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# Mental health and continuity of care in healthcare centers in a city of Southeastern Brazil

# ABSTRACT

**OBJECTIVE:** To analyze factors associated with the continuity of mental health care provided for patients referred to healthcare centers.

**METHODS:** A follow-up study was carried out with 98 patients assisted between 2003 and 2004. These patients were referred to eight healthcare centers with mental health teams located in the catchment area of a mental health reference venter in the city of Belo Horizonte, Southeastern Brazil. Social, demographic, clinical and continuity variables were described and then compared using the chi-square test.

**RESULTS:** After referral, 35 patients did not attend the first visit in the healthcare center. Of those who did, 38 continued in treatment. To return to the reference center for a new visit after referral and to have had more than two referrals were factors that facilitated continuity of care. No individual characteristic was associated with continuity.

**CONCLUSIONS:** The findings suggest that there is a gap in the proposal for the line of care. Treatment continuity seems to be more related to service factors than to patients' characteristics.

**DESCRIPTORS:** Continuity of Patient Care. Community Mental Health Services. Mental Health Services. Patient Care Management.

## INTRODUCTION

In Brazil, the process of psychiatric reform has introduced several modifications to the care provided for individuals with mental disorders. One of the main results of this process was the creation, in the 1980s, of services that substituted psychiatric hospitals, such as *Centros de Atenção Psicossocial* (Centers for Psychosocial Care - CAPS) and *Núcleos de Atenção Psicossocial* (Nuclei for Psychosocial Care - NAPS).<sup>2,4,13,14</sup>

In Belo Horizonte, Southeast Brazil, such services were created in the 1990s and were called *Centros de Referência à Saúde Mental* (Mental Health Reference Centers – CERSAM). Like CAPS, the CERSAM were conceived to deal with urgent cases and crises, prioritizing the most severe cases that used to be referred only to the psychiatric hospital. The CERSAM act in a regionalized way (covering a certain catchment area), and also in a hierarchized way (working with the entire network of health services),<sup>a</sup> including healthcare centers, conviviality centers, general hospitals, psychiatric hospitals and other services.

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<sup>&</sup>lt;sup>a</sup> Secretaria Municipal de Saúde. Propostas da Secretaria Municipal de Saúde. In: Anais da VIII Conferência Municipal de Saúde: etapa municipal da XII Conferência Nacional; 2003; Belo Horizonte, MG, Brasil.

In 2008, there were seven CERSAM in operation, distributed among the nine sanitary districts of the municipality and inserted in the municipal health policy, the Programa BH Vida: Saúde Integral (Belo Horizonte's Life Program: Integral Health), which uses the notion of line of care as a strategy.<sup>a</sup> One of the premises of this program is that the healthcare centers should become the main entrance door for individuals with mental disorders, functioning with referral flows to other services and with counter-referral flows of patients. According to the notion of line of care, this movement of patients across the services network (CERSAM, psychiatric hospitals, general hospital, healthcare centers) should be constantly monitored by the healthcare centers' teams, which are responsible for maintaining the patient's contact with the services.

CERSAM was planned to be a short permanence service where patients stay until the recovery from the crisis period, when they are referred to be followed up in other places, such as the healthcare centers. Following the logic of *Programa BH Vida*, the movement of patients across the services must be performed in a safe way, without negatively affecting treatment continuity.<sup>a</sup>

It is known that failures in treatment continuity negatively affect the results obtained by patients with mental disorders.<sup>4,5</sup> These failures generate a greater level of expenditure of the services' resources and are related to high suicide rates among the patients.

Despite these consequences, some studies show the difficulty in maintaining continuity when patients leave reference services and are referred to healthcare centers. In Campinas,<sup>b</sup> in 1992, of 150 patients referred to healthcare centers to continue the treatment, 49% never attended the first visit. Of those who did, 51.4% abandoned the treatment in up to four months, a period in which 25% were once again admitted to psychiatric hospitals. In another study conducted in Belo Horizonte,<sup>c</sup> in 1997, of 127 patients referred to healthcare centers, 45% returned to CERSAM for a new visit; of these patients, 47.4% were enrolled again and 49.1% were referred again.

