Satisfaction with care in a Brazilian psychiatric inpatient unit: differences in perceptions among patients according to type of health insurance

Satisfação com o cuidado em uma unidade de internação psiquiátrica brasileira: diferenças nas percepções dos pacientes segundo tipo de plano de saúde

Julia Almeida Godoy,[1] Gabriela Pavan,[1] Ricardo Tavares Monteiro,[2] Luis Souza Motta,[1,3] Marco Antonio Pacheco,[1,2] Eduardo Lopes Nogueira,[1,4] Lucas Spanemberg[1,2]

Abstract

Introduction: User satisfaction assessment in mental health services is an important indicator of treatment quality. The objective of this study was to evaluate treatment satisfaction in a sample of inpatients with mental disorders and the associations between levels of satisfaction and clinical/sociodemographic variables.
Methods: This exploratory study investigated 227 psychiatric inpatients who answered the Patient Satisfaction with Mental Health Services Scale (SATIS-BR) and the Perception of Change Scale (EMP). SATIS scores were analyzed according to associations with clinical and sociodemographic data. Pearson correlations were used to correlate SATIS scores with other variables.
Results: We found a high degree of satisfaction with care at the psychiatric inpatient unit assessed. In general, patients rated maximum satisfaction for most items. The highest satisfaction scores were associated with patients receiving treatment through the Brazilian Unified Health System (SUS) and with less education. SATIS showed a moderate positive correlation with EMP. The worst evaluated dimension was physical facilities and comfort of the ward.
Conclusion: Patients treated via SUS may be more satisfied than patients with private health insurance when treated in the same facility. The evaluation of treatment satisfaction can be used to reorganize services at psychiatric inpatient units.
Keywords: Patient satisfaction, inpatients, health care system, health insurance, mental health.

Resumo

Introdução: A avaliação da satisfação do usuário nos serviços de saúde mental é um importante indicador da qualidade do tratamento. O objetivo deste estudo foi avaliar a satisfação com o tratamento em uma amostra de pacientes internados com transtornos mentais e as associações entre os níveis de satisfação e variáveis clínicas/sociodemográficas.
Métodos: Este estudo exploratório investigou 227 pacientes psiquiátricos internados que responderam a Escala de Satisfação do Paciente com os Serviços de Saúde Mental (SATIS-BR) e a Escala de Percepção da Mudança (EMP). Os escores SATIS-BR foram analisados segundo associações com dados clínicos e sociodemográficos. Correlações de Pearson foram usadas para correlacionar escores SATIS com outras variáveis.
Resultados: Encontramos alto grau de satisfação com o atendimento na unidade de internação psiquiátrica avaliada. Em geral, os pacientes atribuíram satisfação máxima para a maioria dos itens. Os maiores escores de satisfação foram associados a pacientes em tratamento pelo Sistema Único de Saúde (SUS) e com menor escolaridade. A SATIS mostrou uma correlação positiva moderada com EMP. A pior dimensão avaliada foi associada às instalações físicas e conforto da enfermaria.
Conclusão: Pacientes com cobertura pelo SUS podem estar mais satisfeitos do que pacientes com planos privados de saúde quando tratados na mesma unidade. A avaliação da satisfação com o tratamento pode ser usada para reorganizar serviços em unidades de internação psiquiátrica.
Descritores: Satisfação do paciente, pacientes internados, sistema de saúde, seguro de saúde, saúde mental.

Introduction

The World Health Organization (WHO) suggests evaluation of mental health services to guarantee the quality of service provided.[1] In recent decades, patient opinions have gained the interest of clinicians, administrators and service accreditation agencies.[2,3] Patients may perceive their health status, symptoms, and improvement differently from the clinical and assistant staff,[4-7] adding an important perspective to the evaluation of outcomes. Patient satisfaction indexes are important indicators of quality of care.[8]

The evaluation of results from the outlook of the patient is a new perspective in mental health and is particularly important in psychiatric wards. Historically, the psychiatric hospital has stigmas and prejudgments arising from the old asylum model of care that was frequently related to abandonment and exclusion, abuses (maltreatment and punishment) and the lack of a medical perspective.[9,10] Despite many important changes, the transition from asylums to general hospitals has not yet been sufficiently followed with quality result assessments, particularly in Brazil. There are a few outcome studies in this country, but most of them have assessed clinical profile and outcomes.[11-15] To the authors' knowledge, only one study has evaluated the outcome based on the patient's outlook.[5]

Satisfaction with treatment is an important factor in the quality of treatment and is related to greater adherence, greater frequency of service use and reduction of treatment abandonment rates.[16] Satisfaction assessment can predict treatment results and can also be considered a result in itself.[17] Studies involving psychiatric inpatients have shown that factors such as older age,[3,18,19] male gender,[3,18,19] better health status,[19] general hospital admission (relative to psychiatric hospital), pleasant atmosphere, shorter hospitalization time,[19] treatments received, staff availability[17] and perception of improvement[5] are factors associated with greater satisfaction with treatment. However, the Brazilian perspective poses even greater challenges to the theme, since the national health system has mixed financing. While the Brazilian Unified Health System (Sistema Único de Saúde [SUS]), which is public, universal and free, is the one with the greatest coverage, it is often seen as of poor quality and low efficiency. Conversely, private health insurance plans have a high cost, and are therefore inaccessible to many people, but are seen as presenting higher quality, suggesting that their users may be more satisfied. Despite these perceptions, there are no studies evaluating satisfaction with care in psychiatric inpatient units considering the type of health insurance as an independent variable.

