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Quality of life of male outpatients with personality disorders or psychotic disorders: a comparison

YVONNE HA BOUMAN[1], CHIJS VAN NIEUWENHUIZEN[2,3], AART H SCHENE[4], CORINE DE RUITER[5,6], [1]Pompestichting, Department of Research, Nijmegen, The Netherlands; [2]TRANZO, Tilburg University, The Netherlands; [3]Youth Forensic Psychiatric Hospital 'De Catamaran', Eindhoven, The Netherlands; [4]Department of Psychiatry, Academic Medical Center, University of Amsterdam, The Netherlands; [5]Department of Psychology, Maastricht University, The Netherlands; [6]Trimbos-instituut, Netherlands Institute of Mental Health and Addiction, Utrecht, The Netherlands

ABSTRACT

Background *Quality of life (QoL) has become increasingly important as an outcome measure in community-based psychiatry. QoL refers to an individual's sense of well-being and satisfaction with his current life conditions. It is measured both through objective social indicators and life domain-specific subjective indicators. People with a personality disorder (PD) or a major mental disorder (MMD) tend to show poor social adjustment, but their relative subjective QoL is not known.*

Aim *To compare the QoL of male outpatients in treatment for PD or MMD overall and by means of specific social and subjective indicators.*

Methods *A sample of 135 men under treatment for PD in Dutch forensic outpatient facilities were compared with 79 men with MMD using the extended Dutch version of the Lancashire Quality of Life Profile (LQoLP).*

Results *Almost all of the objective indicators of QoL were significantly poorer among men with MMD than those with PD, but the groups did not differ on domain-specific subjective ratings of QoL. Indeed, global subjective QoL was lower in the PD than in the MMD patient group. PD outpatients seemed to have a more complex concept of QoL than the MMD outpatients for whom almost half of the variance in subjective QoL rating was related to their everyday activities and their objective sense of safety.*

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Conclusions and implications for practice *Further study of QoL among PD patients would be warranted to test the extent to which subjective dissatisfaction is intrinsic to PD and to explore the possibility of improving it with targeted treatments.*
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Introduction

Since the mid-nineteenth century, psychiatric services have had a responsibility to help patients with severe mental illnesses who show problem behaviour in the community (Link et al., 1999; Oosterhuis, 2004). Two main groups of people use these services: those suffering from chronic and severe mental illnesses, mostly psychotic disorder, and those with personality disorders (PDs). In the last decade, it has become important to consider not only symptomatic aspects of these disorders, but also the general adaptive functioning and quality of life (QoL) of these patients (Coid, 1993; Wilson et al., 1995; Mason, 1999; Van Nieuwenhuizen et al., 2002). The focus of our paper is on the latter.

Personality and psychotic disorders are both characterized by a chronic course and thus may be expected to have an impact on patients' QoL. Chronic psychotic disorder is often characterized by negative symptoms affecting both personal functioning and social integration. Patients with PDs may also be characterized by failures of social integration as a result of an inability to maintain social relationships. Hence, at first sight, the disabling effect of psychotic and PDs on objective and subjective life circumstances might be similar.

QoL refers to a sense of well-being and satisfaction experienced by people under their current life conditions (Lehman, 1983). The division of QoL into three categories of indicators – economic, social and subjective – is generally accepted (McCall, 1975; Glatzer and Mohr, 1987; Goodinson and Singleton, 1989; Farquhar, 1995). Recently, economic indicators were incorporated into the social indicators, leaving two main categories. Diener and Suh (1997) stated that QoL is best approached using the strengths of both perspectives, because 'neither set of indicators is exhaustive, and the fact that each captures a different aspect of societal well-being' (207–208). Subjective well-being refers to the individual's cognitive and affective reaction to his or her whole life, as well as to specific life domains. Social indicators are measures that reflect people's objective circumstances in a given cultural or geographic unit (Diener and Suh, 1997). In studies on QoL in (general) psychiatry, most authors agree on the fact that a broad set of life domains should be used when studying QoL (e.g. housing, finances, work and family; Lehman, 1983; Oliver et al., 1996; WHOQOL group, 1998).

