# Quality of life of patients with schizophrenia 2

T.K. Daradkeh<sup>1</sup> and T. Al Habeeb<sup>2</sup>

**جودة الحياة في الفصاميين من النمط الثاني** توفيق درادكة، طارق الحسب

الخلاصة: درس الباحثان جودة الحياة لدى 211 من الفصاميين في عيادتين خارجيتين في إربد بالمملكة الأردنية الهاشية، وفي الرياض بالمملكة العربية السعودية، واستخدما الاستبيان 24 – SRQ الذي يُمالاً من قِبَل المريض نفسه، والإخراجة المعدلة من سلم قياس جودة الحياة لدى الفصاميين، كما دَرَسَ كلاً من الجنس والحالة العائلية والعمل والتعليم والأعراض غير الذهانية والذهانية. وكانت جودة الحياة لدى ما يقرب من 27٪ منهم جودة عالية للحياة، في حين كان 19.4٪ منهم يعتقدون أن صحتهم العامة ممتازة أو جيدة جداً، وقال 30٪ منهم انهم قد حقَّقوا آمالهم. ولم تكن هناك علاقة يُعْتَدُ بها بين الجنس والحالة العائلية من جهة وبين جودة الحياة من جهة أخرى، في حين كان الترابُط ترابُطاً يُعْتَدُ بها بين الجنس والحالة العائلية من جهة وبين جودة الحياة من جهة أفضل في المرضى الذين يعانون من أعراض ذهانية أقل شدة من غيرهم أو الذين لا يعانون من أعراض ذُهانية على الإطلاق. وكان ربع الأشخاص المدروسين يتمتعون بجودة حياة معقولة على الرغم من من من جهم.

ABSTRACT We studied quality of life in 211 patients with schizophrenia from 2 outpatient clinics in Irbid, Jordan and Riyadh, Saudi Arabia, using the self-reporting questionnaire SRQ-24 and the modified version of the schizophrenia quality of life scale. Sex, marital status, employment, education, non-psychotic symptoms and psychotic symptoms were examined. Approximately 27% had good quality of life, 19.4% thought their general health was excellent or very good and about 30% said they had achieved their expectations. There was no significant relationship between sex and marital status and quality of life but employment and education were significantly related. Patients with less severe psychotic and non-psychotic symptoms were also found to have better quality of life.

#### Qualité de vie des patients schizophrènes - deuxième partie

RÉSUMÉ Nous avons étudié la qualité de vie de 211 patients schizophrènes dans deux services de consultations externes à Irbid (Jordanie) et Riyad (Arabie saoudite) en utilisant le questionnaire direct SRQ-24 et la version modifiée de l'échelle de qualité de vie pour les patients souffrant de schizophrénie. Le sexe, la situation matrimoniale, l'emploi, l'instruction, les symptômes non psychotiques et les symptômes psychotiques ont été examinés. Environ 27 % avaient une bonne qualité de vie, 19,4 % pensaient que leur santé générale était excellente ou très bonne et environ 30 % déclaraient avoir réalisé leurs attentes. Il n'y avait pas de relation significative entre le sexe et la situation matrimoniale et la qualité de vie mais l'emploi et l'instruction étaient significativement liés. On a également trouvé que les patients qui avaient des symptômes psychotiques et non psychotiques moins sévères avaient une meilleure qualité de vie.

<sup>1</sup>Division of Psychiatry, Jordan University of Science, Irbid, Jordan (Correspondence to T.K. Daradkeh: daradkeh@hotmail.com). <sup>2</sup>Department of Psychiatry, King Saud University, Riyadh, Saudi Arabia. Received: 27/05/03; accepted: 15/07/03

المجلة الصحية لشرق المتوسط، منظمة الصحة العالمية، المجلد الحادي عشر، العددان ٥-٦، ٢٠٠٥

898

Eastern Mediterranean Health Journal, Vol. 11, Nos 5/6, 2005

# Introduction

The quality of life of the mentally ill has been a matter of concern for centuries [1]. The great reforms of the past century were prompted by this, and more recently there has been a move from institutional to community care. Quality of life is now a more valued assessment, not only in psychiatry but also in many other areas, particularly those branches of medicine dealing with patients who suffer over relatively long periods of time. Patients are increasingly viewed as people and not just cases. This is indicative of a more consumer-oriented approach to medical care, in which the patient's own views are considered important rather than patients being solely the objects of expert opinion from professionals who themselves judge the effectiveness and relevance of what they do [2].

