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Is early outpatient satisfaction with substance use disorder care a predictor of early dropout? Results of the SUBUSQOL cohort

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1. Introduction

Substance use disorder (SUD) is a relevant health problem worldwide, with consequences for addicted individuals and high costs to society (Brorson, Ajo Arnevik & Rand, 2019). To counteract the global challenge of SUD, health care systems have made efforts to develop different SUD treatment programs aimed at reducing substance use or achieving abstinence, improving adaptive functioning, and preventing relapse (Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013). However, patients' problems with engagement and retention hinder these efforts (Graf et al., 2009). Retention in SUD care programs is consistently associated with positive changes in drug use, psychological health, medical health, criminal behavior, and employment (Meier, Donmall, McElduff, Barrowclough & Heller, 2006), whereas dropout reduces both the efficiency and effectiveness of a treatment program (Lappan, Brown & Hendricks, 2019). Retaining patients in substance care has become one of the goals of treatment programs in a wide variety of therapeutic settings but remains challenging (Braitman & Kelley, 2016) because high dropout rates are reported in all drug treatment modalities in the research literature (Deren et al., 2001; Palmer, Murphy, Piselli & Ball, 2009). Dropout is an especially important problem during the first 3 months of substance use care (Graff et al., 2009). Dropout rates prior to 3 months can be 50% or more (Palmer, Murphy, Piselli & Ball, 2009), and 3 months of treatment appears to be the minimum needed to see symptom improvement (Katz et al., 2004; Simpson & Joe, 2004). The method of preventing potential dropout depends on the ability to identify at an early stage those patients at risk of dropping out and allowing enough time for effective interventions to take place (Hser et al., 2014).

Intrinsic and extrinsic factors affect treatment retention; research has already identified some of these factors, whereas others deserve further attention (Elbreder, de Humerez &

Laranjeira, 2010; Padyab, Grahn, & Lundgren, 2015). A systematic review of 122 studies of dropout from SUD treatment showed that cognitive deficits, low levels of treatment alliance, personality disorders, and younger age were the most consistent risk factors for dropout (Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013). Collectively, studies have suggested that higher income and levels of employment were associated with higher retention, whereas the type of substance use (alcohol only, drug only, or polysubstance use) was not associated with retention among outpatients (Braitman & Kelley, 2016). Studies had conflicting findings concerning gender, with some studies showing worse retention in women (McCaul, Svikis & Moore, 2001; King & Canada, 2004) and others indicating no differences between genders (Elbreder, de Humerez & Laranjeira, 2010; Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013; Marcovitz, McHugh, Volpe, Votaw & Connery, 2016). Studies have also reported divergent findings related to comorbid mental health disorders, with a study concluding that patients with depression and/or anxiety symptoms were less likely to drop out from treatment (Levin et al., 2004), whereas other studies have found that the presence of severe depressive symptoms at baseline is a significant risk factor for early dropout (Curran, Kirchner, Worley, Rookey & Booth, 2002). Previous reviews also identified some treatment factors associated with care dropout, such as court-mandated treatment, an outpatient treatment setting, a drug-free treatment program, and therapist qualities (Baekeland & Lundwall, 1975; Stark, 1992). Thus, researchers regard therapeutic alliance and satisfaction with medical management as key factors affecting engagement in care and therefore retention (Druss, Rosenheck & Stolar, 1999; Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013). Although better satisfaction with inpatient care has been linked to better follow-up and continuity of outpatient care after hospitalization in psychiatry (Zendjidjian et al., 2014), relatively little research has focused on how outpatients perceive the care that they receive in the early stages and how levels of early satisfaction with care

could predict care dropout. It is still a growing topic of interest among patients suffering from SUD because dropout in patients with SUD occurs early in the therapeutic process (King & Canada, 2004).

Thus, this study first aimed to identify various predictors of early dropout from care among outpatients beginning treatment for alcohol or opioid dependence. We hypothesized that patients with lower early satisfaction levels with care had greater odds of dropping out of care.