The reasons for this rupture in treatment continuity were related to aspects of services infrastructure (lack of human resources, lack of medication and of vehicles for home visits, among others) and to conceptual aspects (inconsistency between the proposal and the implemented policy, and the non-definition of the theoretical framework and of the treatment technologies to be used).<sup>b</sup>

Both in Campinas<sup>b</sup> and in Belo Horizonte,<sup>c</sup> there was no specific policy yet to follow up patients during their passage to the healthcare centers when the studies were carried out. If we consider that the mental health project of Belo Horizonte was inserted in *Programa BH Vida* in the year of 2002, it becomes necessary to evaluate whether the proposal for integral care has been effective as regards to providing the continuity of the patients' treatment through the notion of line of care.

Therefore, this study aimed to analyze the factors associated with continuity of the mental health care provided for patients referred to healthcare centers. The results can offer subsidies for the evaluation of these services and for the development of public mental health policies that favor the integral care of patients across the several services of the healthcare network.

### METHODS

Following the evaluation logic suggested by Donabedian (1966),<sup>7</sup> the concept of continuity was used as indicator. This concept is understood here as the orderly and uninterrupted movement of patients across the several elements of the health system.<sup>3</sup> To achieve this, a non-concurrent follow-up study was conducted with patients attending a CERSAM of Belo Horizonte who were referred to healthcare centers in its catchment area.

The researched population was composed of patients who enrolled in CERSAM in the period between January 1, 2003 and July 31, 2004 (n=214). Of these patients, 106 had been referred to healthcare centers at the end of data collection (May 2005), of which 98 (n=98) met the criteria for inclusion in the study (Figure). Patients who were referred to healthcare centers outside the catchment area of the service were excluded, as well as those who did not have the identification of the healthcare center to which they were referred. Eight healthcare centers of the catchment area of CERSAM to which the patients had been referred were visited. These healthcare centers had the basic mental health team, composed of one psychiatrist and two graduated technicians. All patients had a minimum follow-up period of nine months after enrollment in the CERSAM. This period was established taking into account previous studies that estimated the time of permanence in services like CERSAM<sup>c</sup> and the time elapsed between the non-attendance of the visit after referral and the return to the service.19

<sup>&</sup>lt;sup>a</sup> Secretaria Municipal de Saúde. Propostas da Secretaria Municipal de Saúde. In: Anais da VIII Conferência Municipal de Saúde: etapa municipal da XII Conferência Nacional; 2003; Belo Horizonte, MG, Brasil.

<sup>&</sup>lt;sup>b</sup> Amaral MA. Análise da implementação da política de saúde mental para a rede básica em Campinas – 1992/1993 [Master's dissertation]. Campinas: Faculdade de Ciências Médicas da Universidade Federal de Campinas; 1995.

<sup>&</sup>lt;sup>c</sup> Melo APS. Fatores determinantes do abandono do tratamento psiquiátrico em um centro de referência em saúde mental (CERSAM – Pampulha), em BH (MG), 1997-1998 [Master's dissertation]. Belo Horizonte: Faculdade de Medicina da Universidade Federal de Minas Gerais; 2000.

Information regarding sociodemographic and clinical characteristics, as well as related to referral to healthcare centers, were obtained in CERSAM by means of a protocol called screening card. The variables related to continuity of care in the healthcare centers were obtained through the continuity card: period of time between referral by CERSAM and the first visit in the healthcare center, patient's current situation and interval between visits. Collection instruments were created by the authors and tested in a pilot study.

Continuity was defined as maintenance of the patients' contact with the healthcare centers after referral by CERSAM and their permanence in the service for at least three months prior to data collection, without indication of abandonment up to that date. This period was chosen because some patients attended the visits on a quarterly basis. Continuity information was collected directly from the medical records of the healthcare centers. This collection lasted four months.

The collected data were stored in the Epi Info<sup>6</sup> program, version 6.04, and analyzed by the SPSS program, version 11.5.<sup>20</sup>

A descriptive and comparative analysis was performed using Pearson's chi-square test or Fischer's exact test, whenever appropriate, taking the value p<0.05 to verify the statistical significance. For the comparative analysis, continuity of care in healthcare centers within the catchment area of CERSAM was adopted as the dependent variable.

