Comparative Analysis of Several Methods to Quality of Life In Schizophrenia In Nepal

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Abstract

The purpose of this study was to examine assessments of quality of life in patients with developed schizophrenia in Dhanusha District, Nepal, from both a subjective and objective point of view, as well as ratings given by patients and ratings given by patients' families. 38 individuals with schizophrenia were given the Quality-of-Life Interview – Brief Version and the WHO Quality of Life – Bref scale in order to evaluate both the subjective and objective aspects of their quality of life. Interviews with significant family members using the same measures were also conducted. Results show a correlation between subjective and objective measures of quality of life of a modest degree (r = 0.432), and a correlation of the same magnitude was discovered between patients and their relatives (r = 0.464). The use of objective indicators of quality of life and qualitative interviews of patients provides helpful proxy measurements, despite the fact that quality of life is traditionally measured with subjects.

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Introduction

Schizophrenia is among the most severe, persistent, and devastating mental illnesses. It has an impact on overall health, productivity, autonomy, psychological well-being, and people' perceptions of reality. The World Health Organization (WHO) estimates that over 24 million individuals worldwide suffer from schizophrenia. It was listed as among the top 10 ailments responsible for the global disease burden. The trajectory of schizophrenia seems to be positive in around 20% of persons with schizophrenia, as well as a small percentage of people are reported to cure entirely [1]–[4]. There was a change in the therapeutic paradigm, with a greater focus on patient viewpoints such as quality of life. Schizophrenia impairs many aspects of living; persons with the condition often live lonely and marginalized lives in substandard housing, with little earnings, little schooling, and limited occupational and social abilities. The bulk of people work at a lower rate and have little social interactions outside of his family. Patients with schizophrenia too are vulnerable to stigma, which results in discrimination and, as a result, limits their living possibilities and quality of life [5]–[9].

Research on quality of life has been sparked as a result of an increased focus on the needs of patients as individuals, as opposed to patients just as cases (QoL). Quality of life is described as "an individual's view of life in terms of the values and culture in which he lives and in connection to his objectives, aspirations, standards and concerns" by the World Health Organization (WHO) (1). This is a complex concept that incorporates an individual's emotional wellness as well as the cognitive and behavioral capacities to fulfill personal demands as well as social and vocational obligations. In addition, this concept also takes into account an individual's social and professional roles.

Earlier studies conducted on mental patients evaluated quality of life using standard-of-living characteristics. Due to the fact that these parameters are external, they were referred to as objective criteria. In more recent times, quality of life measurements have shifted increasingly toward an emphasis on subjective judgment. This is analogous to the EMIC vs ETIC techniques that are utilized in the field of anthropology (i.e. the view of an insider against the view of an outsider on a cultural phenomena). Few studies have made the attempt to contrast the perspectives of patients and providers about patients' quality of life (QoL) who suffer from chronic mental illness (CMI) [10], [11]. With better concordance on clinical than social aspects, and with the use of focused measures of QoL such as the Sickness Impact Profile (compared with global measures such as the Global Assessment of Functioning, providers have a tendency to rate patients' quality of life lesser than that judged by the patients themselves, with better concordance on clinical than social aspects. In previous research, however, participants were more likely to be medical professionals than members of the patients' families. It's possible that this strategy placed an excessive amount of weight on the opinions of trained professionals while ignoring the relative meaning and significance that individuals attach to the roles they play, particularly in connection to their own cultures. It's possible that family members will provide a more accurate assessment of quality of life because of their proximity to the patients and the fact that they share comparable sociocultural norms. Previous quality of life studies on schizophrenia in Nepal were extremely limited, and they did not evaluate different treatment methods. The current study evaluated both subjective and objective methods, as well as the perspectives of patients' family members, regarding patients' quality of life in Nepal who were diagnosed with schizophrenia[12]–[15].