Thus, beyond the exploratory investigation, we hypothesize that type of health insurance could play a role in the variation of patient satisfaction. For this purpose, all analyses were planned in a sample of inpatient users receiving treatment through both public and private health insurances. They received the same mental health care at the same psychiatric unit during a defined period of study (avoiding seasonal interferences or medical and nurse staff disparities). They had equal bed quality and were assisted by the same medical and nursing staff.

This study aims to evaluate satisfaction with treatment and care in a sample of inpatients with mental disorders treated at a general hospital and to evaluate the associations between level of patient satisfaction with clinical treatment and sociodemographic variables, particularly type of health insurance (public vs. private).

Methods

Sample, setting and design

This was an exploratory cross-sectional study. All patients admitted to the psychiatric hospitalization unit of Hospital São Lucas da Pontifícia Universidade Católica do Rio Grande do Sul (HSL/PUCRS), from April 2014 to July 2016 were invited to participate. The unit has 21 psychiatric beds, of which 11 are designated to patients with private health insurance and 10 to patients who use the public health system (SUS), without physical distinction in relation to type of insurance, i.e., both private and SUS patients may stay in the same room and will receive the same care). The beds are divided into seven rooms with three beds each (male and female rooms), circulation areas and a common area (TV room, reading room and dining room), which is also a visiting area. The physical structure of the unit is similar to that of treatment areas from other medical specialties in the same hospital. There is no access to external open environment in the ward; the space is small and is not adapted for complementary activities (occupational therapy, physical education and group therapies).

Inclusion criteria were broad, and all patients hospitalized during the study period who accepted to answer the research instruments were invited to participate. Individuals who refused to participate in the study or those who could not read or understand the instruments were excluded. A total of 321 individuals were invited. Of these, 49 patients did not complete the Patient Satisfaction with Mental Health Services Scale (SATIS-BR), did not agree to participate or were clinically unable to answer the instrument. In addition, we excluded 15 records of patients who had been

hospitalized for less than 7 days (8 records), records without sufficient data identification (5 records), and cases showing typing errors in SATIS-BR (2 records). Therefore, the final sample consisted of 257 patients (80% of the initial sample) who completed the SATIS-BR and agreed to participate in the study by signing a free and informed consent form.

Procedures

Routine application of the instruments has been described previously.[5] Briefly, at the time of patient discharge, the attending physician answered the Clinical Global Impression Scale – Improvement (CGI-I). To avoid measurement bias (patient embarrassment in answering the questionnaire to their physician), a researcher not directly involved in patient care applied the SATIS-BR, the Perception of Change Scale – Patient Version (Escala de Mudança Percebida [EMP]), the Global Assessment of Functioning (GAF), and the Clinical Global Impression – Patient Version (CGI-P). This same worker also applied the family versions of the instruments EMP and CGI (EMP-F and CGI-F). Therefore, the attending physician was blinded both to the patient's and the patient family's responses. This minimized any potential biasing of the physician's assessment of improvement. All participants were informed about the research objectives, the security of the data, that the interview would not interfere with their treatment and that there were no right or wrong answers to the questions.

Instruments

The clinical and sociodemographic questionnaire used in this study was a standard clinical instrument containing sociodemographic questions (such as gender, age, marital status, educational level and type of health insurance) and questions addressing clinical aspects (e.g., number of previous hospitalizations, previous psychiatric treatment and initial psychiatric diagnosis). In addition, the following CGI assessment scales were used: severity (CGI-S), improvement (CGI-I), improvement assessment by the patient (CGI-P) and improvement assessment by the family (CGI-F). The GAF was used to evaluate the level of functioning of the individuals. These instruments were routinely applied to all patients hospitalized at the psychiatric unit.