The following comparative analyses were conducted: 1) between patients who were referred and never arrived at the healthcare centers and patients who had continuity of care; 2) between the diagnosis and variables related to the conduction of the treatment of patients referred to the healthcare centers (duration of treatment at CERSAM, period of time elapsed between referral and the first visit in the healthcare center, number of referrals, return to CERSAM after referral) – considering that the diagnosis may interfere in continuity<sup>5</sup>; and 3) between patients that presented continuity of care and patients who no longer were in the healthcare centers.

For the analysis related to the diagnosis, it was decided that it would be divided into two main categories: Psychotic and Others. The latter included, according to ICD-10, mood disorders (F30-F39), neurotic disorders (F40-F49), and two or more associated diagnoses - F09+F31; G40+F19+F29; F40 or F32; F19+F70; F29+F00; F20+F32; F20+F60.

The project was approved by the Committees for Ethics in Research of *Universidade Federal de Minas Gerais* (UFMG), under the report 047/2005 and of the Municipal Health Department of Belo Horizonte (SMSA), under the report 013/2005.

### RESULTS

Of the 98 patients referred to the healthcare centers by CERSAM, 64 were women. The average age was 39.2 years (median: 36.5; variation: 21-72; SD=11). The most frequent diagnoses were psychotic disorders (n=43), mood disorders (n=18), neurotic disorders (n=7), and alcoholism (n=5). Twenty-three patients presented two or more associated diagnoses without distinction of which would be the main one. Women were proportionately more frequent than men in all diagnostic categories.

The average duration of the patients' treatment at CERSAM, measured by the period of time between enrollment and the last visit in the service, was 240.79 days (median: 181.5 days; variation: 0-759; SD=202.52). The majority of patients (n=32) remained in the service from one to six months, 27 remained for more than one year, 23 from six months to one year and 16 for up to one month.

The average period of time elapsed between the first referral by CERSAM and the first visit in the healthcare center was 79.16 days, approximately 2.63 months (median: 40 days; variation: 0-662; SD=124.8). Twenty-five patients attended the first visit in up to one month, 24 from one to three months and 14 in more than three months.

The average duration of the patients' treatment in the healthcare centers was 327.11 days (median: 273 days; variation: 0-804; SD=223.8), 24 remained in treatment for more than one year, 22 from six months to one year and 17 for up to six months.

The majority of patients was referred to the healthcare centers only once (n=68). After the first referral, 34 patients returned to CERSAM for a new visit: 9 because they had forgotten about the visit in the healthcare center, had abandoned the treatment or were ill; 9 to get medication; 6 due to difficulties in scheduling a visit in the healthcare center; 6 due to the absence of the reference professional in the healthcare center; and 4 due to resistance to treatment in the healthcare center.

Of the 22 patients who were referred to CERSAM by healthcare centers (counter-referral), half returned to the same healthcare center that had referred them to CERSAM.

At the end of data collection, the medical records of 35 patients were not found in the visited healthcare centers; 38 patients continued in treatment in these centers; 14 abandoned the treatment; 9 were referred to other mental health services and 2 were re-enrolled in CERSAM.

Of the patients who remained in treatment in the healthcare centers (n=38), 18 attended their visits on a monthly basis, 13 every other month, 5 on a weekly basis, 1 every two weeks, and 1 on a quarterly basis.

		Diagnosis Disorders						
Variable	n*	Psychotic		Others		p**		
		n	%	n	%			
Treatment duration at CERSAM***						0.399		
Up to 6 months	47	19	44.0	28	53.0			
More than 6 months	49	24	56.0	25	47.0			
Number of referrals						0.652		
One	67	29	67.0	38	72.0			
Two or more	29	14	33.0	15	28.0			
Return to CERSAM after the first referral						0.598		
Yes	33	16	37.0	17	32.0			
No	63	27	63.0	36	68.0			
Interval between the first referral and the first visit in the healthcare center						0.960		
Up to one month	25	12	40.0	13	41.0			
More than one month	37	18	60.0	19	59.0			
Interval between visits in the healthcare center****						0.173		
Up to one month	24	11	55.0	13	76.5			
More than one month	13	9	45.0	4	23.5			