2. Methods

2.1 Participants and design

The study was based on a longitudinal analysis of data from the SUBstance Users Satisfaction and Quality Of Life cohort (SUBUSQOL). This is a prospective cohort of outpatients who started care for alcohol or/and opioid dependence in French specialized SUD treatment centers (registered in ClinicalTrials.gov ID: NCT02894476). Participants were eligible to participate in the study if they were older than 18 and met the criteria for alcohol dependence, opioid dependence, or both according to the Diagnostic and Statistical Manual, fourth edition (DSM-IV) (American Psychiatric Association, 2000). Clinicians certified in SUD pathologies who were trained in the use of the DSM-IV recruited patients. The multidisciplinary treatment team included psychiatrists, psychologists, social workers, and specialized nurses. Sessions were in an individual format. Treatment included individual motivation enhancement, supportive therapy, and pharmacotherapy. The institutional review board (Comité National Informatique et Liberté) approved the study protocol (DR-2013-156) and ensured the confidentiality of the information collected.

2.2 Data collection

We collected sociodemographic and clinical data from medical interviews and clinical testing at the time of enrollment in SUD care (i.e., the first consultation in the department), which was the time of inclusion in the study. We assessed health-related quality of life (HRQoL), anxiety/depression, and coping strategies with French self-reported questionnaires at the time of inclusion. We assessed satisfaction with a self-reported questionnaire to be completed 15 days after inclusion.

2.2.1 Treatment retention and early dropout

We considered patients who were still followed at the end of the third month to be retained over the three-month period. We defined patients no longer in care at the end of the three-month period as having dropped out of outpatient care.

2.2.2 Outpatient satisfaction with care

We assessed the quality of care satisfaction questionnaire in outpatient consultation (EQS-C) to assess early outpatient satisfaction. We mailed the questionnaire 10 days after the first visit (for an early measure at 15 days) to be completed at home because completing the questionnaire at home facilitated completion and to provide more time to consider the consultation when safely back home (Gasquet et al., 2004). We asked participants to complete and return the questionnaire by mail in a prepaid envelope. The EQS-C is a 27-item self-report instrument consisting of 4 dimensions that explore the technical and interpersonal aspects of care. The validity and reliability of the questionnaire were good, meeting both Cronbach's alpha and the intraclass correlation coefficient requirements among outpatients (Gasquet et al., 2004). Research previously established good reproducibility with an

intraclass correlation coefficient of 0.68 among substance user outpatients (Royer et al., 2019). The first 3 dimensions are related to organizational/nonmedical aspects of care: contact/appointments (6 items), reception facilities (5 items), and waiting time (3 items). The last dimension, consultation with the doctor (13 items), explores the warmth of the doctor, whether the doctor explained his or her decisions, whether the doctor took the patient's opinion into account, whether the patient received the information that he or she wanted, and whether the doctor warned the patient about possible side effects of treatment. We scored each item from 0 to 4, with 4 indicating the greatest level of satisfaction. We provided a "does not apply" category for 13 items related to situations that are not universally relevant. We considered the nonresponse and "does not apply" categories missing data. We computed scores when participants had completed at least half of the items in a dimension, applying the recommendations of the authors who developed the EQS-C (Gasquet et al., 2004). We based the total score and scores for each dimension on the sum of the items. They were standardized to range from 0 (low satisfaction) to 100 (high satisfaction).

2.2.3 Self-perceived quality of life

We used the Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (Q-LES-Q-SF) to assess self-perceived quality of life. The Q-LES-Q-SF is a self-report instrument comprising 16 items derived from the general activities scale of the original 93-item form that assesses the degree of enjoyment or satisfaction experienced over the past week (Endicott, Nee, Harrison & Blumenthal, 1993). Research has previously established the validity and reliability of the French version of the Q-LES-Q-SF among substance users and it has showed excellent consistency and test-retest reliability (Bourion-Bédès et al., 2015a, Bourion-Bédès et al., 2015b). The questionnaire consists of fourteen items exploring patient satisfaction with his or her physical health, social relationships, ability to function in daily

life, physical mobility, mood, family relationships, sexual drive and interest, ability to engage in work, leisure activities, economic status, household activities, living/housing situation, vision, and overall sense of well-being. We scored each item from 1 to 5, with 5 indicating the greatest contentment or satisfaction. We computed the total score for items 1 to 14 (ranging from 14 to 70) and expressed as a percentage (1–100) of the maximum total score. The instrument also includes two additional items measuring satisfaction with medication and overall life satisfaction that are not included in the score.

