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Psychiatric hospitalizations related to mental and behavioral disorders in a psychiatric hospital

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ABSTRACT. The objective of this study was to analyze the sociodemographic, clinical and therapeutic profile of psychiatric hospitalizations related to mental and behavioral disorders. This is an analytical cross-sectional study conducted in a hospital reference in psychiatric treatment in Teresina, Piauí, Brazil. The data were collected with the aid of a form to characterize the sociodemographic, clinical and therapeutic aspects of hospitalizations. The SPSS version 22.0 was used. There was analysis of 291 medical records of patients admitted during the period from February to May 2018, which revealed the year 2018 with the highest rate of psychiatric hospitalization, 239 (82.1%). There was prevalence of men 184 (63.2%), unmarried 209 (71.8%), with a mean age of 38.4 years. There was also a predominance of patients with low schooling. The sex was statistically associated with the use of illicit drugs (p:0.003), suicide attempts (p:0.04) and type of admission (p:0.006). On the other hand, schooling was associated with abandonment (p:0.008); suicide attempt (p:0.033) and previous hospitalizations (p:0.006). Many factors and comorbidities increase the possibility of the patient re- hospitalization.

Keywords: mental disorders; hospitalization; mental health; hospitals, special; psychiatric reform.

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Introduction

Since the 1970's, individuals afflicted with a mental disorder were stigmatized and excluded from social life. The psychological distress in Brazil was seen as satanic work and moral disorder and, in that period, the mental patient was imprisoned, hospitalized, supervised, controlled and punished. They were people who bothered someone with more powerful, who had epilepsy, were poor, unemployed, old, alcoholics and people who felt sad (Arbex, 2019).

The treatment of those patients and the increasing expansion of psychiatric beds in large nosocomial centers aroused a movement in favor of the psychiatric reform, which led to the approval of Law n. 10,216, which regulates the right and the protection of people with mental disorders (Brazil, 2001). It was the great landmark in the change of the mental health care in Brazil, redirecting the care model and creating a definition of a political agenda for mental health, succeeding a great strengthening and expansion of the psychosocial care network (Reis, 2013; Prado et al., 2020; Silva, 2020).

After the psychiatric reform (Ministério da Saúde, 2005) with the movements of criticism for long-term institutions, the mental health policy in Brazil has been advancing with the replacement of psychiatric hospitals by extra-hospital services. These are the Psychosocial Care Centers (CAPS), and Mental Health Outpatient and Services in General Hospitals, Therapeutic Home, mental health care in the basic health network, programs like "back home", as well as others that seek the reintegration of individuals with mental distress in society and the rescue of their citizenship (Kageyama & Yokoyama, 2018; Jafelice & Marcolan, 2018; Silva, Camargo, & Bezerra, 2018).

In this way, the aspects that involve the profile of psychiatric hospitalizations establish a change resulting from a reduced number of admissions in specialized hospitals, with an expected expansion of beds in general hospitals. Despite the reduced number of psychiatric beds, hospitalizations in those health houses still operate as a measure of incarceration of mentally ill patients, although there has been extensive

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reshaping of the hospital-centered model, which results from the patterns of the first institutions previously established (Olmos et al., 2020).

The actions of public policies on mental health in the country have had the power of great resolutions by improving assistance and expanding the network as a result of psychiatric reform as well as the penalties of laws which began to ensure the protection of the patient in psychic distress (Horta et al., 2015; Kageyama & Yokoyama, 2018).

Considering the psychiatric hospital as a device of treatment belonging to the Psychosocial Care Network, it is relevant to characterize the hospitalizations. Therefore, the objective of this study was to analyze the sociodemographic, clinical and therapeutic profile of psychiatric hospitalizations related to mental and behavioral disorders in a psychiatric reference hospital.

Methods

A documentary survey was carried out, of analytical cross-sectional nature. The study was conducted in the city of Teresina, Piauí, in the period from February to May 2018. The research took place at a public institution specialized in the treatment of severe mental disorders, inaugurated in 1965, which has 160 beds, distributed among psychiatric urgencies and male, female and geriatric hospitalization units, with the mission of embracing patients with mental disorder, promoting their treatment and social reintegration.