Material and methods

The sample was divided into two different groups. Located in northern Nepal, the Postgraduate Institute of Medical Education and Research, Dhanusha District is a tertiary care referral center. The study group consisted of 38 patients with an International Classification of Diseases (ICD-10) diagnosis of schizophrenia who attended the out-patient clinic of the Department of Psychiatry there. All of the patients ranged in age from 18 to 50 years old, had been sick for at least two years, but had been clinically stable for three months or more before to the examination. For the purposes of this study, clinical stability was defined as an increase in medication dose of no more than fifty percent in the three months prior to the evaluation. [14], [16]

The patients in the study group each had an equal number of healthy relatives assigned to their group to serve as the comparison. These individuals likewise ranged in age from 18 to 50 years old and had been residing with the patients they were caring for for the last two years.[17], [18] Subjects who were found to be misusing substances (with the exception of cigarettes), suffering from serious chronic physical illnesses, or who had organic brain diseases were not allowed to participate in either group. A priori, before to the assessment, informed consent was obtained from both the patients and their family. Separate interviews were conducted with patients and their relatives, during which the relatives' willingness to participate, level of contact with the patient, and level of awareness regarding the patient's illness were analyzed in order to evaluate the accuracy of the information that was gathered. The Brief Psychiatric Rating Scale, often known as the BPRS, was utilized in order to evaluate the patients' manifest psychopathology [1], [19]–[21].

Assessment of quality of life

Lehman's Quality of Life – Brief Version (QoLI) (31) was used to conduct the QoL assessment. This questionnaire consists of 74 questions, can be finished in about 16 minutes, and has strong psychometric qualities. It is a well-structured questionnaire that covers eight different aspects of life as well as two questions about overall life satisfaction. Every aspect of life, with the exception of one, namely health, is evaluated from both an objective and a subjective point of view. On a scale ranging from thrilled to horrible, each subjective item received a score between 1 and 7, while each objective item received a score between 0 and 1 for the areas of everyday activities and functioning, money, 0–2 for employment and school, and 0–5 for social interactions and family relations. After adding up the scores of all of the subjective and objective domains, we obtained the scores of the appropriate subscales, which ranged from 0–14 and 9–63, respectively, and then we summed those values together to get a total score (range 9–77). [22]–[24]

For the purpose of this study, some minor modifications of the QoLI were carried out. These modifications included (a) the exclusion of the objective domains of living arrangement, legal and safety issues, and all objects regarding interaction by telephone in the domains of social and familial relations (as very few of our patients have telephones), and (b) the consideration of items on current employment as objective indicators, with household work being considered a type of job. This was done because a large portion of our sample included housewives. [25], [26]

WHOQoL–Bref, Field Trial Version (32) is a general questionnaire that consists of 26 questions and may be self-administered. It is a condensed version of the complete WHOQoL-100 scale (33). In the course of our research, we utilized the Hindi version. This scale places more of an emphasis on the patients' subjective responses than than their actual life situations, and the evaluation takes place over the course of the previous two weeks. In addition to questions pertaining to overall health and happiness, it examines a subject's physical health, psychological functioning, social ties, and surroundings. Each item is evaluated between 1 and 5 such that higher ratings imply greater QoL. [27]–[30]

In the current investigation, the scoring pattern of three items that were negatively scaled was switched around so that it would be consistent with the pattern of other things. The range of possible values for the mean score of each domain is between 1 and 5, with the range of possible values for the overall scale score being between 5 and 25. The mean score is derived by dividing the overall score by the number of items contained in the domain. [31], [32]

Statistical methods

The mean, standard deviation (SD), and Pearson's product-moment correlation were the statistical methods that were used to analyze the scores on the three different scales (r). The chi-square test was utilized in order to do analysis on the categorical data.

Results

The mean age of the 38 patients was 33.8 years, with a standard deviation of 9.3 years. Seventy-nine percent of the patients had an education that was less than ten years, and 76% were either unemployed or working in the household. Seventy-four percent of the patients lived in an urban area. Seventy-one percent of the patients had a low to middle socioeconomic status. The duration of illness ranged from 24 months to 288 months (mean 113.6, SD 80.6), medication stability ranged from 15 months to 265 months (mean 85.75, SD 68.53), a daily intake of antipsychotics chlorpromazine equivalents ranged from 33 mg to 1200 mg (mean 513.4 mg, SD 37.2 mg), and 42% of patients had paranoid schizophrenia while 37% had the undifferentiated form of the illness. The range of possible BPRS scores was from 18 to 30. (mean 24.15, SD 5.55).

