



Revista Brasileira de Psiquiatria

RBPPsychiatry

Official Journal of the Brazilian Psychiatric Association
Volume 34 • Number 2 • June/2012



ORIGINAL ARTICLE

Stigma and higher rates of psychiatric re-hospitalization: São Paulo public mental health system

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Received on August 1, 2011; accepted on October 14, 2011

DESCRIPTORS

Schizophrenia;
Psychosis;
Community Mental
Health;
Mood Disorders - Bipolar
Disorder;
Outpatient Psychiatry.

Abstract

Objective: The aim of this study was to assess re-hospitalization rates of individuals with psychosis and bipolar disorder and to study determinants of readmission. **Methods:** Prospective observational study, conducted in São Paulo, Brazil. One hundred-sixty-nine individuals with bipolar and psychotic disorder in need of hospitalization in the public mental health system were followed for 12 months after discharge. Their families were contacted by telephone and interviews were conducted at 1, 2, 6 and 12 months post-discharge to evaluate readmission rates and factors related. **Results:** One-year re-hospitalization rate was of 42.6%. Physical restraint during hospital stay was a risk factor (OR = 5.4-10.5) for readmission in most models. Not attending consultations after discharge was related to the 12-month point readmission (OR = 8.5, 95%CI 2.3-31.2) and to the survival model (OR = 3.2, 95%CI 1.5-7.2). Number of previous admissions was a risk factor for the survival model (OR = 6.6-11.9). Family's agreement with permanent hospitalization of individuals with mental illness was the predictor associated to readmission in all models (OR = 3.5-10.9) and resulted in shorter survival time to readmission; those readmitted were stereotyped as dangerous and unhealthy. **Conclusions:** Family's stigma towards mental illness might contribute to the increase in readmission rates of their relatives with psychiatric disorders. More studies should be conducted to depict mechanisms by which stigma increases re-hospitalization rates.

DESCRIPTORES:

Esquizofrenia;
 Psicose;
 Saúde Mental
 Comunitária;
 Transtornos Afetivos -
 Transtorno Bipolar;
 Psiquiatria Ambulatorial.

Estigma e frequências mais altas de re-hospitalização psiquiátrica: o sistema público de saúde mental de São Paulo

Resumo

Objetivo: O objetivo desse estudo foi avaliar a frequência de re-hospitalizações de indivíduos portadores de psicose e transtorno bipolar, para estudar os determinantes da readmissão. **Métodos:** Estudo de observação prospectivo realizado em São Paulo, Brasil. Foram acompanhados 169 portadores de psicose e de transtorno bipolar precisando de hospitalização no sistema público de saúde mental por 12 meses após a alta. Após contato por telefone com suas famílias, foram realizadas entrevistas a 1, 2, 6 e 12 meses após a alta para se avaliar a frequência de readmissões e os fatores relacionados às mesmas. **Resultados:** A frequência de re-hospitalizações após um ano foi de 42,6%. A contenção física durante a estadia hospitalar foi um fator de risco (RC = 5,4-10,5) de readmissão em muitos modelos. O não comparecimento às consultas após a alta foi relacionado à readmissão pontual aos 12 meses (RC = 8,5, IC 95% 2,3-31,2) e ao modelo de sobrevivência (RC = 3,2, IC 95% 1,5-7,2). O número de readmissões anteriores foi um fator de risco para o modelo de sobrevivência (RC = 6,6-11,9). A aprovação da família para a hospitalização permanente de indivíduos portadores de doença mental foi o fator de predição associado à readmissão em todos os modelos (RC = 3,5-10,9) e ocasionou tempos de sobrevivência mais curtos até a readmissão; aqueles readmitidos foram considerados de forma estereotipada como perigosos e não sadios. **Conclusões:** O estigma da família em relação à doença mental pode contribuir para o aumento na frequência de readmissões de seus familiares portadores de transtornos psiquiátricos. Outros estudos devem ser realizados para demonstrar os mecanismos pelos quais o estigma aumenta a frequência de re-hospitalizações.

