# **Original**

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# Clinical observation, pharmacotherapy and referral on discharge of patients with anxiety disorder in a psychiatric emergency service

Introduction. To analyze factors associated with clinical observation, pharmacotherapy and referral on discharge of patients with anxiety disorder (AD) seeking care at a psychiatric emergency unit.

Method. A total of 5003 consecutive visits were reviewed over a three-year period at a psychiatric emergency service in a tertiary university hospital. Data collected included sociodemographic and clinical information as well as the Global Assessment of Functioning (GAF) and the Severity Psychiatric Illness (SPI) scale scores.

Results. Of all the visits, 992 (19.8%) were diagnosed of AD. Of these, 19.6% required clinical observation and 72.2% were referred to a psychiatrist at discharge. Regression analysis showed that referral to psychiatry was associated with being male, native, psychiatric background, greater severity, lower global functioning, and behavioral disorders. Clinical observation (in a box) was associated with being female, greater severity, and psychotic or behavioral symptoms. Prescription of benzodiazepines was associated with anxiety, no history of addiction, and lower global functioning. Antidepressants were associated with being a native, anxiety with no history of addiction, and lower functioning. Antipsychotics were associated with being native, psychiatric background (not addiction), anxiety, and lower functioning.

Conclusion. Behavior, psychiatric background and illness severity were determinants of referral to a specialist. Besides these, psychotic symptoms and non-specific clinical symptoms were determinants of observation. Drug prescription in AD is less frequent if the main complaint is not anxiety and depends more on the level of functioning than on that of severity.

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# Observación, farmacoterapia y derivación al alta de los pacientes con trastorno de ansiedad en urgencias de psiquiatría

**Introducción.** Analizar los determinantes asociados a indicar observación, prescribir psicofármacos y derivar al especialista en los pacientes con trastorno de ansiedad (TA) visitados en urgencias de psiguiatría.

Método. Se analizaron 5003 visitas consecutivas realizadas en un hospital general universitario durante tres años. Se incluyó información sociodemográfica, clínica y puntuación en las escalas de Evaluación de la Actividad Global (EEAG) y de Gravedad de la Enfermedad Psiquiátrica (GEP).

Resultados. Del total de visitas, 992 (19,8%) fueron diagnosticadas de TA. De estas visitas, 19,6% utilizaron box y 72,2% fueron derivadas al especialista. El análisis de regresión mostró que la derivación a psiquiatría se asociaba con ser hombre, autóctono, tener antecedentes, mayor gravedad, menor actividad global y alteraciones conductuales. La observación (uso del box) se relacionó con ser mujer, mayor gravedad y síntomas psicóticos o de conducta. La prescripción de benzodiacepinas se asoció a ansiedad sin problemas de toxicomanías y a una menor actividad global. Los antidepresivos se relacionaron con ser autóctono, ansiedad sin toxicomanías y con menor actividad. Los antipsicóticos con ser autóctono, tener antecedentes sin toxicomanías, ansiedad y menor actividad.

Conclusión. La conducta, los antecedentes y la gravedad resultaron determinantes de derivación al especialista. Además de estos, los síntomas psicóticos y la inespecificidad clínica lo fueron para indicar observación. La prescripción farmacológica en los TA es menos frecuente si el motivo de

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consulta no es por ansiedad y depende más del nivel de actividad que de la gravedad.

Palabras clave: Trastornos de ansiedad, Urgencias de psiquiatría, Observación, Farmacoterapia, Derivación y consulta

### INTRODUCTION

In Spain, anxiety disorders (AD) are considered to be the most frequent group of mental disorders with an annual prevalence of about 6%.<sup>1,2</sup> In the United States, annual prevalence reaches 18%<sup>3</sup> and the costs of this group of mental disorders have been calculated at more than 42,000 million dollars per year, including loss of productivity, mortality and treatment costs.<sup>4</sup> In addition to being frequent, ADs are very incapacitating and are associated to a reduction in health-related quality of life.<sup>5,6</sup>