The SATIS-BR tool was originally developed by the WHO to assess satisfaction with mental health care in three groups: patients, families and professionals. The instrument consists of 13 questions with answers arranged as 5-point Likert scales. Higher scores mean a higher degree of satisfaction. In addition, the final part of the SATIS-BR presents open questions regarding the user's reviews on the service. The SATIS-BR was translated to and validated in Brazilian Portuguese for use with psychiatric outpatients with adequate psychometric properties of construct validity, convergent validity and reliability.[20] In the validation study, item 6 was eliminated for having a coefficient of saturation below the minimum criterion established. Thus, the final instrument in Brazilian Portuguese consists of 12 items with possible scores ranging from 12 to 60 points. We also used the factorial solution of three factors proposed by Bandeira & Silva in the Brazilian Portuguese validation, namely: SATIS Factor 1, competence and understanding of the team; SATIS Factor 2, Help and reception of the team; and SATIS Factor 3, Physical conditions of the unit. In this work, we performed the association analyses using the total scores of the instrument and its factors (rather than means). The internal consistency (Cronbach's alpha) of SATIS-BR, SATIS Factors 1, 2 and 3 in our sample were 0.836, 0.807, 0.635 and 0.735, respectively – similar to the results reported by Bandeira & Silva.

Finally, the EMP consists of 19 items that assess the patient's perception about changes in life as a result of receiving treatment, with response options arranged as 3-point Likert scales: 1 indicates worse than before; 2 no change; and 3 better than before. Of the 19 items on the scale, a global item assesses how the patient perceives, in general, the results of the treatment received. The remaining items assess perceived changes in various dimensions of the patient's life (e.g., physical, psychological and social life). The EMP was translated to and validated in Brazilian Portuguese and showed suitable psychometric performance in relation to its construct validity, convergent validity, internal consistency and temporal stability.[21] It was also evaluated for psychiatric inpatients. There was a slightly different factor structure in relation to the original scale.[5] In our sample, we used the total scores of the instrument and its factors in the analyses, with an internal consistency result of α=0.847.

Statistical analysis

Sociodemographic and clinical data were described as means and standard deviations for continuous variables and as absolute numbers and percentages for categorical variables. To evaluate the correlations among SATIS and other continuous variables, Pearson correlations were calculated with the following parameters: very weak (0.00 to 0.19), weak (0.20 to 0.39), moderate (0.40 to 0.59), strong (0.60 to 0.79) and very strong (0.80 to 1.00).[22] We used the Student's t-test for independent samples to calculate the association between categorical and continuous

variables. Categorical variables were analyzed with the Pearson chi-square tests; post-hoc analyses of the adjusted residuals were also performed to reveal differences among the categories of each variable. One-way analysis of variance (ANOVA) followed by the Tukey post-hoc test was used to compare parametric variables among three or more groups.

The significance level for all tests was 0.05, and all analyses were performed using the Statistical Package for the Social Sciences (SPSS) version 21.0.

Ethical considerations

All participants signed an informed consent form. This study was approved by the research ethics committee of PUCRS (protocol 1.035.483).

Results

The final sample consisted of 257 patients who filled out the SATIS-BR. Of these, 59.5% were women with at least 9 years of schooling (65%), single or divorced (55.2%). Most of the patients had private health insurance (52.2%), but about half of the sample was hospitalized through SUS (45.5%). The main reason for psychiatric hospitalization was suicide risk (ideation or attempt) (40.9%). The most prevalent psychiatric diagnoses were bipolar disorder (25.9%) followed by unipolar depression (22.4%) and personality disorders (18%). The mean time of hospital stay was 31 days. Table 1 summarizes the main clinical and sociodemographic findings of the sample.

Table 1 - Sociodemographic and clinical characteristics of the total sample

Variable	n (%) or mean (SD)	Variable	n (%) or mean (SD)
Age (years) (n=257), mean (SD)	43.28 (17.9)	Psychiatry treatment (n=241), n (%)	
		Current	144 (59.8)
Gender (female) (n=257), n (%)	153 (59.5)	Past	58 (24.1)
		No treatment	39 (16.2)
Years of education (n=249), n (%)			
≤8	86 (34.5)	Chief complaint (n=254), n (%)	
9-12	101 (40.6)	Suicidal ideation/attempt	104 (40.9)
>12	62 (24.9)	Psychotic symptoms	47 (18.5)
		Behavior change	22 (8.7)
Marital status (n=252), n (%)		Substance abuse	22 (8.7)
Single/separated	139 (55.2)	Other	59 (23.2)
Married	95 (37.7)		
Widowed	18 (7.1)	Main psychiatric diagnosis (n=255), n (%)	
		Bipolar disorder	66 (25.9)
Number of previous hospitalizations (n=241), mean (SD)	2.12 (4.2)	Unipolar depression	57 (22.4)
		Personality disorders	46 (18.0)
		Psychotic disorders	26 (10.2)
Number of previous hospitalizations (n=241), n (%)		Substance use/misuse	24 (9.4)
		Neurotic and anxiety disorders	15 (5.9)
Zero	117 (48.5)	Other	21 (8.2)
One	40 (16.6)		
Two	24 (10)	Other variables, mean (SD)	
Three or more	60 (24.9)	Length of stay (n=254)	31.4 (17.7)
		SATIS-BR (n=247)	53.17 (5.29)
Occupational status (n=254), n (%)		SATIS Factor 1	35.96 (3.57)
Employed/active	93 (36.6)	SATIS Factor 2	13.84 (1.44)
Unemployed	60 (23.3)	SATIS Factor 3	7.85 (1.78)
Retired	60 (23.3)	Global Assessment Functioning (n=257)	67.44 (12.2)
Temporary disability (government benefit)	31 (12.1)	Perception of Change Scale (n=255)	47.61 (4.96)
Other	10 (3.9)	CGI Improvement (n=245)	5.66 (1.29)
		CGI Patient (n=254)	6.38 (1.06)
Health insurance (n=253), n (%)		CGI Family (n=243)	6.26 (1.01)
SUS (public)	115 (45.5)		
Private health insurance	132 (52.2)		
No insurance (self-pay)	6 (2.4)		