Table 1. Variables related to the treatment of patients referred to healthcare centers according to diagnosis. Belo Horizonte, Southeastern Brazil, 2003-2004. N=98

\* Varied with the exclusion of individuals with unknown information

\*\* Pearson's chi-square testa

\*\*\* CERSAM: Centro de Referência à Saúde Mental (Mental Health Reference Center)

\*\*\*\* Total referring to the patients in treatment in the healthcare center (n=38)

Given the importance of the diagnosis for continuity of care and for the management of patients, it was decided that the variables related to the conduction of the referred patients' treatment in relation to the diagnosis would be analyzed. The results are described in Table 1. The diagnosis was not statistically significant for the variables: duration of treatment at CERSAM; number of referrals made by CERSAM; return to CERSAM after referral; and time elapsed between CERSAM's referral and the first visit in the healthcare center.

For the patients who remained in treatment in the healthcare centers (n=38), intervals between visits were the same to all diagnoses. The majority of patients with psychotic disorder and other diagnoses (mood disorders, neurotic disorders, two or more associated diagnoses) attended the visits on a monthly basis. There was no statistically significant difference between the intervals according to the diagnosed with psychosis who attended the visits in an interval larger than one month (n=9), compared to the other diagnoses (n=4).

As the number of patients whose medical records were not found in the healthcare centers was high (n=35), univariate analysis was performed to verify if there were differences between patients with and without records in the services (Table 2). The analysis indicated that the odds of arriving at the healthcare center were statistically higher among the patients who returned to CERSAM for a new visit after the first referral to the healthcare center (OR=3.00; 95% CI:1,05;8,88). No other patient-related variable, such as sex, age or diagnosis, was associated with the patient's arrival at the healthcare centers.

The univariate analysis conducted to verify if there were statistically significant differences between the patients who remained in treatment in the healthcare centers within the CERSAM's catchment area (n=38) and the patients who were no longer in these healthcare centers (n=25) can be found on Table 3. Results showed that the odds of remaining in treatment in the healthcare centers were statistically higher for the patients who were referred two or more times (OR=4.00; 95% CI: 1.10;15.32), and for the patients who returned to CERSAM for a new visit after the first referral (OR=3.91; 95% CI: 1.13;14.05). The other variables did not present statistically significant differences.

#### DISCUSSION

More than one third of the patients referred to the healthcare centers within the catchment area of the studied CERSAM were not able to arrive at these places. Of those who did, 38 remained in treatment, but no individual characteristic was associated with continuity of care.

Variable	n*	Medical record found in the healthcare center					\/.
		Yes	%	No	%	OR (95% CI)	Value p**
Age (years)							0.546
< 36	46	31	67.0	15	33.0	1.0	
≥ 36	52	32	61.5	20	38.5	0.77 (0.31;1.93)	
Sex							0.950
Female	64	41	64.0	23	36.0	1.0	
Male	34	22	65.0	12	35.0	1.03 (0.40;2.69)	
Diagnosis (ICD-10)							0.339
Psychotic disorders (Schizophre- nia, schizotypal, delusional)	43	30	70.0	13	30.0	1.0	
Others	53	32	60.0	21	40.0	0.66 (0.26;1.68)	
Origin of referral							0.551
Spontaneous demand	29	18	62.0	11	38.0	1.38 (0.40;4.81)	
Hospital	29	21	72.4	8	27.6	2.22 (0.61;8.20)	
Healthcare center	24	13	54.0	11	46.0	1.0	
Others***	10	7	70.0	3	30.0	1.97 (0.33;12.78)	
Visits performed before the opening o	f the i	record - CEI	rsam				0.071
None	49	27	55.0	22	45.0	1.0	
Between one and two	27	22	81.5	5	18.5	3.59 (1.05;12.94)	
Three or more	22	14	64.0	8	36.0	1.43 (0.45;4.56)	
Return to CERSAM after the first referr	al						0.023
Yes	34	27	79.4	7	20.6	3.0 (1.05;8.88)	
No	64	36	56.0	28	44.0	1.0	

Table 2. Sociodemographic and clinical characteristics of the patients referred to healthcare centers according to the existence
of the medical record in the services. Belo Horizonte, Southeastern Brazil, 2003-2004. N=98