The research occurred through electronic records of patients hospitalized in the period from February to May 2018. The inclusion criteria were patients aged greater than or equal to 18 years and with diagnosed mental or behavioral disorder. There was exclusion of medical records of patients who did not have electronic record.

Data were collected through the application of an own form, composed of three blocks: The first refers to the sociodemographic variables (sex, age, marital status, education, family income and origin); the second involved the clinical data (diagnosis, hospitalization length, previous hospitalizations, type of admission, factors related to the mental disorder); the third comprised therapeutic variables (drug therapy, complementary therapies).

The data collection happened through the selection of electronic records of patients admitted upon request to the on-duty nurse, initiated only after approval by the ethics committee of the Psychiatric Hospital in which the research occurred and by the REC of UNINASSAU with opinion n. 2.608.146, considering the availability and the institution's interest to participate in the research.

For the construction of the database, the software Microsoft Office Excel was used, and, after coding of all variables in a dictionary, the validation technique was used by typing on a spreadsheet with dual input. Subsequently, the information were transported to the program Statistical Package for the Social Sciences - SPSS version 22.0 (IBM Corp. Released, 2013), aiming at the quantitative analysis based on the principles of descriptive and inferential statistics. For the sociodemographic, clinical and therapeutic variables, the statistical analysis was built by position (mean) and variability (standard deviation) measures for quantitative variables and absolute (n.) and relative (%) frequencies for categorical variables. To verify associations between variables, the chi-square test of association was used. All analyses were performed at a significance level of 5% (p<0.05).

Results

There was the analysis of 291 medical records of patients admitted during the period from February to May of 2018, which revealed the year 2018 with the highest rate of psychiatric hospitalization, 239 (82.1%). There was prevalence of men 184 (63.2%), unmarried 209 (71.8%), with a mean age of 38.4 years (with standard deviation of 12.5) and median of 36.00, ranging between 18 and 85 years. There was also a predominance of patients with low schooling, 70 (24.1%) had incomplete elementary school, 122 (41.9) were unemployed and 98 (33.7%) retired, with income up to three minimum wages 206 (70.8%), 230 (79.0%) had uninformed religion, 161 (55.3%) were from the state capital Teresina - PI) (Table 1).

Table 2 presents the results related to the clinical data: factors related to the mental disorder (comorbidities), diagnosis, hospitalization length, previous hospitalizations, type of admission, factors related to the mental disorder (comorbidities).

Table 1. Sociodemographic characterization of hospitalizations in a psychiatric reference hospital. Teresina, PI, Brazil, 2018.

Variables	n (%)	M (±SD)	Md (±IQR)	Min-Max
Age	291	38.4	36.0	18.0 - 85.0
Sex				
Male	184 (63.2)			
Female	107 (36.8)			
Year of Admission				
2018	239 (82.1)			
2017	16 (5.5)			
2016	4 (1.4)			
2015	11(3.8)			
2014	9 (3.1)			
2013	3 (1.0)			
2012	1 (3.0)			
2011	6 (2.1)			
2010	1 (3.0)			
2009	1 (3.0)			
Schooling	(===)			
Not literate	31 (10.7)			
Complete elementary school	24 (8.2)			
Complete high school	17 (5.8)			
Incomplete high school	21 (7.2)			
Higher Education	10 (3.4)			
Uninformed	118 (40.5)			
Marital status	110 (10.5)			
Unmarried	209 (71.8)			
Married/Stable union	42 (14.4)			
Separated/Divorced	17 (5.8)			
Widow(er)	3 (1.0)			
Uninformed	20 (6.9)			
Labor situation	20 (0.7)			
Employed	29 (10.0)			
Unemployed	122 (41.9)			
Retiree	98 (33.7)			
Housekeeper	26 (8.9)			
Uninformed	16 (5.5)			
Income	10 (3.3)			
	EA (19.6)			
Below one MW 1 - 3 MW	54 (18.6) 206 (70.8)			
Over 3 MW	3 (1.0)			
Uninformed	28 (9.6)			
	28 (9.0)			
Religion Catholic	2((0,0)			
	26 (8.9)			
Evangelical Others or none	10 (3.4)			
	25 (11.2)			
Uninformed	230 (79.0)			
Origin	1717555			
Teresina	161 (55.3)			
Countryside of Piauí	93 (32.0)			
MA PA Other states Uninformed	33 (11.3) 1 (3.0) 1 (3.0) 2 (7.0)			

M (\pm SD): mean and standard deviation; Md (\pm IQR): median and interquartile range; Min-Max: minimum and maximum values; MW: minimum wage in force 954.00R\$ (01/01/2018).

