) mean scores, analysis of the variance, t-test, and chi-square test. The significance of difference (qualitative data) was tested using Pearson's chi-square test ( $\chi^2$ -test) to apply Yates's correction or Fisher exact test whenever applicable. Likert Scale of 0-5 continuum (Strongly agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly disagree (1), was used to measure the responses in a summative assessment. A P-value of less than 0.05 was statistically significant. [8,9].

## Results

A total of 300-outpatients participated with the response rate of 100%. The mean age was  $67.2 \pm 6.3$  years with comparable male: female ratio, mostly married and literate. 14% of the patients were government and self-employed, and the majority resided in Baghdad with their families with an 'adequate' income as shown in Table 1. Most of the patients have chronic medical disorders, mostly hypertension, diabetes mellitus (D.M.), back and joint problems, while psychiatric disorders represented 15.7% of disorders, as shown in Table 2. The mean score of four domains were as follows: Mean  $\pm$ SD (range);

- 1-Physical: 21.0 ± 3.6 (12-28),  
 2-Psychological: 12.0 ± 2.1 (5-17),  
 3-Social: 6.9 ± 2.1 (2-10),  
 4-Environment: 20.2 ± 4.4 (8-32) .

The total mean scores were; 60.7 ± 8.9 (34-79). The response of "acceptable " rating the level of subjective satisfaction with QoL was comparable in the four domains;

the highest level of the response " good " is in the social (47.7%); while the response of "poor" is the highest (49.7%) in the environment domain as shown in Figure 1. When testing the co-relation of sociodemographic characteristics with QoL, a statistically significant association (P-value <0.05) is found with gender, education, occupation, and socioeconomic status. A significant association is found with having a current or chronic medical disorder in general, to specify, back and joint problems, recovered CVA, diseases of the respiratory system.

**Table 1. Socio-Demographic characteristics of the older patients attending Medical City Hospital in Baghdad**

Age (years)	Range	No	%
	<65y	122	40.7
	65-74	141	47
	75-80+	37	12.3
	Male	160	53.3
	Female	140	46.7
<b>Marital status</b>	Never married	12	4.0
	Married	201	67.0
	Widowed & divorced	87	29
<b>Education</b>	Illiterate	59	19.7
	Primary	78	26.0
	Secondary	78	26
	College/university	80	26.7
	Higher education	5	1.7
<b>Occupation</b>	Retired	140	46.7
	Self-employed	14	4.7
	Unemployed	118	39.4
	Government employee	28	9.3
<b>Socio-economic status</b>	Adequate	145	48.3
	Good/ Very good	78	26
	Not adequate	77	25.7
<b>Residence</b>	Urban	258	86.0
	Sub-urban	29	9.7
	Rural	13	4.3
<b>Type of living</b>	With close family member	254	84.7
	With relative	22	7.3
	Alone	24	8.0

Mean ± SD (Range) 67.2±6.3 (60-89)

**Table 2. Clinical Characteristics of the older patients attending Medical City Hospital in Baghdad**

<b>Associated Medical Disorders</b>		<b>No</b>	<b>%</b>
<b>Current Medical Problem</b>		52	17.3
<b>Chronic Medical Disorder</b>		218	72.7
	Diabetes mellitus(DM)	134	44.7
	Hypertension	174	58
	Back & joint problem	137	45.7
	Recovered (CVA)	3	1.0
	Cardiovascular diseases	62	20.6
	Benign Prostatic Hypertrophy (BPH)	10	6.3
	Malignancy	4	1.3
	Thyroid dysfunction	11	3.7
	Respiratory disease	36	12
	Gastrointestinal disorders	34	11.3
	Ophthalmological problem	3	1.0
	Urinary tract problem	6	2.0
<b>Psychiatric Disorders</b>			
	Anxiety	10	3.4
	Depression	12	4
	Obsessive-Compulsive Disorder	4	1.4
	Stable psychotic disorder	9	3
	Somatizations	12	3.9