CGI = Clinical Global Impression; SATIS-BR = Patient Satisfaction with Mental Health Services Scale – Brazilian Version; SD = standard deviation; SUS = Brazilian Unified Health System.

Table 2 shows the correlations of the total SATIS-BR scores with its three factors and with the clinical evaluation scales. The total SATIS-BR scores showed significant positive and strong correlations with all its three factors (r=0.932 with Factor 1, r=0.792 with Factor 2, and r=0.693 with Factor 3, with p<0.001), which indicates that the factors are interrelated. The scale also presented a moderate positive correlation with the EMP (r=0.406, p<0.001), indicating that satisfaction with care and the perception of improvement are related constructs. SATIS-BR also showed a weak correlation with GAF (r=0.151, p<0.05) and a poorly significant correlation with CGI-P (r=0.330, p<0.001), but not with doctor-rated CGI-I or CGI-F.

Regarding the completion of the SATIS-BR, in general patients endorsed mainly the categories of responses related to a moderate to high degree of satisfaction. Exceptions were the items related to comfort and appearance of the hospitalization unit, in which a lower degree of satisfaction was most endorsed. The complete tabulated data consisting of the means, standard deviations and medians obtained for each item of the instrument are available from the authors upon request.

Table 3 presents association analyses of the SATIS-BR total score and its three factors with clinical and sociodemographic variables. No significant associations were found for gender, psychiatric diagnosis, occupational status, marital status or length of stay for either the total score of the instrument or its factors. There was only a weak correlation of age (r=0.145) with Factor 3 (aspect of the unit). SUS patients scored significantly higher than private health insurance patients for both total score and all three SATIS-BR factors. Patients with less schooling were more satisfied than those with more schooling considering the total score of the instrument. In Factor 3, differences in schooling were significant

among the three grades. Patients admitted for suicide risk were more satisfied than patients admitted for other reasons, for both the total score and Factor 1. There was a small but significant difference between the group that had never been hospitalized before and the one with three or more hospitalizations in relation to Factor 1 (competence and understanding of the team). The first group was more satisfied. No differences were found in severity ratings between the private and public health insurance groups.

Discussion

This article evaluated treatment satisfaction in patients hospitalized in a general hospital psychiatric unit. We found a high degree of general satisfaction in the sample. The highest satisfaction scores were found mainly in patients admitted through the public health system (SUS), in those with lower educational level and in patients admitted for suicide risk. The worst dimension was comfort and structure of the unit. SATIS showed a moderate correlation with patient perception of improvement and adequate internal consistency. This is the first study in Brazil to evaluate psychiatric inpatient satisfaction.

The patients were quite satisfied, which is consistent with the literature.[3,18,23] However, some factors associated with satisfaction showed heterogeneous findings. While gender,[3,18,24,25] psychiatric diagnosis,[25-27] age[2,3,18,24] and types of symptoms[17] are related to treatment satisfaction in many studies, our findings did not show this. The main variables associated with higher satisfaction were socioeconomic status (lower schooling and receiving treatment through SUS) and being hospitalized for suicide risk. While socioeconomic aspects will be discussed further, we believe that the

Table 2 - Correlations among SATIS-BR, SATIS factors and clinical scales

	SATIS-BR	SATIS-F1	SATIS-F2	SATIS-F3	EMP	GAF	CGI-I	CGI-P	CGI-F
SATIS-BR	1	-	-	-	-	-	-	-	-
SATIS F1	**0.932***	**1**	-	-	-	-	-	-	-
SATIS F2	**0.792***	**0.701***	**1**	-	-	-	-	-	-
SATIS F3	**0.693***	**0.424***	**0.419***	**1**	-	-	-	-	-
EMP	**0.406***	**0.388***	**0.289***	**0.279***	**1**	-	-	-	-
GAF	**0.151†**	**0.199***	**0.149†**	-0.029	0.047	1	-	-	-
CGI-I	0.016	0.044	0.029	-0.053	-0.029	**0.252***	1	-	-
CGI-P	**0.330***	**0.343***	**0.229***	**0.191***	**0.365***	0.041	**0.290***	1	-
CGI-F	0.072	0.109	0.029	0.011	0.108	**0.146†**	**0.321***	**0.445***	1

CGI-F = Clinical Global Impression – Family; CGI-I = Clinical Global Impression – Improvement; CGI-P = Clinical Global Impression – Patient; GAF = Global Assessment of Functioning; EMP = Perception of Change Scale – Patient Version; SATIS = Patient Satisfaction with Mental Health Services Scale.
* p<0.01; † p<0.05.