Introduction

In the past, psychiatric hospitalization was closely linked to stigma towards the mentally ill.¹ People with mental disorders were kept in hospitals, away from the community, for long periods and there was a stigmatizing belief that their treatment should be conducted in these facilities most of the time.² However, in recent decades a great effort has been made to change such beliefs and practices.³⁻⁶

Firstly, the World Mental Health Organization stimulated the creation of public health policies worldwide to reduce psychiatric beds and substitute them with community treatment facilities.⁷ From 1990 to 2002, the numbers of psychiatric beds have decreased drastically in Europe. For instance, figures fell from 169 to 58 and from 132 to 63 psychiatric hospital beds per 100,000 population in Sweden and in England, respectively.⁸ Secondly, deinstitutionalization movements have tried to return and reintegrate long-stay psychiatric inpatients to the community.^{9,10} Some studies demonstrated that this return to community had a positive effect on the clinical condition of the patients,¹¹ whereas others showed that society's stigmatization towards them increased.¹² This contradicts the theory that contact with individuals with mental illnesses might reduce stigma against them.¹³ Finally, several anti-stigma campaigns have been launched to fight prejudice against the mentally ill.^{14,15}

In order to solidly integrate these individuals into society, however, the three factors mentioned above must act together. Otherwise stigma, an issue that has proven itself to be resilient within societies,¹⁶ can persist in diverse forms, also through psychiatric hospitalization. With the persistence of stigmatizing beliefs and given that current policies no

longer allow lasting stays at psychiatric hospitals, this forced community contact with the mentally ill could elicit a "revolving door pattern".¹⁷ Without a non-stigmatizing culture of deinstitutionalization firmly in place and an adequate community treatment services to shelter these individuals with mental illnesses, multiple brief hospitalizations would replace traditional long-term hospitalization.¹⁸ Thus, these heavy-users of psychiatric beds¹⁹ reflect resilient stigma and desire to maintain the mentally ill apart from society.

According to this hypothesis, even though current psychiatric hospitalization criteria are mainly dictated by medical parameters, stigma could still have an enduring veiled effect on admission rates.²⁰ Although numerous studies have focused on psychiatric re-hospitalization as a measure of relapse²¹ and many have used this issue to assess psychotropic effectiveness,^{22,23} few have analyzed the influence of stigma at the time of re-hospitalization.

The aim of this study was to assess re-hospitalization rates of individuals with psychosis and with bipolar disorder in the city of São Paulo, Brazil, and to study risk factors related to early readmission.

Methods

Background

The study was conducted in São Paulo, the largest metropolis of Brazil. The city has an estimated population of 11 million inhabitants,²⁴ and is the sixth most populous city in the world. A major mental health care reform has been carried out over the last 20 years in São Paulo:^{25,26} a national public health system was created, the Sistema Único de Saúde

(SUS); the number of psychiatric hospital beds has been drastically reduced; and many Centers for Psychosocial Care (*Centro de Atenção Psicossocial* - CAPS) - community outpatients services - were created.^{26,27} CAPS are supposed to be intensive outpatient services, where individuals with greater need for assistance can attend the service more than once a week. Each CAPS has a multidisciplinary team consisting of psychiatrists, psychologists, nurses, social workers and occupational therapists. Aside from hospital beds and CAPS, there are the Basic Health Units (*Unidade Básica de Saúde* - UBS): community services, many of them with psychiatrists, where patients are seen on a monthly basis. At the time of the study, there were 5 stand-alone psychiatric hospitals, 10 general hospitals with psychiatric beds, 43 CAPS and 546 UBS operating in the city.²⁸ Studies published a few years before this present study showed that mental health care resource figures were similar to other developed countries: in 2005, São Paulo had 13.2 psychiatric beds per 100,000 population, a number comparable to countries where deinstitutionalization has been longstanding, and 6.13 psychiatrists per 100,000 population, which was similar to figures of high-income countries as well.^{7,28} According to Saxena et al.,²⁹ Brazil has a good number of human resources for mental health care per capita, as represented by São Paulo, the country's richest city.

The statistics mentioned above reflect the public mental health care system. In parallel, there is a private mental health care system - called supplementary health system - which will not be considered in the present study because, first, data on this system is scarce if not absent; second, the great majority of the population uses the public health system.

