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REVIEW

Satisfaction with services following voluntary and involuntary admission

Damian Smith[1], Eric Roche[2], Kieran O'Loughlin[1], Daria Brennan[3], Kevin Madigan[2], John Lyne[1], Larkin Feeney[2,4], and Brian O'Donoghue[2]

[1]Department of Psychiatry, St. Vincent's University Hospital, Elm Park, Dublin, Ireland, [2]Cluain Mhuire Community Mental Health Services, Blackrock, Co Dublin, Ireland, [3]St. John of God Hospital, Stillorgan, Co Dublin, Ireland, and [4]Department of Psychiatry, Royal College of Surgeons, Dublin, Ireland

Abstract

Background: Service user perspectives are essential for the evaluation and development of mental health services. Service users expressing less satisfaction with services subsequently have poorer treatment outcomes.
Aims: To measure satisfaction with services following psychiatric admission, and to explore its relationship with a number of clinical and service factors.
Methods: A multi-centre observational study was conducted across three mental health services in Ireland. Service users were interviewed and provided with self-report questionnaires. The Client Satisfaction Questionnaire (CSQ-8) was used to measure treatment satisfaction.
Results: The overall level of satisfaction with services was good (CSQ-8 mean score 24.5). Service users who were admitted involuntarily, who experienced physical coercion and lower levels of procedural justice were less satisfied. A better therapeutic relationship, improved insight and better functioning were associated with higher levels of treatment satisfaction.
Conclusion: Mental health services should implement strategies to ameliorate the effects of factors associated with lower levels of treatment satisfaction.

Keywords

Involuntary admission, perceived coercion, physical coercion, recovery style, service user perceptions, therapeutic relationship, treatment satisfaction

History

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Background

Service user perspectives are essential for the evaluation and development of patient-centred, recovery-oriented mental health services (Sowers, 2005), and are beneficial to both user and provider of care (Priebe et al., 2012). Insights garnered from those with first-hand experience of services identify positive and negative aspects of care, which cannot be detected by service providers alone (Locker & Dunt, 1978). Of all the available patient reported outcome measures, treatment satisfaction has the greatest evidence base (McCabe et al., 2007). Improved satisfaction is associated with desirable treatment outcomes including improved quality of life (Blenkiron & Hammill, 2003), higher levels of functioning (Holcomb et al., 1998), and reduced hospitalisations (Priebe et al., 2009). Conversely, service users expressing less satisfaction with treatment are more likely to disengage from follow up (Tempier et al., 2002).

The measurement of satisfaction with services is a complex process, and has been debated internationally in the psychiatric literature. High levels of satisfaction with mental health services have been reported (Jabbar et al., 2011), despite the occurrence of adversity during care. In their study of service users' satisfaction with services, Greenwood et al. (1999) report on the variability of levels of satisfaction across respondents, and discuss how a qualitative measure of satisfaction would go some way towards providing more clarity on the subject. They used three measures of client satisfaction, including a standardised measure, the Client Satisfaction Questionnaire (CSQ-8), and cite high correlations between scores on this and those extracted from semi-structured interviews.

Inpatient treatment negatively impacts upon ratings of satisfaction, especially if on an involuntary basis (Greenwood et al., 1999). Involuntarily admitted service users are more likely to have clinical factors associated with poorer satisfaction, such as diagnoses of psychotic disorders and greater levels of psychopathology (Riecher et al., 1991). These service users are also more likely to experience greater levels of perceived and physical coercion during the process of their admission, both of which have been associated with lower levels of treatment satisfaction (Katsakou et al., 2010; Sorgaard, 2007). Nonetheless one cannot assume that involuntary legal status inevitably leads to treatment dissatisfaction as the majority of involuntarily admitted service users reflect positively upon their admission

Correspondence: Dr Brian O'Donoghue, Cluain Mhuire Community Mental Health Services, Newtownpark Avenue, Blackrock, Co Dublin, Ireland. Tel: +3531 2172100. E-mail: briannoelodonoghue@gmail.com

(O'Donoghue et al., 2010a). To our knowledge, no study has yet examined the relationship between treatment satisfaction and the level of procedural justice and perceived pressures experienced at the time of admission. In addition, the relationship between a service user's recovery style and their satisfaction with services has not yet been investigated.