Table 3 - Associations of SATIS-BR and its factors with clinical and sociodemographic variables

	n	SATIS-BR	p	SATIS-F1	p	SATIS-F2	p	SATIS-F3	p
Gender	257		0.897		0.577		0.875		0.268
Female	153	53.1 (5.2)		35.8 (3.2)		13.8 (1.5)		8.0 (1.7)	
Male	104	53.2 (5.3)		36.0 (3.6)		13.8 (1.3)		7.7 (1.8)	
Psychiatric diagnosis	255		0.937		0.966		0.658		0.634
Substance use/misuse	24	53.2 (4.5)		36.0 (3.0)		13.4 (1.4)		7.9 (1.5)	
Psychotic disorders	26	53.3 (6.1)		35.7 (4.0)		13.9 (1.6)		8.1 (1.8)	
Bipolar disorders	66	53.5 (5.1)		36.2 (3.4)		14.0 (1.2)		7.8 (1.7)	
Unipolar depression	57	53.5 (4.7)		36.0 (3.4)		13.9 (1.2)		8.0 (1.6)	
Personality disorders	46	52.8 (5.0)		36.0 (3.0)		13.8 (1.3)		7.4 (2.0)	
Neurotic and anxiety disorders	15	51.8 (5.1)		35.1 (3.4)		13.6 (1.2)		7.5 (1.6)	
Other	21	53.3 (6.5)		36.1 (4.6)		13.6 (2.0)		8.0 (1.7)	
Type of health insurance	253		**<0.001***		**0.037[†]**		**0.006[†]**		**<0.001***
Public	115	**54.6 (4.2)**		**36.4 (3.0)**		**14.1 (1.1)**		**8.6 (1.3)**	
Private/self-pay	138	**51.9 (5.7)**		**35.5 (3.9)**		**13.6 (1.6)**		**7.2 (1.8)**	
Years of education	249		**0.002[†]**		0.162		0.065		**<0.001***
≤8	86	**54.6 (4.6)[a]**		36.4 (3.1)		14.1 (1.2)		**8.5 (1.5)[a]**	
9-12 years	101	53.0 (5.0)		36.0 (3.4)		13.7 (1.4)		**7.7 (1.6)[b]**	
>12 years	62	**51.4 (6.0)[b]**		35.2 (4.3)		13.6 (1.6)		**7.0 (1.8)[c]**	
Occupational status	254		0.901		0.595		0.759		0.886
Employed or active	93	53.3 (5.1)		36.2 (3.4)		13.9 (1.4)		7.7 (1.9)	
Unemployed	60	53.0 (5.3)		35.8 (3.5)		13.8 (1.2)		7.8 (1.9)	
Retired	60	52.6 (6.1)		35.3 (4.2)		13.6 (1.7)		8.0 (1.6)	
Temporary disability	31	53.7 (4.5)		36.3 (3.0)		13.9 (1.2)		7.9 (1.4)	
Other	10	53.2 (3.9)		36.4 (2.5)		13.9 (1.1)		7.5 (1.7)	
Marital status	252		0.154		0.123		0.123		0.189
Single or separated	139	52.6 (5.6)		35.5 (3.7)		13.6 (1.5)		7.8 (1.8)	
Married	95	53.8 (4.4)		36.5 (3.0)		14.0 (1.1)		7.8 (1.7)	
Widowed	18	54.2 (6.6)		36.1 (4.6)		13.9 (1.4)		8.6 (1.6)	
Reasons for admission	254		**0.037[†]**		**0.014[†]**		0.175		0.670
Suicide risk	104	**54.0 (4.3)[a]**		**36.6 (3.0)[a]**		14.0 (1.1)		8.0 (1.8)	
Psychotic symptoms	47	52.9 (5.2)		35.7 (3.5)		13.8 (1.2)		7.8 (1.7)	
Behavior change	22	51.5 (7.9)		34.7 (5.1)		13.2 (2.2)		7.7 (1.8)	
Drug misuse or intoxication	22	54.4 (3.5)		36.9 (2.3)		13.9 (1.2)		8.0 (1.0)	
Other	59	**51.8 (5.9)[b]**		**35.0 (3.9)[b]**		13.6 (1.5)		7.5 (1.8)	
Number of previous hospitalizations	241		0.139		**0.018[†]**		0.762		0.385
0	117	53.9 (4.6)		**36.6 (3.2)[a]**		13.9 (1.4)		7.8 (1.7)	
1	40	52.2 (5.0)		35.3 (3.3)		13.8 (1.3)		7.4 (1.9)	
2	24	52.2 (5.4)		34.9 (3.3)		13.7 (1.3)		7.9 (1.8)	
≥3	60	52.5 (6.0)		**35.3 (4.0)[b]**		13.6 (1.6)		8.0 (1.5)	