\* Varied with the exclusion of individuals with unknown information

\*\* Pearson's chi-square test or Fisher's exact test

\*\*\* Military Police, Unidade de Pronto Atendimento (UPA - Emergency Unit)

ICD-10: International Classification of Diseases - 10th Revision

The importance of continuity of care for individuals with mental disorders has been extensively reinforced in the international literature. Several aspects and services have been discussed and evaluated.<sup>3,9,10,21</sup> However, in Brazil, only one study was found, carried out in Campinas,<sup>a</sup> which evaluated specifically this theme. This study detected problems relating to lack of clear operating guidelines, infrastructure, and to the system of planning and evaluation of the services when the mental health policy was implemented in the basic network, negatively affecting the patients' continuity of care.

The lack of Brazilian studies focusing on continuity of care becomes even more worrying in view of the fact that mental health interventions in Brazil are still in an improvement stage. The CAPS, NAPS, CERSAM, conviviality centers and other proposals for patients' assistance in the community have been operating for approximately two decades in Brazil. In Belo Horizonte, these proposals have been operating for over ten years only, and were incorporated into the city's policy of integral mental health care (*Programa BH Vida: Saúde Integral*) in the last five years. In light of these facts, it is fundamental not only to analyze the services' effectiveness regarding continuity of care, but also to learn about the assisted clientele so as to adequate the services to users' needs.

It can be noted that the profile of the patients assisted in the healthcare centers studied here was different from the one found in similar services, in which, although the majority of patients is of the female sex<sup>11,15,16,17</sup> and young,<sup>1,8,12,16</sup> the most frequent diagnosis was neurosis<sup>16,17</sup> and not psychosis, as was seen in the present study. A possible explanation for this high proportion of women with diagnosis of schizophrenia could be in the fact that men are more likely to be admitted in psychotic disorder, when compared to women.<sup>18</sup>

<sup>a</sup> Amaral MA. Análise da implementação da política de saúde mental para a rede básica em Campinas – 1992/1993 [Master's dissertation]. Campinas: Faculdade de Ciências Médicas da Universidade Federal de Campinas; 1995.

Variable	n	Treatment	t continues ir	OR (95% CI)	Value p*		
	11	Yes	%	No	%	OK (35% CI)	value p
Age (years)							0.382
< 36	31	17	55.0	14	45.0	1.0	
≥ 36	32	21	66.0	11	34.0	1.57 (0.51;4.93)	
Sex							0.220
Female	41	27	66.0	14	34.0	1.0	
Male	22	11	50.0	11	50.0	0.52 (0.16;1.69)	
Diagnosis (ICD-10)							0.277
Psychotic disorders (Schizophrenia, schizotypal, delusional)	30	20	67.0	10	33.0	1.0	
Others	37	17	53.0	15	47.0	0.57 (0.18;1.79)	
Origin of referral							0.540
Spontaneous demand	18	9	50.0	9	50.0	1.0	
Hospital	21	15	71.0	6	29.0	2.50 (0.55;11.71)	
Healthcare center	13	8	62.0	5	38.0	1.60 (0.30;8.00)	
Others**	7	5	71.0	2	29.0	2.50 (0.29;25.37)	
Previous psychiatric hospitalizations							0.143
None	20	13	65.0	7	35.0	1.0	
One or more	14	11	79.0	3	21.0	1.97 (0.33;12.78)	
Unknown	29	14	48.0	15	52.0	0.50 (0.13;1.88)	
Visits performed before the opening	of the re	cord at CER	SAM				0.480
None	27	14	52.0	13	48.0	1.0	
Between one and two	22	15	68.0	7	32.0	1.99 (0.53;7.62)	
Three or more	14	9	64.0	5	36.0	1.67 (0.37;7.79)	
Treatment duration at CERSAM							0.054
Less than 6 months	26	12	46.0	14	54.0	1.0	
6 months or more	37	26	70.0	11	30.0	2.76 (0.86;9.01)	
Referrals							0.016
One	39	19	49.0	20	51.0	1.0	
Two or more	24	19	79.0	5	21.0	4.00 (1.10;15.32)	
Return to CERSAM after the first refe	rral						0.014
Yes	27	21	78.0	6	22.0	3.91 (1.13;14.05)	
No	36	17	47.0	19	53.0	1.0	
Interval between the first referral by	CERSAM	and the fire	st visit in the	healthcare	center		0.570
Up to one month	25	14	56.0	11	44.0	1	
More than one month	38	24	63.0	14	37.0	1.35 (0.43;4.28)	