This study aimed to measure the level of satisfaction with services in a representative inpatient sample following admission to a psychiatric hospital and to identify demographic, clinical and service factors associated with satisfaction. We hypothesised that service users would express greater levels of treatment satisfaction if they had been admitted voluntarily, had greater insight, improved functioning, less severe symptoms, no co-morbid substance use disorder, a more integrative recovery style, and a better therapeutic relationship with their consultant psychiatrist. In addition we hypothesised that service users would be less satisfied with treatment if they experienced greater levels of perceived and physical coercion during their admission. Finally, we aimed to perform a multivariate analysis in order to demonstrate which factors continued to be associated with treatment satisfaction after adjusting for possible confounding between the variables.

Methodology

Setting

This study was conducted in the inpatient settings of three adult community mental health services in Ireland, serving a total population of approximately 390 000 people. Participants were also drawn from an independent psychiatric hospital, which receives referrals from throughout Ireland.

Participants

Participants were recruited as part of a study entitled ''Service User's Perspectives of their Admission (SUPA).'' All individuals admitted involuntarily to the study centres between 1 May 2010 and 30 June 2011 were invited to participate. Involuntary admissions represent approximately 10% of admissions in Ireland. Therefore to ensure a comparable number of voluntarily and involuntarily admitted participants, we invited the next individual admitted voluntarily after each involuntary admission to participate. All participants were inpatients at the time of recruitment and interview and questionnaire completion. Interviews were conducted in the week prior to discharge. Interviewing clinicians were never a member of the individual's treating team.

We excluded service users with a diagnosis of dementia or intellectual disability. In Ireland individuals with a sole diagnosis of personality disorder or substance use disorder cannot be involuntarily admitted under the Mental Health Act 2001 (Kelly, 2007). Therefore to ensure a representative sample of voluntary and involuntary participants, we excluded such individuals from our study. Service users admitted for treatment of first episode psychosis could not be invited to participate as these individuals were recruited for another study protocol within our setting.

Ethics approval

Ethical approval was granted by ethics committees in each of the study centres. Potential participants were provided with an information sheet and signed a consent form if they agreed to participate. We were not permitted to obtain information relating to individuals who declined to be involved in the study and therefore we could not undertake comparisons.

Instruments

User satisfaction with services was measured using the short form of the CSQ-8 (Attkisson & Greenfield, 2004). This scale is designed for self-administration, and participants answer eight questions on 4-point response scales with individually specified anchors. Items on the CSQ-8 focus on domains of quality of service, kind of service, outcome and general satisfaction. It has demonstrated a high level of internal consistency with a Cronbach's α ranging from 0.83 to 0.93 (LeVois et al., 1981; Nguyen et al., 1983), and has significant correlation (0.6–0.8) with other methods and instruments used to measure global satisfaction (De Wilde & Hendriks, 2005; Greenwood et al., 1999). Previous studies have categorised data from the CSQ-8 using varying cut off points for differing levels of satisfaction (Marchand et al., 2011). As we could find no such method used consistently, we subdivided the total CSQ-8 score into 4 levels of satisfaction reflecting the answers on each item: ''poor'' (score 8–13), ''fair'' (score 14–19), ''good'' (score 20–25) and ''excellent'' (score 26–32).

Level of insight into illness was measured using the Birchwood Insight Scale (BIS; Birchwood et al., 1994). This is an 8-item self-report questionnaire consisting of three domains relating to insight. The validity and reliability of the BIS are well established. It has a Cronbach's α of 0.75, and has significant concurrent validity with the Present State Examination (PSE; Wing et al., 1974) insight items.

Recovery style was measured using the Recovery Style Questionnaire (RSQ39), which is a 39-item self-report questionnaire that contains 13 concepts relating to recovery style (Drayton et al., 1998). Participants fall into a category rated on a spectrum ranging from integrative to sealing over recovery styles (McGlashan, 1987). The RSQ39 has good validity ($r = 0.92$), re-test reliability (Spearman $r = 0.81$) and internal reliability (Cronbach's $\alpha = 0.73$) (Drayton et al., 1998). This concept can only be measured in individuals diagnosed with a psychotic disorder.