Correlations with continuous variables									
		SATIS-BR	p	SATIS-F1	p	SATIS-F1	p	SATIS-F1	p
Age	257	0.019	0.761	-0.061	0.333	0.036	0.566	**0.145**	**0.020[†]**
Length of stay	254	0.030	0.635	0.061	0.333	0.037	0.562	-0.034	0.594

Data presented as mean (standard deviation).
SATIS = Patient Satisfaction with Mental Health Services Scale.
Different superscript letters indicate significant differences among the groups according to the Tukey post-hoc test.
* p<0.001; [†] p<0.05.

greater satisfaction observed in patients hospitalized for suicide risk may be related to better outcomes in these patients in relation to patients with other chief complaints, according to a previous study in the same environment.[14] Since in most cases suicidal ideation is transient, and patients can relate their improvement to the care environment of hospitalization, they can feel greater satisfaction than those admitted for other complaints in which improvement takes longer.

The highest impact variable on treatment satisfaction was type of health insurance. This – along with schooling level – reflects socioeconomic level. Patients in the public health system (SUS) were more satisfied, showing not only higher total SATIS scores, but also in the three domains. These differences, although not explored in the current study, may be related to some peculiarities of our institution. Unlike most health services, where public and private wards are located and handled separately, our unit does not make room distinctions based on the patient's type of health insurance. A study on user satisfaction in southern Brazil found that patients with private health insurances expect treatment privileges and feel dissatisfied when treated in the same environment as SUS users.[28] In addition, SUS is not considered a benefit in Brazil, but rather "the last resort," i.e., when there is no financial condition to pay for private health insurance. Thus, SUS users can feel privileged when they have access to the same services as private health insurance users. The high degree of satisfaction with treatment assessed by SATIS was also seen in other studies involving SUS users.[29,30] In addition, social inequality (a condition highly related to discrepancies in relation to the type of health insurance) may be a more important factor for the perception of health states (and care) than other variables commonly related to individual differences, making this variable key in the evaluation of results, especially in highly unequal countries such as Brazil.[31]

Like other papers in the literature, we found an important association between treatment satisfaction and perception of improvement by the patient.[5,25,30,32] A positive correlation was found between SATIS scores and changes perceived by the patients (as evaluated by EMP) and impression of improvement (as assessed by CGI-P). This did not occur when SATIS scores were correlated with the physician's perception, neither with CGI-I (no correlation) nor with GAF (very weak correlation). These disparities between the perceptions of physicians vs. those of patients are widely recognized[7,4] and increase the need to include the perceptions of patients themselves in the evaluation of results.

The worst satisfaction dimension was in relation to the comfort and structure of the unit – especially among patients with private health insurance. This result was expected because indeed the psychiatric ward is poorly adapted to the mental health care environment (small living space, lack of privacy, absence of external area). This indicates the need for adaptations in design and structure. For example, adding single rooms could increase the sense of privacy and cleanliness.[33] The literature is unclear regarding the effects of design, comfort, environment, and structure of psychiatric units on clinical outcomes. Some studies have shown an improvement in the perception of the environment,[34,35] changes in social behavior[36] and treatment satisfaction and quality of life[35] in wards that redesigned their facilities. However, this remains inconclusive.[37] While there are arguments for psychiatric wards to maintain shared rooms, paradoxically, individual rooms have already been associated with improved social behavior.[38] This is because patients can opt for a private space, and yet they can also often leave the room, unlike patients staying in rooms with other patients who may isolate themselves searching for privacy.[39] Other structural and design changes also influence the patients and the team, including the well-being of the users – an important outcome in health.[33,37]

This study has several limitations. First, our sample is of convenience and was selected in only one institution in southern Brazil. Due to the particularities mentioned above, our findings should be viewed with caution regarding their external validity. Second, we only used quantitative SATIS data. While open-ended questions can offer important data about treatment satisfaction, their analysis ran counter to the quantitative goal of the work. Third, we used only one instrument for satisfaction assessment. There are at least 15 psychiatric inpatient satisfaction assessment instruments available,[40] which measure a number of complementary dimensions of the construct not contemplated by SATIS. However, we opted for an instrument already translated and validated for our environment,[20] and here we offer further evidence of its validity in psychiatric inpatients. Fourth, there are many confusing factors related to the construct satisfaction and assessment of psychiatric inpatient settings. These are related to patient characteristics and the peculiarities of institutions and professionals and have implications in study results.[37] Our study was exploratory and did not aim to control these factors. The present results should be confirmed in future controlled studies. Furthermore, the SATIS-BR was only validated for outpatient settings. However, the instrument does not present specific items that limit the application environment, and our results add some reliability indicators (such as high internal consistency for the instrument in general and for Factors 1 and 3), very similar to another study conducted with

outpatients.[20] The validity of the SATIS-BR in the inpatient environment, however, needs to be tested, since the condition of instability at a time of acute recovery may affect patient responsiveness. Finally, because this was a cross-sectional study, our findings cannot be interpreted in terms of causal relationships. Even so, this is the first Brazilian study of this type, and it paves the way for future research with more robust designs.