Table 3. Association QoL level of satisfaction with the socio-demographic characteristics of the patients

		Poor (<60)		Acceptable (60-79)		Good (=>80)		P value
Age (years)	Range	No	%	No	%	No	%	
	<65 years	45	34.4	77	45.6	-	-	0.151
	65-74	64	48.8	77	45.6	-	-	
	75-80+	22	16.8	15	8.8	-	-	
<b>Gender</b>	Male	59	45.0	101	59.8	-	-	0.011*
	Female	72	55.0	68	40.2	-	-	
<b>Marital status</b>	Single	4	3.1	8	4.7	-	-	0.076
	Married	79	60.3	122	72.2	-	-	
	Widowed & divorced	48	36.6	39	23	-	-	
<b>Education</b>	Illiterate	40	30.5	19	11.2	-	-	0.0001*
	Primary school	39	29.8	39	23.1	-	-	
	Secondary school	22	16.8	56	32.2	-	-	
	College/university graduate	29	22.1	51	30.2	-	-	
	Higher education	1	8.0	4	2.4	-	-	
<b>Occupation</b>	Retired	47	35.9	93	55.0	-	-	0.0001*
	Self-employed	5	3.8	9	5.3	-	-	
	Unemployed	72	55.17.6	46	27.2	-	-	
	Governmental employee	7	5.3	21	12.4	-	-	
<b>Socio-Economic Status</b>	Adequate	59	45.0	86	50.9	-	-	0.0001*
	Good/ Very good	13	9.9	65	38.5	-	-	
	Not adequate	59	45.0	18	10.7	-	-	
<b>Residence</b>	Urban	107	81.7	151	89.3	-	-	0.153
	Sub-urban	16	12.2	13	7.7	-	-	
	Rural	8	6.1	5	3.0	-	-	
<b>Living circumstances</b>	With family member	109	83.2	145	85.8	-	-	0.793
	With relatives	11	8.4	11	6.5	-	-	
	Alone	11	8.4	13	7.7	-	-	

