Factors associated with psychiatric treatment dropout in a mental health reference center, Belo Horizonte

Fatores associados ao abandono do tratamento psiquiátrico em um centro de referência em saúde mental em Belo Horizonte

Ana Paula Souto Melo,[1] **Mark Drew Crosland Guimarães**[2]

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Abstract

Objective: To characterize an outpatient public referral center for mental health and to assess factors associated with treatment dropout. **Methods:** A non-concurrent prospective study was undertaken to review 295 patient files. Patients, whose first consultation took place between January and December 1997, were followed-up for at least four months until April 1998. Patients were considered as having abandoned their treatment when, following a recommendation for at least a second visit, they did not return within four months after the first consultation. Social, demographic and clinical variables were compared to verify possible factors associated with dropout of treatment. Statistical analysis was performed using relative hazard (RR) with 95% confidence interval (CI) estimated by the Cox Regression Model. **Results:** Cumulative incidence of treatment dropout was 39.2% while multivariate analysis indicated that the following characteristics were statistically associated with treatment interruption: to live outside the referral area (RR = 1.95), no history of previous psychiatric hospitalizations (RR = 1.88), alcohol or drug use at admission (RR = 1.72), spontaneous demand to the service (RR = 2.12), lack of bus-passes (RR = 3.68) and to have less than four clinical appointments (RR = 7.31). **Conclusions:** Our findings suggest that services should be aware of the high incidence of treatment interruption, especially among those with no history of previous psychiatric hospitalizations and with less institutional bonds. This may indicate that mental health services should develop and implement public policies targeted at this population.

Keywords: Patient dropout; Community mental health services; Mental disorders/therapy; Psychotherapy; Community psychiatry

Resumo

Objetivo: Caracterizar a clientela de um serviço comunitário de saúde mental e avaliar os fatores relacionados ao abandono de tratamento. **Métodos:** Trata-se de um estudo do tipo prospectivo não-concorrente, com revisão de 295 prontuários médicos. Os pacientes com primeira consulta entre janeiro e dezembro de 1997 foram acompanhados por pelo menos quatro meses até abril de 1998. Foram considerados abandonos aqueles que, após indicação de pelo menos um retorno, não voltaram ao serviço por mais de quatro meses da data da última consulta. Variáveis sociodemográficas e clínicas foram comparadas para verificar fatores associados ao abandono de tratamento. A análise estatística incluiu Relative Hazard - RR com intervalo de 95% de confiança (IC) estimado pelo Modelo proporcional de Cox. **Resultados:** A incidência acumulada de abandono de tratamento foi de 39,2%. A análise multivariada mostrou que uso de álcool ou drogas na admissão (RR = 1,72), não ter história de internação psiquiátrica anterior (RR = 1,88), residir fora das regionais de abrangência do serviço (RR = 1,95), não receber vale-transporte (RR = 3,68), vir ao serviço por demanda espontânea (RR = 2,12) e contar com menos de quatro consultas ambulatoriais (RR = 7,31) tratavam-se de fatores de risco independentes para a ocorrência de abandono de tratamento. **Conclusão:** Esses achados sugerem que os serviços psiquiátricos devem se atentar para a alta incidência de abandono de tratamento, principalmente entre os pacientes que não são egressos de internações psiquiátricas e com menores vínculos institucionais, indicando que esses grupos necessitam de abordagem e ações especiais que devem ser implementadas enquanto políticas públicas em serviços semelhantes.

Descritores: Desistência do paciente; Serviços comunitários de saúde mental; Transtornos mentais/terapia; Psicoterapia; Psiquiatria comunitária

[1] Pontifícia Universidade Católica de Minas Gerais (Pontifical Catholic University of Minas Gerais, PUC-MG) and Medical School UNINCOR - Campus Mário Penna
[2] Department of Preventive and Social Medicine of the Medical School of the Universidade Federal de Minas Gerais (Federal University of Minas Gerais, UFMG)

Correspondence
Mark Drew Crosland Guimarães
Av. Professor Alfredo Balena, 190, 10º andar
30130-100 Belo Horizonte, MG
Tel.: (31) 3248-9103
E-mail: drew@medicina.ufmg.br