Quality of life has been defined as a broad-ranging concept affected in a complex way by such things as physical health, psychological state, level of independence, social relationships and relationship to the environment [3]. This definition lays emphasis on the subjective nature of quality of life, and also on the need to explore all those factors considered to have a significant impact on quality of life. Subjective well-being, in comparison, concerns itself primarily with affective states, positive and negative.

Quality of life assessment puts patients first, and recognizes the importance of their opinions. This assessment is a response to patients' desires not to be treated merely as cases but rather as human beings who have many other concerns. Frequently, their disease or condition may not be the main factor affecting their lives; physicians at times have a tendency to reframe all problems as being related to the presenting disease. A quality of life assessment can help identify where a patient has problems or difficulties. In the case of long-term illness such as schizophrenia, overcoming any of these difficulties may make the patient feel healthier, and as a result make fewer demands on health services [1].

Data regarding the quality of life of patients with schizophrenia from the developing countries in the Eastern Mediterranean Region are sparse, and carrying out such assessment may help identify problems that are not visible and not dealt with by the conventional type of management, primarily consisting of pharmacotherapy. For this reason, we previously carried out a psychometric study on the modified version of the schizophrenia quality of life scale [4]. In our present paper we report on the quality of life of patients living in the community.

## Methods

We did a cross-sectional study over 8 weeks (February–March 2002) on patients with a clinical diagnoses of schizophrenia attending the main outpatient psychiatric clinic in Irbid, Jordan (n = 162) and patients at a private clinic in Riyadh, Saudi Arabia (n = 49). In Irbid, we selected the first 20 patients attending the Thursday clinic. If a patient refused to participate, the next one was approached. In Riyadh, the sample was selected in 2 clinic sessions in March 2002. We used samples from 2 countries to check the consistency of the findings.

All patients were receiving neuroleptic medications, mainly depot preparations. Patients who agreed to take part in this study were reassessed to confirm the diagnosis of schizophrenia according to DSM-IV definition [5]. For convenience, the study included patients who attended the clinics on Thursdays, the day during which the investigators planned their time to work on this project.

المجلة الصحية لشرق المتوسط، منظمة الصحة العالمية، المجلد الحادي عشر، العددان ٥–٦، ٢٠٠٥

Patients selected were asked to fill in the modified version of the schizophrenia quality of life scale (SQLS) [4] and the self-reporting questionnaire (SRQ-20, the 20 non-psychotic items on the SRQ-24) [6]. Patients were also asked to rate their general health on a 4-point scale: excellent, good, fair or poor, and whether they had achieved their expectations as yes or no. The last 2 items were adopted from SF-36 health survey [7]. Patients who were illiterate were assisted by the research team.

The modified schizophrenia quality of life scale [4] consists of 30 items that tap 3 dimensions, psychosocial aspects, symptoms and side-effects of medications. Each item is answered as yes (= 1) or no (= 0). The total score ranges from 0 to 30, the higher the score, the poorer the quality of life. The scale has high reliability and validity.

The self-reporting questionnaire SRQ-24 [6] was originally developed by the World Health Organization as a screening instrument for the detection of psychiatric morbidity across different cultures [6]. It consists of 24 items that require a yes or no response according to the presence or absence of symptoms. The respondent is considered to potentially have a psychiatric disorder if the total number of positive responses to the first 20 (non-psychotic) questions reaches a certain value (cut-off point), or if there is at least 1 positive response to any of the 4 remaining (psychotic) items, or if both criteria are met. A variety of cut-off points, ranging from 3 to 10, have been used for the 20 (non-psychotic) items to screen for the presence or absence of a potential non-psychotic disorder. We used 11 as the cut-off point to categorize patients with a severe psychotic illness, schizophrenia, into those with severe and less severe nonpsychotic symptoms.

Patients were categorized into 3 groups by their total score on the SQLS, good quality of life, SQLS score  $\leq 10$ ; intermediate quality of life, SQLS score  $\geq 21$ . Patients were also grouped by their total score on the first 20 items of the SRQ into those with severe non-psychotic symptoms (SRQ-20  $\geq 11$ ) and those with less severe nonpsychotic symptoms (SRQ-20  $\leq 10$ ). A total psychotic score from the last 4 items on the SRQ-24 was calculated (range 0–4; score of 0 = free of symptoms). The influence of selected variables (sex, marital status, educational status, employment status, non-psychotic and psychotic symptoms) on quality of life was examined.