2.2.4 Anxiety and depression

We used the French version of the Hospital Anxiety and Depression Scale (HADS) (Lépine, 1997). It is a 14-item self-report instrument assessing the levels of depression (7 items) and anxiety (7 items). The HADS showed excellent consistency and test-retest reliability among patients in surgical and medical departments (Zigmond & Snaith, 1983). We scored each item on a 4-point Likert scale. Consistent with previous research, we used a cutoff of 8 for each HADS subscale to differentiate normal distress from mild and severe distress (Bjelland, Dahl, Haug & Neckelmann, 2002). Mean subscale scores from 0 to 7 indicated “normal”, scores from 8 to 10 indicated “mild severity”, and scores from 11 to 21 indicated “moderate or severe severity”.

2.2.5 Coping

The Brief COPE is a 28-item self-report instrument derived from the abridged version of the COPE inventory (Carver, Scheier & Weintraub, 1989). It consists of fourteen scales assessing how often a patient employs a certain coping strategy: (1) active coping, (2) planning, (3) use of instrumental support, (4) use of emotional support, (5) venting, (6) behavioral disengagement, (7) self-distraction, (8) self-blame, (9) positive reframing, (10) humor, (11)

denial, (12) acceptance, (13) religion, and (14) substance use. Research has previously established the validation of the French version that assesses trait coping (the usual way people cope with stress in everyday life) among a student population and showed an excellent structure validity and a satisfactory level of external validity (Muller & Spitz, 2003). We rated each item on a 4-point Likert-type scale ranging from 1: “I have not been doing this at all” to 4: “I have been doing this a lot”. We obtained coping scores by averaging the scores of the subscale items, with higher scores indicating a greater use of the coping style.

2.2.5 Patient sociodemographic and clinical data

At the time of inclusion, we collected data that had been previously identified as factors associated with care dropout. We obtained the participants’ age, gender, educational level, occupational status, marital status and the type of substance dependence, duration of SUD illness, presence of medical and/or psychiatric comorbidities, number of treatment sessions with the physician, and origin of the care request.

2.3 Statistical analysis

2.3.1 Descriptive and comparative analysis

Continuous variables are described as the mean (\pm standard deviation) or median, as appropriate, and we used the numbers or percentages for categorical variables. We used student’s t-test and Pearson’s chi-squared test or Fisher’s exact test to compare groups.

2.3.2 Bivariate and multivariate analyses

We treated dropping out of outpatient care within the three-month period as the dependent variable, and we considered other variables as potential predictive variables. We performed a logistic regression to identify the factors related to early dropout. We investigated

sociodemographic and clinical factors, the influence of anxiety or depression, and early satisfaction with care score. Candidates for inclusion included factors with p-values < 0.2 in the unadjusted analysis. We made no imputation of missing data.

We included all variables described above that were associated with a statistical significance of $\leq 20\%$ in the bivariate analysis (Bursac, Gauss, Williams & Hosmer, 2008). We then eliminated variables with $p > 0.05$ until only statistically significant variables remained in the model. We reported odds ratios (ORs) and their 95% confidence intervals (CIs), and we considered a p-value less than 0.05 to indicate statistical significance. We performed all statistical analyses using SAS 9.4 (SAS Inst., Cary, NC).

3. Results

3.1 Patient characteristics

As shown in Table 1, we recruited 175 patients in the SUBUSQOL cohort. There were 136 men (77.7%) and 39 women (22.3%). The mean age was 39.5 years old (SD=10.8). More than one-third of these patients were married (36.5%), and a minority reported a high school or university education (18.4%). Of the 175 patients, 82 (46.9%) sought care for alcohol dependence and 93 (53.1%) sought care for opioid dependence according to the DSM-IV criteria. The mean duration of substance dependence was 14.9 (SD=11.1) years. Almost half of these patients (47.4%) declared current cannabis use, and less than one-third (30.3%) declared current cocaine use. Eighteen patients (10.3%) required care while undergoing legally mandated SUD treatment. The retention rate at three months was 69.7%. The mean number of treatment sessions with the physician was 5.0 (2.0). Fifty-three patients (30.3%) had dropped out of outpatient care. Outpatients who dropped out at 3 months did not

differ from the outpatients who were still followed at 3 months in terms of their sociodemographic or clinical characteristics, except for the type of dependence ($p=0.007$).

