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Brazilian Mental Health Services Assessment: user satisfaction and associated factors

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Abstract *Patient satisfaction is an important criterion for assessing the quality of Brazilian mental health services at Psychosocial Care Centers (CAPS – from the Portuguese 'Centro de Atenção Psicossocial'). The aim of this study was to evaluate the satisfaction of users at the main CAPS in a region of Minas Gerais state, Brazil, as well as associated factors. This was a cross-sectional study with 11 CAPS. Patients were interviewed using the Patient Satisfaction with Mental Health Services Scale (SATIS-BR) and a semi-structured questionnaire containing sociodemographic and clinical variables. The users were satisfied with the CAPS, particularly in terms of staff competence and the welcome received and care provided. The physical facilities and comfort at the centers obtained the lowest satisfaction scores on the scale. Almost half of the users were unfamiliar with basic aspects of their drug therapy, such as the name of medicines, and one-third reported inappropriate use of medications. Users of midsize CAPS and those providing treatment for alcohol and drug addiction were more satisfied than patients at mental health or 24-hour CAPS. Although this study identified a need for improvement in physical facilities, mechanisms of participation and patient empowerment, the users were satisfied with the CAPS care model.*

Key words *Health service evaluation, Mental health services, Patient satisfaction*

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Introduction

Psychosocial care centers (CAPS – from Portuguese Centro de Atenção Psicossocial) are the main mental health strategy to replace the asylum and hospital-centered model, redefining the concept of mental health treatment. By promoting outpatient treatment, the policy fosters the inclusion of users as active participants in their treatment in a multidisciplinary approach that considers history, culture and everyday activities to create a Singular Therapeutic Project (PTS)[1]. In this respect, assessing user satisfaction is an important criterion in evaluating CAPS quality insofar as it considered the user's perspective.

Psychosocial care centers (CAPS) serve as a gateway to the Brazilian National Health System (SUS) and are organized into care models according to their size, complexity and coverage. Specific care models provide additional treatment for children and adolescents (CAPSi), and CAPS-ad units treat adults, children and adolescents with disorders resulting from drug and alcohol use[2]. The creation of legal instruments was vital to consolidating and developing the Mental Health Policy of 2001. In 2011, the Psychosocial Care Network (RAPS) established guidelines and objectives for each institution in the services network, outlining the expected operational and problem-solving capabilities[1].

User satisfaction reflects the results obtained by the service and the respective determinants of dissatisfaction. This indicator provides information that influences decision making and gives managers the opportunity to assess CAPS not only in terms of administrative issues, but from the perspective of their primary users[3,4]. As a subjective measure, satisfaction is also an important component for user participation in building and changing health services, allowing them to exercise citizenship and reinforcing empowerment in their treatment, recovery and psychosocial rehabilitation[5-7].

In mental health services, satisfaction is related to how easily patients are able to adhere to the treatment plan, ensuring they continue therapy and use the service more frequently, and also contributes to improving quality of life and reducing the need for hospitalization in the future[3,4]. International studies using self-report instruments to assess user satisfaction found a relationship between satisfaction and variables related to the patient, health professionals, service aspects and treatment evolution[8-10]. In Brazil, few studies have assessed mental health services, particularly in terms of user satisfaction[11]. In general, users are satisfied with mental health services[4,6,12-14]; however, the number of variables studied is still small when compared to other aspects assessed. No studies were found that compare CAPS care models, but these may be important in understanding aspects of each center within the RAPS.

Given the implementation of a mental health care strategy, assessing these services is important in order to determine their ability to solve problems and meet user expectations, considering them protagonists in knowledge production[7]. As such, the aim of this study was to assess the satisfaction of users of the main CAPS in a region of Minas Gerais (MG) state, correlating levels of satisfaction with the different care models of the centers and sociodemographic characteristics of the users.

Methods

This was a cross-sectional correlation study that aimed at identifying the factors associated with user satisfaction with mental health services. Data were obtained by applying a validated scale to measure user satisfaction with mental health services and a semi-structured survey, designed to collect sociodemographic data and information on drug therapy.

User satisfaction was measured by applying the short version of the Patient Satisfaction with Mental Health Services Scale (SATIS-BR), designed by the mental health division of the World Health Organization (WHO) and subsequently validated for use in Brazil[3]. The instrument is divided into three subscales that assess satisfaction on a 5-point Likert scale (1 – very dissatisfied; 5-very satisfied) with the competence of the team and understanding of patient needs, the welcome received and help provided, as well as the physical facilities and comfort of the center evaluated.

The semi-structured survey included the sociodemographic variables from the short-form SATIS and was designed to profile users and identify aspects of drug therapy. It also contained variables such as schooling level, occupation and treatment time at the CAPS. Variables identified by health professionals in a pilot study conducted at two CAPS resulted in the inclusion of travel costs and travel time to the centers. These variables were suggested as important factors in continued adherence to treatment at CAPS, as reported by their staff.