Clinician interviewers rated each participant's level of functioning using the Global Assessment of Functioning (GAF), which is scored from 0 to 100, with higher scores indicating improved functioning in social and occupational domains as well as reduced symptom severity (American Psychiatric Association, 2000).

The short form of the Working Alliance Inventory (WAI-S) is a tool used to measure therapeutic alliance between service user and clinician (Horvath & Greenberg, 1989). It is a 12-item self-report measure, which produces a score ranging from -3 to $+68$ with higher scores indicating a better therapeutic relationship.

The MacArthur Admission Experience Interview was administered to determine the level of perceived coercion, level of procedural justice and perceived pressures an individual experienced on admission to hospital (Monahan et al., 1995). Perceived coercion is scored from 0 to 5 with higher scores representing higher levels of perceived coercion by the individual upon admission to hospital. Procedural justice represents the respondent's understanding that others are acting out of genuine concern for them and that they are being listened to and treated with respect and fairness. It is scored from 1 to 4 with higher scores representing less perceived procedural justice. Perceived pressures surrounding a person's admission can be either positive or negative. Pressures are positive when a person, usually a relative or treating doctor, tries to show the service user that they would be better off in hospital, while negative pressures are when the person expresses that the individual would be worse off if they were to resist hospitalisation (Lidz et al., 1995). Perceived pressures are measured by four questions, scored from 0 to 4, with higher scores indicating higher levels of perceived pressures.

Clinical information

Clinician researchers conducted interviews using the Structured Clinical Interview for DSM-IV (SCID-IV) (American Psychiatric Association, 2000). For those participants with psychotic disorders a clinician researcher assessed positive and negative symptom severity using the scale for assessment of positive symptoms (SAPS) and the scale for assessment of negative symptoms (SANS), respectively. The Beck Depression Inventory (BDI) was used to measure depressive symptomatology in all participants (Beck & Beck, 1972).

Physical coercion was defined as the use of one or more of the following: restraint, seclusion or the administration of medications without consent. We obtained information relating to the use of restraint and seclusion from the ''Clinical Practice Form for Physical Restraint'' and the ''Register for Seclusion,'' respectively. Information on the administration of medication without consent was taken from clinical notes and drug charts. Demographic data were obtained from the service user's Electronic Patient Record.

Statistical analysis

Statistical analysis was carried out using the PASW version18. We used Chi-square tests to determine associations for dichotomous variables and we used Fisher Exact test when there was an expected count of less than five in any of the groups. We used *t* tests to compare continuous variable means between the two groups and the Mann–Whitney *U* test was used to determine differences in non-parametric data. Spearman's correlation test was used to determine if non-parametric data were correlated and was expressed as ''rs.'' A correlation of 0 to 0.2 was defined as no correlation or a weak correlation, 0.30 to 0.6 as moderate, 0.7 to 1.0 as a strong correlation. For the multivariate analysis, we created dichotomous values for satisfaction with services, by grouping together ratings of ''poor'' and ''fair'' as dissatisfied, and ''good'' and ''excellent'' as satisfied.

Results

Demographics and clinical characteristics of participants and non-participants

A total of 231 individuals were eligible to participate and 70% ($n = 161$) were interviewed. Of the 161 service users invited to participate, 20% ($n = 32$) did not complete the CSQ-8 questionnaire and therefore 129 participants were included. The reasons for individuals not being interviewed and their allocations along with a flow diagram of participants are presented in Figure 1. Demographic details and clinical information of CSQ-8 completers and non-completers are presented in Table 1. CSQ-8 completers and non-completers did not differ significantly for gender, age, marital status or diagnosis. The 20% of non-completers, however, were more likely to be involuntarily admitted, to have had a longer duration of admission and to have experienced physical coercion during their admission.

