

## Comparisons of quality of life for schizophrenic outpatients and a control population

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### الخلاصة

إن دراسة نوعية الحياة والتركيز على الشعور الشخصي بالرفاهية هو نهج جديد لفهم مدى تأثير المرض على الشخص. تم اخذ عينة (87) مريض من المراجعين للعيادة الخارجية لمستشفى الرشاد في بغداد والذين تم تشخيص مرضهم كفصام لدراسة نوعية حياتهم ومقارنتها مع نوعية حياة الناس الأصحاء من عامة الناس ( 100 ) شخص باستخدام مقياس جودة الحياة النسخة العربية (منظمة الصحة العالمية). سجل المرضى مجموع أدنى درجات على المقياس بالمقارنة مع الناس الأصحاء على جميع جوانب مقياس جودة الحياة.

بالنسبة للناس الأصحاء سجلوا أعلى درجة على المقياس هي الدرجة التي تخص احترام الذات وادني درجة على المقياس هي التي تخص الشعور بالأمان بالنسبة للمرضى كانت أعلى الدرجات على المقياس هي التي تخص الدين وكذلك التي تخص الاعتماد على العلاج والأدوية.

### Abstract

The study of quality of life (QOL) and the focus on patients' subjective sense of well-being is a new approach to understand the impact of the illness. 87 patients suffering from schizophrenia, attending the psychiatric outpatient unit of Al-Rashad Teaching Hospital in Baghdad and 100 control formed the subjects. QOL of the patients and the control sample were assessed using the WHOQOL-100 Arabic version. Patients group scored lower than control on all facets of QOL For the control group the highest scores on facet of self-esteem, while the lowest scores on facet of security.

For the patients, the highest scores on facets of; religion and dependence on treatment or medications.

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## Introduction

Schizophrenia is a long-term disabling illness that affects approximately 1% of the population. The course of the illness can be chronic in some of the affected persons, along with acute psychotic exacerbations that may require hospitalization. For a long time, the reduction of positive symptoms alone was the most important outcome parameter. Along with the discovery of antipsychotic drugs and the shift of place of care from psychiatric hospitals to the community, there is an adoption of other parameters to assess the outcome. QOL is now seen as a key outcome variable in schizophrenia and therefore it should serve as a criterion for treatment planning and measuring the outcome of the treatment.

The study of QOL and the focus on patients' subjective sense of well-being is a fairly new phenomenon that has attracted professional attention only within the past two decades. Between 1850 and 1950, medicine was dominated by the quest for cures; treating chronic illness as well as helping patients manages long-term impairments received less attention (1). Recently this trend has changed and issues related to QOL have become important, especially when cure is not achievable. Illness that cannot be cured must be managed, and the treatment goal becomes maintaining a maximum functioning and a meaningful existence or quality of life. The increasing interest in the measurement of QOL in schizophrenia emerged following widespread deinstitutionalization in the 1950's (2). The initial interest was aimed at assessing the impact of moving patients into the community on health related QOL, but the development of antipsychotic drugs resulted in the adoption of more wide-reaching measures of QOL as a key therapeutic outcome in schizophrenia (2).

The concept of life quality for patients with schizophrenia differs from that used to describe physical illnesses and less-disabling psychiatric illnesses. People who are chronically ill with schizophrenia have particular needs that have a profound influence on their existence and subjective well-being. In a study of QOL among patients, with schizophrenia and compared with that of

cancer patients, (3) it was reported that the patients with schizophrenia differed from those with cancer in marital status, education and employment, with the latter more likely to be married, to have a spouse, to have more schooling, and to be employed.

In a community study of health-related quality of life of schizophrenia and general practice outpatients in Singapore(4) to examine determinants of schizophrenia, 90% of schizophrenia outpatients still lived with their immediate families, but the majority were single, unemployed, and rarely engaged in social activities. They had poorer satisfaction with overall Q health related QOL compared to general practice outpatients.

Chan et al (5) in a study of QOL of clients with schizophrenia found that many of them are cared for in the community after the trend of deinstitutionalization in Hong Kong since 1980s. The sample was recruited from a psychiatric outpatient department. Structured face-to-face interviews were conducted using the Brief Psychiatric Rating Scale and the Hong Kong Chinese World Health Organization Quality of Life Scale-Brief Version a total of 172 people participated in the study. Most of them were single and unemployed. They were least satisfied with their psychological health, financial situation, life enjoyment and sexual activity and from stigma and discrimination. These factors had a great impact on their quality of life.

The study of perceived quality of life in schizophrenia and its relationship to sleep quality (6) found, poor sleepers reported lower mean scores on all QOL domains. The poor sleepers were more depressed and distressed, than good sleepers the negative relationship between complaints of poor sleep quality and QOL measures remained significant even when the confounding effect of depression, side effects, and distress was satiated from the correlation matrix.