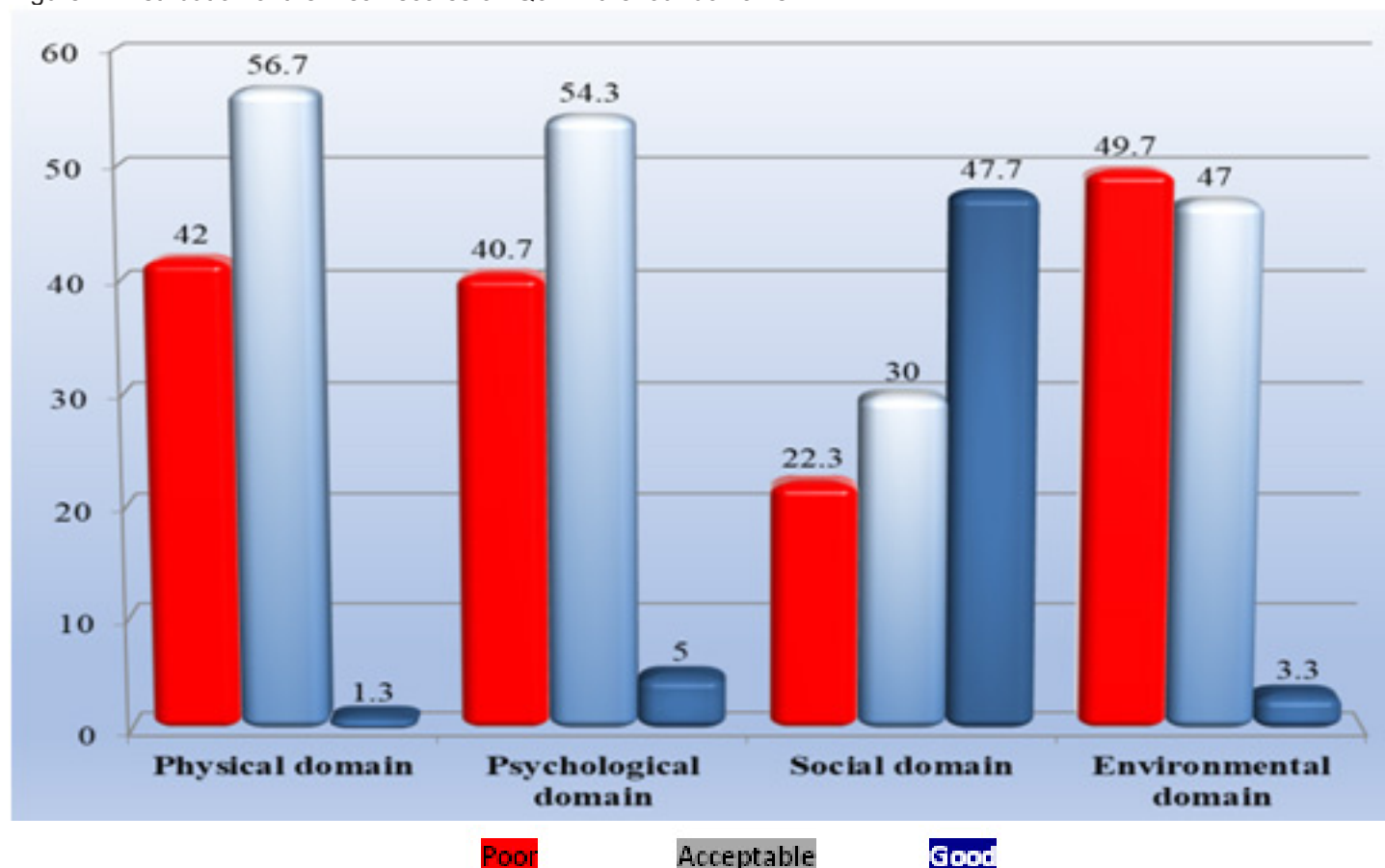
\*Significant difference between proportions using Pearson Chi-square test at 0.05 level.

Table 4. Associations of QoL level of satisfaction with clinical characteristics of the patients

		Poor (<60)		Acceptable (60-79)		Good (>=80)		P value
Associated Medical Disorders		No	%	No	%	No	%	P Value
<b>Current Medical Problem</b>		9	6.9	43	25.4	-	-	0.0001*
<b>Chronic Medical Disorder</b>		104	79.4	114	67.5	-	-	
DM	Yes	65	49.6	69	40.8	-	-	0.129
	No	66	50.4	100	59.2	-	-	
Hypertension	Yes	81	61.8	93	55.0	-	-	0.236
	No	50	38.2	76	45.0	-	-	
Joint Problem	Yes	80	42.7	57	25.4	-	-	0.001*
	No	111	57.3	154	74.6	-	-	
Recovered CVA	Yes	3	2.3	-	-	-	-	0.048*
	No	128	97.7	169	100	-	-	
Cardiovascular diseases	Yes	32	12.2	30	9.5	-	-	0.445
	No	115	87.8	154	90.5	-	-	
BPH	Yes	5	8.5	5	5.0	-	-	0.374
	No	54	91.5	96	95.0	-	-	
Malignancy	Yes	1	0.8	3	1.8	-	-	0.449
	No	130	99.2	166	98.2	-	-	
Thyroid disorder	Yes	5	3.8	6	3.6	-	-	0.903
	No	126	96.2	163	96.4	-	-	
Disease of respiratory system	Yes	10	7.6	26	15.4	-	-	0.040*
	No	121	92.4	143	84.6	-	-	
Gastrointestinal disorder	Yes	17	5.3	17	3.6	-	-	0.449
	No	125	94.7	163	96.4	-	-	
Ophthalmological Problem	Yes	1	0.8	2	1.2	-	-	0.717
	No	130	99.2	167	98.8	-	-	
Urinary tract problem	Yes	4	3.1	2	1.2	-	-	0.251
	No	127	96.9	167	98.8	-	-	
<b>Psychiatric Disorders</b>						-	-	0.540
Anxiety		6	26.6	4	25.0	-	-	
Depression		8	34.2	4	34.6	-	-	
OCD		1	1.3	3	5.8	-	-	
Recovered psychotic disorder		6	11.4	3	13.4	-	-	
Somatization disorder		7	6.3	-	-	-	-	