In recent years, there have been many socioeconomical changes that have entailed an increase in the visits to the psychiatry emergency services. ADs are very important in the emergency psychiatric care, both because of their frequency of occurance as well as the importance of the somatic diseases that may underlie or accompany an anxiety picture. A clinical study on hospital psychiatric emergency showed that 15.6% of the patients came due to anxiety symptoms and that 25.8% were diagnosed of one of the ADs of the tenth edition of the International Classification of Diseases (ICD-10).<sup>10</sup>

The fundamental action of a psychiatrist in the emergency service should be aimed at clarifying if the anxiety symptoms are the response to an organic condition that could justify the picture (AMI, heart arrhythmias, respiratory failure, pulmonary embolism thrombus, anemia, feochromocytoma, poisoning or abstinence to toxics), 10-12 or if they correspond, per se, to a specific anxiety disorder. In the latter case, the psychiatrist must decide whether to prescribe a maintenance treatment or not and evaluate referral or not to a mental health specialist. If necessary, observation can be indicated in order to perform a subsequent evaluation of the case.

A previous study in our emergency service analyzed the clinical factors associated to hospitalization and drug prescription in borderline personality disorder.<sup>13</sup> In the ADs, there is still no consensus in the literature on the clinical decisions regarding referral to the specialist (psychiatry), indication for observation or drug prescription. This study has aimed to determine which factors are associated to the decision for referral to the mental health specialist, to the

indication of observation or to prescribing psychopharmaceuticals in the ADs who come to the Emergency Service.

### MATERIAL AND METHODS

A total of 5003 visits attended during a three-year period from 1 January 2008 to 31 December 2010 in the Emergency Services of a general university hospital of Barcelona (Hospital del Mar) were evaluated. Given that the information was obtained anonymously and no intervention was performed except for the Emergency visit, the informed consent form to participate was not necessary. The study was approved by the Hospital del Mar's Ethics Committee.

Sociodemographic and clinical data that had been collected in the Emergency Service following a routine protocol were prospectively analyzed. The sociodemographic variables were: gender, age, being an immigrant or tourist, existence of social problems and language barrier. The following clinical characteristics were considered: reason for consultation (grouped into 6 categories: anxiety, psychotic symptoms, affective symptoms, behavioral disorder, substance abuse/dependence and others, previous psychiatric background, background of dependence disorder or toxic abuse, and finally, coexistence of psychiatric disorder(s) and toxic abuse/dependence disorders (dual diagnosis). The analysis was performed on each episode seen in the Emergency Service and not on each individual since it was observed during the period studied that some patients had visited the Emergency Service more than one time. Then, the demographic and clinical characteristics (including the GAF scale), Severity Psychiatric Illness scale (SPI), indication for observation (use of box or observation room) and referral to psychiatry (MHC, day hospital, outpatient consultation, etc.) or other non-specialized facilities (Basic Health Area/social services) were collected for the total visits diagnosed of AD.

All the patients referred to the Psychiatric Emergency Service in our hospital are seen by the psychiatrist on duty in a doctor's office located in the same area as the Emergency Service. If the psychiatrist considers it to be pertinent, he/she may indicate observation in the box or observation room. The observation room or box is a place with a bed where the patient stays for a maximum of 48 hours in order to observe his/her disease course, and then to either admit the patient to the hospitalization unit or discharge him/her to home. Our hospital does not have a specific protocol for medical care regarding anxiety disorders in the Emergency Service. The decision to prescribe medication, indicate observation or make a referral to the psychiatric specialist is based on the medical professional's own criterion. DSM IV-TR criteria for the diagnosis of mental disorders were used for the diagnosis in the Emergency Service. We divided the sample into two groups for the purposes of our study: patients with AD on discharge from the Emergency Service and those without AD.