The study of the QoL of major mental disorder (MMD) patients has increased over the past decade, but there are few studies on QoL of PD patients. Co-morbidity of an Axis I disorder in PD patients has been found to be related to a lower QoL in outpatients (Draine and Solomon, 2000; Masthoff et al., 2006),

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whereas patients with PD alone did not differ from patients with an Axis I disorder on global QoL (Trompenaars et al., 2006). The same PD patients were, however, less satisfied with their environment, which includes, among other things, financial situation, leisure activities and home environment (Masthoff et al., 2006). Narud et al. (2005) found that, compared with adults in the general population, PD outpatients gained lower scores on all dimensions of the Short Form-36 (Ware and Sherbourne, 1992) a generic QoL questionnaire. In two studies with inpatients, PD patients displayed a lower subjective QoL than MMD patients, both in general and on several of the domains (Lehman, 1999; Swinton et al. 1999). In all these studies, except for Swinton et al. (1999), over half of the samples consisted of women, which might have skewed the results since men have been found to report a higher QoL than women (Slade et al., 2004; Van Nieuwenhuizen, 1998). Patients in the studies just described were most likely to be suffering from cluster A (odd or eccentric) or cluster C (anxious or fearful) PD, although cluster B PDs were sometimes represented with borderline PD. None of the patients had antisocial PD.

Research aims

Our aim was to compare male outpatients with PD with male outpatients suffering from schizophrenia or other psychotic disorder, on social indicators of QoL and on domain-specific and global subjective indicators of QoL. We also tested which indicators associated with global subjective QoL in these groups.

Method

Participants

Patients under treatment for PD were randomly selected from four forensic outpatient facilities in the Netherlands. The inclusion criteria were: male gender; 18 years or older; intelligence quotient higher than 70; and a primary diagnosis of PD or markedly abnormal PD traits (*Diagnostic and Statistical Manual of Mental Disorders*, 4th edition, text revision, DSM-IV-TR; APA, 2000). Exclusion criteria were having a co-morbid Axis I disorder of mood, anxiety or psychosis. The patients had to have been in contact with the forensic treatment centre at least once a month.

A total of 214 patients were contacted by their therapist or the first author and were handed a leaflet containing basic information about the study; 79 of them did not want to participate (36.9%) and 135 agreed to participate. If a patient agreed to participate, an appointment was made for a first interview, when written informed consent was taken. Patients who did not participate did not differ from patients who consented with regard to age, substance abuse or paraphilic disorders (DSM-IV-TR diagnoses), or on most criminal history variables

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(ever convicted, ever incarcerated, violent or sexual offence). Patients who did not participate were more likely to have had a co-morbid Axis I disorder (41.6% vs 21.5%; χ^2 (1) = 9.64; p = 0.002), and were less likely to have been arrested before age 16 (6.9% vs 28.5%; χ^2 (1) = 13.03; $p < 0.001$) than patients who participated.

Thirty percent of the patients in treatment for PD did not meet the DSM-IV criteria for PD, but had one or more abnormal PD traits, mainly from cluster B (61%). Of the patients with PD, the largest group was classified as 'PD not otherwise specified' (37.8%). Cluster B disorders (antisocial, borderline and narcissistic PD) were present in 23% of the patients. Most PD patients (83%) had one or more co-morbid Axis I disorders, which were substance-use disorders, sexual disorders or impulse control disorders.

Patients were selected for the comparison group from a large database used to develop the Dutch version of the Lancashire Quality of Life Profile (LQoLP) (Van Nieuwenhuizen, 1998; see also Van Nieuwenhuizen et al., 2001). Inclusion criteria for this group were one or more years of contact with psychiatric services and a diagnosis of a severe and persistent mental illness. Exclusion criteria were: florid psychotic symptoms or evidence of organic brain dysfunction (Van Nieuwenhuizen, 1998:75). Patients, who were selected for this study, were adult men suffering from schizophrenia or another psychotic disorder without a co-morbid PD (referred to in our paper as MMD patients). These outpatients were treated at several community psychiatric services throughout the Netherlands, most participating treatment programmes for psychosis. In summary, 79 male outpatients with psychotic disorders were compared with 135 outpatients with PD or abnormal personality traits.

Instruments

QoL

The Dutch version of the LQoLP (Van Nieuwenhuizen, 1998; Van Nieuwenhuizen et al., 1998b) was used to measure objective and subjective QoL in both samples. This structured interview assesses QoL across seven domains: leisure and social participation (15 objective and 7 subjective items), religion (two objective items), finances (eight objective and two subjective items), living arrangements (four subjective and four objective items), legal status and safety (six objective and two subjective items), family relations (five objective and three subjective items), and health (nine objective and seven subjective items) (see also Van Nieuwenhuizen et al., 2001). No data on satisfaction with religion were used in this study because of the great number of missing values for most people in the MMD sample. The internal consistency of the Dutch version of the LQoLP was adequate to good (Cronbach's alpha range = 0.62–0.84). The two-week test–retest reliability was 0.67–0.90 (Van Nieuwenhuizen, 1998, Van Nieuwenhuizen et al., 1998a).

