



BRIEF COMMUNICATION

Profile and costs involved in long-term compulsory hospitalization of psychiatric patients

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Objective: Involuntary hospitalization for acute psychiatry cases can be acceptable when there is potential harm. However, there are few reasons for a patient committed on these grounds to stay in an institution for a long period. The objective of the present study was to identify the profile and costs of compulsory hospitalizations over 20 days in a public psychiatric hospital in the coastal region of the state of São Paulo.

Methods: Retrospective data were collected from the medical records of 1,064 patients admitted between July 2013 and June 2016 from an intensive mental healthcare unit in Santos, state of São Paulo, Brazil.

Results: Records were found of 527 patients who had been hospitalized for at least 21 days during the study period. Long-term hospitalization related to judicial mandates represented 5.9% of the total sample. These patients stayed in the hospital for an average period of 142 days, while patients hospitalized for any other reason stayed an average period of 35 days ($p < 0.001$). The cost of a long-term court-ordered hospitalization averaged US\$ 21,311 per patient.

Conclusion: Judicial mandate has been an important reason for the long-term hospitalization of chronic psychiatric patients in Santos, Brazil.

Keywords: Chronic psychiatric disease; hospitalization; psychiatry hospital; drug abuse; psychosis

Introduction

The involuntary commitment of patients with psychiatric diseases poses ethical dilemmas for all those involved: doctors, lawyers, judges, custodians and relatives. Although it is important to respect the patient's autonomy, effective treatment and avoiding harm are ethically at stake. Differences in laws, regulations, and mental health care services make it difficult to establish direct comparisons among countries.¹ Poor social support, past involuntary admissions and poor functional status are among the most important reasons for judicial institutionalization of a psychiatric patient.² Compulsory hospitalization seems to be most frequent among men with schizophrenia and personality and behavioral disorders.³⁻⁵ However, this profile is not uniform worldwide: in India, recent data indicate that older women are the most typical population to receive compulsory institutionalization.² According to European reports at the end of the 20th century, compulsory hospitalization rates vary widely. While in Portugal the rate was approximately 3% of all hospitalized patients, in Sweden it was 30%.^{1,6} In Europe, the final decision on involuntary commitment is made by a non-medical

authority (e.g., a judge, prosecutor or mayor) or by psychiatrists, depending on the laws of the particular country.⁶ A recent study in Norway showed that the compulsory hospitalization rate has been approximately 25% during the 21st century and has involved a new diagnosis pattern: fewer cases of psychosis and more cases of alcohol and illicit drug abuse.⁷ Interventions that prevent patients from being involuntarily admitted are urgently needed⁸ and more research on this subject could increase understanding about the needs of patients and society.⁹ While short-term compulsory hospitalization for acute cases of psychiatric disease remains acceptable, there are very few reasons for a patient to stay in an institution for a long period. In Brazil, the involuntary commitment of a patient is a legal matter that must be determined (and can only be revoked) by a judge. Thus, longer hospitalization may be more frequent for these cases, since further paperwork is required for patient discharge. The objective of the present study was to identify the profile of compulsory hospitalizations lasting over 20 days in a public hospital in the coastal region of the state of São Paulo. The costs associated with these long-term hospitalized patients were also assessed.

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Method

This study was approved by the ethics committee of Universidade Metropolitana de Santos, state of São Paulo, Brazil (protocol CAAE 59877316.7.0000.5509).

Retrospective data were collected from intensive mental healthcare unit medical records for the period July 2013 to June 2016. There were 1,064 admissions over this period. Patients admitted by court order who stayed in the hospital for a period of 21 days or longer met the inclusion criteria (n=527).

The criteria for remaining in the hospital more than 21 days were divided into two groups: 1) judicial mandate and 2) other causes. Other causes included difficulties adjusting to medication, family resistance to patient discharge, other diseases requiring extra care, and difficulties finding an opening in a psychiatric unit (institution or outpatient services).

The cost of hospitalization, including medication, food, bedroom maintenance, staff salary and third-party services, was calculated by the unit's financial manager to be US\$150 per day.

The data were analyzed in SPSS version 23.0. The Kolmogorov-Smirnov test was used to assess data distribution. Quantitative analyses were carried out with the Kruskal-Wallis and Mann-Whitney *U* tests. Statistical significance was determined using the Tukey multiple comparisons test. Qualitative data were analyzed using chi-square. The confidence interval was set at 95%, with differences considered significantly different at $p < 0.05$.

