RESEARCH PAPERS

Psychopathology and Quality of Life in Schizophrenia

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This study was conducted to evaluate the relationship between psychopathology and quality of life in individuals with schizophrenia. The findings indicate that psychopathology, as determined by total Brief Psychiatric Rating Scale (BPRS) score, correlates negatively with global life satisfaction and subjective quality of life subscales, but not with objective ones. When positive and negative symptom clusters were examined, negative symptoms appeared to have a greater impact on subjective measures of quality of life.

Key Words: psychopathology, quality of life, schizophrenia

INTRODUCTION

An important goal in the treatment of schizophrenia is to improve quality of life. Symptom reduction has been assumed to play a role in improving quality of life, but the nature of this role is unknown. There has been little research on this relationship, although understanding it has become more important with the development of new treatments.

Measuring quality of life usually consists of an examination of objective and subjective ratings of various life domains, such as living situation, finances, work and school, daily activities and functioning, family and social relations, legal issues, and services and continuity of care (Lehman 1988). Schizophrenic symptoms instrumentally affect these life domains, but it is not so clear if an individual's subjective feelings of satisfaction are similarly affected (Diener 1984).

Another way to examine quality of life is to equate it with well-being and to ask individuals how they feel about their lives in general (Lehman 1988). A global quality of life indicator such as this may measure mental health, that is, symptoms and medication side effects, while the examination of individual life domains may provide more discrete measures of well-being resulting from specific life conditions (Diener 1984).

Also of importance is the effect of the individual's values, beliefs, and judgements, through which symptoms are filtered, on various life domains (Spilker 1990). For example,

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Table 1

Comparisons of BPRS scores and quality of life scales

Quality of life subscale	BPRS scores		
	BPRS total	Negative symptom cluster	Positive symptom cluster
Global life satisfaction	$r = -0.63$ $P = 0.0001$	$r = -0.52$ $P = 0.0005$	$r = -0.44$ $P = 0.004$
Sum of subjective measures	$r = -0.39$ $P = 0.01$	$r = -0.37$ $P = 0.02$	$r = -0.25$ $P = 0.1$
Sum of objective measures	$r = -0.16$ $P = 0.31$	$r = -0.27$ $P = 0.09$	$r = -0.11$ $P = 0.5$

an understanding that psychotic symptoms derive from an *illness* affects one's sense of well-being differently than if one experiences the same symptoms as an indication of being inhabited by demons, as may occur within some cultural milieus. This example also illustrates how a person's well-being may be affected by others, since their shared beliefs will influence their behavior toward the ill individual.

Psychopathology and quality of life in individuals with schizophrenia has not been a focus for study, although it has been discussed in the context of other research (Lehman 1983; Levitt and others 1990; Sullivan and others 1992; Holcomb and others 1993). Subjects in these studies were described as "chronic" or "severe and persistently mentally ill," without specified diagnoses, and psychopathology was narrowly measured as "anxiety" or "depression" that would be expected to influence quality of life.

As part of a feasibility study aimed at making comparisons among 3 different rehabilitation models and a standard medical model, we undertook to examine the relationship between psychopathology and quality of life in individuals with schizophrenia.

METHODS

Ten subjects were recruited from each of 4 programs: 3 community-based rehabilitation programs and a hospital clinic giving standard treatment of medication and counseling. The patients attending the hospital clinic were not involved in work, school, or rehabilitation. The community-based programs were chosen to represent a variety of settings, including a traditional workshop, a clubhouse program, and an educational program. All subjects were stable and living in the community.

Individuals were interviewed if they had a referral diagnosis of schizophrenia, were between ages 18 and 40, and did not have an organic cerebral illness, severe mental retardation, chronic physical disorder, or other primary psychiatric diagnosis (for example, alcohol or substance abuse). Subjects were administered the Structured Clinical Interview for DSM-III-R (SCID-P) (Spitzer and others 1987) by a psychiatrist (SP), who also rated the individuals who met criteria for a diagnosis of schizophrenia on the BPRS (Overall and Gorham 1962). The Quality of Life Scales (Lehman 1988) consist of subjective and objective measures of quality of life in various life domains as well as a global rating of life satisfaction. These scales were administered by a research associate (SC).

Pearson correlation coefficients were used as a measure of linear association between each of 1) the global life satisfaction score, 2) the sum of subjective quality of life measures, and 3) the sum of objective quality of life measures and each of 1) the total BPRS score, 2) the sum of BPRS scores on negative symptoms, and 3) the sum of BPRS scores on positive symptoms. Similarly, possible correlations were explored between the individual subscales of the Quality of Life Scales and 1) BPRS questions examining depression and anxiety and 2) total BPRS scores.