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At the end of the interview, the patient is asked to rate his overall life quality at that time, by indicating on a 100 mm ladder how he perceives his life on a continuum ranging from 'life at its worst' to 'life at its best'. This is called Cantril's ladder (Cantril, 1965, discussed in Van Nieuwenhuizen et al., 1998a). The Life Satisfaction Scale (LSS) is used throughout the interview for rating satisfaction on the 25 subjective items of the six domains, ranging from one (cannot be worse) to seven (cannot be better). For each domain, a mean domain score was calculated by adding the scores of domain-specific subjective indicators and dividing the total by the number of items used.

Demographic background

Demographic variables are incorporated in the LQoLP. Additional information on the forensic outpatients with regard to psychiatric diagnosis and background was taken from patient files or gathered during an interview used to score the Level of Service Inventory revised (Andrews and Bonta, 1995), which is not part of the current study. Axes I and II diagnoses were determined by clinicians trained in DSM-IV assessment.

Statistical analyses

Independent sample *t*-tests were used to examine differences between MMD and PD outpatients on ordinal or interval variables. Chi-square tests were used to study group-differences on nominal variables. Significance levels were set at $\alpha \leq 0.05$. A Bonferroni correction was employed in the comparison of the PD outpatients with the MMD outpatients. For each category of variables, the significance of a result was assessed by dividing $\alpha = 0.05$ by the number of items analysed, which were eight general characteristics ($\alpha \leq 0.006$); 11 objective social indicators ($\alpha \leq 0.005$); and six subjective indicators ($\alpha \leq 0.008$). A forward multiple linear regression was performed for PD and MMD patients, separately, to explore determinants of global QoL entering the 11 objective (see Tables 1 and 2) and six subjective domain-specific indicators of QoL and Cantril's ladder as dependent variable. One social (objective) indicator was chosen for analysis from each of the domains of the original LQoLP (see Oliver et al., 1996; Van Nieuwenhuizen et al., 1998a; Ruggeri et al., 2001; Ruggeri et al., 2005): having work; number of leisure activities; having a helping friend; being religious; living alone; having debts; frequency of family contact; psychiatric hospitalization in the previous year; and having been a victim of violence. The indicator 'having an intimate relationship' was added because of correlations found previously with subjective QoL (see Ruggeri et al., 2001; Ruggeri et al., 2005). We also added whether or not the patient had children. For PD patients, the number of Axis I disorders was added in a second analysis (see Trompenaars et al., 2006).

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Table 1: Demographic characteristics and indicators of QoL of personality disordered and psychotic outpatients

	Personality disordered outpatients (N = 135)		Psychotic outpatients (N = 79)	
	Mean	(SD)	Mean	(SD)
General characteristics				
Average age	37.5	(10.4)	40.2	(9.9)
Average age formal education	17.5	(2.8)	19.5***	(5.1)
Frequency of psychiatric hospital admissions	1.5[b]	(0.8)	2.8[c]***	(1.1)
Average age at first admission	27.5[b]	(11.4)	25.7[d]	(8.3)
Subjective indicators				
Living circumstances LSS[a]	5.0	(1.18)	5.0	(1.14)
Social participation and leisure LSS[a]	4.8	(0.87)	4.7	(0.89)
Health LSS[a]	4.5	(0.98)	4.5	(0.92)
Finances LSS[a]	3.8	(1.40)	4.0	(1.31)
Family relationships LSS[a]	4.5	(1.38)	4.9	(1.40)
Safety LSS[a]	5.2	(1.10)	5.1	(1.03)
Cantril's ladder	47.6	(22.8)	59.9[e]***	(23.3)

Note: LSS = life satisfaction scale, range one (life at its worst) – seven (life at its best).
[a]Variables used in linear regression.
[b]n = 33.
[c]n = 72.
[d]n = 71.
[e]n = 78.
***$p \leq 0.001$.
QoL, quality of life.

Results

General characteristics

The groups did not differ on average age (Table 1). About one-third of both groups finished primary school, which starts at the age of six, but MMD patients spent an average of two more years in formal education than PD patients.