The severity of the disease was determined by the Spanish version of the Severity Psychiatric Illness (SPI) from the PSYMON protocol developed by the mental health services program of the Northwestern University of Chicago psychiatry department.<sup>14</sup> It is an instrument to evaluate psychiatric care of severe patients which essentially aims to collect three points: level of care (hospitalization or not), duration and course. It is a 12-item scale. Three are related with reasons for the admission (potential risk of suicide, danger for others and severity of the psychiatric symptoms), one on capacity for self-care, five on complications regarding the psychiatric disease (medical, occupational, familial, substance abuse/dependence and instability in the home) and finally, three related with complications of the psychiatric treatment (opposition to treatment, degree of premorbid dysfunction and familial involvement). Scoring goes from 0, absence of severity, to 3 that indicates maximum severity.15 Total score of the scale was collected for the years 2008 to 2010, while the items of the subscales were only collected for the years 2009 and 2010 (N=2639). Data were analyzed with the SPSS program, version 16.0.

Analysis was made on each episode and not on each individual and the significance level of the hypotheses studied was p (<0.05). Demographic and clinical characteristics of patients with and without AD were compared using the chi-square test for categorical variables and the Student's T test for continuous variables. The subscales of the SPI were compared between the two groups (with/without AD) using Mann-Whitney U non-parametric test. Factors associated to the decision to refer the patient to a psychiatrist or not, use of the observation box and drug prescription (benzodiazepines, antidepressants and antipsychotics) between the patients affected by AD were studied through a multivariate binary logistic regression analysis. First, a univariate analysis was made for those variables potentially associated to said decision (age, gender, social problem, being an immigrant, psychiatric history, toxic abuse/dependence, dual diagnosis, language barrier, reason for consultation, GAF, SPI and use of observation box). In the second pace, candidate variables were chosen a priori as an initial passage to the screening mode to then enter them into the logistic regression model. Associations that reached a significance level of p<0.1 were chosen to be included in the final multivariate binary logistic regression model while those that were not significant were considered as confounding variables.

### **RESULTS**

Of the 5003 visits seen in the psychiatric emergency service during 2008-2010, 992 (19.8%) had or had been diagnosed of AD. The specific number of patients diagnosed of AD was 841 because the same patient could have come to the emergency service more than once during the study period. Table 1 summarizes the clinical and demographic

characteristics of the visits made in the psychiatric emergency service during the study period and shows the differences between the patients diagnosed with AD and those who were not. In comparison with the two groups, those having AD were younger, included more women and had fewer social problems. Furthermore, they had a lower proportion of psychiatric backgrounds, less prevalence of toxic abuse and/or dependence backgrounds and they were clinically better according to the Severity Psychiatric Illness (SPI) and Global Assessment of Functioning (GAF) scales. Anxiety was the principal reason for consultation of the AD group on the contrary to affective, psychotic symptoms, toxic consumption and behavior symptoms that were more characteristic of the group without AD. Finally, the proportion of referral of the patient to the psychiatry specialist and use of the observation box were greater for the group without AD.

In the broken-down results of the SPI (Severity Psychiatric Illness Scales) (years 2009 and 2010; N=2639), it was observed that patients with AD had significantly less suicidal behavior (0.40 vs 0.55, p=0.000), less dangerousness towards others (0.26 vs 0.38, p=0.000), less severity in the psychiatric symptoms (1.47 vs 1.56, p=0.011), less substance abuse/dependence (0.70 vs 0.85, p=0.002), less opposition to the treatment (0.52 vs 0.71, p=0.000) and greater capacity for self-care (0.60 vs 0.77, p=0.000) than the group of patients without the disorder. In turn, the case group had fewer associated medical problems (0.44 vs 0.51, p=0.107), less premorbid dysfunction (0.94 vs 1.01, p=0.098), less familial involvement (0.45 vs 0.48, p=0.206), less instability in the home (0.42 vs 0.51, p=0.052), fewer social-familial problems (0.89 vs 0.96, p=0.077) and work problems (0.76 vs 0.77, p=0.011) than the group of patients without AD although these differences were not statistically significant.