The Q-LES-Q-SF, HADS and coping results are presented in Table 2. Of the 175 patients included in the study, 98%, 94%, and 94% completed the Q-LES-Q-SF, Brief COPE, and HADS questionnaires, respectively. The mean Q-LES-Q-SF score was 52.9 (SD=17.9). The mean anxiety score was 10.1 (SD=4.4), and the mean depression score was 7.9 (SD=4.2). In total, 45.1% of the patients had moderate or severe anxiety, and 28% had moderate or severe depression. Patients' most commonly used problem-focused coping strategies were acceptance (5.4 ± 1.7) and planning (5.2 ± 1.6), and the most commonly used emotional-focused coping strategy was self-blame (5.4 ± 1.6). Their least commonly used coping strategy was religion (2.6 ± 1.2). The results did not reveal a significant difference between the outpatients who dropped out and those still followed at 3 months in terms of their self-perceived quality of life and HADS scores at baseline. Patients using behavioral disengagement ($p=0.02$) and denial ($p=0.05$) were significantly more likely to have dropped out at a 3-month period.

3.2 Satisfaction scores

Of the 175 patients included, we could use 171 questionnaires. We sent the EQS-C questionnaires 11.7 days (SD=4.2) after study inclusion on average and participants returned in a mean time of 16.4 days (SD=19.5) after they were sent. The completion rate overall by outpatients without applying the process of missing data was 86.5%. The satisfaction scores are shown in Table 3. The mean total satisfaction score was 79 (SD=15.6). The mean satisfaction scores were 79.4 (SD=18.8) for "contact/appointments", 78.1 (SD=16.2) for

“reception facilities”, 73.0 (SD=24.6) for “waiting time”, and 80.8 (SD=17.2) for “consultation with the doctor”.

3.3 Factors associated with early dropout from outpatient care

The results of the bivariate and multivariable analyses are reported in Table 4. Higher satisfaction with care (OR=0.96, 95% CI=0.93–0.98, p=0.01) and the use of positive reframing (OR=0.77, 95% CI=0.59–0.96, p=0.04) led to significantly lower levels of dropout from care at 3 months. Dropping out of care was more likely to occur among females (OR=2.97, 95% CI=1.1–8, p=0.03) and those using the denial coping strategy (OR=1.37, 95% CI=1.1–1.8, p=0.02).

4. Discussion

The current study found the retention rate to be 69.7%, with approximately one-third of patients having dropped out of outpatient care in the 3-month period. The observed prevalence of dropout (30.3%) is similar to those in previous reports in other countries among patients with SUD (Bell & Mutch, 2006; Lappan, Brown & Hendricks, 2019) but exceeds the average dropout rate of approximately 20% reported in a meta-analysis of adult psychotherapy studies that excluded treatment for SUDs (Swift & Greenberg, 2012). This emphasizes the need to develop programs and measures to reduce dropout in the field of SUD care.

As expected, higher levels of early satisfaction with care among patients were associated with a reduced risk of dropout. This is a significant finding; a previous review revealed that the SUD field lacks of research on predictors such as motivation, alliance, and treatment satisfaction (Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013). Similar to Lippens et al. (2011), our finding might indicate that early satisfaction contributes to a greater

investment in the care process, thereby leading to positive behavior changes that lead to greater satisfaction, further change, and better follow-up. This finding may be interesting to clinicians who treat individuals with SUDs. Indeed, just as research has increasingly considered satisfaction to be an important means of evaluating the care provided to patients with SUD (Zhang, Gerstein & Friedmann, 2008), patient satisfaction measures should also be considered when developing effective strategies to enhance retention and consequently prevent dropout. Patient satisfaction should be integrated into a continuous quality of care program and change the way practitioners address dropout across therapeutic settings, especially outpatient settings where studies have reported care providers' organizational barriers to adequate consideration of patient satisfaction (Zendjidjian et al., 2014).

With the exception of gender, none of the demographic characteristics was related to dropout in the final model of this study. Consistent with previous studies (Mc Caul, Svikis & Moore, 2001; Arfken, Klein, di Menza & Schuster, 2001; King & Canada, 2004), female gender was a significant predictor of dropout, with an odds of dropping out of care for women that was almost three times greater than that for men. This result indicates the need for more focused research in this area, perhaps regarding the choice of care modality by gender. Providing particular attention to women entering care may be important to enable them to feel a sense of empowerment with regard to the care (see Graf et al., 2009). There has been speculation that role-related factors, such as extended family issues, qualitative parenting factors, and household issues, as well as stigma and guilt, may explain women's difficulties engaging in treatment (King & Canada, 2004; Graf et al., 2009). In line with the vast majority of studies collected in a previous review (Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013), this study did not show an association between age and dropout. That younger age did not predict a higher rate of dropout does not prove that age and dropout are unrelated. True relationships between age and dropout might not have been