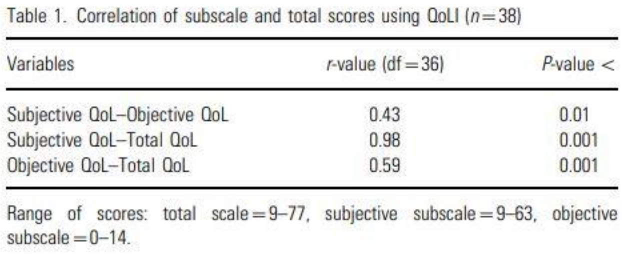


Table 1. Correlation of subscale and total scores using QoLI ($n = 38$)

Variables	r-value (df = 36)	P-value <
Subjective QoL–Objective QoL	0.43	0.01
Subjective QoL–Total QoL	0.98	0.001
Objective QoL–Total QoL	0.59	0.001

Range of scores: total scale = 9–77, subjective subscale = 9–63, objective subscale = 0–14.

The average age of the relatives was 41.2 years, and only three of them were single, whereas 17 of the patients were single (chi-square=14.4, df=74, P0.001). Additionally, a greater proportion of the patient populations were unemployed (10 versus 0) or housewives (19 vs. 11) (chisquare=26.54, df=74, P0.001) than the relatives.

The patients' relatives were comparable to one another in terms of the other sociodemographic factors (such as gender, education, area, family type, and socioeconomic level). 42 percent of the index patients' relatives were either a spouse or a parent, and 40 percent of the relatives were both. Since the patient's initial contact with our organization, a key relative came with them to the psychiatric outpatient department for 77% of the follow-up visits (the mean number of visits was 35, and the standard deviation was 27).

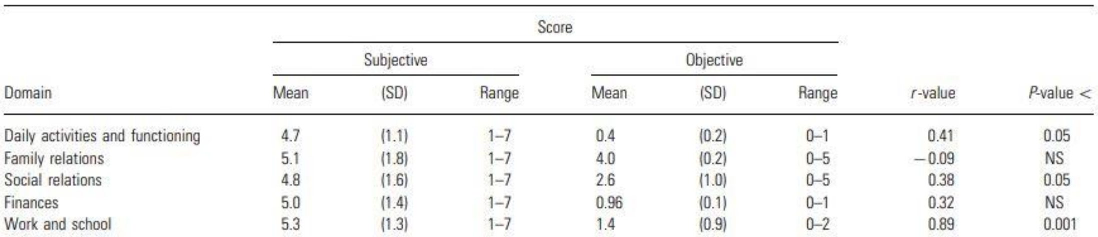
Subjective versus objective QoL

The association between subjective and objective quality of life scores was only moderate (r=0.43), while total quality of life scores associated extremely strongly with both objective and subjective quality of life scores (Table 1). In terms of the various aspects that make up quality of life, there was a generally high level of consensus regarding work and academic pursuits, but this level of consensus was much lower or did not exist for other domains (Table 2).

Patients’ versus relatives’ perspectives

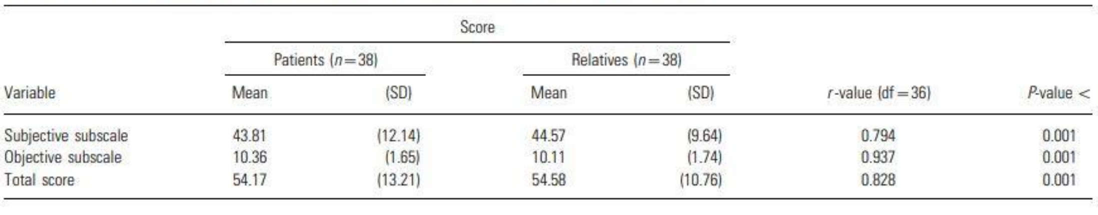
When employing the QoLI, the degree of agreement between the viewpoints of patients and those of their relatives was significantly greater, ranging between 0.8 and 0.94. (Table 3). There was a lower degree of congruence between the scores that patients and their relatives obtained on the WHOQoL, with correlations ranging from 0.2 to 0.5 in table 4.