Introduction

Treatment drop-out is one of the main issues arising for mental health professionals. Both inpatients and outpatients show some risk of treatment dropout before completion.[1] The literature about treatment dropout in mental health is wide, evidencing the severity of the issue, with higher repercussions among patients with more severe clinical conditions. In community psychiatric services, dropout rates ranging from 30 to 60%[2] have been reported, depending on the service's characteristics, such as day-hospital, inpatient and outpatient services. Other relevant factors are the type of treatment provided and the characteristics of the patients seen (e.g., drug users, schizophrenics, alcoholics, among others). Many studies have been already accomplished trying to determine the predictive factors for psychiatric treatment dropout. However, the relevant factors for interruption are controversial, mainly those related to sociodemographic variables. The main factors reported in the literature may be grouped into three categories: those related to the patients' sociodemographic data,[3-4] those related to clinical data[5-6] and those related to the type of service providing psychiatric care.[1-2,7-8] Nonetheless, despite some disagreements found between dropout rates, studies show that interruption of treatment is an endemic situation.[9]

Considering Brazil's current policy on mental health assistance, when a great number of beds in psychiatric hospitals have been closed and new substitutive institutional arrangements have started, it is appropriate to start an adequate assessment of treatment dropout as one of the quality indicators of these new services. Of note, the assessment of mental health services is becoming more relevant in the Brazilian literature, accompanying a worldwide trend.[10]

The Mental Health Reference Centers (CERSAMs) are embedded in the proposal of psychiatric de-institutionalization and were inspired by the discussion of restructuring the model of mental health assistance which until then was centered in inpatient care. In these services, multidisciplinary teams are in charge of psychiatric urgencies and propose the stabilization of crises. Patients are seen in day-stay or outpatient basis up to the improvement of the acute picture, aiming to further referral to other services, mainly to basic mental health units. In Belo Horizonte there are currently seven of these centers. This study aims mainly to characterize CERSAM-Pampulha clients, by analyzing factors associated with treatment dropout in this service from January 1997 up to April 1998. Priority was given to discuss this issue considering the importance of continuity in the treatment of psychiatric patients and because it was a service still being structured.

Methods

This is a non-concurrent prospective study (historical cohort), with descriptive and analytical components. Patients who underwent through only one initial interview in the service and were referred in this first consultation were excluded (n = 384). Patients seen for the first time between January and December 1997, with at least one indication for a second consultation, were eligible (n = 527). Of these, a simple random probabilistic sample with 295 patients was selected, being followed-up, retrospectively, for at least four months up to 04/31/1998. Therefore, treatment dropouts were patients who came to the initial interview (first consultation) during the year 1997, who had at least one indication for a new consultation and who had not returned within a period of more than four months up to 04/31/1998. The follow-up period was defined as the time between the date of the first consultation and the date of the last consultation in the service, in months. Sociodemographic and clinical data were obtained from a secondary source (medical charts). Exposure measure variables were categorized and grouped into three groups: sociodemographic, indication of first consultation in the service and those related to the treatment's continuity. A pilot study with 10% of the sample was performed in order to test the data collection instruments and sampling procedures. Ethical and confidentiality issues were considered, patients were not identified at all and the project was approved of by the Ethical Committee of the Federal University of Minas Gerais (Opinion no: ETIC 134/99).

Patients who interrupted the treatment were compared to those who have not dropped out in order to determine the factors associated with treatment dropout. Initially, we have accomplished a descriptive analysis of the population (distribution of frequencies and central tendency measures) in order to verify the profile of patients who were seen at the CERSAM Pampulha. The accumulated incidence of dropouts was estimated as follows: the numerator was the number of interruptions and the denominator was the sample population. The median time of follow-up was estimated using Kaplan-Meier's method.[11] Concordance analysis of collected data was performed by the Kappa Index, with 95% confidence intervals.[12]