Table 3. Univariate analysis of the patients' sociodemographic and clinical characteristics according to continuity of care in the healthcare centers. Belo Horizonte, Southeastern Brazil, 2003-2004. n=63

\* Pearson's chi-square test or Fisher's exact test

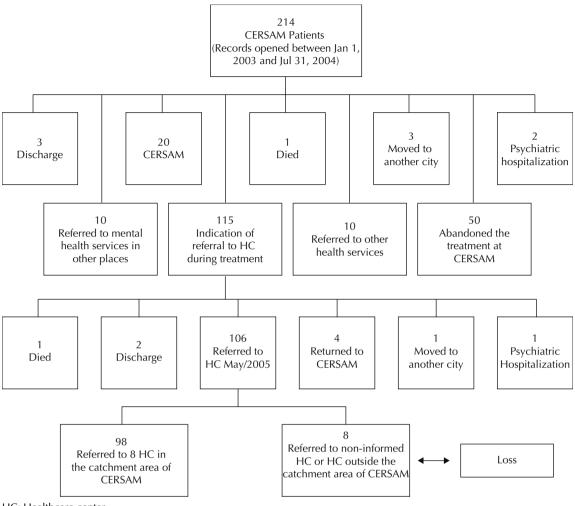
\*\* Military Police, Unidade de Pronto Atendimento (UPA - Emergency Unit)

The majority of patients remained in CERSAM for 8.8 months on average, until total referral to the healthcare centers. This period of permanence was higher than the average found in other studies (13 to 52 days)<sup>18,a</sup> and similar to the average found in one CAPS in the city

of São Paulo (7 to 24 months).<sup>b</sup> Besides pointing to the nature of "outpatient clinic" developed by CERSAM, this datum seems to indicate difficulties in referring the cases to continuity of care in services of the basic healthcare network. Another remark is that the period

<sup>&</sup>lt;sup>a</sup> Melo APS. Fatores determinantes do abandono do tratamento psiquiátrico em um centro de referência em saúde mental (CERSAM – Pampulha), em BH (MG), 1997-1998 [Master's dissertation]. Belo Horizonte: Faculdade de Medicina da Universidade Federal de Minas Gerais; 2000.

<sup>&</sup>lt;sup>b</sup> Pitta AMF, Lamerato A, Goldberg JI, Corazza D, Lima EA, Fernandes MH, et al. Avaliação de serviço de atenção médico-psicossocial a usuários do sistema de saúde no município de São Paulo. São Paulo: Núcleo de Ensino e Pesquisas CAPs Luiz Cerqueira, Dep. Medic. Preventiva da Faculdade de Medicina da USP; 1991.



HC: Healthcare center

Figure. Flowchart of the selection process of the follow-up patients. Belo Horizonte, Southeastern Brazil, 2003-2004.

of permanence at CERSAM was statistically the same for all the diagnostic categories, that is, there was no different treatment according to the diagnosis.

The average period of time elapsed between the first referral made by CERSAM and the first visit in the healthcare centers (2.5 months) was higher than the one found in services from the basic network of Campinas<sup>a</sup> (15 days, ranging from 1 to 48 days) and a little lower than the one found in a study conducted in Belo Horizonte<sup>b</sup> (up to 3 months). In the case of the present study, this datum suggests a difficulty in scheduling visits in the healthcare centers. This difficulty could be related to infrastructure issues, such as the lack of mental health professionals and medications in the units, and also to an increased demand for this kind of assistance.

Half the patients were counter-referred to the healthcare centers of origin. This may indicate an effort of CERSAM to comply with the proposal for the line of care, which is characterized by flows of referrals to the services and of return of information to the level that referred the patient (counter-referral).

The medical records of more than one third of the patients referred to healthcare centers were not found. Although this number is a little lower than the one verified in Campinas<sup>a</sup> (49%), it still points to the existence of a barrier between the services, showing that some patients have difficulties in arriving at the healthcare centers after referral. However, the patients of the present study who manage to overcome this first barrier and arrive at the healthcare centers seem to be able to remain in treatment in these services (62%).