# Factors associated to the decision to refer patients to the psychiatry service from the emergency service

The proportion of patients referred to the psychiatry specialist was greater in the group without AD. Table 2 shows the candidate variables that were chosen for initial passage to the screening mode to be introduced into the multivariate logistic regression model that was used to decide the patient's referral or not to the psychiatrist after the visit to the emergency service.

Patients with AD who were referred to psychiatry were significantly older, were more frequently men and had more psychiatric backgrounds. Furthermore, there were natives in greater proportion, were clinically worse according to the SPI and GAF scales, came to consult more frequently due to behavior disorders and consequently, more often required the observation box during their stay in the emergency

Variables <sup>a</sup>		Anxiety D (N= 992)		Without anxiety D (N= 4011)		
	N N	%	N	%	χ²	p
Man	400	40.2	2162	53.9	59.2	<0.001
Age	39.3	15	42.3	15.5	5.5	<0.001
Social problem	145	14.6	1262	31.5	111.8	< 0.001
lmmigrant	201	20.2	801	20.0	0.01	0.91
Psychiatric backgrounds	689	69.3	3106	77.5	28.7	< 0.001
Toxic abuse/dependence	158	15.9	1491	37.2	163	< 0.001
Dual diagnosis <sup>b</sup>	126	12.7	932	23.3	52.9	<.001
Language barrier	47	4.7	224	5.6	1	0.32
Main reason for consultation						
Anxiety	526	53	887	22.1	374.9	< 0.001
Affective symptoms	80	8.0	653	16.3	42.7	< 0.001
Psychotic symptoms	83	8.4	509	12.7	14.1	< 0.001
Toxic abuse/dependence	90	9.1	667	16.6	35.2	< 0.001
Behavioral disorders	138	13.9	830	20.7	23.4	< 0.001
Others	75	7.5	459	11.5	12.4	< 0.001
SPIc	5.9	3.8	10.2	5	24.9	< 0.001
GAF <sup>d</sup>	72.2	12	62.7	13.3	19.9	< 0.001
Use of observation box	195	19.6	1657	41.4	160.6	< 0.001
Referral to psychiatry	718	72.2	3581	89.4	192.8	< 0.001

<sup>&</sup>lt;sup>a</sup> Age, SPI and GAF expressed in mean (SD), compared by Student's T test

service. Patients with AD who were derived to nonspecialized services consulted due to anxiety significantly more than those derived to psychiatry.

Table 3 shows the final logistic regression model. Independent factors for referral to psychiatry that were significant were being male, native and non-immigrant, having psychiatric backgrounds, greater severity according to the SPI, less global activity according to the GAF and having behavior disorders as the main reason for the consultation.

# Factors associated to the decision to use the observation box during the emergency

The use of the observation box during the patient's stay in the emergency service was recommended more frequently for patients in the group without AD. In the subsample of patients with AD, recommendation to use the observation box was more frequent for the female gender, when the main reasons for the consultation were psychotic symptoms or behavioral disorders, less global activity and greater severity of the psychiatric disease. It was less frequent when the principal reasons for the consultation were related with substance abuse or dependence, anxiety symptoms or "other causes."

Table 3 shows the independent factors that were significant in the final logistic regression model. These factors were being a woman, principal reason of consultation due to psychotic symptoms, behavior disorders or toxic abuse/dependence and severity of psychiatric disease (SPI).

# Factors associated to the decision to prescribe medication in the emergency service

On arrival to the emergency service, 93 patients (9.4%) with AD were only taking benzodiazepines, 82 patients

<sup>&</sup>lt;sup>b</sup> Coexistence of a Psychiatric disorder(s) and toxic abuse/dependence disorders

<sup>&</sup>lt;sup>c</sup> Severity psychiatric illness scale (SPI).

<sup>&</sup>lt;sup>d</sup> Global Assessment of Functioning scale (GAF) scale.