Univariate analysis was performed by means of Cox Proportional Hazards Model and the magnitude of associations of selected variables with dropout was estimated through the Relative Hazard with 95% confidence interval.[13] Statistical significance of each variable was assessed by a p value of the Cox model. Afterwards, we accomplished a multivariate analysis using also the Cox Proportional Model.[13] We obtained therefore estimates of the relative risk of dropout, adjusted by the multiple factors which might contribute for the event. Initial criteria for variable selection in the multivariate model were: 1) being associated with the event in the univariate analysis considering p value as equal to 0.20; 2) assessment of the clinical and epidemiological meaning of each variable. The modeling was accomplished step by step, by successive deletion of variables, and only those which contributed to explain the event at a 0.05 significance level remained in the final model. Wald's test was used aiming to assess the importance of each variable in the modeling. The adequacy of the model was assessed verifying the parallelism of curves of each segment of variables in the final model.[14]

Results

Of the 295 patients included, 116 dropped-out from treatment during the period investigated, resulting, therefore, in an accumulated dropout rate of 39.2%. Up to the end of the period, 16.9% of patients remained in treatment at the service and 43.2% were referred to other services (Table 1).

The descriptive characteristics of the first consultation are shown in Table 1. There was a slight predominance of men, with 51.2% of the studied population. The mean age was 35.3 years (median = 33 years), evidencing that a young population attended the service, being 68.7% of patients under 40 years old. Regarding schooling, 39.4% of patients were illiterate or had finished primary school (four years) and a small part of them had started college. The occupational situation showed 18.9% of unemployed and 11.1% of retired subjects, with an important proportion of missing answers (29.4%), a consequence of the precarious filling-out of medical charts.

Table 1 – Distribution of frequencies of sociodemographic and clinical characteristics of the studied population (n = 295), CERSAM Pampulha, January 1997 to April 1998, Belo Horizonte (MG)

Variable	n = 295	%
Sample population at the end of the study		
Dropped out of treatment	116	39.2
Under treatment	50	16.9
Referred	127	43.2
Ignored	2	0.7
Schooling (years)		
None (illiterate)	17	5.8
1-4	99	33.6
5 +	123	41.6
Ignored	56	19.0
With whom came at the first consultation		
Alone	29	10.1
Family nucleus (mother, father, siblings, children, spouse)	161	54.4
Others	105	35.5
Prior psychiatric hospitalization		
None	146	49.5
1-2	65	22.0
3 +	73	24.7
Ignored	11	3.8
Professional at the welcome interview		
Psychiatrist	137	46.3
Other professionals	158	53.7
Origin of referral		
Health center	88	30.1
Psychiatric hospital	78	26.4
Spontaneous demand	50	16.9
Others	79	26.6
Diagnosis (ICD-9)		
Schizophrenic psychoses (295)	76	25.7
Affective psychoses (296)	30	10.2
Not-specified psychosis (298.9/0)	22	7.4
Neurotic depression (300.4/0)	23	7.9
Alcohol dependence syndrome (303.9/2)	22	7.4
Others	79	26.8
Unclear diagnosis	43	14.6
Prior psychiatric treatment		
Yes	189	64.2
No	32	10.8
Ignored	74	25.0
Use of alcohol or street drugs in the last six months		
Yes	64	21.6
No	221	75.0
Ignored	10	3.4
Indication of outpatient treatment in the welcome interview		
Outpatient setting	173	58.7
Day-stay	106	35.9
Ignored	16	5.4
Type of registration at the service		
Day-stay	56	19.0
Day-stay + outpatient setting	64	21.7
Outpatient setting	134	45.4
Welcome interview (initial interview)	41	13.9

Most patients came accompanied to their first consultation, especially by their family nucleus 54.4% (mother, father, siblings, spouse), and 10.1% of them came alone to the welcome interview (Table 1). The number of admissions prior to the first consultation at the CERSAM Pampulha showed that 46.7% of patients had originated from hospitals, i.e., as they had been already admitted to psychiatric hospitals at least once in lifetime. Psychiatrists were those who more frequently had seen patients in their first consultation (welcome interview), in 46.3% of cases, followed by psychologists, nurses, social workers and occupational therapists. Regarding

the provenience of referrals, patients were mainly referred by Health Centers (30.1%) and psychiatric hospitals (26.4%), and only 16.9% came spontaneously to the service.