Table 2. Scores of the objective and subjective domains of QoLI and their correlations



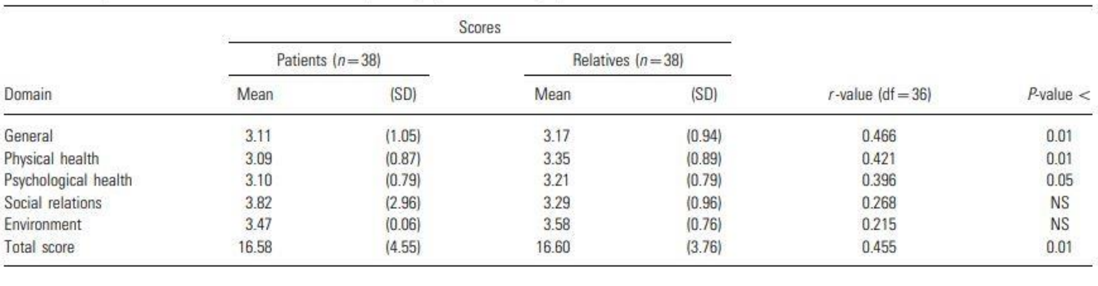
	Score							
	Subjective			Objective				
Domain	Mean	(SD)	Range	Mean	(SD)	Range	*r*-value	*P*-value <
Daily activities and functioning	4.7	(1.1)	1–7	0.4	(0.2)	0–1	0.41	0.05
Family relations	5.1	(1.8)	1–7	4.0	(0.2)	0–5	−0.09	NS
Social relations	4.8	(1.6)	1–7	2.6	(1.0)	0–5	0.38	0.05
Finances	5.0	(1.4)	1–7	0.96	(0.1)	0–1	0.32	NS
Work and school	5.3	(1.3)	1–7	1.4	(0.9)	0–2	0.89	0.001

Table 3. Subscale and total mean scores and their correlations across patient and relative groups using QoLI



	Score					
	Patients (*n*=38)		Relatives (*n*=38)			
Variable	Mean	(SD)	Mean	(SD)	*r*-value (df=36)	*P*-value <
Subjective subscale	43.81	(12.14)	44.57	(9.64)	0.794	0.001
Objective subscale	10.36	(1.65)	10.11	(1.74)	0.937	0.001
Total score	54.17	(13.21)	54.58	(10.76)	0.828	0.001

Table 4. Score profile and correlations on WHO QoL in patient group and relative group



	Scores					
	Patients (*n*=38)		Relatives (*n*=38)			
Domain	Mean	(SD)	Mean	(SD)	*r*-value (df=36)	*P*-value <
General	3.11	(1.05)	3.17	(0.94)	0.466	0.01
Physical health	3.09	(0.87)	3.35	(0.89)	0.421	0.01
Psychological health	3.10	(0.79)	3.21	(0.79)	0.396	0.05
Social relations	3.82	(2.96)	3.29	(0.96)	0.268	NS
Environment	3.47	(0.06)	3.58	(0.76)	0.215	NS
Total score	16.58	(4.55)	16.60	(3.76)	0.455	0.01

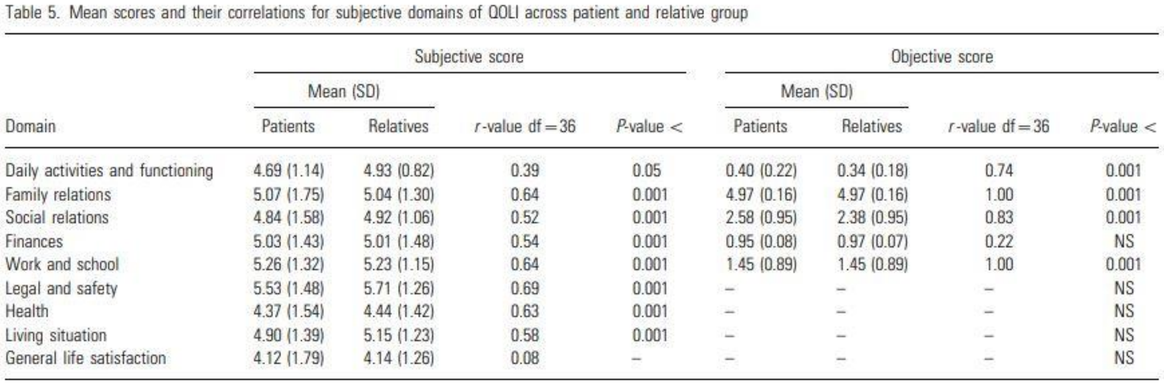


Table 5. Mean scores and their correlations for subjective domains of QOLI across patient and relative group

