Comparison of Quality of Life with Standard of Living in Schizophrenic Out-patients

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Standard of living reflects the objective dimension of how well the basic needs of life are met, while quality of life is the patient's own subjective view of well-being and satisfaction with her/his life. Sixty-one schizophrenic out-patients completed self-report inventories and participated in interviews about quality of life and standard of living. When living standards were met by a well functioning social service system, patients' perceptions of their quality of life and the standard of living appeared to be independent. Subsequent analyses revealed that 'inner experiences' was one quality-of-life domain frequently reported as unsatisfactory. Moreover, differences in quality of life were found across patients' age, education, and work status.

Mental health professionals are aware of the impoverished lives of patients with chronic schizophrenia when treated in hospital. Current treatment strategies make it possible to treat most patients with schizophrenia in the community with only occasional admissions. The interaction of antipsychotic drugs, psychiatric rehabilitation, and maintenance treatment has been shown to decrease positive symptoms and to improve patients' repertoires of social and coping skills (Anthony et al., 1978; Goldstein et al., 1978; Dencker, 1980; Leff et al., 1982; Liberman et al., 1986; Hogarty, 1988). Most mental-health rehabilitation programmes seek to increase the standard of living of their patients. However, few studies have attempted to measure whether positive gains translate into patients' perceptions of improved quality of life (Corrigan et al., 1990).

Quality of life is a person's own subjective evaluation of her or his life situation. The Organization for Economic Co-operation and Development (OECD) considered that growth of standard of living should not be an aim in itself, but rather this should be to create conditions for people to attain their own goals concerning their quality of life (Levi & Anderson, 1975). Preferences, aspirations, dreams, hopes, and ambitions differ depending on genetic factors, life experiences, and perceptions of reality (Abbey & Andrews, 1985). Quality of life and well-being is influenced by the dynamic gap between aspirations and perceived reality (Levi & Anderson, 1975; Andrews & Withey, 1976; Campell, 1976; Naess, 1981, 1988; Nuechterlein & Dawson, 1984; United Nations, 1990). This subjective concept of quality of life does not require freedom from illness (Rosenthal, 1970; Zubin & Spring, 1977). When measuring quality of life, patients are asked to report their satisfaction/dissatisfaction with items representing different life domains. In this model, stress, vulnerability, disease and impaired quality of life interact (a cybernetic and ecological process). The model has been used in several epidemiological studies on population, environment and quality of life in general populations (Levi & Anderson, 1975; Campell et al., 1976).

Three recent studies (Malm et al., 1981; Lehman et al., 1982; Heinrichs et al., 1984) have generated a number of domains of quality of life, which can be used to assess needs and quality-of-life goals. The assessments covered basic areas of daily needs (United Nations, 1990): health care, safety and security, food, housing, knowledge/education, fundamental interpersonal relationships, finance, and activities. Quality-of-life evaluations might also include environment, contacts, dependence, mental health, physical health, leisure, work, and religion. Moreover, 'inner experiences' could also be measured – for example self-sufficiency, self-reliance, inner harmony, pleasure, joy, and love.

Whereas quality of life is defined as a subjective index, standard of living can be assessed objectively, as an observer's evaluation of a patient's current life situation (Levi & Anderson, 1975; Campell et al., 1976; Erikson & Åberg, 1984; United Nations, 1990). Standard of living may comprise an objective assessment of the patient's coping skills and dependence on help from others to manage daily life and survive in the community. Satisfaction of these is necessary for most people to report an acceptable quality of life.

The services provided by community support programmes and case management are aimed at meeting the basic general needs of their clientele,
thereby improving patients’ living standards (Intagliata, 1982; Test, 1984). Given the ever-increasing number of patients in the community, investigators have argued that quality of life, including cognitive as well as emotional components, may be relatively unrelated to standard of living (Campell et al., 1976; Lehman, 1983; Avison & Speechley, 1987). Epidemiological studies have suggested that above a certain threshold – the United Nations poverty line – general standard of living loses its significance to quality of life (Levi & Anderson, 1975; United Nations, 1990).