Table 3 presents the results related to the following therapeutic aspects: use of antidepressants, anxiolytics, mood stabilizers, antipsychotics, anticonvulsants and electroconvulsive therapy. Since a single patient could make use of more than one therapy concomitantly, the total could sum more than 100%.

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Table 2. Clinical characterization of hospitalizations in a psychiatric reference hospital, (n= 291). Teresina, PI, Brazil, 2018.

Variable	N	(%)
Hypertension		
Yes	24	8.2
No	267	91.0
Diabetes Mellitus		
Yes	12	4.1
No	279	95.9
Dyslipidemia		
Yes	2	7
No	289	99.3
Licit_PAS		
Yes	80	27.5
No	211	72.5
Illicit PAS		
Yes	56	19.2
No	235	80.8
Self-mutilation		
Yes	3	1.0
No	288	99
Treatment abandonment	200	**
Yes	148	50.9
No	143	49.1
Suicide attempt	110	1711
Yes	30	10.3
No	261	89.7
Irre_CAPS_followup	201	07.7
Yes	71	24.4
No	220	75.6
Psychiatric history	220	75.0
Yes	100	34.4
No	191	65.6
Type of admission	171	03.0
Voluntary admission	24	8.2
Involuntary admission	211	72.5
Compulsory admission	55	18.9
Diagnostic hypothesis	33	10.7
F10 - F19*	33	11.3
F10 - F19 F20 - F29*	166	56.8
F20 - F29* F30 - F39*	67	22.8
Other types of disorders	25	8.1
Other types of disorders	45	0.1

Irre_CAPS_followup: Irregular follow-up in the psychosocial care center; Licit_PAS: licit psychoactive substance; Ilicit_PAS: illicit_psychoactive substance; F10 - F19: mental and behavioral disorders resulting from the use of psychoactive substances; F20 - F29: Schizophrenias, schizothymic disorders and delusional disorders; F30- F39: Mood (affective) disorders

Table 3. Characterization regarding the therapeutic aspects (n= 291). Teresina, PI, Brazil, 2018.

Variable	N	(%)
Antidepressants		
Yes	31	10.7
No	260	89.3
Electro Convulsive Therapy		
Yes	1	3
No	290	99.7
Anxiolytics		
Yes	200	68.7
No	91	31.3
Mood stabilizers		
Yes	110	37.8
No	181	62.2
Antipsychotics		
Yes	269	92.4
No	22	7.6
Anticonvulsants		
Yes	12	4.1
No	279	95.9
Source: Data collected by	the authors (2018)	

Source: Data collected by the authors (2018).

Table 4 presents the intersection between the following variables: sex and use of licit drugs, sex and use of illicit drugs, sex and treatment abandonment, sex and suicide attempt, sex and irregular follow-up in CAPS, sex and type of admission, sex and re-hospitalizations.

Table 4. Intersection between variables and sex. Teresina, PI, Brazil, 2018.

Associated factor/Sex	Female	Male	P-value
Use of licit drugs	31	49	0.666
Use of illicit drugs	11	45	0.003
Treatment abandonment	56	92	0.701
Suicide attempt	16	14	0.04
Irregular follow-up in CAPS	29	42	0.413
Type of admission			0.006
Voluntary	7	17	
Involuntary	90	171	
Compulsory	10	45	
Uninformed	0	1	
Previous hospitalizations			0.166
None	26	48	
Second	16	33	
Third	11	7	
Several times	51	85	
Uninformed	3	11	

Source: Data collected by the authors (2018).

There was also the intersection between schooling and clinical variables, revealing statistically significant association between level of schooling and the abandonment (0.008); level of schooling and suicide attempt (0.033), and level of schooling and previous hospitalizations (0.006).

Discussion

The psychiatric hospital is part of the psychosocial care network. According to the Federal Mental Health Law n. 10,216/01), it can be considered one of the forms to treat of mental disorders, because it is an important and indispensable therapeutic resource for those who need urgent and emergency care during a crisis. Nevertheless, the priority is to replace and reduce those beds in psychiatric hospitals gradually (Ministerio da Saúde, 2011).