Analysis of variance, *t*-test, chi-squared test and correlation coefficient were used to test for differences in the quality of life between groups of patients classified by sociodemographic and psychopathology variables, and to test the significance of any association.

# Results

The sample comprised 149 (70.6%) male and 62 female patients. Mean age was 33.1 years (standard deviation 11.3). Approximately 46% were never married, 36% married, and the rest were divorced, separated or widowed. Concerning employment status, 53.1% were unemployed, 20.5% were in partial employment and 6.3% were employed or performing their household duties in the case of female patients. Just under a quarter of our sample, 23.8%, were illiterate or had less than 6 years formal education, 23.3% had 7–12 years formal education and 52.9% had more than 12 years formal education.

Approximately 56% of the patients viewed their general health as acceptable with approximately 25% viewing it as poor (Table 1). Approximately 30% of the patients thought that they had achieved

المجلة الصحية لشرق المتوسط، منظمة الصحة العالمية، المجلد الحادي عشر، العددان ٥-٦، ٢٠٠٥

900

their expectations; the rest did not because of their illness. Table 2 shows crosstabulation of quality of life with severity of non-psychotic symptoms. It reveals that 26.6% (n = 55) had good quality of life, 37.7% (n = 78) had intermediate quality of life and 35.7% (n = 74) had poor quality of life. It is interesting to note that 74.5% of patients with less-severe non-psychotic symptoms has good quality of life, compared with 25.5% with severe non-psychotic symptoms. The difference was significant ( $\chi^2 = 94.6, df = 2, P \le 0.001$ ). None of the patients with less severe nonpsychotic symptoms had poor quality of life. There was no significant difference in the quality of life of patients in Jordan and those in Saudi Arabia.

Regarding the psychotic profile (positive), 15.3% (n = 32) were found to be asymptomatic or free from positive symptoms (score = 0); 24.4% (n = 51) mildly psychotic; 26.8% (n = 56) moderately psychotic, 20.6% (n = 43) severely psychotic and 12.9% (n = 27) very severely psychotic (score = 4). There was a statistically significant positive relationship between the summed SQLS score and the global psychotic score (r = 0.64,  $P \leq 0.001$ ), indicating that the greater the psychotic symptoms, the worse the quality of life. There was no significant difference regarding quality of life between male [SQLS mean score 15.8 standard deviation

Table 1 Schizophrenic patients' view of their general health					
View of health	No.	%			
Excellent	10	4.7			
Good	31	14.7			
Fair	118	55.9			
Poor	52	24.7			
Total	211	100			

901

(SD) 7.9] and female (SQLS mean score 17.0, SD 6.6) patients, nor in the SQLS mean scores for different marital status (F = 0.48, P = 0.75). Table 3 shows that quality of life of employed patients (SQLS mean score 12.1, SD 8.6) was significantly better than that of unemployed patients (SQLS mean score 18.3, SD 6.9) (F = 12.4,  $P \le 0.001$ ). Similarly patients with higher level of education reported a better quality of life than lesseducated patients (F = 10.6, P < 0.001).

## Discussion

The deinstitutionalization of psychiatric services and the drift from a more symptomfocused view on outcome of treatment to a more holistic view has increased interest in quality of life issues. Studies on subjective quality of life among community-based patients with severe mental illness have indicated they have a better subjective quality of life compared to patients in hospital settings. Studies of deinstitutionalization programmes have also generally reported improvement in subjective quality of life as patients move from inpatient care settings to community care [8].

An extensive MedLine search on the quality of life of patients from our Region with schizophrenia revealed no single research report that would allow us to compare our findings with those of others. This is the first report on the quality of life of non-institutionalized patients with schizophrenia, and it is legitimate to consider it the first database set on quality of life of patients with severe mental illness in this Region. Since our study is cross-sectional by design, it does not provide information on the effectiveness of our care programme as we have no baseline quality of life assessment ratings.