**Immigrant** 

Dual diagnosis<sup>b</sup>

Language barrier

Psychiatric backgrounds

Toxic abuse/dependence

Table 2 Univariate relation between the demographic and clinical characteristics and referral to psychiatry after visits to the emergency service of patients with anxiety disorder **Psychiatry** Non-psychiatry (N=717)(N=275)Variables<sup>a</sup> Ν 0/0 Ν 0/0 OR 95% CI р Man 303 97 0.055 1 - 1.79 42.2 35.3 1.34 39.8 37.9 0.068 1.01 0.99 - 1.01 Age 148 15.6 Social problem 1.05 0.7 - 1.56 106 14.8 39 14.2 0.89

17.1

80.2

17.1

13.5

4.2

78

113

35

29

17

43

28.4

41.1

12.7

10.5

6.2

15.6

< 0.001

< 0.001

0.109

0.247

0.245

0.061

0.52

5.81

1.42

1.33

0.66

1.45

0.38 - 0.72

4.3 - 7.87

0.95 - 2.12

0.85 - 2.06

0.34 - 1.22

1 - 2.1

Main reason for consultation							
Anxiety	369	51.4	159	57.8	0.081	0.77	0.58 - 1.02
Affective symptoms	64	8.9	16	5.8	0.141	1.59	0.9 - 2.8
Psychotic symptoms	63	8.8	20	7.3	0.524	1.23	0.73 - 2.08
Toxic abuse/dependence	60	8.4	30	10.9	0.258	0.75	0.47 - 1.19
Behavioral disorders	110	15.3	27	9.8	0.032	1.67	1.07 - 2.6
Others	52	7.2	23	8.4	0.643	0.86	0.51 - 1.43
SPIc	6.5	3.4	4.3	3.3	< 0.001	1.2	1.15 - 1.26
GAF <sup>d</sup>	70.4	11.7	76.9	11.5	< 0.001	0.95	0.94 - 0.96

21.2

152

123

576

123

97

30

Use of observation box

(8.2%) were only taking antidepressants, 14 patients (1.4%) only antipsychotics and 181 patients (18.2%) were taking several types of treatment. After the visit to the emergency service, only benzodiazepines were prescribed to 197 patients (19.8%) with AD, only antidepressants to 59 patients (5.9%), only antipsychotics to 36 (3.6%) and several types of treatment to 110 patients (11.1%).

Table 3 shows the final logistic regression model on the decision to prescribe benzodiazepines, antidepressants or antipsychotics in the ADs seen in the emergency service. The prescription of these three drug groups was more frequent when the principal reason for consultation was anxiety or lower level of global activity and was less frequent in patients with a background of dual pathology.

## DISCUSSION

Of all the visits attended in the psychiatry emergency service, 19.8% were coded as AD. The latter, regarding the

remaining visits, corresponded to younger ages, more women, those who had fewer social problems, less proportion of psychiatric and drug-addiction backgrounds and in general, they were clinically better. Anxiety was the main reason for consultation of this group on the contrary to affective, psychotic symptoms, toxic consumption and behavioral symptoms that were more characteristic of the group without AD. Finally, the proportion of referral of the patient to the psychiatry specialist and use of the observation box were greater for the group without AD. The results of the broken-down SPI have shown that patients with AD have a lower risk of self-harm, less danger towards others, less severity in the psychiatric symptoms, less substance abuse/dependence, less opposition to treatment and greater capacity for self-care.

Another finding that should be emphasized in this study is that one of the most determining factors for the emergency psychiatrist in the decision to refer ADs to the psychiatric specialist was that the patient had behavioral disorders, probably avoidance of the panic/phobic spectrum

 $<sup>^</sup>a$  Age, SPI and GAF expressed in mean (SD). Except in these three variables, all the other comparisons are by  $\chi^2$  (gl=1).

<sup>&</sup>lt;sup>b</sup> Coexistence of psychiatric disorder(s) and toxic abuse/dependence disorders

<sup>&</sup>lt;sup>c</sup> Severity psychiatric illness scale (SPI).