The level of satisfaction reported by service users did not vary according to gender ($t = 0.16$, $p = 0.88$) and it was not correlated with age ($r = 0.14$, $p = 0.12$). There was no difference in level of satisfaction reported by service users on their first admission as compared to those who had been readmitted (CSQ-8 scores 26 versus 24, $t = 1.0$, $p = 0.32$). There was also no association between duration of admission and the level of satisfaction with services ($rs = -0.15$, $p = 0.09$).

Satisfaction with services and admission status (involuntary or voluntary)

Of all voluntarily and involuntarily admitted service users the mean level of satisfaction with service as reported by the CSQ-8 was 24.5 (SD 6.0) which represents a good overall level of satisfaction. Voluntarily admitted service users reported excellent satisfaction with services compared to involuntarily admitted service users who reported a good overall level of satisfaction (CSQ-8 26 versus 22, $t = -3.9$, $p = <0.001$). The level of satisfaction associated with legal status of service users is presented in Table 2.

Insight and global functioning

A service users level of insight was correlated with the level of satisfaction they expressed, with greater insight weakly associated with greater satisfaction ($rs = 0.24$, $p = 0.01$). Higher levels of functioning, as measured by GAF score, were also weakly associated with greater treatment satisfaction ($rs = 0.25$, $p = 0.01$).

Diagnosis, level of psychopathology, and co-morbid substance use disorders

There was no difference in the levels of satisfaction reported by service users with a primary diagnosis of psychotic disorder as compared to those diagnosed with affective or anxiety disorders (CSQ-8 scores 24 versus 25, $t = -1.63$, $p = 0.11$). Satisfaction with services was not correlated with the severity of positive symptoms ($rs = -0.05$, $p = 0.74$), negative symptoms, ($rs = -0.21$, $p = 0.14$) or depressive symptoms ($rs = -0.05$, $p = 0.6$). Service users with co-morbid harmful or dependent drug use reported a good