Regarding the diagnoses (ICD-9), the group of schizophrenic, affective and non-specified psychoses corresponded to 128 patients (43.3%), of which most of them were schizophrenia cases (59.0%). Among neuroses, 7.9% represented neurotic depression, whereas alcohol dependence syndrome corresponded to 7.4% (n = 22). The group of unclear diagnoses was composed by 43 subjects (14.6%).

Sixty-four point two percent of patients had already been seen in other psychiatric service prior to CERSAM Pampulha, whereas the use of street drugs or alcohol at the admission or in the six months prior to the admission was recorded for 21.6% of patients. Of note, after the first consultation, 35.9% of subjects were indicated for day-stay and 58.7% for outpatient treatment. Therefore, along the treatment at the CERSAM Pampulha, 19.0% of the service's clients were exclusively treated in day-stay and 21.7% were seen in day-stay and afterwards in outpatient care or vice-versa. Patients who were only seen in outpatient setting reached 45.4% (mean = 4 outpatient consultations; median =1 consultation) and the remaining ones (13.9%) had only come to their first consultation in the service, despite the indication for a second consultation.

When assessing the data concerning the continuation of treatment of the patient at the CERSAM Pampulha (Table 2), nearly 24.3% of patients at the institution, received bus passes sometime during the treatment. According to reports in the medical charts, 4.4% of patients were admitted to psychiatric hospitals during their treatment in the service. At least one domicile visit was accomplished for 7.1% of the patients. For those who were visited, the mean number was 3.0 visitations with median of 1.0. Regarding the number of outpatient consultations, 32.9% of patients had not received any outpatient attention, 42.8% had from one to four consultations and 24.3%, between 5 and 65 consultations.

Table 2 – Distribution of variables collected in the treatment of the studied population (n = 295), CERSAM Pampulha, January 1997 to April 1998. Belo Horizonte (MG)

Variable	n = 295	%
Use of bus passes		
Yes	72	24.3
No	220	74.7
Ignored	3	1.0
Psychiatric hospitalization during the treatment		
No hospitalization	282	95.6
1 +	13	4.4
Domicile visit		
None	274	92.9
One	12	4.1
2-20	9	3.0
Number of outpatient consultations		
None	97	32.9
1-4	126	42.8
5-65	72	24.3
Length of stay (months)		
Up to 1	140	47.5
1-4	81	27.4
4-15	74	25.1
Stay-time of dropouts (months) (n = 116)		
Up to 1	80	69.0
1-2	14	12.0
2-6.6	22	19.0

The median length of stay of patients at the CERSAM was 1.1 month (34 days), with a mean of 2.97 months (90.4 days), and 47.5% of patients remained in treatment in the service for one month. For patients who dropped out the treatment, the mean period of treatment decreased to 1 month, with a median of 0.26 month (8 days). The lowest follow-up period for this group was 0.03 month and the highest was 6.6 months. Mean follow-up time varied according to the type of treatment. Among patients who remained in day-stay and afterwards in outpatient setting or vice-versa, the follow-up mean was 5.7 months (median = 3.7 months). For those in exclusive day-stay regime, the mean was 3.5 months (median = 1.5 month), whereas for those seen only in outpatient setting, the mean was 2.3 months (median = 1 month).

Data reliability assessment indicated a good agreement for most of the variables. Gender and schooling showed 100% of agreement on the collected information (Kappa = 1.0), whereas regarding place of domicile and the defining variable of the event the Kappa index was 0.75 (95% CI = 0.58 - 0.92) and 0.73 (95 % CI = 0.55 - 0.90), respectively.

The univariate analysis indicated that, among sociodemographic variables, the risk of treatment dropout was statistically higher for male patients (RR = 1.48; 95% CI = 1.00 - 2.20), for those who lived out of the referral area of the CERSAM Pampulha (Venda Nova, Pampulha and Norte) and several cities other than Belo Horizonte (RR = 2.34; 95% CI = 1.44 - 3.81) - Table 3.