In a study assessing self-perceived clinical & social needs among 120 schizophrenic outpatients,& the relationship between needs & subjective QOL, found that patients needed care & support in the areas of company, psychological distress, daytime activity, and

sexual expression. All these were associated with a poorer subjective QOL (7).

Olfson et al.,(8)studied sexual dysfunction , quality of life, and relationships found 45.3% of them complain of sexual dysfunction which was significantly associated with lower global QOL .Schmidt, et al (9) in their study to evaluate the QOL of 164 schizophrenic outpatients found the majority of patients were moderately happy with their general QOL. They were least satisfied in the domains of job and financial situation, mental health and sexuality. Psychopathology and especially the quality of individual care had a significant influence on the evaluation of QOL.

Kurs et al (10) in a comparative study of 47 schizophrenia outpatients, 47 non-affected siblings, and 56 non-patients matched for gender and age were evaluated using the Quality of Life Enjoyment and Life Satisfaction Questionnaire. As expected, schizophrenia patients reported significantly poorer QOL in most specific domains than both their siblings and controls.

The study of Q.O.L of people with schizophrenia living in the community and comparing it with that of the general population is informative to highlight areas of life that might need attention in treatment planning.

### **Methodology**

The study was carried out in the psychiatric outpatient unit of Al-Rashad Teaching Hospital during the period from October 1,2010-May 30,2011. A random sample of 87 schizophrenic patients was included. and compared with 100 individual from general population as control group .Patients were having duration of illness of 2 year or more, under treatment with antipsychotic for at least 6 months, they were not having florid psychotic symptoms & living in the community of at least 6 months. Patients with organic mental illness & unstable course of schizophrenia were excluded.

The diagnosis of schizophrenia was assessed by using the International Diagnostic Checklist of ICD-10(11). QOL of the patients and the control sample were assessed using the

WHOQOL-100 Arabic version (12). The WHOQOL-100 was designed to determine the impact that disease and health intervention has on QOL. A 5-point response scale is used to rate the intensity, frequency, capacity or evaluation of the selected area of QOL. The WHOQOL-100 provides separate facet and domain scores, including a score for the facet pertaining to global QOL and general health.

A high score on any of the WHOQOL-100 domains corresponds to a favorable QOL.

Each of the 25 facets comprises four items scored on a 5-point scale. The possible score range for facets and domains is 4-20. Higher scores indicate better QOL. Data obtained was analyzed using T-test of significance. Patients participating in this research were informed that this research was of a scientific nature and has no direct impact on the management. A written informed consent was obtained.

## Results

Table 1 shows the characteristics of the samples. The patients sample consisted of 50 males (57.5%) and 37 females (42.5%), mean age in years  $41.1 \pm SD 15.5$ , for those patients 26 of them (29.8%) had work and 61 (70%) not working. Of those patients only 33 (37.9%) were married, the rest were single. The control sample consisted of 62 males (62%), 38 females (38%), their mean age in years  $40.9 \pm SD 14.5$ , concerning their employment; 75 of them (75%) were employed and 25 (25%) were not, of the control sample 67 of them (67%) were married, the rest were single.

Table 2 shows mean scores and standard deviations of the WHOQOL – 100 facets and the differences in the schizophrenic and control group.

For the control group the highest scores on facet of self-esteem, while the lowest scores on facet of security. For the patients, the highest scores on facets of; religion and dependence on treatment or medications. The patients group scored lower than control on all facets of QOL, which was a significant except in the facets for:



negative affect, dependence on treatment or medications and security being higher than control.

Table 3 shows mean scores and standard deviations of the WHOQOL-100 domains difference in the schizophrenic and control sample. The patients on average scored lower than control on all domains and the difference was significant.

The effect of marital status on QOL domains in both study groups is presented in tables 4, 5. Marital status had no effect on QOL except for environmental domain in which the scores were higher in married than unmarried ones. The married patients scored higher than unmarried ones on all QOL domains which was a significant.

The effect of employment on QOL domains in both study groups is presented tables 6 and 7. In the patients group the working patients scored higher than not working patients on domains for physical health, psychological health, level of independence.