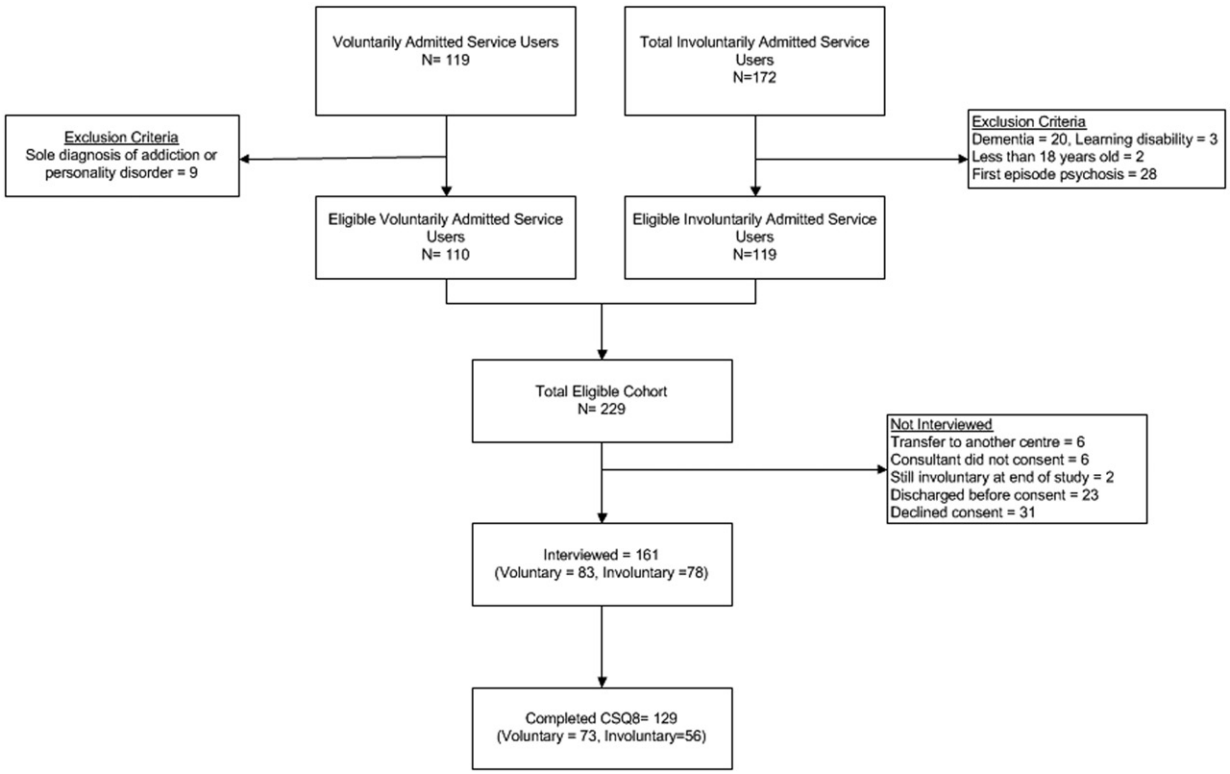

Figure 1. Flow diagram of participants in the study.

Table 1. Comparison of demographic and clinical characteristics of participants and non-participants.

	Completed CSQ8 ($N=129$)		Incomplete CSQ8 ($N=33$)			
	% (N)	Mean ± SD	% (N)	Mean ± SD	Statistical test of difference	p Value
Sex						
Male	53 (69)		55 (18)		$\chi^2=0.01$	0.91
Female	47 (60)		45 (15)			
Mean age, years						
Total group		42.8 ± 14.1		44.6 ± 13.1	$t=-0.66$	0.51
Males		40.2 ± 12.7		39.3 ± 9.7	$t=0.28$	0.78
Females		45.8 ± 15.1		50.9 ± 14.0	$t=-1.20$	0.24
Marital status						
Married	26 (33)		21 (7)		$\chi^2=0.29$	0.87
Unmarried	61 (79)		67 (22)			
Separated/divorced/widowed	13 (17)		12 (4)			
Diagnosis						
Psychotic disorders	44 (57)		55 (18)		$\chi^2=1.13$	0.29
Anxiety & affective disorders	56 (72)		45 (15)			
Co-morbid diagnoses						
Alcohol – harmful use or dependence	21 (27)		12 (4)		$\chi^2=1.32$	0.25
Cannabis – harmful use or dependence	15 (19)		15 (10)		$\chi^2=0.01$	0.95
Admission details						
Involuntary admission	43 (56)		70 (23)		$\chi^2=7.27$	0.01
First admission	14 (18)		15 (5)		$\chi^2=0.25$	0.88
Admission length, days		44.5 ± 40.4		133.5 ± 330.4	$t=-2.95$	0.01
Involuntary admission order, days		44.4 ± 49.3		144.4 ± 391.9	$t=-1.81$	0.08
Tribunal occurring[a]	52 (29)		57 (13)		$\chi^2=0.15$	0.70
Any physical coercion during admission (%)	16 (20)		42 (14)		$\chi^2=11.48$	<0.001
Symptomatology (s.d.)						
Positive symptoms, mean SAPS[b]		7.4 ± 4.1		8.1 ± 4.1	$t=-0.58$	0.57
Negative symptoms, mean SANS[b]		4.9 ± 4.2		6.4 ± 6.6	$t=-0.85$	0.41
Depressive symptoms, mean BDI		17.8 ± 13.9		14.6 ± 12.2	$t=1.02$	0.31

[a]Only includes participants involuntarily admitted ($n=79$).
[b]Only includes participants with a psychotic disorder ($n=57$).

overall level of satisfaction, but were significantly less satisfied than those without this co-morbid diagnosis (CSQ-8 scores 21 versus 25, $t = -2.86$, $p = 0.01$). This relationship was not present for participants with co-morbid alcohol use disorders (CSQ-8 scores 24 versus 25, $t = -0.56$, $p = 0.58$).

Recovery style

Of the individuals with a psychotic disorder, the category of recovery style was not correlated with the level of satisfaction experienced (rs = 0.01, $N = 41$, $p = 0.99$). There was no difference in the mean CSQ-8 scores between the group of individuals with an integrative recovery style and a sealing over recovery style (24.7 versus 23.4, $t = 0.60$, $p = 0.55$).