RESULTS

The mean age of the study population was 30.3 y (SD = 4.88 y). Sixty percent were males and 40% were females. Most (80%) were single. Their mean level of education was 11.93 y (SD = 2.37 y). Seventy-three percent lived in a private house or apartment, while the remainder lived in a group home, boarding home, or halfway house. None of age, gender, marital status, level of education, or living situation correlated with global life satisfaction. Those individuals hospitalized in the past year (n = 8), however, described a diminished sense of global life satisfaction ($t = 2.19$, df 38, $P = 0.035$) and were more symptomatic as measured by the BPRS ($t = 2.41$, df 38, $P = 0.02$). Individuals who were attending different rehabilitation programs did not differ from one another or from those attending regular clinic follow-up on any of the demographic measures outlined previously.

Both of the subjective ratings of quality of life, that is, the global life satisfaction score and the sum of the subjective measures, were negatively correlated with the total BPRS score (r = –0.63, P = 0.0001 and r = –0.39, P = 0.01, respectively) (Table 1). Objective ratings of quality of life did not correlate with total BPRS score (r = –0.16, P = 0.31).

Positive and negative symptom clusters taken from the BPRS were also compared with quality of life ratings. Negative symptoms were negatively correlated with both global life satisfaction (r = –0.52, P = 0.0005) and subjective quality of life (r = –0.37, P = 0.02), but not with objective quality of life ratings (r = –0.27, P = 0.09). Positive symptoms were negatively correlated with global life satisfaction (r = –0.44, P = 0.004), but not with ratings of subjective or objective quality of life (r = –0.25, P = 0.1 and r = –0.11, P = 0.5, respectively).

When psychopathology (measured by total BPRS scores) was compared with the Quality of Life Scales, significant negative correlations were found for the following subscales: global life satisfaction (r = –0.61, P < 0.0001); leisure activities (r = –0.41, P = 0.008); social relations (r = –0.49, P = 0.001); health care utilization and requirements (r = –0.61, P < 0.0001); and personal safety (r = –0.43, P = 0.005). No correlation was found between psychopathology and finances, family relations, and work or school.

Depressive mood, as measured by BPRS, and global life satisfaction were also negatively correlated (r = –0.42, P = 0.007), as were depressive mood and the personal safety subscale (r = –0.32, P = 0.04). Anxiety was negatively correlated with the health care utilization and requirements subscale (r = –0.49, P = 0.001).

DISCUSSION

In this study, individuals with schizophrenia who were stable enough to function within the community suffered from a diminished sense of life satisfaction as they became more symptomatic. The sample size was relatively small, however, and information regarding the subjects' medication histories was not gathered. Those who were symptomatic may have received larger dosages of medication than those who had few or no symptoms, causing dysphoria and interfering with their subjective quality of life (Weiden and others 1989; Awad 1992). In contrast, 75% of subjects were well enough to attend a community rehabilitation program, and there were no symptomatic differences found between this group and those receiving only regular outpatient treatment.

In this study, degree of psychopathology as measured by the total BPRS scores did not correlate with objective measures of quality of life within a schizophrenic population receiving treatment. This might not have been the case in a community sample, which would include untreated individuals, who might indeed have objectively shown diminished quality of life.

Subjective measures were influenced by psychopathology, however, and negative symptoms, in particular, influenced a wide range of quality of life measures. It is these symptoms that are less responsive to current treatments and provide the greatest challenge for future treatments. Psychopathology also had a dramatic negative effect on global life satisfaction. In addition, depression and anxiety need to be addressed in this population, because they affect the individual's sense of well-being and, in turn, his or her requirements for and use of the health system.

The development of more effective symptom-reducing medications may cause difficulties by increasing the expectations of ill individuals, caregivers, and families. If these expectations are not met, subjective quality of life may suffer (Calman 1984). Rehabilitation and psychoeducation thus become important for facilitating a healthier adaptation. These approaches must be included in treatment plans for other reasons. Improved housing and other instrumental interventions, for example, while they objectively enhance quality of life, may also positively influence the individual's sense of satisfaction and well-being. Family psychoeducational approaches may help to enrich the patient's relationships, while supportive psychotherapy may enhance self-esteem. Interventions of this sort may indirectly modify symptoms by decreasing stress, further improving quality of life. Symptoms may recur or become exacerbated, however, even under the most supportive and positive circumstances.

Compared with our medical colleagues, psychiatrists have come late to examining quality of life as a determinant of treatment outcome. Symptom relief is not the only measure of therapeutic success, and it may be no measure of success at all if it comes at too great a cost, as with the dysphoria often experienced with neuroleptic treatment.

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