detected because of a reduced sample size, as the majority of large studies reported positive findings between younger age and a higher dropout rate (Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013). Interestingly, we did not find the type of substance use and length of dependence to be significant predictors of dropout in the current study. These results are consistent with previous reports that found that neither the type of substance dependence or use, nor polysubstance use predicted retention (McCaul, Svikis & Moore, 2001; Braitman & Kelley, 2016; Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013). Additionally, this study did not show a statistical association between dropout and anxiety or depression. These results are consistent with previous findings (Andersson et al., 2018) but also differed from other studies that found baseline depressive symptoms to be a reliable predictor of dropout (Stark, 1992; Curran, Kirchner, Worley, Rookey & Booth, 2002).

Furthermore, this study showed significant associations between coping strategies and dropout. Using a denial coping strategy was associated with an increased risk of care dropout, whereas using positive reframing was associated with a reduced risk of dropout. These results support previous findings in other chronic illnesses indicating that dysfunctional coping may lead to an absence of or inadequate care adherence, utilization, and satisfaction, whereas functional meaning-based coping such as positive reframing leads to desirable health behaviors such as satisfaction with care (Graham, 2015). Research has shown that SUD care relies heavily on communication and the patient's ability to learn new strategies for coping with stress, psychological symptoms, and relational difficulties (Brorson, Ajo Arnevik, Rand-Hendriksen & Duckert, 2013). This research highlights the importance of identifying outpatients' coping strategies, which could be ideal targets when seeking to improve care retention. Health care professionals, through technical competence, health knowledge, and shared decisional control, might affect patients' dynamic variables, thus influencing their perceptions and subsequent coping processes.

The results from this study should be interpreted in light of a number of strengths and limitations. First, the representativeness of the sample is limited because the patients were recruited from French specialty treatment services, thereby limiting the generalizability of these results. Further studies that include patients with alcohol or opioid dependence who are treated in routine medical practices should be conducted to confirm our results. Second, as in all studies that use self-reported questionnaires, our results may be limited by social desirability response bias. This study is also limited by the fact that we used a generic outpatient satisfaction questionnaire, an instrument that may not be relevant to patients with SUD due to the specific and different expectations those outpatients may have. However, to the best of our knowledge, considering that dropout is a major problem in patients with SUD during the first three months (Graff et al., 2009), the current study is the first to examine satisfaction with care specifically in the early stages of the treatment process among outpatients with substance dependence who were beginning care. Furthermore, the major strength of the study is the prospective design. As patients with SUD are increasingly treated in ambulatory settings, the factors associated with the lack of retention may become of paramount importance.

5. Conclusion

This study indicated that female gender had the highest impact on leaving care, while we also identified several influential and potential remediable factors, such as low satisfaction, low use of positive reframing, and high use of the denial coping strategy. First, psychological interventions such as supportive strategies and cognitive behavioral therapy might help patients to use positive coping strategies, which could affect retention in care. Furthermore, that outpatients with a higher level of satisfaction with care early in the process were significantly less likely to drop out of care has considerable implications for both practice and

research. It points to the need for clinicians to examine how satisfaction can be integrated into care programs. Based on this study, clinicians might assess measures of satisfaction and patients might inform care providers of poor satisfaction so that clinicians can adjust program care to meet the needs of outpatients early in the process. Future prospective research can build on this study to more thoroughly investigate the factors that lead to greater early satisfaction among outpatients with SUD. Such research could investigate patient and treatment characteristics that are associated with early satisfaction with care and use those characteristics to improve satisfaction and ultimately contribute to increased retention of patients with SUD.

Contributors

SB-B, RS and CB designed the study protocol. SV, PDP, AS and OM collected the data used in the current manuscript. CB and IC-U performed the statistical analysis. SB-B participated in the discussion and writing of the paper. AS and CB oversaw the drafting of the manuscript. All authors contributed to reading and critically revising the final manuscript and agree to be accountable for all aspects of the work

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Declaration of Competing Interest

The authors declare no conflicts of interest.

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Table 1. Participants' sociodemographic and clinical characteristics.