المجلة الصحية لشرق المتوسط، منظمة الصحة العالمية، المجلد الحادي عشر، العددان ٥-٦، ٢٠٠٥

symptoms	·						
Quality of life	Non-psychotic symptoms						
-		Alla		Severeb		Less severe <sup>b</sup>	
	No.	%	No.	%	No.	%	
Good (SQLS $\leq$ 10)	55	26.6	14	25.5	41	74.5***	
Intermediate (SQLS							
11–20)	78	37.7	64	82.1	14	17.9	
Poor (SQLS $\ge$ 21)	74	35.7	74	100	0	0	
Total	207	100	152	73.4	55	26.6	

Table 2 Cross-tabulation of quality of life with severity of non-psychotic	;
symptoms	

<sup>a</sup>Some values missing.

<sup>b</sup>On the self reporting questionnaire, severe = score  $\geq$  11, less severe = score  $\leq$  10. SQLS = schizophrenia quality of life scale.

\*\*\*P < 0.001.

The finding that nearly a quarter of our patients viewed their general health as excellent or good and approximately 30% achieved their expectations confirms previous reports of the good prognosis for a subset of patients with schizophrenia [9,10]. The question that needs answering is whether our findings in this regard represent the natural outcome of patients with schizophrenia, or if such an outcome has been influenced by our treatment programme, which mainly consists of pharmacotherapy and supportive psychotherapy. The World Health Organization international pilot study on schizophrenia and subsequent

employment status							
Employment status	No.	Mean SQLS score	SD				
Unemployed	109	18.3	6.9				
Partial employment	42	15.3	7.3				
Employed	54	12.1	12.1***				
Total	205ª	16.0	7.9				

Table 3 Cross-tabulation of quality of life with
employment status

Table 4 Cross-tabulation of quality of life with educational attainment							
		,					

Education (years in formal education)	No.	Mean SQLS score	SD
≤6	49	18.9	6.3
7–12	48	18.3	7.1
≥13	109	13.9	8.1***
Total	206ª	16.1	7.8
<sup>a</sup> Some values missing.			

SQLS = schizophrenia quality of life scale. SD = standard deviation. \*\*\*P < 0.001.

SD = standard deviation.

SQLS = schizophrenia quality of life scale.

<sup>a</sup>Some values missing.

\*\*\*P < 0.001.

المجلة الصحية لشرق المتوسط، منظمة الصحة العالمية، المجلد الحادي عشر، العددان ٥-٦، ٢٠٠٥

determinants of the outcome of severe mental disorders has consistently shown that patients in developing countries have more favourable outcome, course of the condition and higher recovery rates than patients in industrialized countries [9,10].

The reason for the better outcome in the developing world is not completely understood. It may be due to the fact that many people with mental illness in villages in the developing world are better accepted, less stigmatized, and more likely to find work in the agricultural economy or to engage in meaningful labour [9,11,12]. A striking observation is that in Arab communities, individuals with schizophrenia are more likely to remain in the community with their families, which helps protect them from becoming socially isolated. There is a great deal of evidence for the better psychosocial adaptation and outcome of schizophrenia in Saudi Arabia and Algeria [13,14].

Despite the limited resources in terms of care in our set-up, the relatively high proportion of patients who perceived their quality of life as good or fair can only be explained by the psychosocial support our patients obtain from relatives. It is interesting to note that none of our patients was homeless, and a reasonable percentage of them was married and employed. To our surprise we did not find a relationship between sex, marital status and quality of life but this could be explained by the small sample size. Salokangas et al. studied the association of sex and marital status with quality of life and found that the quality of life of single men was poorer than others in almost all the areas in which it was measured [15]. Differences between single women and married men or women were much smaller. Women, independent of their marital status, were more satisfied with their life, had more close relationships and had more often done useful work than men [15].

Our findings of a positive association between the level of distress as measured by the SRQ-24 and poor of quality of life is consistent with the findings of Ritsner et al., who found that improved quality of life of patients with schizophrenia was related to reduction of distress and of paranoid symptoms [16]. Our findings regarding employment are also consistent with the findings of Bryson, Lysaker and Bell who reported a positive association between amount of participation in paid work activity and improvement in quality of life [17]. In studies investigating predictors of subjective quality of life in severely mentally ill persons, the results have mostly shown weak associations between sociodemographic characteristics and subjectively reported indicators of satisfaction [18]. Our findings regarding the association between psychopathology and quality of life supports the results of cross-sectional investigations of the relationship between psychopathology and subjective quality of life, especially concerning depressed mood and anxiety [19-21].