Therapeutic relationship

The strength of the therapeutic relationship between the service user and their consultant psychiatrist was moderately correlated with the level of satisfaction with services they reported (rs = 0.63, $p = <0.001$).

Perceived coercion, procedural justice and perceived pressures

The level of procedural justice experienced on admission was moderately correlated with the level of satisfaction with services (rs = 0.38, $p = 0.005$). Lower levels of satisfaction were also weakly correlated with higher perceived coercion (rs = −0.21, $p = 0.02$) and perceived pressures (rs = −0.17, $p = 0.06$), although the latter only neared statistical significance.

Physical coercion

Of participants, 16% ($n = 20$) experienced any form of physical coercion during their admission. These service users reported a good overall level of satisfaction, but despite this finding were significantly less satisfied with the services they received than those who did not experience any form of physical coercion (CSQ-8 scores 20 versus 25, $t = -2.94$, $p = 0.01$). For all available participants use of seclusion ($n = 15$) (CSQ-8 scores 20 versus 25, $t = -2.51$, $p = 0.02$) and medication without consent ($n = 10$) (CSQ-8 scores 18 versus 25, $t = -3.85$, $p = <0.001$) resulted in significantly lower levels of satisfaction. Participants who experienced the use of restraint ($n = 16$) also reported lower levels of satisfaction, however this did not reach statistical significance (CSQ-8 scores 21 versus 25, $t = -1.80$, $p = 0.09$).

In those individuals admitted involuntarily, the use of any physical coercion was associated with lower levels of treatment satisfaction (CSQ-8 scores 19.5 versus 23.3, $t = -2.05$, $p = 0.05$) and this was specific for the administration of medication without consent (CSQ-8 scores 17.9 versus 22.9, $t = -2.13$, $p = 0.04$). In involuntarily admitted service users, the use of restraint (CSQ-8 scores 20.6 versus 22.1, $t = -0.69$, $p = 0.49$) or the use of seclusion (CSQ-8 scores 19.3 versus 22.9, $t = -1.64$, $p = 0.11$) were not associated with different reports of treatment satisfaction. No voluntarily admitted service users experienced any physical coercion therefore analysis could not be conducted in this sub-group.

Multivariate analysis

All variables associated with treatment satisfaction were then entered into a logistic regression model, the results of which are displayed in Table 3. This model correctly predicted 99% of those who reported a satisfaction of ''good'' or ''excellent'' and 64% of those who reported it to be ''poor'' or ''fair.'' Overall the model correctly predicted 93% of reports of treatment satisfaction. The model explained between 36 and 59% of the variance in the reporting of satisfaction with services. Overall, full data were available for 62% ($n = 79$) of cases. After controlling for the confounding that may occur between the variables in the model, this analysis revealed that only the therapeutic relationship and the use of seclusion reliably predicted satisfaction with services. The WAI-S measures the therapeutic relationship with one's consultant psychiatrist on a scale ranging from −3 to 68 with higher scores indicating a better therapeutic relationship. For every increase of 1 on the WAI-S, the odds of an individual reporting improved satisfaction increase by a factor of 1.1 ($p = 0.02$, 95% CI 1.02 and 1.19). For those Individuals who

Table 2. Level of satisfaction with services according to legal status.

	Legal status % (*N*)		
Total CSQ8 score	All	Voluntary	Involuntary
Poor (8–13)	6 (8)	1 (1)	13 (7)
Fair (14–19)	14 (18)	11 (8)	18 (10)
Good (20–25)	32 (41)	26 (19)	39 (22)
Excellent (26–32)	48 (62)	62 (45)	30 (17)
Total	100 (129)	100 (73)	100 (56)

Table 3. Logistic regression model of variables predicting satisfaction with services.