Information on the medication used was

collected directly from patient prescriptions or medical charts by the researchers and the following treatment-related variables were included in the survey: description of medication used, inappropriate use and seeking guidance on medication use.

A script was compiled for survey and SATIS scale application to train the researchers involved in data collection, and instructions were provided to standardize their approach to users. The list of users treated at the centers and eligible to participate in the study was updated on each data collection day to avoid approaching those unable to take part and identify new users.

Sample size was calculated to determine the minimum number of interviewees, considering the populations of the cities of Betim (417,000 inhabitants), Contagem (648,000) and Ibirité (173,000) (MG), in 2014. Due to the heterogeneity of the events assessed, a priori probability of 50% was considered, with 5% error, 95% confidence error and 30% dropout rate. The minimum number of interviewees for each CAPS considered the ratio between the population of the city where the center was located and the total number of inhabitants in all the cities included in the study, divided by the number of CAPS in the cities. OpenEpi® software version 3.02 was used to calculate sample size, obtaining a minimum of 500 participants.

Data were collected at 11 medium-sized to large CAPS, two of which were CAPS II, four CAPS III, two CAPSi, one CAPS-ad and two CAPS-ad III. All the managers gave their informed consent for the centers' participation in the study. Participants were recruited from August 2014 to February 2015 and data collection at each CAPS lasted an average of 30 days, occurring simultaneously at some of the nearby centers. Interviews were conducted on dates predetermined by the center managers, based on the availability of the support needed by the research team for data collection and access to the CAPS on days when typical activities were taking place. Data collection dates at the different centers were scheduled on alternate days to allow for changes in health care teams on call or on duty, in order to approach users who visited the centers on different days for routine or return consultations. The interviews were conducted in areas that ensured participants and their companions (when present) could talk with the interviewer without being interrupted by staff or other users. All the data on medication use were confirmed by the researchers after the interview against the patient's medical chart or most recent prescription on file at the center or in the user's possession.

Participants comprised a systematic sample of users at the centers, under intensive or non-intensive treatment, on the scheduled data collection days. Staff recommendation was the inclusion criterion used to select eligible patients at the centers. The health care team identified users capable of being interviewed at the time, that is, patients who had not experienced an acute mental health crisis in the last few days. The users were invited to participate and asked to sign a consent form. Family members or companions could also sign the consent form and then participate in the interview, relaying the information to the users as needed. During the interview, users who did not understand the questions on the SATIS scale, even after an explanation by the researcher, were excluded from the study due to mental confusion. Also excluded were those who seemed restless or provided conflicting information, since they were deemed psychologically unfit to participate. The database was compiled using quality control methods, with 10% double data entry exhibiting excellent interrater agreement ($k > 0.80$). Data that differed during two-pass verification were reviewed by the two data entry researchers. Interrater agreement for the data collected from the medical charts and prescriptions was significant ($k = 0.79$; $p = 0.00$), indicating little difference in data extraction. Agreement is important because none of the centers used electronic charts and data were extracted by reading the documents.

The sociodemographic and clinical characteristics and assessment of the satisfaction scores by subscale and item were described using measures of central tendency and dispersion, as well as percentages. Percentages were calculated for users who were very satisfied or satisfied, with scores of 4 or 5, somewhat satisfied, with a score of 3, and those dissatisfied with mental health services, who rated the answers as 1 or 2. Data were analyzed using the *Statistical Package for the Social Sciences* (SPSS), version 19.0. Nonparametric tests were applied when deemed necessary based on the Kolmogorov-Smirnov (0.21; $p = 0.00$) and Shapiro-Wilk tests (0.79; $p = 0.00$).

Kendall's nonparametric test was used to compare the means for the three SATIS-BR subscales, in order to detect significant differences between scores; Wilcoxon's test was applied to the means of the subscales two at a time to determine which subscale pairs differed significantly; the Friedman test was used to identify the specific items on the scale with the highest or lowest

average ranking positions, that is, the aim was to determine which questions exhibited ranking positions far higher or lower than those obtained in the remaining items. A significance level of 5% was adopted for all analyses. The tests were performed to compare the values obtained in different ways and establish which items on the SATIS best measured user satisfaction.

Univariate analysis was performed to assess the correlation between the level of user satisfaction and sociodemographic or clinical characteristics. The variables were categorized and analyzed by the Mann-Whitney U test for group comparison, at a 5% significance level. This test verifies the association between two nonparametric variables when groups with different individuals are compared. As such, groups of users were established to compare the level of satisfaction in each and identify significant differences. Regression analysis was not possible because the satisfaction scores showed non-normal distribution.