There were 291 hospitalizations in the period of collection of this study, in which there was prevalence of men, 184 (63.2%), unmarried 209 (71.8%), with a mean age of 38.4 years (with standard deviation of 12.50) and median of 36.00, ranging between 18 and 85 years. Similar data were found in a study conducted in the state of Bahia, which also points the male patient hospitalized more frequently than female patients. The male sex accounted for 67.90% of hospitalizations by sex; the same also pointed out similar rate in relation to the age of hospitalized patients, with mean age of 38 years, i.e., the individual of productive age, which generates socioeconomic and family losses (Santos, Sena, & Aguiar, 2017).

There was also a predominance of patients with low schooling, 70 (24.1%) had incomplete elementary school, 122 (41.9) were unemployed and 98 (33.7%) retired, with income up to three minimum wages 206 (70.8%), 230 (79.0%) had uninformed religion, 161 (55.3%) were from the state capital (Teresina - PI).

The lack of a home, low and/or no income, low and/or no schooling are much more common among people with mental disorder and make the psychiatric hospitalization in this population very frequent, accentuating their marginalization and vulnerability, due to stigma and discrimination. These are often violations of their political, human and civil rights, such as having education, work, reproductive rights, some suffer degrading life conditions that come to be inhumane, such as lack of hygiene, physical and sexual abuse due to the mental condition and social vulnerability (World Health Organization [WHO], 2013).

Disorders from the use of psychoactive substances (alcohol and other drugs), schizophrenia and related psychosis and mood disorders, such as unipolar depression and bipolarity, were responsible for most causes of hospitalization in the study, 266 (90.9%) (Rehm et al., 2019).

A similar study conducted in Bahia (Santos et al., 2017) also confirmed those data, in which schizophrenia and schizothymic and delusional disorders were also responsible for most admissions, represented proportionately by 45.63% of the entire demand.

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According to the World Health Organization, schizophrenia is a severe mental disorder in which people have characteristic symptoms such as distortions of thinking and perception, inadequacy, and dullness of affection without jeopardizing the intellectual capacity. Nonetheless, over time, there may be cognitive losses, affecting over 21 million people around the world (WHO, 2013).

In relation to the modalities of admission, there are three known types, namely; voluntary admission, requested or consented by the patient; involuntary admission, not consented/requested by the patient, often made by third parties, mainly relatives; and compulsory admission, determined through a judicial action, requested by a physician and occurring only after the physician's report (Brazil, 2001). In this aspect, the highest prevalence was involuntary admission, with 211 (72.5%).

The associations of rates that make up the profile of the patient of the psychiatric hospital where the study was conducted show that they have high rates of previous admissions, with prevalence of men, and, as a cause of previous hospitalizations, the study proved to be treatment abandonment, use of illicit and licit substances and, sometimes, concomitant to the treatment, which can potentiate or retard the drug effect, leading to relapses of psychotic crises, in addition to the irregular follow-up in CAPS (Franken, Parker, Allen, & Wicomb, 2019).

It is clear that this type of specialized service of the PSCN cannot be deleted, because it offers the necessary support when the extra-hospital means are not sufficient and satisfactory to meet those chronic patients, proved with the rates generated by the study.

The incorrect filling of the records concerning the variables considered important, many times omitted from the electronic records of hospitalized patients, made some of the profile survey data incomplete and generated "uninformed" rates, possibly damaging the research as well as future researches in this sense and the creation of public policies for profiles that could have been drawn correctly.

Conclusion

The study showed that many factors and comorbidities increase the possibility of the patient's rehospitalization, also revealing that patients with mental disorder with a caregiver or partner have less chances of re-hospitalization than the one without any type of caregiver.

More studies like this are necessary to create and discover the best policies that focus on and meet these demands of psychiatric patients, which may also exchange successful experiences with other regions of the country, thus allowing their applicability to the reality found in each unit, and improving the way the health care teams of extra-hospital services, such as Psychosocial Care Centers (CAPS), therapeutic houses, programs like "back home", identify and treat those people, so that they can be included in society again and may have their dignity, rights and duties guaranteed as any other citizen.

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