Sampling and procedure

The subjects for this study were recruited from the *Hospital Psiquiátrico Philippe Pinel*, one of five public stand-alone psychiatric hospitals of São Paulo. This facility has 36 acute psychiatric beds for males and 12 for females, being responsible for almost 10% of the hospitalizations of individuals with psychosis and bipolar disorder (ICD-10 F2 and F31/F30) of the metropolis.³⁰

Patients are only admitted to the facility through emergency units located throughout the city. Individuals are referred from these units to the hospital on an as-needed basis; thus, inpatients originate from all regions of the metropolitan area. Also, specifically at this hospital, all psychiatric diagnoses are accepted for hospitalization; the only exception being subjects with substance use disorder as the primary diagnosis. These individuals are admitted elsewhere. Hence, individuals at this hospital are considered representative of the city's bipolar and psychotic disorder patients who required hospitalization in the public health system.

The study sample comprised adult subjects consecutively discharged from the hospital from May to August 2009. During each month of the study, patients and their families were consecutively asked at the time of their discharge whether they were willing to participate in the study. After providing a description of the study to the participants, a written, informed consent was obtained. If a number between 40 and 50 participants was reached for the month, the recruiting was suspended and reinitiated at the beginning of the following

month. After discharge, an appointment was made at the CAPS nearest to the patient's home. As a rule, this took place no more than one month after they left the hospital.

Of the total discharges in this four-month period ($n = 271$), 216 (79.7%) were randomly invited to participate in the study. Of these, 176 (81.5%) agreed to collaborate, signed an informed consent form and would be contacted at least once after discharge.

The sample had an array of different diagnoses. In order to obtain a more homogenous sample, only individuals with the diagnosis of psychosis or bipolar disorder (ICD-10 F2 or F31/F30) were considered for analysis; individuals with substance abuse disorder ($n = 1$, 0.6%), unipolar depression ($n = 2$, 1.1%), mental retardation ($n = 1$, 0.6%) and organic mental disorder ($n = 3$, 1.7%) as the primary diagnosis were not considered. This resulted in a final sample of 169 individuals.

Next, a social worker contacted the patient's family by telephone at four different points in time: 1 month, 2 months, 6 months and 12 months after discharge from the index hospitalization. The social worker tried to reach every family at the specific time points several times. If contact was not made in the month designated for the team to call the family, it was considered a refusal. From the 169 families, 145 (86%) were contacted in the first month, 136 (81%) in the second month, 134 (79%) at month 6 and 108 (64%) at month 12.

Instrument and measures

The instrument was a specific questionnaire designed for the study. The first part was filled out by the main investigator with data from the patient's hospital file. Sociodemographic data, data on the psychiatric disorder, information about the hospital stay and the hospital discharge were collected.

The second part was filled out by the social worker by telephone interviews. It consisted of 6 parts; 1) individual's general behavior; 2) attendance to his/her outpatient consultations, and if not, why; 3) medication compliance; 4) in this part the interviewer asked whether the subject was re-hospitalized since index hospitalization (re-hospitalization was also considered if the patient was readmitted elsewhere than the hospital where the study was conducted), including reason why the individual was re-hospitalized; 5) information about drug use; 6) questions about the family's opinion on psychiatric hospitalization ("Do you agree with brief hospitalization?"; "Do you wish your relative had stayed a longer time at the hospital?"; "Do you agree with permanent hospitalization of the mentally ill?").

For the last phone interview (12 months post-discharge), a stereotype questionnaire used in previous studies was filled out.³¹ The family member was asked to compare his relative to someone in the general population, regarding 12 stereotypes: dangerous, creative, unpredictable, healthy (body and soul), less intelligent, bedraggled, controlled, abnormal, gifted, unreliable, reasonable, weird. Possible answers to the questions on stereotypes were: "more present", "equally present", or "less present".

As outcome variables, point-estimates of re-hospitalization in the interview schedule (1 month, 2 months, 6 months and 12 months) were used. That is, for these outcome variables, only data obtained at those specific time-points

were considered. A further variable was created representing the survival to re-admission (“re-hospitalization survival”), considering data obtained from all time-points.