Characteristic	Full sample		Patients who were followed at 3 months		Patients who dropped out at 3 months		p-value
	N	% or mean (SD)	N	% or mean (SD)	N	% or mean (SD)	
Age	175	39.5 (10.8)	122	39.1 (10.9)	53	40.3 (10.7)	0.51
Gender							0.09
Male	136	77.7	99	81.1	37	69.8	
Female	39	22.3	23	18.9	16	30.2	
Marital status							0.81
Never married	73	42.9	52	44.4	21	39.6	
Married/live with a partner	62	36.5	41	35.0	21	39.6	
Separated/divorced/widowed	35	20.6	24	20.5	11	20.8	
Education level							0.58
Primary school	20	11.5	15	12.4	5	9.4	
Secondary school	122	70.1	86	71.1	36	67.9	
High school/university	32	18.4	20	16.5	12	22.6	
Living arrangement							0.37
Alone	62	35.6	44	36.4	18	34.0	
With family	74	42.5	47	38.8	27	50.9	
With friends	31	17.8	24	19.8	7	13.2	
Homeless	7	4.0	6	5.0	1	1.9	
Occupational status							
Unemployed/student	99	56.6	72	59.0	27	50.9	0.29
Full-time work	60	34.3	37	30.3	23	43.4	
Part-time work	9	5.1	8	6.6	1	1.9	
Retired	7	4.0	5	4.1	2	3.8	
Duration of SUD (years)	169	14.9 (11.1)	119	13.9 (10.4)	50	17.2 (12.3)	0.07
Type of dependence							0.007
Alcohol dependence	82	46.9	49	40.2	33	62.3	
Opioid dependence	93	53.1	73	59.8	20	37.7	
Comorbid axis I diagnosis (yes)	67	38.3	47	38.5	20	38.5	0.99
Origin of the care request							0.07
Patient	116	66.3	86	70.5	30	56.7	

Justice system	18	10.3	14	11.5	4	7.5
Medical care	41	23.4	22	18.0	19	35.8

Abbreviations: SUD, substance use disorder; SD, standard deviation

Table 2. Self-perceived quality of life, HADS and Brief COPE scores.

	Full sample		Patients who were followed at 3 months		Patients who dropped out at 3 months		p-value
	N=175		N=122		N=53		
	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)	
Self-perceived quality of life							
Q-LES-Q- SF score	172	52.9 (17.9)	121	53.6 (17.1)	51	51.1 (19.8)	0.39
HADS							
Anxiety subscale score	162	10.1 (4.4)	113	10.1 (4.4)	49	10.2 (4.4)	0.91
Depression subscale score	164	7.9 (4.2)	114	7.9 (3.9)	50	8.0 (5.0)	0.85
Coping Brief COPE							
Active coping	164	5.0 (1.5)	113	5.0 (1.5)	51	5.0 (1.4)	0.79
Planning	164	5.2 (1.6)	113	5.2 (1.6)	51	5.1 (1.6)	0.59
Use of instrumental support	163	5.0 (1.7)	113	5.0 (1.6)	50	5.0 (1.8)	0.98
Positive reframing	164	4.9 (1.7)	113	5.0 (1.7)	51	4.6 (1.8)	0.15
Acceptance	164	5.4 (1.7)	113	5.4 (1.6)	51	5.5 (1.9)	0.71
Use of emotional support	164	4.9 (1.7)	113	4.9 (1.7)	51	4.9 (1.8)	0.84
Denial	164	3.3 (1.6)	113	3.1 (1.5)	51	3.6 (1.8)	0.05
Venting	163	4.3 (1.6)	113	4.4 (1.6)	50	4.1 (1.5)	0.27
Self-blame	163	5.4 (1.6)	113	5.4 (1.6)	50	5.5 (1.8)	0.92
Humor	164	3.3 (1.5)	113	3.3 (1.3)	51	3.5 (1.9)	0.25
Religion	163	2.6 (1.2)	113	2.6 (1.3)	50	2.4 (1.0)	0.27
Self-distraction	164	4.9 (1.3)	113	4.8 (1.3)	51	5.2 (1.3)	0.10
Substance use	164	5.2 (2.1)	113	5.2 (2.1)	51	5.1 (2.2)	0.87
Behavioral disengagement	163	3.1 (1.3)	113	2.9 (1.1)	50	3.4 (1.6)	0.02

Abbreviations: SD, standard deviation; Q-LES-Q-SF, Quality of Life and Enjoyment Satisfaction Questionnaire-Short-Form; HADS, Hospital Anxiety and Depression Scale.