<sup>&</sup>lt;sup>d</sup> Global Assessment of Functioning scale (GAF) scale.

Table 3 Binary logistic regression model of the determinants of referral to a specialty from the emergency service, of the use of the observation box and drug prescription (benzodiazepines, antidepressants and/or antipsychotics) in patients with anxiety disorder Variables OR CI 95% р Decision to refer to psychiatry<sup>a</sup> Man 0.016 1.5 1.08 - 2.09**Immigrant** 0.007 0.6 0.41 - 0.87Psychiatric backgrounds <.001 5.12 3.71 - 7.06Reason for consultation: behavioral disorders 0.036 1.74 1.04 - 2.91SPI 1.06 - 1.18 < 0.001 1 12 GAF (every 10 points) < 0.001 0.72 0.62 - 0.84Decision to use observation box<sup>b</sup> Man < 0.001 0.49 0.35 - 0.71Reason for consultation: psychotic symptoms 0.042 1.74 1.02 - 2.97Reason for consultation: toxic abuse/dependence 0.028 0.21 - 0.910.44 Reason for consultation: behavioral disorders 0.004 1.89 1.23 - 2.91SPI < 0.001 1.16 1.11 - 1.21 Treatment with Benzodiazepines<sup>c</sup> **Dual diagnosis** 0.003 0.42 0.24 - 0.740.37 0.16 - 0.82Reason for consultation: affective symptoms 0.015 Reason for consultation: psychotic symptoms 0.004 0.28 0.12 - 0.66Reason for consultation: toxic abuse/dependence 0.003 0.25 0.10 - 0.62Reason for consultation: anxiety < 0.001 2.64 1.81 - 3.86Use of observation box 0.42 - 0.910.015 0.62 GAF (every 10 points) 0.003 0.78 0.69 - 0.89Treatment with antidepressants<sup>d</sup> **Immigrant** < 0.001 0.35 0.2 - 0.61**Dual diagnosis** 0.006 0.34 0.16 - 0.73Reason for consultation: anxiety < 0.001 2.79 1.9 - 4.09Use of observation box 0.016 0.54 0.33 - 0.89GAF (every 10 points) < 0.001 0.66 0.56 - 0.77Treatment with Antipsychotics<sup>e</sup> **Immigrant** 0.032 0.55 0.32 - 0.95Psychiatric backgrounds 0.015 1.76 1.12 - 2.76**Dual diagnosis** 0.006 0.34 0.16 - 0.73Reason for consultation: anxiety 0.004 1.75 1.19 - 2.57 GAF (every 10 points) < 0.001 0.5 - 0.7

or compulsive rituals of the obsessive spectrum. Other expected and logical determinants of referral to the specialist described in the practical guidelines of care in the emergency services<sup>10,16,17</sup> were having psychiatric backgrounds (the strongest) and greater disease severity.

On the other hand, greater global activity, being a woman and being an immigrant or tourist were variables associated to the decision to refer to a non-specialized area (basic health area/social services). The emergency service of the Hospital del Mar covers the health care of one of the

Discrimination power: AUC (95% CI): 0.786 (0.753 – 0.818); Model calibration (Hosmer and Lemeshow test): p=0.268.

<sup>&</sup>lt;sup>b</sup> Discrimination power: AUC (95% CI): 0.700 (0.658 - 0.741); Model calibration (Hosmer and Lemeshow test): p=0.941.

Discrimination power: AUC (95% CI): 0.734 (0.702 – 0.766); Model calibration (Hosmer and Lemeshow test): p=0.938.

d Discrimination power: AUC (95% CI): 0.728 (0.690 – 0.766); Model calibration (Hosmer and Lemeshow test): p=0.398.