<sup>&</sup>lt;sup>a</sup> Amaral MA. Análise da implementação da política de saúde mental para a rede básica em Campinas – 1992/1993 [Master's dissertation]. Campinas: Faculdade de Ciências Médicas da Universidade Federal de Campinas; 1995.

 <sup>&</sup>lt;sup>b</sup> Melo APS. Fatores determinantes do abandono do tratamento psiquiátrico em um centro de referência em saúde mental (CERSAM – Pampulha), em BH (MG), 1997-1998 [Master's dissertation]. Belo Horizonte: Faculdade de Medicina da Universidade Federal de Minas Gerais; 2000.

These results strongly suggest that the proposal for the line of care can be frail concerning the maintenance of contact between services and patients when they move across the different assistance units of the network. As regards the concept of continuity, these findings point to a failure in cross-sectional continuity, understood as the services' capacity of maintaining the contact with the patients when they change assistance level.<sup>3</sup> At the same time, these results corroborate the existence of a good follow-up continuity, that is, when the patient manages to arrive at the service, the latter is able to maintain him in treatment with time.<sup>3</sup>

Nevertheless, considering that the majority of patients attend visits once a month or every two months, two hypotheses can be raised. The first suggests that this interval could be attributed to the stabilization of the patients' symptoms, leading to the adoption of different therapeutic conducts by the services' professionals, as discussed by Amaral.<sup>a</sup> The second hypothesis suggests that the interval between visits could be attributed to the discrepancy between the demand for assistance and the offer of mental health professionals, discussed as an important structural issue involved in continuity of care.<sup>5</sup>

Returning to CERSAM for a new visit after the first referral, as well as having been referred two or more times, increased the odds of patients being found in the healthcare centers and remain in treatment. This shows the importance and need for integration between the different mental health services that intermediate the patient during his passage to the healthcare centers, as advocated by the municipal health policy of Belo Horizonte.<sup>b</sup>

This fact is supported by the findings of the present study, since no individual characteristic of the patient, such as sex or age, was associated with continuity of care. Besides, there were no different conducts on the part of professionals according to the patients' pathology. When examining the results of the present study, one must consider the utilization of secondary data. Some variables could not be collected due to lack of information in the medical records (schooling, duration of the disease, associated symptomatology and marital status), limiting the analysis. Despite this limitation, it is possible to conclude that continuity of care in healthcare centers was not associated with patients' individual attributes; rather, it may be related to context factors, including those referring to the management and organization of the municipality's health system.

In order to get around these problems, it is recommended that: the mental health teams in the healthcare centers are expanded by hiring specialized professionals; these services have quality medication in such an amount that it meets the mental health demand; referral protocols are created, stressing the importance of services integration before, during and after referral. In this sense, it would be important to involve family health teams not only in the active search for patients who do not attend the scheduled visits, but also in the follow-up of these patients during their entire treatment.

The usefulness of studies like the present one is that we can learn about and intervene in the services' reality. Broader evaluations involving the trinomial structure, process and result serve to identify the organizational and/or individual factors that would be involved in continuity, facilitating or hindering it.

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<sup>&</sup>lt;sup>a</sup> Amaral MA. Análise da implementação da política de saúde mental para a rede básica em Campinas – 1992/1993 [Master's dissertation]. Campinas: Faculdade de Ciências Médicas da Universidade Federal de Campinas; 1995.

<sup>&</sup>lt;sup>b</sup> Melo APS. Fatores determinantes do abandono do tratamento psiquiátrico em um centro de referência em saúde mental (CERSAM – Pampulha), em BH (MG), 1997-1998 [Master's dissertation]. Belo Horizonte: Faculdade de Medicina da Universidade Federal de Minas Gerais; 2000.