Psychiatric background

The age at first admission to a psychiatric hospital did not differ between the groups. Most PD patients (65.8%) had been treated in a psychiatric facility before the current episode, mainly as outpatients (44.4%). MMD patients had a more extensive psychiatric history than PD patients. More MMD than PD patients had previously been hospitalized at all, and more frequently; 30% of the MMD

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Table 2: Personality disordered and psychotic outpatients: general characteristics and social indicators of QoL

	Personality disordered outpatients (N = 135)		Psychotic outpatients (N = 79)	
	P	(*n*)	*P*	(*n*)
General characteristics				
Education: none or primary school	35.6	(48)	27.8	(22)
Been accused of crime in previous year	37.3[b]	(50)	12.7***	(10)
Visited a doctor for physical problems	74.1	(100)	54.4**	(43)
Uses medication for mental problems	46.7	(63)	91.1***	(72)
Social indicators				
Work: yes[a]	34.1	(46)	6.3***	(5)
Daily or weekly family contact[a]	80.0	(108)	65.8	(52)
Relationship: yes[a]	48.9	(66)	11.4***	(9)
Has a friend who will help when needed[a]	73.3	(99)	51.9***	(41)
Living situation: alone[a]	34.8	(47)	62.0***	(49)
Children: yes[a]	49.6	(67)	16.5***	(13)
Debts: yes[a]	58.5	(79)	37.2[c]**	(29)
Been victim of violence in previous year[a]	26.7	(36)	20.3	(16)
Religious: yes[a]	52.6	(71)	59.5	(47)
Has been hospitalized in psychiatric hospital the previous year[a]	5.9	(8)	30.4***	(24)

Note: Cells represent proportions of the samples with the characteristic.
[a]Variables used in regression analyses.
[b]$n = 134$.
[c]$n = 78$.
**$p \leq 0.01$; ***$p \leq 0.001$.
QoL, quality of life.

group had been inpatients the year before the interview. Most of the MMD patients used medication (Tables 1 and 2).

Social and subjective QoL

Objective social indicators of QoL are shown in Table 2; subjective indicators are presented in Table 1.

Social indicators of QoL

Several differences between PD and MMD outpatients were found in terms of objective social indicators of QoL (Table 2). More PD patients had an intimate relationship and/or had children. MMD patients were more likely to be living alone (62% vs 35%) and they rarely had a job (6% vs 34%). With regard to general

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social contacts, MMD patients assessed their contacts with friends as less helpful than PD patients did (52% vs 73%). Almost a quarter of the patients in both samples had been a victim of some form of aggression in the previous year. PD and MMD patients were similar in reports of having a religious belief (53–60%). MDD patients engaged in fewer leisure activities than PD patients [PD mean (M_{PD}) = 3.1, standard deviation (SD) = 0.8; MMD mean (M_{MMD}) = 2.7, SD = 0.8; $p < 0.001$).

Domain-specific subjective indicators of QoL

PD and MMD outpatients did not differ on domain-specific subjective indicators of QoL (Table 1). On average, PD and MMD patients were satisfied with their leisure and social participation; with their family; with their living circumstances; with regard to safety and legal matters; and with their health in general. In contrast, the PD and MMD patients were, on average, neither satisfied nor dissatisfied with their financial situation.

Global QoL

MMD outpatients were more satisfied with their current life than PD patients as measured with Cantril's ladder (Table 1).

Multivariate analyses

Performing forward multiple regression analyses, we found a different equation for MMD patients compared with PD patients (Table 3). For MMD patients, satisfaction with leisure and social participation and having been a victim of crime significantly predicted global subjective QoL; the amount of variance explained was 41%. For PD patients, however, satisfaction with health, leisure and social participation, with finances and whether or not a patient considered himself religious explained 36% of the variance in Cantril's ladder.

The presence of an Axis I disorder was then added to the analysis for PD patients. This resulted in a non-significant increase of the explained variance (0.9%).

Discussion

In this study with male outpatients in treatment for PD or with schizophrenia (or other psychotic disorder) (MMD), we found that the groups differed on most social indicators of QoL; overall MMD patients displayed a lower objective QoL than PD patients, but the PD patients gave a lower subjective global QoL rating. The groups, however, did not differ with regard to domain-specific subjective

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Table 3: Prediction of global QoL by social and subjective indicators for personality disordered outpatients and psychotic outpatients

	Personality disordered outpatients (*N* = 135)			Psychotic outpatients (*N* = 78)		
	B	SE B	β	B	SE B	β
Predictor						
Victim of violence				−11.6	5.05	−0.20*
Religiosity	−10.3	3.18	−0.23***			
Social participation and leisure LSS	6.6	2.10	0.25**	16.2	2.32	0.61***
Health LSS	5.8	1.91	0.25**			
Finances LSS	3.2	1.21	0.20**			

Notes: Only indicators emerging in the models are presented. See Tables 1 and 2 for entered indicators; 'number of leisure activities' was also entered. LSS = life satisfaction scale. Model forensic psychiatric outpatients: $R = 0.62$; $R^2 = 0.38$; Adj. $R^2 = 0.36$; $F(4,128) = 19.9$; $p = 0.000$. Model general psychiatric outpatients: $R = 0.65$; $R^2 = 0.43$; Adj. $R^2 = 0.41$; $F(2,74) = 27.7$; $p = 0.000$. B = regression coefficient. SE B = standard error of B. β = standardized regression coefficient.
$^*p \leq 0.05$; $^{**}p \leq 0.01$; $^{***}p \leq 0.001$.
QoL, quality of life.

