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Drug and Alcohol Dependence 66 (2002) 71–76

DRUG and ALCOHOL DEPENDENCE

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# Subjective quality of life and depressive symptoms in women with alcoholism during detoxification treatment

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Received 28 November 2000; accepted 20 July 2001

**Abstract**

The study investigated whether subjective quality of life (SQOL) differs in alcoholic women with and without depressive symptoms being in detoxification treatment. Moreover, we tested whether depressive symptoms were correlated with other subjective evaluation criteria. SQOL and psychopathology were obtained in 70 alcoholic women during treatment. Alcoholic women with depressive symptoms showed a lower SQOL regarding several life domains, in particular their family situation, and life as a whole. Additionally, they reported more needs for support and more negative consequences of alcoholism. The findings underline the relevance of quality of life ratings in detoxification treatment and their association with depressive symptoms.


*Keywords:* Subjective quality of life; Alcoholism; Depression; Subjective evaluation criteria

## 1. Introduction

Alcoholism often occurs alongside other mental diseases, e.g. anxiety disorder, depression or personality disorder (see review in Wetterling (1999)). Especially in women, alcohol dependency is frequently associated with depression. Both forms, alcohol use as a consequence of a depressive disorder (primary depression) and depression occurring with pre-existing alcoholism (secondary depression) have been found in several studies (Haver and Dahlgren, 1995). Depressive comorbidity in alcoholic women has been reported to range from 25 to 66% (Schuckit, 1986). The figures vary depending on how depressive symptoms have been assessed, e.g. whether rating scales or diagnostic classification systems have been used. Depression appears to be particularly common during and following detoxification (Beck et al., 1993; Behar et al., 1984; Turnbull and Gomberg, 1988).

Various studies investigated the prognostic significance of depression in alcoholism with inconclusive findings. Some studies reported lower relapse rates and a more favourable outcome for depressive female alcoholics (Kranzler et al., 1996; Rounsaville et al., 1987) and especially for women with a primary depressive disorder (Schuckit and Winokur, 1972). Yet, in other studies a depression disorder in alcoholism was correlated with a higher propensity to return to drinking (Greenfield et al., 1998; Miller et al., 1996). Moreover, relapses often appear characterised by a negative mood and an occurrence of depressive symptoms (Connors et al., 1998).

There is a growing interest in investigating alcoholic patients' views and subjective criteria both as moderating variables for outcome and as an outcome criterion in their own right (Beattie et al., 1993; Longabaugh et al., 1994). Subjective evaluation criteria directly mirror statements by patients and can be used for evaluating care (Priebe et al., 1995, 1998). Their increasing importance reflects widespread calls for user involvement and a partnership model of care in which views of patients—and not only those of clinicians and experts—are taken seriously and considered as relevant.

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0376-8716/02/$ - see front matter 
PII: S0376-8716(01)00183-1

A high degree of depression seems correlated with a low subjective quality of life (SQOL; Pyne et al., 1997; Sullivan et al., 1992). The family, friendships, leisure activities and mental health are domains, where especially alcoholic women report problems or that they assess as having a low SQOL (Akerlind and Hörnquist, 1992; Gomberg and Schilit, 1985; Rudolf et al., 1996). In our own study, the structure of SQOL was a suitable criterion for separating among alcoholic women. Different profiles of SQOL of four subgroups were correlated with different forms of the objective living-situation, with the degree of psychopathology and with the clinical prognosis (Rudolf and Priebe, 1999a).

This paper reports the degree of depressive symptoms in alcoholic women and its association with SQOL and other subjective evaluation criteria, i.e. self-rated symptoms, needs for support and views on the effects of drinking. Based on the literature, one may expect a generally lower SQOL for alcoholic women with marked depressive symptoms. Yet, it is less clear precisely what life domains alcoholic women with depression are less satisfied with and whether they differ from non-depressed patients in subjective criteria other than SQOL as well. The relationship between depressive symptomatology on the one hand and SQOL and other subjective evaluation criteria on the other is subject of this paper.

## 2. Method

### 2.1. Subjects

The subjects were 70 alcoholic women between 23 and 63 years of age who were consecutively admitted to three hospitals in Berlin, Germany, for detoxification from alcohol. The diagnosis was made by the clinician psychiatrist according to ICD-10 (World Health Organization, 1992). Women who fulfilled the criteria of F10.2 of ICD-10 were first approached by their doctor and asked for participation in the study. In case they agreed, they were contacted by a researcher. Participation or non-participation did not have any effects on the treatment the patients received. Informed consent was obtained from all patients. The women were interviewed during the second week after admission by a researcher who was not involved in treatment, and none of the information as assessed in the interviews was passed on to the treatment team. This was a naturalistic study and all women took part in the routine treatment programme of the given hospital. The inpatient treatment programme for addiction in the selected hospitals usually lasted 3 weeks and included physical withdrawal, sport and sociotherapeutic activities, and participation in meetings of the alcoholics anonymous. Treatment focussed on physical withdrawal. If further treatment for depression or another mental disorder was needed, patients were referred to specific outpatient programmes following hospitalisation such as individual psychotherapy.