Among variables related to prior history, the risk of dropout increased when the patients had never been admitted to a psychiatric hospital (RR = 2.06; 95% CI = 1.37 - 3.10), when they came spontaneously to the service (RR = 2.34; 95% CI = 1.44 - 3.81) and when there was no history of psychiatric treatment prior to the arrival at the CERSAM (RR = 2.60; 95% CI = 1.43 - 4.71). Regarding the diagnosis, there was higher risk of dropout among patients with alcoholism (RR = 3.04; 95%CI = 1.67 - 5.55) and for those with unclear diagnosis (RR = 2.86; 95%CI = 1.67- 4.90), without statistical association with other diagnostic categories. Higher dropout risk was also associated with the use of illicit drugs or alcohol at the admission (RR = 2.18; 95%CI = 1.44 - 3.31), with not having received bus passes (RR = 3.60; 95%CI = 2.00 - 6.48) and having received attention for less than four times in outpatient consultations (RR = 4.80; 95%CI = 2.67 - 8.61).

The risk of dropout was lower for patients who at the first consultation had indication for day-stay (RR = 0.48; 95%CI = 0.31 - 0.74), who used the service's ambulance (RR = 0.0; 95%CI 0.21 - 0.76) and who had a change of their attending health professional changed after the first consultation (RR = 0.52; 95%CI = 0.28 - 0.96).

Lastly, the multivariate analysis indicated six variables which were independently statistically associated with dropout (Table 4): to have come to the service spontaneously (RR = 2.12; 95%CI = 1.36 - 3.31), having no prior psychiatric admission (RR = 1.88; 95%CI = 1.20 - 2.94), use of alcohol or illicit drugs at the moment of admission or up to six months before the admission (RR = 1.72; 95%CI = 1.12 -2.65), to reside outside the service's referral area (RR = 1.95; 95%CI =1.18- 3.21), to have not received bus passes (RR = 3.68; 95%CI = 1.95 - 6.96) and to have attended less than four consultations during the follow-up (RR = 7.31; 95%CI = 3.81-14.02).

Table 3 – Univariate analysis of the sociodemographic and clinical characteristics (associated with treatment dropouts) in subjects seen at the CERSAM Pampulha, January 1997 to April 1998, Belo Horizonte (MG)

Variable	Total n[ϒ]	Dropout (%)[ρ]	Relative Risk (95%CI)[£]	p Value[¶]
Sex				
Male	133	58 (43.6)	1.48 (1.00 - 2.20)*	0.050
Female	135	43 (31.8)	1.0	
Domicile				
Outside the referral area	36	21 (58.3)	2.34 (1.44 – 3.81)*	0.002
Referral area	232	80 (34.4)	1.0	
Prior hospitalization				
None	139	64 (46.0)	2.06 (1.37-3.10)*	< 0.001
More than one	129	37 (28.6)	1.0	
Referral origin				
Spontaneous	47	31(66.0)	2.34 (1.44 – 3.81)*	< 0.001
Other	221	70 (31.6)	1.0	
Diagnosis				
Alcoholism	20	13 (65.0)	3.04 (1.67 – 5.55)*	< 0.001
Unclear	35	18 (51.4)	2.86 (1.67 – 4.90)*	< 0.001
Others	213	70 (32.8)	1.0	
Use of alcohol or drugs in the last six months				
Yes	60	34 (56.6)	2.18 (1.44-3.31)*	< 0.001
No	208	67 (32.2)	1.00	
Prior psychiatric treatment				
No	28	14 (50.0)	2.60 (1.43 - 4.71)*	0.002
Ignored	65	35 (53.8)	2.67 (1.72 – 4.12)*	< 0.001
Yes	175	52 (29.7)	1.0	
Indication for outpatient treatment				
Day-patient	101	29 (28.7)	0.48 (0.31 – 0.74)*	0.001
Outpatient	167	72 (43.1)	1.00	
Use of ambulance				
Yes	48	11(22.9)	0.40 (0.21 - 0.76)*	0.005
No	220	90 (40.9)	1.00	
Use of bus passes				
Yes	67	12 (17.9)	1.00	
No	201	88 (43.7)	3.60 (2.00- 6.48)*	< 0.001
Change of health professional				
Yes	43	12 (27.9)	0.52 (0.28 – 0.96)*	0.039
No	225	89 (39.5)	1.00	
Number of consultations				
0 – 4 Consultations	199	87 (43.7)	4.80 (2.67 – 8.61)*	< 0.001
5 + Consultations	69	14 (20.2)	1.0	
Admission mode				
Brought by the police	13	7 (53.8)	2.03 (0.94 - 4.41)	0.071
Others	255	94 (36.8)	1.0	
Domicile visits				
Yes	17	5 (29.4)	0.52 (0.21 - 1.29)	0.16
No	251	96 (38.2)	1.0	
Schooling				
Primary school	92	39 (42.3)	1.39 (0.91 - 2.13)	0.11
Ignored	42	15 (35.7)	1.23 (0.69-2.21)	0.47
Others	134	47 (35.0)	1.0	
Age				
< 36 years	169	72 (42.6)	1.28 (0.87 - 1.89)	0.19
36 + years	120	41 (34.2)	1.0	