Questions 13 to 15 on the SATIS-BR scale are optional and allow users to record information not covered by the other questions, such as giving their opinion about the best and worst aspects of the center and areas for improvement. These data were analyzed by reading each individual answer and categorizing them according to the most common subjects. When an answer addressed more than one subject, either the most relevant issue to the user or the first to be mentioned was considered, based on confirmation of the relevance/order indicated by the user when questioned by the researched during the interview.

The study was approved by the Research Ethics Committee of the Federal University of Minas Gerais.

Results

A total of 467 valid interviews were conducted at the 11 CAPS included in the study, located in three of the most populated cities of the Médio Paraopeba region (MG) and serving a population of more than 1.2 million inhabitants.

The CAPS users were largely men (63.17%), single (67.75%) and aged between 25 and 59 years (65.59%), with an average of 34.77 years (SD = 16.54) for all participants. Most subjects had completed the initial years of elementary school (51.49%) and many worked in low-level jobs or as tradesmen (34.74%) (Table 1).

The users interviewed were being treated by the specialists at the CAPS (98.29%) and most were responsible for obtaining their own medication (70.63%). More than half of the participants had been undergoing treatment for up to two years (59.77%) and many had no travels costs (60.09%) because they either used the transport provided by the centers or lived nearby. The majority of the CAPS users interviewed (75.47%) took up to 40 minutes to get to the mental health center (Table 2).

Participants used an average of 3.38 (SD = 1.76) medications during the day, varying from 0 to 9. When asked what medicine they used, 45.80% were able to name or read all the medications listed on their prescriptions and/or medical charts, while 39.23% were unable to name any. One third of the participants (34.78%) reported inappropriate use of medicines at some time during their treatment and 73.14% asked questions about their medication (48.40% asking their doctor, 8.40% nursing staff, and 7.82% pharmacists). It is important to note that a number of users approached other health care professionals or even family members and friends (13.30%) when in doubt about their medication.

User satisfaction was presented by subscale and an overall score. The average score for overall user satisfaction was 4.46 (SD = 0.65) on a scale of 1 to 5, indicating they were satisfied or very satisfied with the center in question. High average scores were also recorded in the subscales, with 4.54 (SD = 0.65) in subscale 1, related to staff competence and understanding, 4.64 (SD = 0.71) in subscale 2, pertaining to the welcome received and care provided, and 4.09 (SD = 1.06) in subscale 3, for physical facilities and comfort (Table 3).

Comparison of the means using Kendall's test demonstrated a significant difference (X^2 = 206.77). Subscale means compared in pairs via Wilcoxon's nonparametric test confirmed that users were more satisfied with the welcome received and cared provided when compared to staff competence and understanding and the physical facilities and comfort at the center (Table 3).

Each item in the SATIS-BR scale was analyzed to determine the percentage of satisfied, very satisfied, somewhat satisfied, and dissatisfied users (Table 4). Considering all items on the scale, most users were satisfied or very satisfied. Questions related to the competence of the staff member who provided the most care, satisfaction with the welcome received and care given, and whether the user was treated with dignity and respect obtained the highest percentages. The lowest

Table 1. Sociodemographic characteristics of mental health center users in the Médio Paraopeba region of Minas Gerais state, Brazil, 2014-2015.

Variables	Categories	Frequency (%)
Age (years)	0 to 4 years	2(0.43%)
(n = 465)	5 to 9 years	40(8.60%)
	10 to 14 years	29(6.24%)
	15 to 19 years	37(7.96%)
	20 to 24 years	25(5.38%)
	25 to 39 years	141(30.32%)
	40 to 59 years	164(35.27%)
	60 years and over	27(5.81%)
Gender	Male	295(63.17%)
(n = 467)	Female	172(36.83%)
Occupation	Never Worked	18(4.47%)
(n = 403)	Low-level jobs	82(20.35%)
	Jobs requiring elementary school qualification	140(34.74%)
	Jobs requiring a high school diploma/ technical qualifications	22(5.46%)
	Student	103(25.56%)
	Jobs requiring a college degree	9(2.23%)
	Retired/Government benefits	21(5.21%)
	Unemployed	6(1.49%)
	Others	2(0.50%)
Civil status	Married/ Common law marriage	96(20.78%)
(n = 462)	Single	313(67.75%)
	Divorced/separated	53(11.47%)
Schooling level	No education	10(2.48%)
(n = 404)	Special-needs school	2(0.50%)
	Incomplete elementary school	208(51.49%)
	Complete elementary school	47(11.63%)
	Incomplete High school	46(11.39)
	High school diploma	72(17.82%)
	Vocational-Technical School	7(1.73%)
	Incomplete College	5(1.24%)
	College degree	6(1.49%)
	Doctoral degree	1(0.25%)

percentages were recorded for satisfaction with the comfort and appearance of the center and its general physical facilities.