The aim of this study is to test the relationship between standard of living and self-evaluated quality of life. We hypothesise that there is no correlation between the two constructs when severely mentally ill people have reached a minimum standard of living that is adequate for survival (United Nations, 1990).

Method

All 66 out-patients with a DSM-III-R diagnosis of schizophrenia (American Psychiatric Association, 1987), who received maintenance depot neuroleptic medication at the Psychiatric Outpatient Clinic of Lillhagen Hospital, were invited to participate in this study. Diagnoses were obtained by a review of case notes and validated by the director of the programme (UM). All subjects resided in the Central District of Gothenburg, a city of about 500,000 inhabitants on the west coast of Sweden. The participants ranged in age from 21 to 65 years and had no history of drug or alcohol abuse. Of the 66 patients, three declined to participate and two were excluded because of poor reading skills. The remaining 61 subjects completed two instruments: the Standard of Living Questionnaire (SOL–I) and the Quality of Life self-assessment (QLS–100) inventory.

The SOL–I (developed by the authors and available on request) is a structured interview in which, along with basic demographic information, data are collected regarding several subscales that together yield an overall evaluation of standard of living. These subscales measure: standard of housing, number of rooms per occupant, access to and use of community services (transportation, telephone and home-help service), weekly activities, education, current employment, and social network. In addition, the SOL–I provides information about social dependence, that is need to live with others, need of company to travel, and need of help in handling money. Hence the SOL–I can quantify each QLS–100 domain (see below), and other objective measurements may be added.

The QLS–100 (developed by the authors and available on request) is a 100-item inventory organised into 11 domains, and which asks patients to indicate which they consider to be currently unsatisfactory. The domains are: housing (including household and self-care), environment (including community services), knowledge and education, contacts, dependence (including finances), inner experiences, mental health, physical health, leisure, work, and religion. Scores from the domains provide an overall index of quality of life. In a separate study, the QLS–100 was administered twice over 7–10 days to 30 patients at the Psychiatric Outpatient Clinic Centrum, Gothenburg. The test–retest reliability for overall QLS–100 score was 0.88.

Within three days of finishing the QLS–100, the subjects completed a 40–50-minute QLS interview, in which they were questioned about each item scored as being unsatisfactory. The format for completing the instruments and conducting the interviews paralleled suggestions made by Lehman et al. (1983). Specifically, in the interview subjects were asked: (a) to describe what aspects of the item were unsatisfactory, (b) whether they wanted to change these items and in what direction, and (c) whether they believed the unsatisfactory items would eventually improve.

Statistical analysis

Relationships between quality-of-life and standard-of-living variables were determined using Pearson product-moment correlations. Within subject differences across QLS–100 domains were evaluated by a repeated-measures analysis of variance, as were differences in quality of life across demographic variables. These tests were conducted using BMDP (Dixon et al., 1989).

Results

There were 42 men and 19 women. The mean (s.d.) age of the sample was of 35.9 (6.1) years. The patients had had a relatively short mean length of illness – 5.7 (2.3) years since initial referral. No subject had a physical disease or defect that confounded psychiatric symptoms. Fifty-four (89%) had never been married, four (6%) were currently married or cohabiting, and four were divorced or widowed. These data resemble those of other such samples of chronic schizophrenic out-patients (Doane et al., 1985; Mueser et al., 1990).

Standard of living

Information from the SOL–I suggested that the patients had attained a good standard of living (Table 1). The standard of housing is based on presence of eight facilities: a sink with running water, electricity, stove, refrigerator, hot running water, central heating, toilet facilities, and bath/shower. The maximum score was 8.0 and the average score for this sample was 7.7, thereby demonstrating a ceiling effect. Only two patients (3%) lived in temporary housing. Forty-two patients (69%) lived in their own homes and seven (11%) shared homes with others. Ten (16%) lived with their families. The patients’ homes averaged 1.5 rooms per occupant.