ϒ Totals varied due to the exclusion of missing information
ρ Number and ratio of dropout in the period
* Statistically significant at 0.05
¶ p value is related to the value obtained in the Cox Regression model for each variable
£ Obtained with the Cox Proportional Hazards Model

Table 4 – Estimated Relative Risks with 95% confidence intervals of variables included in the final model, January 1997 to April 1998, Belo Horizonte (MG)

Variable	Relative Risk (95%CI)	p Value [1]
Use of alcohol or drugs		0.009
Yes	1.72 (1.12 – 2.65)	
No	1.0	
Domicile		0.009
Outside the referral area	1.95 (1.18 – 3.21)	
Referral area	1.0	
Prior hospitalization		0.013
None	1.88 (1.20 – 2.94)	
More than one	1.0	
Use of bus passes		< 0.001
No	3.68 (1.95 – 6.96)	
Yes	1.0	
Referral origin		< 0.001
Spontaneous	2.12 (1.36 – 3.31)	
Other	1.0	
Number of outpatient consultations		< 0.001
0 – 4	7.31 (3.81 – 14.02)	
5 or more	1.0	

[1] *Cox Regression model*

Discussion

There is no consensus regarding the concept of psychiatric treatment dropout, what, many times, hampers the comparison between studies. In this study, we chose to use the period of four months of absence to the service to define a dropout event as it is a service which attends urgencies and crises. In general, in this context, there is a higher frequency of consultations at the beginning of the treatment and, at the same time, this period provided a space of time for patients to make a new appointment. In an emergency service, if patients do not return within four months, the possibility of returning after the time needed to treat this episode is very low. Sparr et al indicate that, of patients who lost their appointments, 71.1% made a new appointment spontaneously, according to the following frequency: 73.3% in the first two weeks, 15.8% within four weeks, 4% within three months, 6.9% within four months. After this period, the follow-up was continued for up to 6 months, and there was no new appointment after the fourth month.[15]

The accumulated dropout rate found at the CERSAM Pampulha was 39.2%. It is a high rate and compatible with the literature for this type of service. In one review article about treatment dropout in community services, we found rates ranging between 30 and 60% in the first year of follow-up.[2]

In Brazil, one survey performed at the Psychosocial Attention Center (CAPs) Luiz Cerqueira (São Paulo) found a lower dropout ratio (27.1%). However, at this service, the definition used for dropout was "patients who came to the first interview or up to two more times and have not returned afterwards", without a temporal definition of dropout.[16] Botega's study, performed in a exclusively outpatient psychiatric care center, which differs from the attention given at the CERSAM Pampulha, found a dropout rate of 33.2%.[17]

There was a higher proportion of treatment dropout just at the beginning, i.e., 69% of dropouts were of patients who ended prematurely their treatment, within one month of less of follow-up (mean = 30.5 days). According to Pang et al, patients are expected to drop out their treatment preferably at the beginning, before the establishment of the therapeutic relationship between patients and health professionals. Other authors also indicate that the beginning of treatment is the period with the highest dropout risk.[1-2,7,18]