Analysis of the mean ranks for each item on the satisfaction survey using Friedman's test indicated a significant difference between all 12 items ($X^2 = 393.49$; p = 0.000). The highest means corresponded to the questions regarding the competence of the staff member who provided the most care, help received from the health care team, and the person who admitted the patient to the center.

The open-ended questions, designed to obtain additional opinions about the center, were categorized according to the subjects mentioned most often. More than half of the participants (n = 252) were willing to share what they considered best about the center, the most frequently cited being the welcome received, collaboration and respect between staff and users (35.31%), the workshops and activities on offer at CAPS (26.59%) and praise for staff (25.40%). A total of 101 statements were recorded about the worst aspects of the centers, 28.71% of which referred to the rundown infrastructure. Of the 218 suggested improvements, the most common involved the infrastructure (55.04%), need for more staff (11.93%) and additional workshops and activities (9.63%).

Univariate analysis verified the association between sociodemographic and clinical variables

Table 2. Characteristics related to the accessibility of mental health centers in the Médio Paraopeba region of Minas Gerais state, Brazil, 2014-2015.

Variables	Categories	Frequency (%)
Original consultation	Private service	3(0.64%)
(n = 467)	Municipal specialist	5(1.07%)
	Mental health service specialist	459(98.29%)
Travel costs	Free of charge	271(60.09%)
(n = 451)	Up to R$6.00	63(13.97%)
	R$ 6.00 a12.00	80(17.74%)
	R$ 12.00 a 18.00	32(7.10%)
	R$ 18.00 a 24.00	4(0.89%)
	More than R$ 24.00	1(0.22%)
Travel time	Up to 20min	169(39.49%)
(n = 428)	Up to 40min	154(35.98%)
	Up to 60 min	77(17.99%)
	Up to 80 min	7(1.64%)
	Up to 100 min	10(2.34%)
	Up to 120 min	10(2.34%)
	Up to 180 min	1(0.23%)
Person responsible for obtaining medicines	Caregiver	1(0.22%)
(n = 463)	Family	135(29.16%)
	Patient	327(70.63%)
Time treated at the center	less than 1 year	161(37.01%)
(n = 435)	1 to 2 years	99(22.76%)
	3 to 5 years	71(16.32%)
	6 to 9 years	31(7.13%)
	10 to 15 years	49(11.26%)
	15 to 20 years	20(4.60%)
	20 to 29 years	3(0.69%)
	More than 30 years	1(0.23%)

and the level of user satisfaction. A statistically significant difference was only observed for the variables employment, size and care model of the center, and treatment duration (Table 5). As such, users who were employed and those treated at the center for less than two years exhibited a higher level of satisfaction than those who were unemployed and undergoing treatment for more than two years. Patients treated at smaller centers (CAPS II) showed greater satisfaction than those cared for at larger 24-hour facilities (CAPS III). Users treated at mental health clinics were less satisfied than those at centers providing treatment solely for drug and alcohol dependence.

Discussion

The user satisfaction results indicated that most were satisfied or very satisfied with CAPS in the Médio Paraopeba region (MG), corroborating other studies conducted in Brazil using the SATIS-BR scale[6,12,15,16]. By contrast, international studies have generally found moderate to good satisfaction among mental health service patients[17].

The demographic profile of the interviewees indicated that most were single men of an economically active age, with little education and employed in low-level jobs. The large number of men differs from many other studies and can be explained by the inclusion of CAPS-ad in the study, where male patients predominate. This finding is in line with other investigations and information on the consumption of psychotropic drugs[15,18]. It is important to note that women are subject to different social constraints and more stigmatized than men when seeking treatment for drug or alcohol addiction, which may contribute to their lower numbers at CAPS-ad[15].

Table 3. Average patient satisfaction and paired comparison of subscale means using the Wilcoxon nonparametric test for mental health centers in the Médio Paraopeba region of Minas Gerais state, Brazil, 2014-2015.

Subscales	Mean (SD)	Wilcoxon		
		P(1-2)	P(1-3)	P(2-3)
1. Satisfaction with team competence and understanding	4.54(0.65)			
2. Satisfaction with the welcome received and care provided	4.64(0.71)	0,00*		0,00*
3. Satisfaction with the physical facilities and comfort	4.09(1.06)		0,00*	
Global Scale	4.46(0.65)			

* p < 0,001.

Table 4. Patient Satisfaction with Mental Health Services Scale (SATIS-BR) and Friedman test mean ranks for mental health centers in the Médio Paraopeba region of Minas Gerais state, Brazil, 2014-2015.