We used the following 15 predictors: age (years, continuous), sex (male vs. female), number of previous hospitalizations (none; 1; 2 to 5; 6 to 10; 11 or more), not taking medication before admission (yes vs. no), duration of hospitalization (continuous, days), physically restrained during hospital stay (yes vs. no), anti-psychotic dose on discharge (continuous, calculated on chlorpromazine-equivalents), type of anti-psychotics on discharge (typical; atypical; atypical plus typical), depot antipsychotics on discharge (yes vs. no), number of antipsychotics on discharge (continuous), number of psychotropics on discharge (continuous), attending outpatient consultations after discharge (yes vs. no), taking medication after discharge (yes vs. no), family’s agreement with permanent hospitalization (yes vs. no), family’s agreement with brief hospitalization (yes vs. no).

Outcome variables did not show statistically significant differences between individuals with psychosis and individuals with bipolar disorder; therefore, the sample was analyzed as a whole as opposed to being split up according to diagnosis.

Statistical analysis

Participants and non-participants were compared. An independent t-test was conducted for the continuous variables (age and duration of hospital stay); and for categorical variables (sex, diagnosis of entry and of discharge, number of previous hospitalizations and time since the illness began) Chi-square tests were used.

Backwards stepwise logistic regression was conducted between the predictors and outcome variables. Other variables differing from those described in the previous subsection as “predictors” (family member visits during hospital stay, reason of admission and family’s desire for a longer hospital stay) were excluded since exploratory analysis conducted by calculating chi-square coefficients between them revealed no association with the outcome.

Afterwards, a Cox proportional hazards regression model was used to obtain the best predictor for time to one-year re-hospitalization. Variables that yielded significant correlations in the logistic regression were entered. Next, this predictor was used to conduct two distinct Kaplan-Meier survival curves, considering “re-hospitalization survival” as the outcome. Log rank was used to estimate statistical difference between the two curves.

Since stereotype information was obtained only in the last round of interviews, at 12 months after discharge this information was not included in the previous analyses in order to not reduce the sample for the regression. Only 108 families could be contacted at this final time-point. Stereotypes were thus compared between those re-admitted and those not re-admitted by means of chi-square analysis.

All statistical analyses were conducted with SPSS 18.0 (PASW) for Windows. Two-tailed tests and level of significance (p) of 0.05 were used.

Results

Analyzing participants and non-participants, no statistical differences were found between them regarding mean age, sex, diagnosis of entry and of discharge, mean duration of

hospital stay, number of previous hospitalizations and time since the illness began (data not shown). The majority of participants were single males, with their last admission within one year before study entry (64.6%). Sample characteristics are shown in Table 1. Of the 169 individuals of the study, 72 (42.6%) were readmitted at least once within 12 months of their hospital discharge date.

At the 1-month post-discharge time-point, not taking medication before the hospitalization was protective (OR = 0.2, 0.1-0.7 95%CI) and physical restraint during admission was a risk factor (OR = 7.4, 1.9-28.4 95%CI). At the 2-month time-point, again, not taking medication before the hospitalization was protective (OR = 0.3, 0.1-0.8 95%CI) and physical restraint during admission was a risk factor (OR = 5.4, 1.5-19.2 95%CI). Depot antipsychotics at discharge were also a risk factor (OR = 6.0, 95%CI 1.7-21.8). At the 12-month time-point not taking medication before the hospitalization was protective (OR = 0.3, 0.1-0.9 95%CI) and physical restraint during hospital stay was a risk factor (OR = 10.5, 2.2-50.8 95%CI). Having 11 or more previous admissions was a risk factor for individuals contacted at this time (OR = 8.8, 95%CI 1.1-68.6), as well as not going to outpatient consultations after discharge (OR = 8.5, 95%CI 2.3-31.2). Summing data from all time points in the “re-hospitalization survival” model, a higher number of previous admissions

Table 1 Sample characteristics (n = 169)