### 2.2. Measures

Psychopathological symptoms were rated on the Hamilton Depression Scale (HAMD; Hamilton, 1960) and the Brief Psychiatric Rating Scale (BPRS; Overall and Gorham, 1962) by the interviewer, a research psychologist with clinical qualification who was trained and experienced in applying the assessment scales. Depressive symptoms were assessed regardless of their diagnostic classification. This was because we aimed at investigating the role of depressive symptoms without limitation as set by the concepts of current nosological typology. For distinguishing between alcoholic women with and without depressive symptoms we used a cut-off point of 11 on the HAMD. A HAMD score of 11 or higher is to be considered as a moderate degree of depressive symptoms and non-depressive groups are assumed to show a score of ten or lower (Robbins et al., 1985). Thirty-two women were classified as belonging to the non-depressive group ('ND': HAMD $\leqslant$ 10), 38 women to the depressive group ('D': HAMD $\geqslant$ 11).

SQOL was examined using the German version (Berliner Lebensqualitätsprofil; Priebe et al., 1995) of the Lancashire Quality of Life-Profile (Oliver, 1991; Oliver et al., 1997). In the Berliner Lebensqualitätsprofil, SQOL is rated as satisfaction with life in general and with different life domains: family, social relations, health, leisure activities, finances, work, living situation and security. Satisfaction is rated by the patients on a Likert-type-scale ranging from one (most unsatisfied) to seven (most satisfied) with four being the neutral middle point. Several studies using the Berliner Lebensqualitätsprofil demonstrated SQOL as a suitable evaluation criterion distinguishing between different diagnostics groups of mentally ill patients (Kaiser et al., 1997; Priebe et al., 1998; Röder-Wanner and Priebe, 1995; Rudolf and Priebe, 1999b).

Self-rated symptoms were obtained on the Beck Depression Inventory (BDI; Beck and Steer, 1987) and the Von Zerssen Complaints Checklist (BL; CIPS, 1986). Needs were self-rated on the Berlin Needs Assessment Schedule, which obtains patients' view on their needs for help or support in 16 domains (Hoffmann and Priebe, 1996; Priebe et al., 1998).

Illness and treatment-related data were assessed through a structured interview. In addition, the women were asked about their subjective view on positive and negative aspects of their drinking.

### 2.3. Statistical analysis

Comparisons between the two groups (women without and with depressive symptoms) were made using $\chi^2$-tests, $t$-tests and non-parametric tests (Mann–Whitney, M–W). Pearson correlations were calculated for analysing the relationship between SQOL and sociodemographic and clinical data. A discriminant analysis was carried out for separating the depressive and non-depressive group by SQOL ratings.

## 3. Results

Table 1 shows the sociodemographic and clinical characteristics of the two groups. Depressive and non-depressive women differed only in a few variables: The non-depressive women had a better professional qualification, most of them reported having friends. The women with depressive symptoms had been hospitalised for withdrawal more frequently and had more severe general psychopathology. These differences did not hold after Bonferoni adjustment. Depressive and non-depressive women differed neither in age at onset nor in duration of alcoholism.

The results of the discriminant analysis according to the two groups show the largest difference between women with and without depressive symptoms in satisfaction with their family. Factor loading is about $r = 0.83$ (Table 2). Other domains of SQOL which distinguished between the two groups are social relations, mental health, life in general and leisure activities. Women without depressive symptoms reported a higher SQOL in most of the rated domains. SQOL ratings alone correctly classify 74% of the sample in 'depressive' and 'non-depressive'.

In agreement with the observer-rated severity of depression, the degree of self-rated mental and physical symptoms was higher in the depressive group (Table 3). Needs for help rated on the Berlin Needs Assessment Schedule were reported mainly with respect to support needed for coping with alcoholism (86% of the total sample). Many women stated they needed support concerning their mental health (51%), job-situation (38%), physical health (21%) and information about their illness and specific treatment options (20%). Women with depressive symptoms reported more needs than non-depressive women did. The range was from 2 to 9 for the depressive group and from 0 to 6 for the other group. Especially concerning mental health, social contacts, housework and food, more women with depressive symptoms compared to those without depressive symp-