The sample was well educated, 56 patients (92%) having had some college education or vocational training. Twelve patients were in open employment. The sample remained relatively active as well. Forty subjects (66%) reported weekly activities. The patients’ support systems
Table 1
Standard of living for 61 schizophrenic out-patients

<table>
<thead>
<tr>
<th></th>
<th>Mean (s.d.) standard of housing</th>
<th>Mean (s.d.) number of rooms per occupant</th>
</tr>
</thead>
<tbody>
<tr>
<td>% (n) with access to:</td>
<td>7.7 (0.83)</td>
<td>1.5 (1.00)</td>
</tr>
<tr>
<td>public transportation</td>
<td>100 (61)</td>
<td></td>
</tr>
<tr>
<td>telephone</td>
<td>100 (61)</td>
<td></td>
</tr>
<tr>
<td>weekly activities</td>
<td>65.5 (40)</td>
<td></td>
</tr>
<tr>
<td>home-help service</td>
<td>22.9 (14)</td>
<td></td>
</tr>
<tr>
<td>% (n) with some college/vocational education</td>
<td>92.0 (56)</td>
<td></td>
</tr>
<tr>
<td>% (n) in open employment</td>
<td>19.7 (12)</td>
<td></td>
</tr>
<tr>
<td>% (n) with social network:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>family</td>
<td>78.7 (48)</td>
<td></td>
</tr>
<tr>
<td>friends</td>
<td>67.2 (41)</td>
<td></td>
</tr>
<tr>
<td>mental health personnel</td>
<td>100 (61)</td>
<td></td>
</tr>
</tbody>
</table>

1. Eight facilities make maximum score of 8.

were fairly intact, with 48 (79%) reporting frequent contacts with family or friends.

Our sample had attained a standard of living similar to that of the general population in Sweden (Erikson & Åberg, 1984). All Swedish citizens have access to a community-based social security that provides financial support when no job is available or for someone unable to work. Moreover, in large cities a variety of community services are available, for example, good public transport, free access to schools, books and papers, cheap home-help services, and inexpensive dental and health care. The educational level in our sample was similar to that of Erikson & Åberg's (1984) sample. However, the general population was more active in outdoor and recreational activities, and more likely to live with another person (83%) than the patients in this sample (41%, 25 patients).

Quality of life

The frequency of items in each QLS–100 domain that were rated unsatisfactory was determined for each subject; the mean and standard deviations of these frequencies are listed in Table 2. A repeated-measures ANOVA across the 11 subscales or domains of the QLS–100 showed that patients had different levels of satisfaction across domains (F(1, 60) = 125.15, P<0.0001). Post-hoc analyses suggested that patients reported greatest dissatisfaction in the domains of mental health, inner experiences, contacts, and work.

To test for relationships between standard of living and quality of life, a total QLS score was determined by summing the number of items rated unsatisfactory across domains. Correlations between each subscale and overall quality of life were high and ranged from 0.48 to 0.87. These findings supported the use of a summary QLS–100 total score to represent overall quality of life.

There was no significant association between patients’ overall perception of their quality of life and their total standard of living (r=0.19, P>0.10) despite the large variance found in the QLS. Moreover, no significant associations were found among the 72 analyses correlating subscales of the SOL and subscales of the QLS–100. The evidence therefore strongly suggests that quality of life and standard of living are independent for schizophrenic patients.

Subsequent analyses showed significant relationships between overall score on the QLS–100 and three demographic variables. Older patients were likely to report lower quality of life (r=0.31, P<0.01). A one-way ANOVA suggested that patients with higher education reported lower quality of life than patients without (F(1, 59) = 3.62, P=0.06). Those employed reported a better quality of life than the unemployed patients (F(1, 59) = 3.84, P<0.05). Differences in quality of life did not differ with sex or marital status.