In summary, the patients were satisfied with the treatment received at the psychiatric inpatient unit. Satisfaction was mainly related to the perception of improvement and was greater among patients in the public health system group. The evaluation of treatment satisfaction is an important outcome in health and should be incorporated into the reorientation of changes in the processes of organization, team training, and physical design improvements. The theme needs to be better analyzed, with controlled studies for the various confounding factors related to the characteristics of the patients and the peculiarities of each institution.

Disclosure

No conflicts of interest declared concerning the publication of this article.

References

1. World Health Organization. The World Health Report 2001. Mental health: new understanding, new hope [Internet]. [cited 2017 Dec 8]. http://www.who.int/whr/2001/en/whr01_en.pdf?ua=1
2. Blenkiron P, Hammill C. What determines patients' satisfaction with their mental health care and quality of life? Postgrad Med J. 2003;79:337-40.
3. Greenwood N, Key A, Burns T, Bristow M, Sedgwick P. Satisfaction with in-patient psychiatric services. Relationship to patient and treatment factors. Br J Psychiatry. 1999;174:159-63.
4. Lubaczewski S, Shepherd J, Fayyad R, Guico-Pabia CJ. Real-world disparities between patient- and clinician-reported outcomes: results from a disease-specific program in depression and anxiety. Prof Case Manag. 2014;19:63-74.
5. Pavan G, Godoy JA, Monteiro RT, Moreschi HK, Nogueira EL, Spanemberg L. Is there a correlation between physicians' clinical impressions and patients' perceptions of change? Use of the Perceived Change Scale with inpatients with mental disorders. Trends Psychiatry Psychother. 2016;38:234-41.
6. Quinten C, Maringwa J, Gotay CC, Martinelli F, Coens C, Reeve BB, et al. Patient self-reports of symptoms and clinician ratings as predictors of overall cancer survival. J Natl Cancer Inst. 2011;103:1851-8.
7. Trujols J, Siñol N, Iraurgi I, Batlle F, Guàrdia J, Pérez de Los Cobos J. Patient and clinician's ratings of improvement in methadone-maintained patients: Differing perspectives? Harm Reduct J. 2011;8:23.
8. Donabedian A. The quality of care. How can it be assessed? JAMA. 1988;260:1743-8.
9. Lipsitt DR. Psychiatry and the general hospital in an age of uncertainty. World Psychiatry. 2003;2:87-92.
10. Silva NG, Oliveira AGB. Interconsulta psiquiátrica e unidades de internação psiquiátrica no Brasil: uma pesquisa bibliográfica. Mundo Saude. 2010;34:244-51.
11. Dalgalarrondo P, Botega NJ, Banzato CEM. Patients who benefit from psychiatric admission in the general hospital. Rev Saude Publica. 2003;37:629-34.
12. Dalgalarrondo P, Gattaz WF. A psychiatric unit in a general hospital in Brazil: predictors of length of stay. Soc Psychiatry Psychiatr Epidemiol. 1992;27:147-50.
13. Hallak JEC, Crippa J a. S, Vansan G, Zuardi AW. Diagnostic profile of inpatients as a determinant of length of stay in a general hospital psychiatric unit. Braz J Med Biol Res. 2003;36:1233-40.
14. Moreschi HK, Pavan G, Godoy JA, Mondrzak R, Almeida MR, Pacheco MA, et al. Factors related to positive and negative outcomes in psychiatric inpatients in a General Hospital Psychiatric Unit: a proposal for an outcomes index. Arch Clin Psychiatry. 2015;42:6-12.
15. Nuernberg GL, Baeza FL, Fleck MP, Rocha NS. Outcomes of inpatients with severe mental illness: a naturalistic descriptive study. Braz J Psychiatry. 2016;38:141-7.
16. Barbosa CD, Balp M-M, Kulich K, Germain N, Rofail D. A literature review to explore the link between treatment satisfaction and adherence, compliance, and persistence. Patient Prefer Adherence. 2012;6:39-48.
17. Hackman A, Brown C, Yang Y, Goldberg R, Kreyenbuhl J, Lucksted A, et al. Consumer satisfaction with inpatient psychiatric treatment among persons with severe mental illness. Community Ment Health J. 2007;43:551-4.
18. Kuosmanen L, Hätönen H, Jyrkinen AR, Katajisto J, Välimäki M. Patient satisfaction with psychiatric inpatient care. J Adv Nurs. 2006;55:655-63.
19. Rosenheck R, Wilson NJ, Meterko M. Influence of patient and hospital factors on consumer satisfaction with inpatient mental health treatment. Psychiatr Serv. 1997;48:1553-61.
20. Bandeira M, Silva MA da. Patients' Satisfaction with Mental Health Services Scale (SATIS-BR): validation study. J Bras Psiquiatr. 2012;61:124-32.
21. Bandeira M de B, Andrade MCR, Costa CS, Silva MA da. Patient's perception on the treatment in mental Health services: validating the Perception of Change Scale - patient version. Psicol Reflex Crit. 2011;24:236-44.
22. Evans JD. Straightforward statistics for the behavioral sciences. Pacific Grove: Brooks/Cole; 1996. 632 p.
23. Müller MJ, Schlösser R, Kapp-Steen G, Schanz B, Benkert O. Patients' satisfaction with psychiatric treatment: comparison between an open and a closed ward. Psychiatr Q. 2002;73:93-107.
24. Hall JA, Dornan MC. Patient sociodemographic characteristics as predictors of satisfaction with medical care: a meta-analysis. Soc Sci Med. 1990;30:811-8.
25. Hasler G, Moergeli H, Bachmann R, Lambreva E, Buddeberg C, Schnyder U. Patient satisfaction with outpatient psychiatric treatment: the role of diagnosis, pharmacotherapy, and perceived therapeutic change. Can J Psychiatry. 2004;49:315-21.
26. Holikatti PC, Kar N, Mishra A, Shukla R, Swain SP, Kar S. A study on patient satisfaction with psychiatric services. Indian J Psychiatry. 2012;54:327-32.
27. Kelstrup A, Lund K, Lauritsen B, Bech P. Satisfaction with care reported by psychiatric inpatients. Relationship to diagnosis and medical treatment. Acta Psychiatr Scand. 1993;87:374-9.
28. Gerschman S, Veiga L, Guimarães C, Ugá MAD, Portela MC, Vasconcellos MM, et al. Consumer satisfaction study in philanthropic hospital health plans. Ciênc Saúde Colet. 2007;12:487-500.
29. Kantorski LP, Jardim VR, Wetzel C Christine, Olschowsky A, Schneider JF, Heck RM, et al. User satisfaction with psychosocial healthcare services, Southern Brazil. Rev Saude Publica. 2009;4329-35.
30. Silva MA da, Bandeira M, Scalon JD, Quaglia MAC. Patients' satisfaction with mental health services: the perception of changes as predictor. J Bras Psiquiatr. 2012;61:64-71.
31. Massa KHC, Pabayo R, Chiavegatto Filho ADP. Income inequality and self-reported health in a representative sample of 27017 residents of state capitals of Brazil. J Public Health. 2018;40:e440-e446.
32. Perreault M, White ND, Fabrès E, Landry M, Anestin AS, Rabouin D. Relationship between perceived improvement and treatment satisfaction among clients of a methadone maintenance program. Eval Program Plann. 2010;33:410-7.
33. Csipke E, Papoulias C, Vitoratou S, Williams P, Rose D, Wykes T. Design in mind: eliciting service user and frontline staff perspectives on psychiatric ward design through participatory methods. J Ment Health. 2016;25:114-21.