	Subjective score				Objective score			
	Mean (SD)				Mean (SD)			
Domain	Patients	Relatives	*r*-value df = 36	*P*-value <	Patients	Relatives	*r*-value df = 36	*P*-value <
Daily activities and functioning	4.69 (1.14)	4.93 (0.82)	0.39	0.05	0.40 (0.22)	0.34 (0.18)	0.74	0.001
Family relations	5.07 (1.75)	5.04 (1.30)	0.64	0.001	4.97 (0.16)	4.97 (0.16)	1.00	0.001
Social relations	4.84 (1.58)	4.92 (1.06)	0.52	0.001	2.58 (0.95)	2.38 (0.95)	0.83	0.001
Finances	5.03 (1.43)	5.01 (1.48)	0.54	0.001	0.95 (0.08)	0.97 (0.07)	0.22	NS
Work and school	5.26 (1.32)	5.23 (1.15)	0.64	0.001	1.45 (0.89)	1.45 (0.89)	1.00	0.001
Legal and safety	5.53 (1.48)	5.71 (1.26)	0.69	0.001	–	–	–	NS
Health	4.37 (1.54)	4.44 (1.42)	0.63	0.001	–	–	–	NS
Living situation	4.90 (1.39)	5.15 (1.23)	0.58	0.001	–	–	–	NS
General life satisfaction	4.12 (1.79)	4.14 (1.26)	0.08	–	–	–	–	NS

Discussion

Despite having a very small sample size, the study was successful in demonstrating conclusions that might be of interest to the broader public. Because the findings of previous researchers have been usually inconsistent (8, 10, 19, 34–37), it is difficult for a single study to provide a baseline for comparison. Nevertheless, the fact that SQoL and OQoL were shown to have an association in this particular study lends credence to the idea that, at the very least in a Nepalese context, SQoL and OQoL are interchangeable with one another. However, because there is a lack of consensus about individual categories of activity, the measuring of quality of life in these areas is more difficult. The large disparity in mean scores among subjective and objective assessments for finances, social relations, and daily activities and functioning suggests that both subjective and objective steps cannot be considered as proxy measures for the other in this type of investigation. This is in addition to the relatively poor correlations that were found (with the exception of that of work or school activities).

The findings of the comparisons between the patients and their relatives reveal a great deal more agreement. Having said that, these findings need to be interpreted in light of the way families are structured in Nepalese society. Joint families consisting of unmarried children, married sons/grandsons/great-grandsons, together with their wives and children, and sometimes other members such as widowed daughters and their children are traditional in Nepal. This is in contrast to the norm in the West, which is a two-generation blood-relative based nuclear family. In the West, the nuclear family typically consists of two generations of blood relatives. Despite the fact that the nuclear family has been enjoying a surge in popularity in the west over the past several decades, the traditional joint family is still the prevalent form of family life, particularly in rural regions (38). As a direct result of this, patients receive a significant level of social support from their parents, siblings, and other members of their families, and there is a far deeper understanding of the issues that patients face than in the western society. It has been observed that in Nepalese society, marriage is seen as a holy union; hence, societal standards urge the spouse to assist the ailing partner at the expense of significant or even everlasting personal pain. This is because marriage is regarded as a sacred union in Nepalese culture (39). This might be the reason for the high degree of connection that was found between the overall score on QoLI and the scores for the individual domains of QoL. (Tables 3 and 5).

The associations were weaker when using the WHOQoL measure, but they were still acceptable overall (Table 4). The findings of this study are in contrast to those obtained by Tosic et al., who administered the extended version (100 questions) of the WHOQoL survey to doctors rather than family members and friends. When examining quality of life in severe mental illness, our findings imply that family may be utilized as a sort of proxy rating, and this strategy is better to utilizing the treating physician, at least in Nepal.

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