**Table 1-Characteristics of respondents**

Factors	Schizophrenic ( 87 )		control sample( 100 )	
Gender				
Male	50	57.5%	62	62%
Female	37	42.5%	38	38%
Age in years				
Mean	41.1		40.9	
SD	15.5		14.6	
Working				
Yes	26	29.8%	75	75%
No	61	70%	25	25%
Married				
Yes	33	37.9%	67	67%
No	54	62.1%	33	33%

**Table 2-Differences in the schizophrenic and controls on different facets**

Facet	Schizophrenic(87)		control(100)		Df	T-test	P-value
	Mean	Sd	Mean	Sd			
1 Pain& discomfort	9.8	2.9	10.8	3.3	185	2.18	0.03
2 Energy &fatigue	9.1	3.2	15.5	3.4	185	13.1	0.0001
3 Sleep& rest	10.3	3.9	14.1	4.3	185	6.7	0.0001
4 Positive affect	7.4	2.7	11.3	3.8	185	7.9	0.0001
5 Thinking; Learning, Memory and concentration	10.5	3.4	14.8	3.2	185	8.9	0.0001
6 Self-esteem	9.1	3.8	17.1	2.5	185	17.206	0.0001
7. Body image& Appearance	10.6	3.4	16.4	3.1	185	12.199	0.0001
8 Negative affect	12.9	3.8	11.4	3.6	185	2.769	0.0062
9 Mobility	9.9	3.2	16.2	2.8	185	14.359	0.0001
10.Activates of daily living	9.3	3.7	15.6	3.4	185	12.130	0.0001
11.dependence on medication or treatment	13.1	2.8	7.8	2.2	185	14.478	0.0001
12 working capacity	8.8	3.0	16.3	3.4	185	16.751	0.0001
13. personal relationships	10.5	3.4	15.7	2.3	185	12.383	0.0001
14 Social support	9.3	3.6	13.1	4.3	185	7.009	0.0001
15 Sexual activity	7.8	2.8	12.6	4.0	185	9.371	0.0001
16 Physical safety& security	8.6	2.3	7.9	2.1	185	2.161	0.0320
17 Home environment	8.8	3.1	12.3	4.1	185	6.506	0.0001
18 Financial resources	8.1	2.6	13.4	3.2	185	12.311	0.0001
19 Health& social care: accessibility &quality	9.9	2.8	11.6	2.3	185	4.557	0.0001
20 Opportunities for acquiring new information& skills	7.4	2.6	12.6	3.0	185	12.572	0.0001
21 Participation in &opportunities for recreation/leisure activities	7.1	2.2	10.1	2.8	185	8.060	0.0001
22 Physical environment (pollution, noise, trafics, climate)	8.8	3.1	11.9	4.1	185	5.763	0.0001
23 Transportation	9.7	3.3	12.3	3.4	185	5.288	0.0001
24. Spirituality/religion/personal beliefs	13.6	3.6	16.2	3.3	185	5.151	0.0001
25. Overall Quality of general health	9.7	3.7	13.2	3.4	185	6.739	0.0001

**Table 3- Differences in the patients and controls in different domains**

Domains	Schizophrenic group(87)		control group(100)		Df	T-test	P-value
	Mean	Sd	mean	Sd			
Physical health	3.3	11.8	13.9	3.4	185	4.271	0.0001
Psychological health	10.9	3.6	14.3	3.3	185	6.736	0.0001
Level of independence	10.4	3.5	15.7	3.7	185	10.018	0.0001
Social relationships	10.8	3.6	13.8	3.5	185	5.684	0.0001
Environment	9.6	3.1	11.3	3.4	185	3.553	0.0005
Spiritual	13.6	3.6	16.2	3.3	185	5.151	0.0001
Overall QOL and general health	9.7	3.7	13.2	3.4	185	6.739	0.0001

**Table 4- Differences in the patients in the area of marriage.**

Domains	Married(33)		Not married(54)		Df	T-test	P-value
	Mean	Sd	Mean	Sd			
Physical health	12.5	3.1	10.3	3.5	85	2.968	0.0039
Psychological health	12.4	3.1	9.2	2.9	85	4.865	0.0001
Level of independence	11.3	3.1	9.3	3.7	85	2.596	0.0111
Social relationships	12.3	3.5	9.4	3.3	85	3.887	0.0002
Environment	10.9	2.9	9.7	3.4	85	1.686	0.0954
Spiritual	13.9	3.3	12.1	3.9	85	2.210	0.0298
Overall QOL and general health	11.1	3.8	8.9	3.1	85	2.945	0.0042

**Table 5- Differences in the controls in the area of marriage.**

Domains	Married(67)		Not married(33)		Df	T-test	P-value
	Mean	Sd	Mean	Sd			
Physical health	13.1	3.2	14.1	2.8	98	1.529	0.1295
Psychological health	14.2	3.2	14.1	3.4	98	0.144	0.8858
Level of independence	15.2	2.9	16.11	3.7	98	1.344	0.1820
Social relationships	14.7	3.1	12.7	3.8	98	0.000	1.0000
Environment	11.9	3.4	10.2	3.1	98	2.419	0.0174
Spiritual	16.2	2.9	16.2	3.1	98	0.000	1.0000
Overall QOL and general health	13.4	3.3	13.1	3.7	98	0.411	0.6823