Questions on the short-form SATIS-BR scale	N	Dissatisfied (Score 1 and 2 in scale	Somewhat satisfied (Score 3 in scale)	Satisfied (Score 4 e 5 in scale)	mean rank *
Subscale 1 - Satisfaction with team competence and understanding					
Person who admitted you to the center	457	25(5.47%)	37(8.10%)	395(86.43%)	6.92
Understanding your needs on admission	451	33(7.32%)	37(8.20%)	381(84.48%)	6.58
Staff understanding about the type of care needed	456	41(8.99%)	32(7.01%)	383(84.00%)	6.33
Type of care provided at the center	454	21(4.62%)	36(7.93%)	397(87.45%)	6.58
Discussion about treatment	452	30(6.64%)	37(8.18%)	385(85.18%)	6.16
Staff competence	453	17(3.75%)	38(8.39%)	398(87.86%)	6.72
Competence of the staff member who provided the most care	450	9(2.00%)	16(3.56%)	425(94.44%)	7.40
Subscale 2 - Satisfaction with the welcome received and care provided					
Were you treated with dignity and respect?	462	23(4.98%)	25(5.41%)	414(89.61%)	6.94
Care provided by staff	455	17(3.74%)	33(7.25%)	405(89.01%)	7.10
Welcome received from staff	458	16(3.49%)	31(6.77%)	411(89.74%)	6.87
Subscale 3 - Satisfaction with physical facilities and comfort					
Comfort and physical appearance	459	52(11.33%)	55(11.98%)	352(76.69%)	5.52
General facilities	450	58(12.89%)	77(17.11%)	315(70.00%)	4.88

*Friedman test X2 = 393.49 p = 0.000.

Most users consulted with specialists at the CAPS, obtained their prescribed medication at the center and reported easy access in terms of short travel times and no travel costs. Mercier and Corten[19] found that user satisfaction with mental health care was related to access to additional services free of charge, continuity of care and obtaining medication at no cost, which may explain the high user satisfaction scores observed for CAPS in this region. Nevertheless, the CAPS care model goes beyond these criteria, since in addition to guaranteeing access, patients must feel welcome and satisfied with the services in order to contribute to creating the Singular Therapeutic Project (PTS) alongside staff and establish a relationship with the center[20].

In order to ensure the effectiveness of mental health services, managers must identify and address the predictors of user satisfaction. A Brazilian study found that perceived change was the main indicator of user satisfaction with mental health services[16], whereas research in the United

States identified access, quality, and patient participation in their treatment as predictors[21].

In the present study, users were satisfied with CAPS and the highest scores recorded were related to the competence of health care professionals in charge of their treatment as well as the welcome received and care provided, corroborating studies conducted in other areas of the country[6,12,15,16]. A study in the United Kingdom analyzed the importance of relationships in mental health care. Patient accounts of their experiences at mental health facilities often referred to the staff they encountered on admission, highlighting the importance of these relationships in hospitalization[22]. Satisfaction is a multidimensional construct based primarily on expectation, whereby users form an opinion by comparing their prior expectations against their actual experience[23]. As such, patients in this study may have attributed higher scores to the CAPS, and staff in particular, because their expectations were low as a result of negative experiences in other health care services with different care models or other CAPS where staff were less competent.

In both the present study and others published in Brazil, the lowest satisfaction scores on the SATIS-BR scale were related to the physical facilities and comfort at the centers[5,6,12,16]. Although patients reported being satisfied or very satisfied with the centers in general, the items identified as needing improvement reveal a series of shortcomings in the physical structure of CAPS. Despite the existence of construction standards for CAPS[24], infrastructure problems and a lack of standardization are evident, including the adaptation of residential buildings to accommodate CAPS, lack of wheelchair access and the need for refurbishment[25,26], which could have a significant effect on user satisfaction and should be addressed by managers.

Patient knowledge regarding their medication was also assessed in this study. Most were unable to name any of the medicines they used, which may have contributed to the self-reported inappropriate use. It is important to underscore that users were satisfied with the centers, despite their lack of knowledge regarding some aspects of their treatment. A study at a health care facil-

Table 5. Univariate analysis via the Mann-Whitney test of the sociodemographic variables and overall satisfaction of users at mental health centers in the Médio Paraopeba region of Minas Gerais state, Brazil, 2014-2015.