Table 3. Outpatient early satisfaction with care scores.

	Full sample		Patients who were followed at 3 months		Patients who dropped out at 3 months		p-value
	N=175		N=122		N=53		
	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)	
EQS-C scores							
Contact/appointments	169	79.4 (18.8)	119	79.5 (19.9)	50	79.1 (16.1)	0.90
Reception facilities	170	78.1 (16.2)	119	79.6 (16.3)	51	74.5 (15.3)	0.05
Waiting time	169	73.0 (24.6)	118	75.1 (23.7)	51	68.2 (26.3)	0.09
Consultation with the doctor	170	80.8 (17.2)	119	82.3 (17.2)	51	77.3 (17.1)	0.07
Total satisfaction score	171	79.0 (15.6)	119	80.5 (16.1)	52	75.8 (14.3)	0.06

Abbreviations: SD, standard deviation; EQS-C, Quality of Care Scale in outpatient consultation

Table 4. Factors associated with dropout of care in the 3-month period.

	Bivariate regression analysis			Multivariate logistic regression analysis N=141		
	OR	95% CI	P-value	OR	95% CI	P-value
Gender (female vs male)	1.9	0.9-3.9	0.008	2.97	1.0-1.8	0.03
Marital status (ref: never married)			0.81			
Married/live with a partner	1.3	0.6-2.6				
Separated/divorced/widowed	1.1	0.5-2.7				
Education level (ref: primary school)			0.58			
Secondary school	1.3	0.4-3.7				
High school/university	1.8	0.5-6.2				
Duration of SUD	1.0	1.0-1.1	0.08	1.01	0.97-1.05	0.54
Type of dependence (opioid vs alcohol)	0.4	0.2-0.8	0.008	0.75	0.19-3.0	0.68
Current cannabis use (ref: no use)	0.5	0.2-1	0.04	0.47	0.18-1.3	0.13
Current cocaine use (ref: no use)	0.4	0.2-0.8	0.01	0.47	0.17-1.4	0.16
Origin of the care request (ref: justice system)			0.04			
Patient	1.2	0.4-4.0		1.07	0.27-4.1	0.92
Medical Care	3.2	0.8-10.7		2.89	0.63-13.3	0.17
EQS-C Total satisfaction with care score	1	1.0-1.1	0.07	0.96	0.93-0.98	0.01
HADS- Anxiety subscale score (ref: normal level)			0.14			
Mild severity (8-10)	2.3	0.9-5.6		1.82	0.55-6.1	0.32
Moderate or severe severity (11-21)	1.2	0.5-2.7		1.09	0.36-3.2	0.87
HADS- Depression subscale score (ref: normal level)			0.29			
Mild severity (8-10)	0.53	0.2-1.3				
Moderate or severe severity (11-21)	1.24	0.6-2.7				
Self-perceived quality of life- Q-LES-Q-SF score	1.0	0.5-1.2	0.79			
Brief COPE strategies						
Active coping	1.0	0.5-1.2	0.79			
Planning	0.9	0.8-1.2	0.59			
Use of instrumental support	1.0	0.8-1.2	0.98			
Positive reframing	0.9	0.7-1.1	0.15	0.77	0.59-0.96	0.04
Acceptance	1.0	0.9-1.3	0.70			
Use of emotional support	1.0	0.8-1.2	0.84			

Denial	1.2	1.0-1.5	0.06	1.37	1.1-1.8	0.02
Venting	0.9	0.7-1.1	0.27			
Self-blame	1.0	0.8-1.2	0.92			
Humor	1.1	0.9-1.4	0.25			
Religion	0.8	0.6-1.2	0.27			
Self-distraction	1.2	1.0-1.6	0.10	1.32	0.9-1.9	0.12
Substance use	1.0	0.8-1.2	0.87			
Behavioral disengagement	1.3	1.0-1.7	0.02			

Abbreviations: SUD, substance use disorder; OR, odds ratio: the probability of dropout in the 3-month period occurring; OR<1 decreased frequency of dropout; OR>1 increased frequency of dropout; SD, standard deviation; EQS-C, Quality of Care Scale in outpatient consultation; HADS, Hospital Anxiety and Depression Scale.