Age (years; mean, range)	37.5 (18-65)
Male gender (%),n	79.3% (134)
Between 1 and 8 years of study (%),n	86.4% (146)
Single (%),n	85.8% (145)
Duration of hospital stay (days; mean, range)	17.3 (1-44)
First hospitalization (%),n	7.7% (13)
Number of previous hospitalizations (%),n	
11 or more:	24.3% (41)
6 to 10:	13% (22)
2 to 5:	35.5% (60)
1:	11.8% (20)
When was the last admission? (%),n	
Less than 1 year:	64.6% (93)
1 to 2 years:	21.5% (31)
Not taking medication at time of admission	53.3% (90)
Physical restraint during hospitalization	18.3% (31)
Medication at discharge	
Only typical	69.8% (118)
Only atypical	5.9% (10)
Typical and atypical	18.3% (31)
No antipsychotics	5.9% (10)
Depot antipsychotics	17.2% (27)
Diagnosis at discharge	
Psychotic disorder	111 (65.7%)
Bipolar Disorder	43 (25.4%)
Schizoaffective disorder	9 (5.3%)
Unspecified psychosis	6 (3.6%)

(OR = 6.6 to 11.9) and not attending outpatient consultations (OR = 3.2, 95%CI 1.5-7.2) were also risk factors. What was consistent among all models was family's agreement with permanent hospitalization of the mentally ill being a risk factor (OR ranging from 3.5 to 10.9). Other variables, such as age, sex, duration of hospital stay, antipsychotics dose, type of antipsychotics and number of psychotropics at discharge, as well as taking medications after discharge, did not show a significant correlation to readmission in any of the models (Table 2).

All the above-mentioned variables were used in the Cox proportional hazards regression model, which after 8 steps indicated "family's agreement with permanent hospitalization of the mentally ill" as the best predictor for time to one-year re-hospitalization (OR = 2.24, 95%CI 1.34-3.75). Thus, Kaplan-Meier survival analysis showed that individuals whose family agreed with permanent hospitalization had a significantly worse outcome with a shorter time to re-hospitalization (mean survival time = 10.44 vs. 11.00 months; $\chi^2 = 13.65$, $p < 0.001$) (Figure 1). Individuals readmitted were significantly more stereotyped as dangerous ($\chi^2 = 9.76$, $p < 0.01$) and ill ($\chi^2 = 12.01$, $p < 0.01$) (Figure 2).

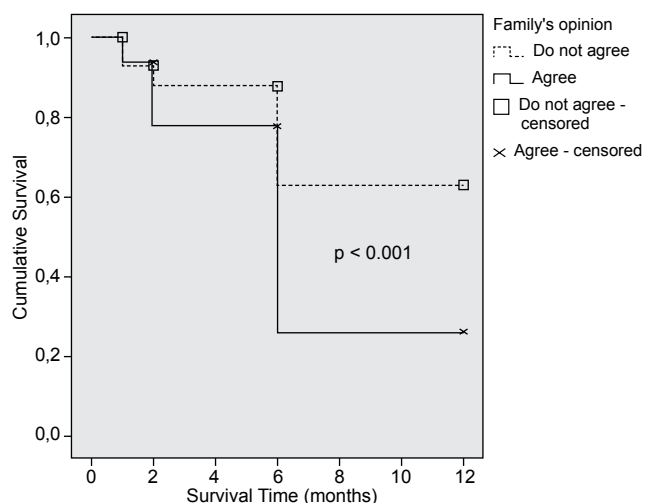


Figure 1 Kaplan-Meier Survival functions according to family's agreement with permanent hospitalization.

Table 2 Logistic regression of re-hospitalization at different time-points and re-hospitalization survival