Variables	Categories	N	Mean (SD)	P
Gender	Female	262	4.47(0.62)	0.97
	Male	150	4.44(0,.69)	
Age	Economically inactive age group	85	4.51(0.58)	0.61
	Economically active age group (15 to 60 years)	326	4.44(0.66)	
Employment	Unemployed	134	4.41(0.66)	0.04*
	Employed	228	4.51(0.62)	
Schooling level	Incomplete High school	277	4.53(0,.57)	0.90
	High school diploma	81	4,.23(0.83)	
Marital status	Married/ Common law marriage	120	4.40(0.71)	0.90
	Single/ Divorced/Separated	267	4.48(0.63)	
Medicines	Uses up to 4 mental health medicines	267	4.48(0.63)	0.24
	Uses 5 or more mental health medicines	120	4.39(0.71)	
Center capacity	Patient treated at smaller centers (CAPS II)	180	4.56(0.52)	0.02**
	Patient treated at 24-hour centers (CAPS III)	231	4.38(0.72)	
Care model	Mental health centers	313	4.38(0.68)	0.00***
	Alcohol and drug treatment centers	98	4.72(0.43)	
Travel costs	Free of charge	248	4.43(0.67)	0.15
	Costs incurred to reach the center	155	4.52(0.60)	
Traveling time to the center	Up to 40 minutes	289	4.45(0.66)	0.33
	Over 40 minutes	95	4.50(0.61)	
Treatment time	Patient treated at the center for up to 2 years	231	4.49(0.65)	0.00#
	Patient treated at the center for more than 2 years	152	4.36(0.64)	

SD- Standard Deviation. P- p value. *0.043; **0.022; *** < 0.001; # 0.002.

ity in the United Kingdom found that users recognized the importance of medication in their treatment and highlighted the need for caregivers to communicate with patients and their families in this regard. Forced medication or using medicines without the patient's consent generate negative experiences that could hamper treatment continuity[22].

Some patients in the present study used up to 9 medications, all related solely to the treatment of mental disorders. These users are subject to a variety of adverse reactions, side effects and drug interactions[27], which may influence the effectiveness of the proposed treatment as well as adherence and continuity. In this respect, there is a need to reorganize pharmaceutical care specializing in mental health services and training health care professionals[28,29]. There is an adequate pharmaceutical infrastructure in place in the Médio Paraopeba region, but few activities that ensure a better understanding of drug therapy[30]. Research indicates that dispensing drugs at the CAPS themselves contributed to a high level of satisfaction among users and family members[5]. However, user satisfaction, level of knowledge and treatment adherence are important issues in mental health services, and determining the relationship between requires further research.

Lack of knowledge about drug therapy also demonstrates the need to reinforce user participation in compiling a treatment plan and patient empowerment. Issues such as treatment management may also affect patient understanding and adherence. Gaining Autonomy & Medication Management (GAM) is an innovative practice that has improved the quality of life and well-being of users. By understanding the effects of medicines and their role in their mental disorder, users can participate more fully and actively in their treatment, transforming their relationship with health care professionals[31].

Positive results from international studies reinforce the need to implement MSM in mental health services, allowing subjective expression and critical thinking on the part of users, in line with the growing trend in psychosocial care, which promotes social reinsertion, autonomy and the exercise of citizenship[31,32].

Patient participation in their treatment is increasing and recognized as a positive practice, which is currently being monitored by the British National Health System (NHS)[17,33]. These initiatives are important at CAPS to ensure that patients adopt an increasingly critical stance, including knowing their rights and participating in health care, thereby obtaining a broader view of a range of different aspects.

Higher satisfaction scores were recorded among CAPS II users than those at CAPS III, which are 24-hour centers where patients remain hospitalized for a few days after admission. A possible hypothesis in this case is that deprivation of liberty, even for a short and clinically justified period, may not coincide with patient expectations. When lucid, such as during the interview, users may not accurately recall their condition during a mental health crisis, which would explain the decision made by the health care professionals. As expected, centers with different care models and interventions result in varying levels of patient satisfaction[16]. Future studies could assess whether this difference is due to the characteristics of the care model, user perceptions regarding the staff and center acquired over an extended time period, or patients' personal opinion. The same approach should be adopted to explain the lower satisfaction scores among mental health service users in relation to CAPS-ad, given the different types of users and practices in place at each center.

This study found no association between high satisfaction scores among CAPSi patients (aged up to 15 years) when compared to users in other age groups. However, Silva et al. found that age was an important factor linked to patient satisfaction, with older users reporting greater satisfaction[16]. Future studies should conduct age-stratified assessments to determine whether an association exists, since a different care approach may help establish a relationship between users and mental health centers.

The higher satisfaction scores among employed users and those treated over shorter time periods may also reflect differences in the expectations of different types of patients. Recognition of CAPS medical personnel on the part of patients who also work may be a criterion that further enhances their appreciation. Patients who remain in treatment for longer periods have to deal with conflicts and accepting their chronic mental disorder, which may interfere in their treatment and level of satisfaction with the center.

It is important to consider that high satisfaction scores may reflect user familiarity with the center, their gratitude and primarily their appreciation of a care model that is vastly different from treatment received in psychiatric hospitals. Risk of bias due to gratitude occurs when patients overlook negative aspects and bond with the staff that care for them[34], potentially affecting the results of this and other studies aimed at

evaluating health care services. Analysis of the answers to the open-ended questions on the SATIS-BR scale and treatment-related questions was important in identifying shortcomings in CAPS infrastructure and the lack of knowledge among users regarding their care, findings which invite reflection and future investigation on the perceived satisfaction of these users.