Data from the first consultations at CERSAM Pampulha in the year 1997 show that, of 973 new patients who sought the service, nearly 55% (597 patients) had indication for a new consultation, confirming the great demand for attention. Friedmann et al claimed that, within the new policy of mental health care, psychiatric emergency services had their role redefined, with an increase in their attributions, including to be the site for definitive treatment of acute patients.[19] Having become responsible for the treatment and stabilization of crises, these services are currently facing several problems, among them the difficulty of placing patients in outpatient treatment programs, increasing the delay to start long-term treatments. Therefore, what is observed is that the CERSAM Pampulha, besides performing its role in the attention of emergencies and stabilization of crises to which it is meant, has also become responsible for the definitive treatment of cases of an important layer of subjects, as for 25.1% of the sample the length of stay in the service was from 4 to 15 months. The provision of outpatient attention for almost half of the patients points to a distortion in the role of this institution, as it is an emergency service which aims to keep the treatment up to the stabilization of crises, indicating that these clients might have been receiving attention in other outpatient services. However, among CERSAM Pampulha's patients there was a predominance of patients with diagnosis of psychoses (46.4%), with a higher number of schizophrenia (25.7%) and a higher proportion of men, of young patients and those coming from psychiatric hospitals. This profile is different from that of outpatient services which are characterized by seeing a higher number of neurotic patients and women.[10,16,20]

Also of note, few patients (10.1%) came alone to the welcome interview, arriving in the majority of cases accompanied by a relative from their inner family nucleus. Contrarily to our society, data from Cohen et al[9] show that in a psychiatric rehabilitation center in Chicago 51.0% of patients reported living alone and only 18.0% of them lived with their families.

The variable with the strongest association with treatment dropout at CERSAM Pampulha was the number of outpatient consultations, indicating that the lower the number of consultations the higher the risk of dropout (RR = 7.31; 95%CI = 3.81-14.02). One possible explanation could be the establishment of a better transferential bond between patients and their attending professionals in case the treatment is continuous. This finding is corroborated by the literature which confirms that the higher number of dropouts occurs after the first consultations.[1-2,18] On the other hand, the lower number of consultations could be a consequence of early dropout, and may therefore be understood as a marker of service utilization. Multivariate adjustment indicated that patients who lived outside the referral area and do not receive bus passes show higher risk of treatment dropout. Thus, data corroborate the importance of seeing patients who live nearby the service and to provide transportation for their most economically challenged patients. Considering the precarious socioeconomic situation of patients who attend public health services, the study evidenced that free transportation is a fundamental resource to keep the continuity of the treatment for the population, and it might be useful extend it to a higher number of the service's patients.

Of note, the higher risk of dropout of patients who were not referred by psychiatric hospitals and who came spontaneously

to the service. In Romney's study[3] there is indication that the great majority of patients who dropped out of treatment had no prior experience with psychiatric services and failed to reestablish contact after the precocious end of treatment. In Atwood's study, chronically psychotic patients showed five-fold chances of continuing their treatment compared to other psychiatric conditions. Therefore, at the end of the study, these data may indicate that less severe subjects showed higher risk of treatment dropout.[21] These results are in accordance with other studies, which point to higher risk of less severe patients to not attend the service.[22-24] The prior institutional experience and the bond established with the service are factors which may, thus, enable a higher possibility of compliance of patients to the appropriate follow-up and consequently to a higher effectiveness of their treatment. Corroborating with this context is the fact that patients without well-established psychiatric diagnoses, without prior history of psychiatric treatment and alcohol and drugs abusers are at higher risk of dropping out of treatment in our analysis, what in concordant with other studies.[1-2,4,8,25]

Despite they may not be generalized, these data contribute for a better understanding of the factors associated with dropout of psychiatric follow-up in a community service, according to the national policy of dehospitalization. With this high dropout rate it is necessary to develop and establish public policies aimed at patients at higher risk of treatment dropout, enabling a higher effectiveness of services and a higher quality of life of their users.

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