Finally, we believe that a collaborative effort is needed by the countries of the Region to evaluate the quality of life of patients with severe mental illness, and it would be of great interest to find out the impact of management programmes on the quality of life of these patients. We admit that our sample was relatively small to make valid generalizations, but our findings warrant further investigation by multiple centres and under the close supervision of the World Health Organization.

#### References

- Orley J, Saxena S, Herrman H. Quality of life and mental illness: reflections from the perspective of the WHOQOL. *British journal of psychiatry*, 1998, 172:291–3.
- Gill TM, Feinstein AR. A critical appraisal of the quality of life measurements. *Journal of the American Medical Association*, 1994, 272(8):619–26.
- 3. The World Health Organization quality of life assessment (WHOQOL): position paper from the World Health Organization. *Social science and medicine*, 1995, 41(10):1403–9.
- Al-Habeeb T, Daradkeh TK. The quality of life of patients with schizophrenia 1 (Jordan–Saudi Project): the reliability and

المجلة الصحية لشرق المتوسط، منظمة الصحة العالمية، المجلد الحادي عشر، العددان ٥-٦، ٢٠٠٥

validity of the modified version of schizophrenia quality of life scale (SQLS). *Arab journal of psychiatry*, 2003, 14(1):10–18.

- Diagnostic and statistical manual of mental disorders, 4th ed. Washington DC, American Psychiatric Association, 1994.
- 6. Harding TW et al. Mental disorders in primary health care: a study of their frequency and diagnosis in four developing countries. *Psychological medicine*, 1980, 10:231–41.
- Ware YE, Snow KR, Kosinski M. SF-36 health survey: manual and interpretation guide. Boston, Massachusetts, New England Medical Center, 1993.
- Barry MM, Zissi A. Quality of life as an outcome measure in evaluating mental health services: a review of the empirical evidence. Social psychiatry and psychiatric epidemiology, 1997, 32:38–47.
- Sartorius N, Gulbinat W, Harrison G. Long term follow up of schizophrenia in 16 countries: a description of the international study of schizophrenia conducted by the World Health Organization. Social psychiatry and psychiatric epidemiology, 31(5):249–58.
- 10. World Health Organization. *Schizophrenia: an international follow up study.* Chichester, England, John Wiley, 1979.
- 11. Al Assra A, Amin H. Hospital admission in a psychiatric division in Saudi Arabia. *Saudi medical journal*, 1988 9:25–33.
- 12. Warmer R. *Recovery from schizophrenia: psychiatry and political economy*, 2nd ed. London, Routledge, 1994.
- El Gaaly A. Outpatients in Canada and Saudi Arabia: a comparison of two clinic

samples. *Egyptian journal of psychiatry*, 1985, 7:99–106.

- Robert P et al. Course of psychosis in Algeria and France: about 342 cases observed from 1975 to 1985. *Psychopathol*ogy, 1989, 22(6):301–8.
- 15. Salokangas PIC, et al. To be or not to be married—that is the question of quality of life in men with schizophrenia. *Social psychiatry and psychiatric epidemiology*, 2001, 36(8):381–90.
- Ritsner M et al. Predictors of quality of life in major psychoses: a naturalistic followup study. *Journal of clinical psychiatry*, 2003, 64(3):308–15.
- Bryson G, Lysaker P, Bell M. Quality of life benefits of paid work activity in schizophrenia. *Schizophrenia bulletin*, 2002, 28(2):249–57.
- Bobes J, Gonzàles MIP. Quality of life in schizophrenia. In: Katschnig H, Freeman H, Sartorius N, eds. *Quality of life in mental disorders*. New York, John Wiley & Sons, 1997:165–78.
- 19. Browne S et al. Quality of life in schizophrenia: relationship to sociodemographic factors, symptomatology and tardive dyskinesia. *Acta psychiatrica scandinavica*, 1996, 94(2):118–24.
- 20. Corrigan PW, Buican B. The construct validity of subjective quality of life for the severly mentally ill. *Journal of nervous and mental disease*, 1995, 183(5):281–5.
- 21. Dickerson FB, Ringel NB, Parente F. Subjective quality of life in out-patients with schizophrenia: clinical and utilization correlates. *Acta psychiatrica scandinavica*, 1998, 98(2):124–7.