QoL. Satisfaction with leisure and social participation predicted subjective global QoL for both groups, but otherwise qualities accounting for their subjective states differed.

Our findings differed from those of Swinton et al. (1999), who found no differences between forensic PD and forensic MMD patients except for having a job (within the hospital) (PD > MMD) and social benefit refusal (MMD > PD), but, they were comparing inpatients, albeit, like us, all men. The difference in settings may have determined the level of freedom patients had to shape their lives, and might therefore explain the differences in outcomes between the two studies. High-security hospital inpatients live in a very structured environment with limited choices with regard to how and with whom they spend their time, whereas outpatients have more choices and are responsible for their course of action.

For PD patients, satisfaction with their health and with their leisure and social participation contributed the most to their general level of subjective QoL. For MMD patients, satisfaction with leisure and social participation was most important. Global QoL seems to reflect mainly subjective experience for PD patients whereas for MMD patients, global subjective QoL was related to one social and one subjective indicator. The relationship between victimization and QoL, which surfaced for MMD patients, has previously been demonstrated by Lehman (1983) and Holloway (1995). The negative relationship between adhering to a religion and global subjective QoL for PD patients is counterintuitive. It might be that

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belonging to a religion, with its strong set of values, makes PD patients, specifically, more aware of the harm they cause other people, and might therefore negatively influence their subjective well-being.

A possible explanation for the discrepancy between objective and subjective ratings of QoL among MMD patients may be that they may have adapted to their situation better than PD patients. Blenkiron and Hammill (2003), for example, reported that the duration of a disorder positively correlates with life satisfaction. Besides a lower QoL as measured by social indicators, MMD patients had a more extensive psychiatric history than PD patients. The objective life circumstances of MMD patients may have reflected adjustment to this long and severe period of disabling illness. People tend to adapt their expectations to new, less favourable circumstances and shift their life goals to more attainable ones (see, e.g. Goodinson and Singleton, 1989). This shift may contribute to higher levels of life satisfaction despite lower levels of objective QoL. Inability to make such adjustments may be a fundamental component of men with PD; they are often regarded as finding it difficult to learn from experience. By definition, the men with PD would have been struggling with the disorder for longer than those with psychosis, even if their use of services was less.

In a more general theory of response shift (see Schwartz and Sprangers, 2000), three explanations for this shift are offered: reconceptualization, reprioritization and recalibration. The first explanation refers to a change in the concept of QoL over time. The second, reprioritization, explains the shift from a rebalance in the concept, by which the same predictors are used but with different values. According to the third explanation, patients can also change their point of reference and adopt a different benchmark. The difference between PD and MMD patients could not be explored by using response shift theory, because the present research design was not longitudinal.

This study has several limitations, which should be considered when interpreting the results. First, the patients participating in this research were adult male outpatients who were either suffering from a PD or MMD. No distinction was made between different PDs, although previous research has indicated that studying the QoL of subgroups of PDs seems useful (Sareen et al., 2004; Chen et al., 2006). Subcategories were not employed because the level of apparent co-morbidity between PDs or traits from multiple categories of PD was high. This made clear distinction between subgroups impossible. Second, non-response could confound the results by selection bias. Non-responders differed on 2 of the 11 characteristics on which they were compared: they were more likely to have had a co-morbid Axis I disorder and fewer had been arrested before age 16.

The two main goals of psychiatric treatment are reduction in the primary effect of mental disorder and of harm to self and/or others. The correlation between objective life circumstances, defined as social indicators of QoL, and recidivism or criminal behaviour has been established in several studies (e.g. Goggin et al., 1998; Gendreau et al., 2000; Odonne-Paolucci et al., 2000; Monahan

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et al., 2001). We could find no studies exploring the relationship between subjective indicators of QoL and recidivism or criminal behaviour except for one using return to jail as an outcome measure (Draine and Solomon, 1994). So far, the influence of subjective well-being on crime desistance has not been established empirically, although one might expect a protective role of subjective QoL against criminal recidivism. The effects of treatment on subjective QoL and, in turn, on criminal recidivism await empirical evaluation.

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Address correspondence to: Yvonne HA Bouman, Pompestichting, Department of Research, PO Box 31435, 6503 CK Nijmegen, The Netherlands. Email: y.bouman@pompestichting.nl

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