Table 1
Sociodemographic and clinical characteristics of the alcoholic women without and with depressive symptoms

| | Patients without depressive symptoms ($n = 32$) | Patients with depressive symptoms ($n = 38$) | Statistics |
|---|---|---|---|
| Age | $42.1 \pm 9.6$ | $44.7 \pm 9.7$ | $t = -1.1$, 68 d.f., ns |
| *Vocational training* | | | $\chi^2 = 5.4$, 1 d.f., $P \leqslant 0.05$[a] |
| No training | 12% | 37% | |
| Apprenticeship/degree graduated | 88% | 63% | |
| Partnership | 66% | 55% | $\chi^2 = 0.8$, 1 d.f., ns |
| Children | 66% | 71% | $\chi^2 = 0.2$, 1 d.f., ns |
| Social relations | 84% | 58% | $\chi^2 = 5.8$, 1 d.f., $P \leqslant 0.05$[a] |
| Employed | 59% | 47% | $\chi^2 = 1.0$, 1 d.f., ns |
| Monthly income (DM) | $2036 \pm 865$ | $2023 \pm 867$ | $t = 0.1$, 61 d.f., ns |
| *Illness* | | | |
| Age at onset | $33.3 \pm 10.2$ | $34.4 \pm 11.4$ | $t = -0.43$, 68 d.f., ns |
| Duration | $8.8 \pm 6.0$ | $10.3 \pm 7.0$ | $t = -0.95$, 68 d.f., ns |
| Number of previous detoxifications | $0.8 \pm 1.9$ | $2.6 \pm 4.6$ | $t = -2.2$, 51.3 d.f., $P \leqslant 0.05$[a] |
| BPRS | $28.5 \pm 5.8$ | $35.4 \pm 6.0$ | $t = -4.9$, 68 d.f., $P \leqslant 0.001$ |

Means, standard deviations and percentual frequencies of the two groups. $t$-Tests for independent samples and $\chi^2$.
[a] Not statistically significant after Bonferoni adjustment.

Table 2
Subjective quality of life in the two groups

| Satisfaction with | Patients without depressive symptoms ($n = 32$) | Patients with depressive symptoms ($n = 38$) | Statistics | Factor loading |
|---|---|---|---|---|
| Family | $5.9 \pm 1.1$ | $4.4 \pm 1.7$ | $t = 4.3$, $P \leqslant 0.001$[a] | 0.83 |
| Social contacts/friends | $5.6 \pm 1.0$ | $4.9 \pm 1.6$ | $t = 2.4$, $P \leqslant 0.05$ | 0.46 |
| Mental health | $3.7 \pm 1.4$ | $2.8 \pm 1.5$ | $t = 2.3$, $P \leqslant 0.05$ | 0.45 |
| Life in general | $4.4 \pm 1.2$ | $3.7 \pm 1.6$ | $t = 2.0$, $P \leqslant 0.05$ | 0.39 |
| Leisure activities | $4.7 \pm 1.8$ | $4.0 \pm 1.6$ | $t = 1.9$, $P \leqslant 0.10$ | 0.36 |
| Finances | $5.0 \pm 1.9$ | $4.4 \pm 2.1$ | $t = 1.3$, ns | 0.25 |
| Job situation | $4.4 \pm 2.2$ | $3.8 \pm 2.2$ | $t = 1.2$, ns | 0.23 |
| Accommodation | $5.8 \pm 1.5$ | $5.7 \pm 1.7$ | $t = 0.2$, ns | 0.04 |
| Safety | $3.7 \pm 1.5$ | $3.8 \pm 1.9$ | $t = -0.2$, ns | −0.03 |
| SQOL mean score | $4.8 \pm 0.8$ | $4.2 \pm 0.9$ | $t = 3.0$, $P \leqslant 0.01$[a] | – |

Means and standard deviations of the two groups. $t$-Test for independent samples (68 d.f.). Factor loading of the variables in the discriminant analysis.

[a] Bonferoni adjusted $P \leqslant 0.05$.

toms rated a need for support. Yet, this difference failed to reach statistical significance. Most of the total sample reported negative consequences of their drinking: the most frequently mentioned domains were the family (41%), job-situation (26%) and physical and mental health (26%). Women in the depressive group were more concerned about these negative consequences of alcoholism and reported more aspects they were worried about, but there was no single domain that was predominantly emphasised in either of the two groups. Many women also expressed concerns about their job-situation (36% of the total sample), health (34%) and family or partnership, respectively (23%). Additionally, 49% of the women mentioned positive effects of their alcoholism. The most-reported aspects dealt with short-term consequences: feeling self-confident and more competent (18%), becoming more sociable (10%) and being able to cope with mental complaints, e.g. reducing anxiety (6%).