	1 month (n = 145)	2 months (n = 136)	6 months (n = 134)	12 months (n = 108)	Re-hospitalization survival (n = 169)
	OR (95%CI)	OR (95%CI)	OR (95%CI)	OR (95%CI)	OR (95%CI)
Higher age	*	*	0.9 (0.9-1.0)	*	1.0 (0.9-1.0)
Number of previous hospitalizations					
0	*	*	*	1	1
1				0.5 (0.0-9.7)	2.4 (0.3-17.5)
2 to 5				3.5 (0.5-26.1)	6.6 (1.2-37.1)
6 to 10				6.0 (0.6-56.6)	10.8 (1.6-75.2)
11 or more				8.8 (1.1-68.6)	11.9 (1.9-74.7)
Not taking medication before hospitalization	0.2 (0.1-0.7)	0.3 (0.1-0.8)	*	0.3 (0.1-0.9)	0.5 (0.2-1.0)
Physical restraint during hospital stay	7.4 (1.9-28.4)	5.4 (1.5-19.2)	*	10.5 (2.2-50.8)	*
Longer hospitalization	0.9 (0.9-1.0)	*	*	*	*
Number of psychotropics on discharge	*	0.7 (0.4-1.0)	*	*	*
Depot antipsychotic on discharge	*	6.0 (1.7-21.8)	*	*	*
Not attending to consultations after discharge	*	*	*	8.5 (2.3-31.2)	3.2 (1.5-7.2)
Agreement with permanent hospitalization	5.0 (1.7-14.7)	3.8 (1.3-10.7)	4.1 (1.6-10.6)	10.9 (3.1-37.9)	3.5 (1.6-7.6)

* Variable not present in the final model.

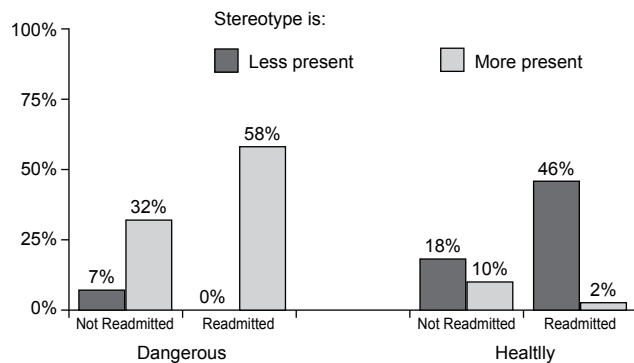


Figure 2 Stereotypes attributed to patients compared to someone of the general population, considering survival to re-admission after 12 months.

When asked what could have possibly prevented the re-hospitalization, families were unanimous in choosing the option that “the patient should have stayed longer in the hospital before leaving it”. No family stated insufficiency of outpatient services as the cause of re-admittance.

Discussion

This is one of the few studies to analyze re-hospitalization rates in a Latin American country where psychiatric beds have been drastically reduced.³² Our results showed that in such settings stigma might play an important role in influencing readmission.

Similar to what is usually stated in the literature,^{33,34} after one year the re-hospitalization rate for individuals of the sample was of 42.6%. Not taking medication before index hospitalization was protective, whereas physical restraint during hospitalization was a risk factor for readmission in most models. Depot antipsychotics on discharge was a risk factor for the 2-month assessment point, while greater number of previous admissions and not attending consultations after discharge were factors related to the 12-month assessment and to the survival model. Family’s agreement with permanent hospitalization of the individual with mental illness was the variable associated with readmission in all models, being the best predictor for readmission and resulting in a shorter survival time to rehospitalization. Also, those readmitted were stereotyped as dangerous and unhealthy. Families complained about the short duration of hospitalization as the main cause for rehospitalization.

Our results suggest that risk to readmission may depend mainly on three factors: adherence, severity of illness and stigma.

The main reason for admission for patients reporting that they were “not taking medication at time of admission” probably was their non-compliance to medical treatment.³⁵⁻³⁷ For adherent patients who reported they were taking their medication, stigma or refractoriness might have been the cause of admission instead. For patients reporting not taking medication before hospital entrance, the admission itself and the restored adherence during their hospital stay protected them against future hospitalizations and thus non-adherence turned into a protective factor (for the other patients, admission did not interfere with stigma and refractoriness).

Along the same lines, in clinical practice depot-medication is usually administered for those who are non-adherent.^{38,39} At the 2-month post-discharge period, haloperidol-decanoate (the only depot antipsychotic available in the public health system) administered just before departure would no longer produce an effect; consequently, non-adherent individuals discharged on this medication became more prone to rehospitalization at this period. Another proxy to non-adherence acting as a risk factor, for instance, would be not attending outpatient treatment after leaving the hospital.