<sup>&</sup>lt;sup>e</sup> Discrimination power: AUC (95% CI): 0.714 (0.670 – 0.759); Model calibration (Hosmer and Lemeshow test): p=0.324.

areas having the greatest proportion of immigrants of Barcelona, regardless of legal status. Currently, the proportion of immigrants in the city is 17.3%, reaching up to 41.6% in the district of "Ciutat Vella," principal coverage area of the hospital.<sup>18</sup> While the proportion of tourists or non-registered immigrants, among other factors, could explain these results, the differences of gender observed may be biased by the fact that women generally have a greater tendency to express their problems and to ask for help more easily than men.<sup>19</sup> This may entail greater variability and low specificity due to greater frequency of different types of elevated generalized anxiety episodes.

This same variability could explain the differences of gender observed regarding the decision to use the observation box, this being more frequent in women. Other clinical factors involved when deciding to observe are the presence of psychotic symptoms, behavioral disorders or greater severity of psychiatric disease. On the contrary, the observation box is used less when the reason for consultation is toxic abuse or dependence.

Another finding of this study is that, in practice, the psychiatry frequently prescribes anxiolytic, antidepressant or antipsychotic medication to treat anxiety disorders in the emergency service if the reason for the consultation is anxiety. On the contrary, other reasons for consultation do not contribute to the decision: except for benzodiazepines which are prescribed less frequently if the reasons for consultation are drug addiction or affective or psychotic symptoms. Furthermore, prescription is less frequent when the patient has a background of comorbidity with toxic abuse or dependence disorder. On the other hand, it should be mentioned that the decision to prescribe medication in the anxiety disorders depends more on their level of global activity (the lower the activity the more likely the prescription of medication) then on the severity of the disorder.

The factors associated to the decision to prescribe antidepressants in anxiety disorders were having worse global activity and consulting for anxiety. The factors associated to not prescribing them were being an immigrant or tourist, having used the observation box during the stay in emergency service and having comorbidity with the substance abuse or dependence disorder. The factors associated to the prescription of antipsychotics were having worse global activity, psychiatric backgrounds and consulting for anxiety. On the other hand, the factors associated to not prescribing them were being an immigrant or tourist and having comorbidity with substance abuse or dependence disorder. Although the antipsychotics were normally used in the emergency service for sedation in cases of behavior disorders, at present, some systematic reviews support the use of low doses of second-generation antipsychotics (quetiapine, risperidone) for the treatment of anxiety disorders.20,21

An analysis as a whole is needed regarding attention in the emergency service to immigrants and the anxiety disorder given the elevated proportion of these in the district of "Ciutat Vella" of Barcelona. Our results indicate a lower proportion of referral to the specialist and the prescription of antidepressants or neuroleptics among the group of immigrants. A previous study performed by our group in the year 2008<sup>22</sup> indicated that, on the contrary to the native population, the group of immigrants had more social type problems, more language problems, fewer psychiatric backgrounds and less previous contact with the outpatient mental health services. These factors, together with cultural differences that could cause different concepts on the mental disease, may bring about a real social barrier and clinical non-specificity that prevents greater access to treatment and to the mental health outpatient facilities.

This study has some limitations. In the first place, the psychiatric diagnoses analyzed correspond to nosological orientation established by the emergency service psychiatrist and not by the performance of a structured interview. However, previous studies have indicated elevated reliability in the diagnoses performed by the clinicians of the psychiatric emergency service.<sup>23</sup> Another limitation to be stressed is diagnostic comorbidity since it may affect the decision of the emergency physician. This variable could not be analyzed in our study because we only obtained the information about the main diagnosis from each psychiatric emergency. It is possible that patients affected by toxic dependence disorder or affective picture may also be patients with an AD. In the third place, most of the patients with AD were taking medication at the time of the emergency and this medication may have affected the decision to prescribe drugs. Finally, other factors may have affected the decision process: the mental health network, restrictions in the use of the observation rooms and problems with followup in the mental health network. The findings of said study reflect action patterns of only psychiatric emergency services of one hospital in Spain and its generalization to other institutional frames or countries is limited.

This has been a naturalistic study that approaches the practice in one psychiatric emergency service regarding patients with anxiety disorder. Future investigations are needed to analyze the effect of the medical decisions.

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