Predicting factors of an acute hospitalization from a Mobile Psychiatry Unit

Laia Pujol[1], Marina Angelats[1], Jordi León[1], Angeles Malagón[1], Magda Bellsolà[1], Ana González[1], Luis M. Martín[1], Victor Pérez[1,2,3], David Corcoles[1,2]

[1]Institut de Neuropsiquiatria i Addiccions. Parc de Salut Mar. Barcelona, España.

[2]Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM). [3]Universitat Autònoma de Barcelona. Barcelona, España.

Introduction

The main method of assistance in situations of acute decompensation in patients with mental illness is the hospitalization. It is often used as the first step to enter the mental health system or the admission could be indicated due to the natural course of the disease. Studies describing mobile teams of psychiatry (MPU) were first made during the 70s, and up until today determinants of income on MPUs have not been assessed.

Aims

To determine which factors can help a mobile team of psychiatry predict the hospitalization of a patient.

Methods

A total of 1672 MPUs were analyzed from 2007 until the present day. Social-demographic variables (age, gender, coexistence status and educational level) and clinical (drug use, psychiatric history, treatment adherence and clinical record) were collected. Other parameters such as severity, disability and aggressiveness according to different scales were also assessed.

We performed a multivariate logistic regression using SPSS 20.0 package (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.) to determine the relative contribution of the variables

Results

Some social-demographic and clinical variables were statistically significant. Older age seems to be a predictor of no hospitalization (p<0.001), as having secondary education (p=0.006), a good treatment adherence (p<0.001), having a previous linkage between the patient and the medical team (p<0.001) and the syndromic diagnosis (cognitive disorder, drug disorder, psychotic disorder, mood disorder, personality disorder) (<0.001).

Concerning the scales, a higher result on the scale of aggression (AVAT) was also a predictor of hospitalization (p=0.013), as well as the Scale to Assess Unawareness in Mental Disorder (SUMD) (p<0.001), the questionnaire for Disability Assessment Scale of the World Health Organization (WHO/DAS) (p<0.001), the mean Clinical Global Impression (CGI) (p<0.001) and Global Assessment of Functioning Scale (GAF) (p<0.001).

Gender, drug use, coexistence status, psychiatric history, the average number of visits and previous admissions in an acute unit were not statistically significant (p>0.05).

The best logistic regression model obtained showed that age, drug use and higher scores on the GAD scale were protective factors for admission while higher scores on GEP, AVAT and CGI were risk factors.

Table 1

Column1	No hospitalization (N,%)	Hospitalization (N, %)	p
Gender (male)	635 (56,1)	284 (54,7)	0,893
Average age (DE)	49,58 (20,06)	46,58 (17,79)	<0,001
Past medical history	481 (42,6)	276 (54,1)	<0,001
Drug use	315 (27,7)	127 (25,0)	0,24
Live alone	282 (24,5)	143 (27,6)	0,178
Secondary studies	522 (47,7)	266 (55,2)	0,006
Active worker	67 (5,9)	17 (3,3)	<0,001
Psychiatric history	843 (74,4)	392 (77,0)	0,257
Treatment adherence	343 (42,7)	43 (11,4)	<0,001
Previous linkage	250 (22,9)	39 (7,9)	<0,001
Average previous visits (DE)	3,77 (4,77)	3,14 (3,05)	<0,001
Previous hospitalization	92 (9)	53 (11,1)	0,199
Mental health network refers	460 (40,4)	194 (38,3)	0,001
Syndromic Diaghnosis:			<0,001
Cognitive disorder	109 (9,5)	15 (2,9)	
Drug disorder	65 (5,7)	7 (1,4)	
Psycothic disorder	406 (35,5)	427 (82,4)	
Mood disorder	265 (23,1)	51 (9,8)	
Personality disorder	145 (12,7)	3 (0,6)	
Agressiveness (DE)	2,73 (2,52)	4,91 (2,84)	0,013
SUMD (DE)	9,65 (4,06)	12,85 (2,80)	<0,001
WHO/DAS (DE)	11,48 (4,42)	13,68 (3,88)	<0,001
Total GEP (DE)	12,17 (4,51)	16,67 (4,35)	0,345
CGI (DE)	4,03 (1,18)	5,37 (0,74)	<0,001
EEAG	47,25 (24,49)	30,87 (10,68)	<0,001

Conclusions

Psychiatric hospitalization from mobile teams of psychiatry seems to be guided by the severity of the psychiatric symptoms. Substance abuse, previous treatment adherence, aggressive behavior and low level of functioning are important factors. Differences detected between other psychiatric units suggest that more studies should be performed to improve our capacity to prevent hospitalizations.

References

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INAD Institut de Neuropsiquiatria i Addiccions

Parc de Salut MAR Barcelona