Correlations within the subgroups between SQOL mean score on the one hand and social and clinical criteria on the other, reveal only a few significant associations within both groups: SQOL is positively correlated with age (ND: $r = 0.46$, $P \leqslant 0.01$; D: $r = 0.52$, $P \leqslant 0.01$), occupation (ND: $r = 0.37$, $P \leqslant 0.05$; D: $r = 0.40$, $P \leqslant 0.05$), age at onset of alcoholism (ND: $r = 0.52$, $P \leqslant 0.01$; D: $r = 0.38$, $P \leqslant 0.01$). Being older, having a job and onset of alcoholism at a higher age are correlated with a higher SQOL. Degree of psychopathological symptoms as observer rated on the BPRS is negatively correlated with SQOL in the non-depressive group. A higher degree of symptoms correlates with a lower SQOL (BPRS: $r = -0.46$, $P \leqslant 0.01$).

## 4. Discussion

The results of this study reveal a high extent of depressive symptoms in alcoholic women during detoxification. More than half of the sample was at least moderately depressive. Regardless of origin and exact diagnosis of the depression (Behar et al., 1984; Haver and Dahlgren, 1995; Schuckit, 1986), depressed alcoholic women reported a much lower SQOL than the women without depressive symptoms. This finding, that depression is negatively correlated with SQOL, is consistent with the results of other reports (Pyne et al., 1997; Rudolf and Priebe, 1999b; Sullivan et al., 1992).

As a former study demonstrated, SQOL was a convenient marker for distinguishing subgroups of alcoholic women under treatment (Rudolf and Priebe, 1999a). The analysis reported in this paper shows that alcoholic women with and without depressive symptoms differ in some aspects of SQOL. The more private aspects, e.g. personal relations and mental health, seem to be of a particular relevance. This might point at the importance of family involvement and psychological treatments rather than conventional social work focussing on accommodation and employment.

Depressive and non-depressive patients also showed differences in other subjective evaluation criteria: depressive women had a higher degree of self-rated symptoms and complaints, and reported more needs for support in different areas of life and more negative consequences of alcoholism. In contrast to SQOL ratings, which differed overall as well as in specific life domains, depressive women reported in general more needs and negative consequences of drinking, but not with respect to specific life domains. This may be due to a higher sensitivity of domain specific SQOL ratings as

Table 3
Self-rated depression, complaints, subjective needs and view on alcoholism

| | Patients without depressive symptoms ($n = 32$) | Patients with depressive symptoms ($n = 38$) | Statistics[a] |
|---|---|---|---|
| BDI | $7.7 \pm 5.3$ | $14.7 \pm 6.2$ | $t = -5.0$, $P \leqslant 0.001$[b] |
| Complaints checklist BL | $17.1 \pm 12.6$ | $30.0 \pm 12.7$ | $t = -4.2$, $P \leqslant 0.001$[b] |
| Needs[c] | $2.6 \pm 1.5$ | $4.0 \pm 1.8$ | $z = -3.2$, $P \leqslant 0.01$[b] |
| Consequences of drinking[c] | $0.9 \pm 1.3$ | $1.4 \pm 1.0$ | $z = -2.5$, $P \leqslant 0.05$[b] |
| Worries[c] | $0.9 \pm 0.7$ | $1.2 \pm 0.6$ | n.s. |
| Positive aspects of drinking | 56% | 42% | n.s. |

Means, standard deviations and percentual frequencies of the two groups.
[a] $t$-Test for independent samples (68 d.f.), Mann–Whitney test, $\chi^2$ test (1 d.f.; $n = 70$).
[b] Bonferoni adjusted $P \leqslant 0.05$.
[c] Number of mentioned domains.

compared to ratings of needs and negative effects of drinking.

In line with results of Priebe et al. (1998), the findings suggest a strong link between different subjective criteria and observer-rated psychopathology. However, correlations between SQOL and some objective criteria, like age, job-situation and age at onset of alcoholism, show that low SQOL is likely not to be a mere consequence of depression, but also associated with other factors.

Observer rated depression and patients' rated QOL reveal overlapping, but not identical information. To some extent, the association with observer rated depression might be seen as a validation of the satisfaction ratings that form the SQOL scores. Since both assessments are relatively simple to obtain, they may become part of routine assessment and provide complementary information. Future research might investigate as to what extent the prognostic value of depression in alcoholism is mediated and explained by patients' SQOL. Assuming that none of the two factors—neither depression nor SQOL—is a mere function of the other, both phenomena may be important for treatment. Management of depression and psychosocial interventions targeting areas of dissatisfaction (Priebe et al., 1999) may have to be combined in a comprehensive care package. In this case, assessments of depression and SQOL will have a place in diagnostic procedures as well as in outcome measurement. In between 1 and 2 weeks after the beginning of detoxification might be a good point of time for patients to consider their life and rate SQOL, even if some of them are likely to be depressed. Any interpretation of SQOL scores in these patients should consider the level of depressive symptoms but, vice versa, information on patients' SQOL might also be important when considering therapeutic implications of depressive symptoms.

## Acknowledgements

This study was supported by the 'women research programme' of the Berlin Senate. Grant number: P-2/93/11/94-95.

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