Limitations of this study were the non-probability sampling technique, requiring caution when generalizing the data and associations found, and its cross-sectional design, which made it impossible to monitor the evolution of patient satisfaction at different points over time. Longitudinal studies will make it possible to monitor changes in user opinions, demands and criteria or the centers themselves. Nevertheless, the present study analyzed patients at CAPS with a range of care models and provides important data given the lack of assessment at these recently-created centers, which have broken from the traditional approach to mental health care.

User participation in evaluating mental health services is a common practice in countries such as the United Kingdom, Canada and Australia, but is still incipient in Brazil[7]. Using the opinion of patients as an assessment criterion represents a change in the mental health paradigm of a system that, until recently, underestimated user perception. As such, different strategies should be used to evaluate mental health care facilities, including user acceptance of the services offered and compliance with technical criteria, in order to complement this complex process.

Collaborations

SN Silva and MG Lima contributed in the design, data analysis and writing of the manuscript, CMR Brandão contributed in writing the manuscript and review of final version.

References

1. Brasil. Ministério da Saúde (MS). Gabinete do Ministro. Portaria nº 3.088, de 23 de dezembro de 2011. Institui a Rede de Atenção Psicossocial para pessoas com sofrimento ou transtorno mental e com necessidades decorrentes do uso de crack, álcool e outras drogas, no âmbito do Sistema Único de Saúde (SUS). *Diário Oficial da União* 2013; 21 maio.
2. Brasil. Portaria nº 336, de 19 defevereiro de 2002. Define e estabelece diretrizes para o funcionamento dos Centros de Atenção Psicossocial. *Diário Oficial da União* 2002; 20 fev.
3. Bandeira M, Silva MA. Escala de Satisfação dos Pacientes com os Serviços. *J Bras Psiquiatr* 2012; 61(3):124-132.
4. Silva M. Satisfação dos usuários com os serviços de saúde mental. In: M Bandeira, LA Lima, S Barroso, organizadores. *Avaliação de serviços de saúde mental: Princípios metodológicos, indicadores de qualidade e instrumentos de medida*. Petrópolis: Vozes; 2014. p. 55-86
5. Miranda PO, Souza OF, Ferreira TF. Avaliação da satisfação dos pacientes e familiares em um serviço de saúde mental na cidade de Rio Branco, Acre. *J Bras Psiquiatr* 2014; 63(4):332-340.
6. Kantorski LP, da Rosa Jardim V, Wetzel C, Olschowsky A, Schneider JF, Heck RM, Bielemann VL, Schwartz E, Coimbra VCC, Quevedo ALA, Saraiva SS. Satisfação dos usuários dos centros de atenção psicossocial da região Sul do Brasil. *Rev Saude Publica* 2009; 43(Supl. 1):29-35.
7. Presotto RF, Silveira M, Delgado PGG, Vasconcelos EM. Experiências brasileiras sobre participação de usuários e familiares na pesquisa em saúde mental. *Cien Saude Colet* 2013; 18(19):2837-2845.
8. Lunnen KM, Ogles BM, Pappas LN. A multiperspective comparison of satisfaction, symptomatic change, perceived change, and end-point functioning. *Professional Psychology: Research and Practice* 2008; 39(2):145.
9. Hackman A, Brown C, Yang Y, Goldberg R, Kreyenbuhl J, Lucksted A, Wohlheiter K, Dixon L. Consumer satisfaction with inpatient psychiatric treatment among persons with severe mental illness. *Community Ment Health J* 2007; 43(6):551-564.
10. Anderson R, Barbara A, Feldman S. What patients want: A content analysis of key qualities that influence patient satisfaction. *J Med Pract Manage* 2007; 22(5):255-261.
11. Costa PHA, Basile Colugnati FA, Ronzani TM. Avaliação de serviços em saúde mental no Brasil: revisão sistemática da literatura. *Cien Saude Colet* 2015; 20(10):3243-3253.
12. Camilo CA, Bandeira M, Leal R, Scalon JD. Avaliação da satisfação e sobrecarga em um serviço de saúde mental. *Cad Saúde Colet* 2012; 20(1):82-92.
13. Heckert U, Teixeira LS, Trindade AS. Avaliação da satisfação dos usuários do Centro Regional de Referência em Saúde Mental (CRRESAM) da região central de Juiz de Fora, MG. *HU rev* 2006; 32(1):15-19.
14. Jaegger RC, Guitton AP, Lyrio JM, Santos MM, Freitas RCO, Gonçalves SR, Lima LA, Legay LF. A experiência de morar fora: avaliação da satisfação de usuários em um serviço de saúde mental. *Cad Saúde Colet* 2004; 12(1):27-39.