Discussion

The results confirm that a normal standard of living does not in itself generate high quality of life (Levi & Anderson, 1975; Campell et al, 1976). Furthermore, the correlation between subjective quality of life and objective standard of living was non-significant for this sample of chronic schizophrenic out-patients, who had a standard of living that approximated to that of the general Swedish population. Other studies have indicated that professionals’ measurements of patients’ functioning, well-being and health do not always correlate with patients’ self-assessments (Andrews & Withey, 1976; Campell, 1976; Campell et al, 1976; Thapa & Rowland, 1989).

Our findings suggest that patients’ goals exceed basic general standards. Complaints might arise from patients’ dissatisfaction with their ‘inner experiences’—self-fulfilment, self-reliance, inner harmony, freedom, joy, and love, etc.—which are frequently excluded from psychiatric rehabilitation agendas and outcome measurements (Anthony &
Farkas, 1982; Strachan 1986; Avison & Speechley, 1987; Corrigan et al., 1990; Skantze et al., 1990). Our study further showed that dissatisfaction with the domains of mental health, contacts, and work all contributed to a low quality of life as well.

Three demographic variables seem to affect patients' perceptions of their quality of life. Firstly, employed patients attained a better quality of life. Anecdotally, patients reported that they still had aspirations to live like 'normal people' – having their own family, employment, and friends. That many patients never married and were unemployed may reflect their deficits when interacting and coping with their human, social, and physical environment, and the complexity of modern society (Rosenthal, 1970; Zubin & Spring, 1977; Erikson & Åberg, 1984; Ciompi, 1987). Recent knowledge about patients' pathophysiology and cognitive deficits may lead to revised methods to improve learning of skills and coping (Nuechterlein & Dawson, 1984; Hogarty, 1988; Mueser & Berenbaum, 1990; Mueser & Glynn, 1990). Our results also showed that as patients age, they report greater dissatisfaction with life. Perhaps older patients are less likely to deny the effect of their illness, and hence better perceive the accumulated impact of their defects and dysfunctions upon their lives. Another interesting finding is that better-educated patients reported a lower quality of life. There were anecdotal reports that these subjects were repeatedly offered jobs below their educational and occupational level, or they were not able to manage any job.

Patients' complaints about their mental health, inner experiences, contacts, and work may be partly explained by previous findings that schizophrenic patients suffer from intense emotions in their involvement with others. These intense experiences may create stress, resulting in disturbed information processing, disturbed social perception, and even psychotic episodes, despite maintenance treatment and social adjustment (Goldstein et al., 1978; Leff et al., 1982; Nuechterlein & Dawson, 1984; Fallon & Pederson, 1985; Strachan, 1986; Liberman et al., 1988; Vaughn, 1989). Patients' perception of lack of initiative and drive, affecting several QLS domains, may be an effect of persisting negative symptoms and the side-effects of antipsychotic medication, or even of the anticholinergic effects of anti-Parkinsonian drugs (Hogarty, 1988).

One aspect of this study likely to cause frustration and concern among everyone involved with clinical rehabilitation of patients with chronic schizophrenia is the implication that even the most dedicated and strenuous efforts to provide standards of living comparable to those in the general population may fail to improve the patients' quality of life. The patients' subjective impressions of their lives may thus be more dependent upon the dynamics of their 'inner world' than on possession of various attributes and acquisitions in the 'outer world'. In the final analysis, we may have to accept that the burden of insight into chronic psychopathology, and painful awareness of emotional and social handicaps, influence the quality of life to a greater extent than any other factor. Thus, clinicians and politicians are faced with the further challenge of structuring treatment and social-service strategies to meet the needs of enhanced 'inner experiences' and quality of life as well as standard of living.

Acknowledgements
The authors wish to thank Michael Goldstein, Charles Wallace, and Robert Liberman for their insightful comments on this manuscript.

References