#### REFERENCES

- Almeida Filho NM, Mari JJ, Coutinho E, França JF, Fernandes G, Andreoli SB, et al. Estudo multicêntrico de morbidade psiquiátrica em áreas urbanas brasileiras (Brasília, São Paulo, Porto Alegre). *Rev Assoc Bras Psiquiatr.* 1992;14(3):93-104.
- 2. Amarante P. A trajetória da reforma psiquiátrica no Brasil. Rio de Janeiro: Fiocruz; 1995.
- Bachrach LL. Continuity of care for chronic mental patients: a conceptual analysis. *Am J Psychiatry*. 1981;138(11):1449-56.
- Bandeira M, Gelinas D, Lesage A. Desinstitucionalização: o programa de acompanhamento intensivo na comunidade. *J Bras Psiquiatr.* 1998;47(12):627-40.
- Bandeira, M. Reinserção de doentes mentais na comunidade: fatores determinantes das rehospitalizações. J Bras Psiquiatr, 1993;42(9):491-8.
- Dean AG, Dean JA, Coloumber, D; Brender KA et al. Epi-Info versão 6. Atlanta: Centers of Disease Control and Prevention; 1994.
- 7. Donabedian A. Evaluating the quality of medical care. *Milbank Mem Fund Q.* 1996;44(3):166-206. doi:10.2307/3348969
- Filho JFS, Cavalcanti MT, Cadilhe GR, Vilaça AT, Avancini E, Machado HO, et al. Avaliação de qualidade de serviços de saúde mental no Município de Niterói - RJ - A satisfação dos usuários como critério avaliador. *J Bras Psiquiatr*. 1996;45(7):393-402.
- Fortney J, Sullivan G, Williams K, Jackson C, Morton SC, Koegel P. Measuring continuity of care for clients of public mental health systems. *Health Serv Res.* 2003;38(4):1157-75. doi:10.1111/1475-6773.00168
- Greenberg GA, Rosenheck RA. Managerial and environmental factors in the continuity of mental health care across institutions. *Psychiatr Serv.* 2003;54(4):529-34. doi:10.1176/appi.ps.54.4.529
- 11. Lima IMN, Alessi NP. O serviço de assistência ambulatorial em saúde mental de uma unidade de saúde

do município de Ribeirão Preto, SP. *J Bras Psiquiatr*. 2002;51(5):269-80.

- Melo APS, Guimarães MDC. Factors associated with psychiatric treatment dropout in a mental health reference center, Belo Horizonte. *Rev Bras Psiquiatr.* 2005;27(2):113-8. doi:10.1590/S1516-44462005000200008
- 13. Nick E, Oliveira SB. Tendências políticas de saúde mental no Brasil. J Bras Psiquiatr. 1998;47(11):583-9.
- Pitta AMF. Os Centros de Atenção Psicossocial: espaços de reabilitação? J Bras Psiquiatr. 1994,43(12) 647-54.
- Pitta AMF, Filho JFS, Souza GW, Lancman S, Kinoshita RT, Cavalcanti MT, et al. Determinantes da qualidade de serviços de saúde mental em municípios brasileiros – estudo da satisfação com os resultados das atividades desenvolvidas por pacientes, familiares e trabalhadores dos serviços. J Bras Psiquiatr. 1995;44(9):441-52.
- Pondé MP. Avaliação de dois serviços de saúde da rede básica de atendimento da Prefeitura Municipal de Campinas. *J Bras Psiquiatr.* 1994;43(8):429-32.
- Ribeiro, MS. Cinco anos de um ambulatório público de saúde mental: o ambulatório do Centro Regional de Saúde de Juiz de Fora – MG – 1981/1985. *J Bras Psiquiatr.* 1994;43(3):163-9.
- Silva JPL, Coutinho ESF, Amarante, PD. Perfil demográfico e sócio-econômico da população de internos dos hospitais psiquiátricos da cidade do Rio de Janeiro. *Cad Saude Publica*. 1999;15(3):505-11. doi:10.1590/S0102-311X1999000300007
- Sparr LF, Moffitt MC, Ward MF. Missed psychiatric appointments who returns and who stays away. *Am J Psychiatry*. 1993;150(5):801-5.
- 20. SPSS versão 11.5 for windows [software]. Chicago: Statistical Package for the Social Science; 2001.
- Ware NC, Dickey B, Tugenberg T, McHorney C. CONNECT: A measure of continuity of care in mental health services. *Ment Health Serv Res*. 2003;5(4):209-21. doi:10.1023/A:1026276918081

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