Results

Records were found of 527 patients who had been hospitalized for 21 days or longer during the study period, representing 49.5% of all admissions (n=1,064). These patients were mainly males (63.6%) with a mean age of 35.5 years. Court-ordered hospitalizations were 5.9% of the sample. These patients remained in the hospital for an average period of 142 days, while patients hospitalized for any other reason remained for an average of 35 days ($p < 0.001$). The average cost of these long-term involuntary hospitalizations was US\$21,311 per patient. As a reference, the (monthly) minimum wage in Brazil during the study period was US\$ 230. Diagnoses were defined according to the DSM-IV-TR.¹⁰ While the most frequent reason for commitment in this group of long-term patients was non-affective psychotic disorders (39.6%), 51.6% of the patients admitted by court order were cases of substance use disorders.

Table 1 summarizes the data on hospitalizations over the study period.

Discussion

Hospitalization due to chronic psychiatric conditions was common in the past but has become exceptional at present. In many countries, progress towards psychiatric reform began in the 1970s, and the community took on an important role in caring for the mentally ill. It is now believed that if a psychiatric patient requires hospitalization, it should be brief and efficient. To achieve this goal, the community and the healthcare system should provide the following: psychosocial care centers; integration of mental health with primary healthcare; more residential facilities; and specific services for people substance

Table 1 Diagnoses of patients remaining 21 days or more in an intensive mental healthcare unit in the city of Santos, state of São Paulo, Brazil, between July 2013 and June 2016

Reasons	Organic disorders	Dependence syndrome	Psychosis	Mood disorders	Neurotic disorders	Personality disorders	Mental retardation	Others	Total
Difficulties adjusting to medication	3 (1.6)	28 (15.4)	90 (49.5)	39 (21.4)	3 (1.6)	6 (3.3)	9 (4.9)	4 (2.2)	182 (100.0)
Other diseases requiring extra care	3 (10.0)	10 (33.3)	10 (33.3)	4 (13.3)	0 (0.0)	0 (0.0)	3 (10.0)	0 (0.0)	30 (100.0)
Difficulties finding an opening in psychiatric units	0 (0.0)	3 (2.6)	77 (65.8)	28 (23.9)	0 (0.0)	1 (0.9)	8 (6.8)	0 (0.0)	117 (100.0)
Difficulty in counter-referencing	0 (0.0)	10 (41.7)	7 (29.2)	5 (20.8)	0 (0.0)	1 (4.2)	1 (4.2)	0 (0.0)	24 (100.0)
Family resistance to patient discharge	1 (1.3)	16 (20.0)	37 (46.3)	16 (20.0)	0 (0.0)	6 (7.5)	4 (5.0)	0 (0.0)	80 (100.0)
Multi-factors (except judicial mandate)	1 (1.6)	11 (17.5)	33 (52.4)	5 (7.9)	1 (1.6)	6 (9.5)	6 (9.5)	0 (0.0)	63 (100.0)
Judicial mandate	0 (0.0)	16 (51.6)	11 (35.5)	1 (3.2)	0 (0.0)	0 (0.0)	2 (6.5)	1 (3.2)	31 (100.0)

Data presented as n (%).

Of the 1,064 patients admitted in this period, 527 remained at least 21 days.

For each diagnosis, a list of reasons for prolonged hospitalization is provided in absolute numbers and as a percentage of the cases.

abuse disorders.¹¹ Without these steps, psychiatric patients will return for more and/or longer hospitalization periods. This is particularly noticeable in young males whose aggressive behavior is associated with psychosis or personality disorders.^{12,13}

While the need to hospitalize some psychiatric patients is unquestionable, the duration of commitment should be reviewed: patients admitted by court order can only be released from the hospital with the judge's authorization. In the present study, judicial mandates for hospitalization resulted in hospital stays four times longer than any other reason. Although not to the same extent, significantly longer hospitalization was observed in England for cases of involuntary commitment.¹⁴ The costs of court-ordered hospitalization are quite high. It could be suggested, following the practice of other countries, that judges include a recommendation for hospital discharge to be determined by the medical staff in charge of the patient's care.

This study involves certain limitations that must be highlighted. Since it was based on a single institution in one region of the state of Sao Paulo over a period of less than three years, its results may not be applicable elsewhere in Brazil or abroad. Future studies should consider a broader area and study period, since multi-center data might provide further insight into the questions raised in this study.

Conclusion

Judicial mandate was demonstrated to be a primary reason for very long-term hospitalization of chronic psychiatric patients in Santos, Brazil. This practice leads to considerable costs for the public health system.

Disclosure

The authors report no conflicts of interest.

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