\*Significant difference between proportions using Pearson Chi-square test at 0.05 level.

Figure 1. Distribution of the mean scores of QoL in the four domains



## Discussion

The Arabic modified version of the WHOQOL-BREF instrument was implemented in Iraq for the first time, two decades ago [12], and many Arab authors found it useful to apply to different population sectors [13,14]. In a cross-sectional study, we chose a convenient sample of older patients attending the geriatric clinic in a central teaching hospital in Baghdad. This represents a sociodemographic profile of which most of them were urban, educated, financially independent: either live on pension or working and reside with their families. The high level of literacy can be attributed to the national campaign for eradication of illiteracy during the 1970s and free college education [15,16]. Hypertension, D.M., back and joint problems affected most of the attendees to this clinic. The prevalence of psychiatric disorders in this group is much lower than what Andreas et al., Volkert et al. revealed in their studies [17,18]. It is also lower than Ibrahim et al. found in the elderly residing with their families or others residing in nursing homes in Baghdad [19]. Al Abbudi and Ezzat found high rates of depression, dementia, and schizophrenia among elderly attending a psychiatric hospital [20]. Shihab, Sabah, & Natiq reported a comparable prevalence; 23%, among elderly attending primary health care centers in Baghdad [21]. This variation could be attributed to differences in methodology and culture. Patients with severe psychiatric disorders usually attend consultation psychiatric clinics, and patients with dementia were excluded from this study. Most of the patients perceived their QoL as “acceptable” in general and “good” in the domain of social relationships attributed to the social support and confinement provided by their families, financial

autonomy, and absence of disabling medical conditions. These factors seem to enhance the social position and the morale of the elderly in general [4,6,10,22,23]. Raazi J et al. and Qadri et al. also found “acceptable and good” levels of QoL of elderly in India [24,25]. The total mean score for the four domains in this study:  $60.7 \pm 8.9$  (34-79), is higher than what Onunkwor et al. found,  $51.8 (\pm 2.7)$ , in his study about residents in elderly homes in Malaysia [26]. Netuveli & Blane, Garcia, et al., and Knesebeck et al., indicated that financial independence, self-realization, comfortable social contact, and shared leisure activities are the leading factors in promoting QoL [4,5,27]. These factors were also manifested by the significant association of QoL with education, occupation, socioeconomic status: P-value (0.0001). Among the medical conditions that negatively affect the QoL: back and joint problems had the highest association with QoL, P value 0.001, followed by CVA and diseases of the respiratory system. Hypertension and D.M. did not affect the patient’s satisfaction with their QoL, like what Kumar et al. found in India [22]. Also, Wandell et al., and Al-Shehri et al. concluded that D.M. affects the QoL mostly through its complications in their studies in Nordic countries, and Saudi Arabia [28,29]. The difference in association with a different dimension of QoL confirms the effect of individual variation in life profile and self-perception across different cultures [23,30,31]. In Iraq, nursing homes for the elderly are few and underdeveloped, and most people perceived their residents as “abandoned” against religious beliefs and social tradition [10,32]. Therefore, vulnerable elderly or those who live alone because of war losses or forced displacement are in urgent need of proper health and social care by the government and civil society [32].



## Conclusion

The overall level of subjective satisfaction with their QoL was 'acceptable' or average, comparable to previous studies. The positive sociodemographic characteristics and the stability of their medical problems promote the moral and social position.

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