15. Barbosa GC, Oliveira MAFd, Moreno V, Padovani CR, Claro HG, Pinho PH. Satisfação de usuários num Centro de Atenção Psicossocial em álcool e outras drogas. *Revista Portuguesa de Enfermagem de Saúde Mental* 2015(14):31-37.
16. Silva MA, Bandeira M, Scalon JD, Quaglia MAC. Satisfação dos pacientes com os serviços de saúde mental: a percepção de mudanças como preditora. *J Bras Psiquiatr* 2012; 61(2):64-71.
17. Newman D, O'Reilly P, Lee SH, Kennedy C. Mental health service users' experiences of mental health care: an integrative literature review. *J Psychiatr Ment Health Nurs* 2015; 22(3):171-182.
18. Carlini EA, Noto AR, Sanchez ZM, Carlini CMA, Locatelli DP, Abeid LR, Amato TC, Opaleye ES, Tondowski CL, Moura YG. *VI Levantamento nacional sobre o consumo de drogas psicotrópicas entre estudantes do ensino fundamental e médio das redes pública e privada de ensino nas 27 capitais brasileiras-2010*. Brasília: SENAD; 2010.
19. Mercier C, Corten P. Évaluation de la qualité de vie de patients psychotiques. In: Kovess V, editor. *Evaluation de la qualité en psychiatrie*. Paris: Economica; 1994. p. 263-287.
20. Dutra VFD, Oliveira RMP. Revisão integrativa: as práticas territoriais de cuidado em saúde mental. *Aquichan* 2015; 15(4):529-540.
21. Sohn M, Barrett H, Talbert J. Predictors of Consumer Satisfaction in Community Mental Health Center Services. *Community Ment Health J* 2014; 50(8):922-925.
22. Gilburt H, Rose D, Slade M. The importance of relationships in mental health care: A qualitative study of service users' experiences of psychiatric hospital admission in the UK. *BMC Health Services Research* 2008; 8(1):1.
23. Bandeira M, Silva MA, Camilo CA, Felício CM. Satisfação de familiares de pacientes psiquiátricos com os serviços de saúde mental e seus fatores associados. *J Bras Psiquiatr* 2011; 60(4):284-293.
24. Brasil. Ministério da saúde (MS). *Manual de Estrutura Física dos Centros de Atenção Psicossocial e Unidades de Acolhimento: Orientações para Elaboração de Projetos de Construção de CAPS e de UA como lugares da Atenção Psicossocial nos territórios*. Brasília: MS; 2013.
25. Nascimento AF, Galvanese ATC. Evaluation of psychosocial healthcare services in the city of Sao Paulo, Southeastern Brazil. *Rev Saude Publica* 2009; 43(Supl. 1):8-15.
26. Silva SN, Lima MG. Avaliação da estrutura dos Centros de Atenção Psicossocial da Região do Médio Paraopeba-Minas Gerais. *Epidemiol. Serv. Saúde* 2017; 26(1):149-160.
27. Moura CS, Ribeiro AQ, Starling SM. Avaliação de interações medicamentosas potenciais em prescrições médicas do Hospital das clínicas da Universidade Federal de Minas Gerais. *Latin american journal of pharmacy* 2007; 26(4):596-601.
28. Alencar TOS, Cavalcante EAB, Alencar BR. Assistência farmacêutica e saúde mental no Sistema Único de Saúde. *Revista de Ciências Farmacêuticas Básica e Aplicada* 2013; 33(4):489-495.
29. Zanella CG, Aguiar PM, Storpirtis S. Atuação do farmacêutico na dispensação de medicamentos em Centros de Atenção Psicossocial Adulto no Município de São Paulo, SP. *Cien Saude Colet* 2015; 20(2):325-332.
30. Silva SN, Lima, MG. Assistência Farmacêutica na Saúde Mental: um diagnóstico dos Centros de Atenção Psicossocial. *Cien Saude Colet* 2017; 22(6):2025-2036.
31. del Barrio LR, Cyr C, Benisty L, Richard P. Autonomous Medication Management (GAM): new perspectives on well-being, quality of life and psychiatric medication. *Cien Saude Colet* 2013; 18(10):2879-2887.
32. Vasconcelos EM. Empoderamento de usuários e familiares em saúde mental e em pesquisa avaliativa/interventiva: uma breve comparação entre a tradição anglo-saxônica e a experiência brasileira. *Cien Saude Colet* 2013; 18(10):2825-2835.
33. Care Quality Commission (CQC). *National summary of the results for the community mental health survey 2012*. [acessado 2016 Set 05]. Disponível em: http://www.nhssurveys.org/surveys/660
34. Esperidião M, Bomfim LA. Avaliação de satisfação de usuários. *Cien Saude Colet* 2005; 10(Supl.):303-312.

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