**Table 6- Differences in the patients in the area of work. .**

Domains	Working group(26)		Not working(61)		Df	T-test	P-value
	Mean	Sd	Mean	Sd			
Physical health	13.3	3.1	10.7	4.3	85	2.275	0.0284
Psychological health	12.6	3.4	9.3	3.2	85	3.122	0.0033
Level of independence	12.8	3.2	9.4	3.4	85	3.266	0.0022
Social relationships	11.7	3.3	10.1	3.9	85	1.424	0.1623
Environment	10.2	2.8	9.1	3.0	85	1.203	0.2359
Spiritual	13.7	3.4	12.5	3.8	85	1.062	0.2945
Overall QOL and general health	11.2	3.9	8.7	3.5	85	2.095	0.0425

**Table 7- Differences in the controls in the area of work. .**

Domains	Working group(75)		Not working(25)		Df	T-test	P-value
	Mean	Sd	Mean	Sd			
Physical health	13.8	2.9	14.4	3.1	98	0.881	0.3807
Psychological health	14.4	3.3	14.4	3.4	98	0.001	1.0000
Level of independence	15.8	3.1	15.9	3.5	98	0.135	0.8927
Social relationships	13.8	3.7	13.9	3.2	98	0.121	0.9041
Environment	11.4	3.2	11.6	3.3	98	0.269	0.7888
Spiritual	16.6	2.8	15.9	3.4	98	1.025	0.3081
Overall QOL and general health	13.4	3.2	12.7	3.9	98	0.895	0.3727

## Discussion

On facets of QOL, patients on average scored lower than control group. It is very important to note that in the facet of physical safety and security both the schizophrenic and the control scored lower than average score. This could be a reflection of the unstable and volatile environment in Iraq. The finding the controls scoring lower than patients as show in table 2 points to the relative lesser emotional response of schizophrenic patient .

In respect of facets of QOL that the majority of patients were least satisfied and scored lower than average were participation in and opportunities for acquiring new skills, and opportunities for recreation. This is in contrast to Schmidt et al, (9) study in which most of their patients were satisfied with the facet of opportunities for acquiring new skills and recreation. This difference can be related to the advanced community mental health care in a developed country like Germany compared with developing country like Iraq.

In respect to financial resources facet the majority of our patients on average reported lower score compared with control which was statistically significant difference as shown in Table 2, and most of them describe themselves as being in destitute status. Malm and colleagues (13) found similar result.

Concerning the facet that most of the control sample on average were most satisfied with and scored higher than the other facets were the self-esteem, this is in contrast to schizophrenics group that majority scored lower than the average score and it was lower than that for control which was statistically significant as shown in table

(2) this could be due to stigma of the illness and the discrimination by the society, similar finding was reported by Chan S.etal., (5).

In respect to facet that most satisfied with in the patients group and scored above average score was the religion facet; but it was lower than controls and it was statistically significant as shown in table (2), probably religion had a modest effect on QOL in such type of mental illness.

Of facets with regard to: Pain and discomfort, energy and fatigue, sleep and rest, positive affect, mobility, activities of daily living, working capacity, sexual activity, and home environment ,most of our patient got lower scores than the average score and lowered than that scored for control group, which was statistically significant as shown in table (2).this reflect the poor physical and psychological health, and may be because of the absence of rehabilitations facilities,Schmidt K.etal (9) reporting that the quality of the individual care provided for schizophrenic patients had a significant influence on QOL.

In control sample marital status had no effect on subjective QOL, but on all the QOL domains in control sample there was no difference with marital status, however married subject scored higher on environmental domain, which was statistically significant as shown in table (5) probably because of companionships.

For the same domains married& unmarried patients scored lower than the control, but married patients scored higher than unmarried ones on all QOL domains which was statistically significant as shown in table (4) and this may indicate a better outcome for married patients, this is similar to the finding reported by Lehman A. (14), however Skantze K.etal (15) reported that subjective QOL for patients with schizophrenia unrelated to marital status.

The importance of the employment in the patients groups was shown by a higher scores of employed patients on all QOL domains, which was statistically significant as shown in table (6), this result is consistent with that of, Priebe etal.,(16) In control sample the employed & non employed scores similarly on QOL domains (table 7)..The majority of our patients are unemployed

(70%) as compared with control (25%) and this may be related to lack of rehabilitation facilities.

One of the limitations of this study is the small size of the sample which was a reflection of the security situation in Baghdad and the low attendance to outpatient clinic.

The results of this study showed serious defect in schizophrenic out patients in the areas of: financial resources, self-esteem, physical safety and security, working capacity, opportunities for acquiring new skill, physical & psychological health.

This study highlights the needs for high quality community mental health care and rehabilitation facilities. Good community mental health requires psychiatric teams involving social workers, psychologists, mental health nurses, vocational therapists, and psychiatrists. In addition studies from other developing countries have demonstrated the value of formation of self-help groups of families and the use of family education and support.

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