							95% confidence intervals	
	B	SE	Wald	df	*p* Value	Odds ratio	Lower	Upper
Insight	−0.25	0.22	1.22	1	0.27	0.78	0.51	1.21
Legal status	0.95	1.59	0.36	1	0.55	2.59	0.12	57.97
Co-morbid substance use disorder	−0.84	1.27	0.43	1	0.51	0.43	0.04	5.25
Perceived pressures	0.06	0.72	0.01	1	0.94	1.06	0.26	4.34
Procedural justice	0.25	0.2	1.66	1	0.2	1.29	0.88	1.89
Perceived coercion	−0.47	0.32	2.19	1	0.14	0.63	0.24	1.16
Therapeutic relationship	0.09	0.04	5.44	1	0.02	1.1	1.02	1.19
Seclusion	−4.04	1.93	4.38	1	0.04	0.02	0.0	0.78
Medication without consent	22.36	27430.43	0.0	1	0.1	5.11	0.0	-
GAF score	−0.03	0.04	0.47	1	0.49	0.97	0.89	1.06

experienced seclusion, there was a decrease in the odds of them being satisfied by a factor of 0.02 ($p = 0.02$, 95% CI 0.0 and 0.78). With the odds ratio to aid interpretation, individuals who experience seclusion were less likely to be satisfied by a factor of 50 (95% C.I. 1.28 and 100).

Discussion

Summary of findings

This study found that service users are generally satisfied with the services they receive following psychiatric admission (CSQ-8 mean score, 24.5). There are specific factors however, associated with lower levels of satisfaction with services, namely: involuntary admission, co-morbid substance use disorder, less procedural justice, greater perceived coercion, experiencing the use of seclusion and medication without consent. Inpatients with greater insight, improved functioning and a better therapeutic relationship with their consultant psychiatrist had higher levels of satisfaction with services.

Comparisons with the literature

This study confirms previous findings that involuntary legal status is associated with significantly lower levels of satisfaction following psychiatric admission (Greenwood et al., 1999). This is a consistent and concerning association, as poorer satisfaction is associated with worse treatment outcomes (Tempier et al., 2002). Involuntarily admitted service users are more likely to experience perceived and physical coercion (Fiorillo et al., 2012) and these factors have been associated with reduced treatment satisfaction (Katsakou et al., 2010; Sorgaard, 2007). In our study, 16% ($n = 20$) of participants experienced any form of physical coercion and in line with previous findings; these individuals were more likely to report less satisfaction with services (Iversen et al., 2007). At times, physical coercion can unfortunately be necessary, so the challenge for mental health services is to undertake this practice and still deliver care, preserve the therapeutic relationship and maintain a high level of satisfaction. This is actually feasible, as the level of procedural justice experienced is not directly related to the use of physical coercion, i.e. individuals who experience physical coercion are very aware of the manner in which they are being treated (O'Donoghue et al., 2011).

Regarding the impact of perceived coercion, the results of this study are consistent with that of Katsakou et al., in that a greater level of perceived coercion experienced at the time of admission is weakly correlated with reduced treatment satisfaction; however, this relationship loses its significance once adjusted for confounding (Katsakou et al., 2010). To our knowledge this is the first study to report an association between satisfaction with inpatient treatment and the level of procedural justice and perceived pressures experienced at the time of admission. We found that the level of procedural justice is positively correlated with treatment satisfaction. This association is stronger than the association between perceived coercion and satisfaction with services indicating that procedural justice may be a more important influence on patient reported outcomes.

The strongest association found in the present study was between the therapeutic relationship and treatment satisfaction. This association has been well documented (Bressington et al., 2011) and some have suggested that these two measures are intrinsically linked, and therefore overlap (McCabe & Priebe, 2004). A recent analysis however, demonstrated that measuring both these outcomes individually could provide distinct and valuable information (Reininghaus et al., 2011).

Few studies have reported on the relationship between treatment satisfaction and co-morbid substance use disorders. Our finding that co-morbid substance use disorders are weakly associated with significantly reduced treatment satisfaction is consistent with the results of a pilot study by Primm et al., who reported that these service users are less satisfied with the care they receive (Primm et al., 2000).

Clinical implications

If clinicians and mental health services are cognisant of the factors associated with treatment satisfaction, interventions could be implemented to enhance satisfaction and therefore improve treatment outcomes.