34. Nicholls D, Kidd K, Threader J, Hungerford C. The value of purpose built mental health facilities: Use of the Ward Atmosphere Scale to gauge the link between milieu and physical environment. Int J Ment Health Nurs. 2015;24:286-94.
35. Urbanoski KA, Mulsant BH, Novotna G, Ehtesham S, Rush BR. Does the redesign of a psychiatric inpatient unit change the treatment process and outcomes? Psychiatr Serv. 2013;64:804-7.
36. Whitehead CC, Polsky RH, Crookshank C, Fik E. Objective and subjective evaluation of psychiatric ward redesign. Am J Psychiatry. 1984;141:639-44.
37. Papoulias C, Csipke E, Rose D, McKellar S, Wykes T. The psychiatric ward as a therapeutic space: systematic review. Br J Psychiatry 2014;205:171-6.
38. Ittelson WH, H. M. Proshansky, Rivlin LG. A study of bedroom use of two psychiatric wards. Hosp Community Psychiatry. 1970;21:177-81.
39. Ittelson WH, Proshansky HM, Rivlin LG. Bedroom size and social interaction of the psychiatric ward. Environ Behav. 1970;2:255-70.
40. Boyer L, Baumstarck-Barrau K, Cano N, Zendjidjian X, Belzeaux R, Limousin S, et al. Assessment of psychiatric inpatient satisfaction: a systematic review of self-reported instruments. Eur Psychiatry. 2009;24:540-9.

Correspondence:
Lucas Spanemberg
Av. Ipiranga, 6690, 6º andar – Unidade Psiquiátrica
90610-000 - Porto Alegre, RS - Brazil
E-mail: lucas.spanemberg@pucrs.br