As for the second factor, when considering medication quantity as a proxy for illness severity, variables related to this issue did not show a correlation. With the exception of the above-cited depot-antipsychotic, the type of antipsychotics again did not predict earlier re-hospitalization, similarly to what was suggested by Kennedy and colleagues.⁴⁰ However, the need for physical restraint during hospitalization could indicate a more aggressive behavior, being a consequence of a more severe disorder or even a non-compliance characteristic of the individual.³⁷ As in our findings, other studies have shown that the number of previous hospitalizations was the strongest predictor for rehospitalization;⁴¹ this fact could also be interpreted in part as a proxy for disorder severity.

These first two factors are well described in the literature. What our study brings to light, though, is the third factor mentioned: stigma and readmission. The family’s agreement with permanent hospitalization of the psychiatric patient was the best predictor of readmission and could be interpreted as a reiterated wish to institutionalize their relative with mental illness, to keep them away from the family. The number of previous hospitalizations as a risk factor could also be seen as a reflection or consequence of this desire. A hypothesis linking the three factors would be that stigma could possibly result in a vicious cycle: more family stigma leads to neglect of the relative’s treatment, which in turn could lead to worse symptom control, leading to more stigma and recurrent hospitalizations. This could worsen the outcome, make the disorder chronic, and, finally, consolidate stigma. Also, if long-term hospitalization is no longer possible today due to worldwide mental health care reform, which has also reached Brazil,⁴² such a desire to segregate the individual with mental illness from society could probably be camouflaged into multiple brief hospitalizations. This is also reinforced by the fact that those with family stigma had a significantly shorter survival to readmission.

Although several studies have assessed stigma towards mental illness in São Paulo and Brazil in general,⁴³⁻⁴⁵ none have linked stigma to their practical consequence, such as higher readmission rates. Accordingly, literature states that stigma comprises three different but correlated aspects: stereotyping, prejudice and social distance.⁴⁶ Stereotypes are knowledge structures designed to categorize people in order to deal with them. Re-hospitalized individuals were repeatedly stereotyped as dangerous and unhealthy. Their families more often reported beliefs that people with mental illness should be permanently hospitalized (prejudice) and, therefore possibly brought these patients more often for psychiatric hospital admission (social distance).

Finally, what might also be seen somewhat as a sign of stigmatization of individuals with mental illness is that all families stated a short duration of hospitalization as the

major cause of re-hospitalization instead of an insufficiency of outpatient services. This reveals the hospital-based treatment beliefs of these families, despite all efforts to maintain the individual with psychiatric disorders integrated into the community.

One limitation of the study is that side-effects were not addressed after discharge. As the majority of the sample was under the effect of typical anti-psychotics, side-effects related to them could be an issue influencing adherence and relapse, for example. However, type of anti-psychotics was not significantly related to compliance issues, and were excluded from final regression models. Another debatable point is that, although the study is representative of bipolar and psychotic patients of the public mental health system, no data on the private system is available. Thus, it would be of interest to know whether the findings are different for those using the private health system for psychiatric issues. One could argue that another limitation is that no structured instrument evaluating illness severity could be applied before the patients left the hospital, since this was an observational study. However, we chose to use several variables such as physical restraint and medication issues as proxy to case severity.

Conclusion

The present study replicates findings of the literature reporting that factors such as adherence and severity of illness might influence readmission rates. However, stigma was also observed as an important factor contributing to the risk of re-hospitalization. A family's wish to keep individuals with mental illness permanently hospitalized might contribute to the "revolving door" readmission pattern of their relatives with psychiatric disorders.

Therefore, in order to more precisely depict the nature of this correlation between stigma and readmission rates, more studies in the field should be conducted. Also other services and regions of the country should be involved, so as to assess whether this is related to the psychiatric culture of the Brazilian population, or with mental health care reform, for example. Those families whose relatives have recurrent hospitalizations should be especially addressed regarding, for instance, stigma and beliefs about psychiatric illness and psychiatric treatment.

Acknowledgments

The author would like to thank Dr. Eduardo Guidolin and Dr. Jeferson Valim for supporting the conduction of the study, and Prof. Yuan-Pang Wang and Prof. Wulf Rössler for the advice on the preparation of the present manuscript.

Disclosures

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* Modest

** Significant

*** Significant. Amounts given to the author's institution or to a colleague for research in which the author has participation, not directly to the author.

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