Our findings suggest that targeting the therapeutic relationship between clinician and service user may improve treatment satisfaction. The therapeutic relationship is enhanced by effective communication between the service user and their treating clinician (Priebe & McCabe, 2008). This can involve simply explaining a person's illness and the indication for their admission/treatment in a style appropriate to their educational and cultural background (McCabe & Priebe, 2004). Furthermore, it is vital that clinicians seek and acknowledge an individual's own experience of their illness and treatment. A recent randomised controlled trial found that a computer mediated intervention structuring patient–clinician dialogue to include discussion of unmet treatment needs improved service user satisfaction and quality of life over a 1-year period (Priebe et al., 2007).

Maintaining satisfaction with services and the therapeutic relationship becomes all the more challenging when an individual is involuntarily admitted and experiences coercive practices. Interventions aimed at minimising the use of physical coercive measures may improve satisfaction with inpatient services. A recent review by Stewart et al. reported on a broad range of interventions associated with a reduction in the use of seclusion and restraint in adult psychiatric units (Stewart et al., 2010). These included, changes to national and local policy on coercive measures; increased staff levels to allow for greater staff to patient ratios; improved staff training on the alternatives to restraint, e.g. de-escalation techniques; formalised case review procedures and collaborative crisis management initiatives.

A patient-centred and collaborative approach to treatment decision making is associated with improved treatment satisfaction (Wills & Holmes-Rovner, 2006). Advance directives and collaboratively developed care plans may be of benefit in pre-empting difficult treatment decisions, while still maintaining satisfaction with services (Nicaise et al., 2012). An advance directive is a document which the service user develops with their treating clinician in order to outline their preferences for treatment in the event that they become

incompetent of making decisions or are unable to communicate their preferences to their treating team (Srebnik & La Fond, 1999). A study undertaken in Ireland demonstrated that service users would welcome the introduction of advance directives into clinical practice (O'Donoghue et al., 2010b).

Finally, we suggest that immediately following and throughout the admission process, service user satisfaction may be improved with the support of a key-worker. This individual is usually a member of the ward staff who is readily available to the service user and can act as their confidant and advocate. Previous studies have highlighted the importance of the key-worker role in maintaining treatment satisfaction in involuntarily admitted service users (Sorgaard, 2007).

Strengths and limitations

This study included a representative sample of voluntarily and involuntarily admitted service users from a number of inpatient mental health services and therefore its results should be generalizable. The present study contributes to the literature on treatment satisfaction as it explores its relationship with a wide range of factors, some of which have not previously been described.

Due to the observational nature of our study, we cannot comment on the causality between treatment satisfaction and the associated factors we have identified. Another limitation of our study is that we were unable to include service admitted for a first episode psychosis, which may have resulted in an over-representation of inpatients with enduring mental health disorders. The methodology of earlier studies on treatment satisfaction has been criticized for the use of non-standardised instruments (Lebow, 1982). In the present study, we used the CSQ-8, which is a well-established instrument with good reliability and validity in inpatient mental health populations (Attkisson & Greenfield, 2004). Despite these advantages, the CSQ-8 also has limitations, one of which is that it was designed by health research academics and therefore may not capture aspects of inpatient care important to service users. Recent research in this area has led to the development of service user generated measures of satisfaction, which incorporate the issues most relevant to service users while still retaining good psychometric properties (Evans et al., 2012). A further limitation is that non-participants were more likely to be of involuntary legal status and to have experienced any form of physical coercion. It is a reasonable assumption that these individuals would have expressed lower levels of treatment satisfaction. Consequently, their non-participation introduces a potential bias in that the level of satisfaction with services found could have been over-estimated. The wide confidence intervals in the results of the multivariate analysis would encourage caution in the interpretation of the results.

Conclusion

This study has demonstrated that although service users express a good overall level of satisfaction with services (CSQ-8 24.5) following psychiatric admission; those service users who are admitted involuntarily (CSQ-8 22), who have a co-morbid substance use disorder (CSQ-8 21), who experience less procedural justice, greater perceived coercion, the use of seclusion (CSQ-8 20) and medication without consent (CSQ-8 18), express less satisfaction with the care they receive. We suggest that mental health services could implement strategies targeting these service users with a view to improving their level of satisfaction and consequently their treatment outcomes.

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Declaration of interest

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