# **Originals**

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# Clinical prevalence and reason for visit of patients with generalized anxiety disorder seen in the psychiatry out-patient clinics in Spain. Results of the LIGANDO study

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Introduction. Generalized anxiety disorder (GAD) is frequent and has a great impact on quality of life. Its prevalence in the general population and in primary care has been established previously in Spain; however it still must be determined in the mental health.

Methods. An epidemiological, multicenter and cross-sectional study was carried out, collecting demographic data, reason for consultation and presence of GAD diagnosis according to ICD-10 criteria of their first 75 visiting patients on a randomly selected representative sample of 312 psychiatrists.

Results. Data from 20,347 subjects was recorded. Clinic prevalence of GAD was 13.7% (95% confidence interval: 13.3%-14.2%). The most frequent reason for psychiatric consultation was depressive symptoms (26.7%) followed by symptoms of anxiety (18.2%). In 71.4% of GAD patients, the reason for consultation was anxiety symptoms.

**Conclusions.** GAD clinic prevalence in Spain is high. Almost one out of three GAD-patients visits the psychiatrist office for a reason other than this condition.

## Key words:

Generalized anxiety disorder. ICE-10. Outpatient psychiatrist office. Reason for consultation. Prevalence.

Actas Esp Psiquiatr 2009;37(1):17-20

Prevalencia clínica y motivo de consulta en pacientes con trastorno de ansiedad generalizada atendidos en consultas ambulatorias de psiquiatría en España. Resultados del estudio LIGANDO

Introducción. El trastorno de ansiedad generalizada (TAG) es frecuente y produce un gran impacto sobre la

Correspondence: Luis Caballero Servicio de Psiquiatría Hospital Puerta de Hierro San Martín de Porres, 4 28035 Madrid (Spain) F-mail: Luiscabmar@vaho.es calidad de vida. En España se ha establecido su prevalencia poblacional y en atención primaria, pero quedaba por determinar su prevalencia en la clínica de salud mental.

Métodos. Estudio epidemiológico, multicéntrico, transversal en el que 312 psiquiatras representativos del total nacional seleccionados al azar recogieron datos demográficos, motivo de consulta y presencia de diagnóstico de TAG según la CIE-10 de los primeros 75 pacientes que acudían a consulta.

Resultados. Se recogió información de 20.347 sujetos, con una prevalencia clínica de TAG del 13,7% (intervalo de confianza del 95%: 13,3-14,2%). El motivo más frecuente de consulta psiquiátrica fueron los trastornos de depresión (26,7%) seguidos de trastornos de ansiedad (18,2%). El 71,4% de los afectados de TAG consultaba por síntomas de ansiedad.

Conclusiones. La prevalencia clínica del TAG en España es alta. Casi uno de cada tres pacientes afectados de TAG consulta por un motivo distinto a su diagnóstico principal.

# Palabras clave:

Trastorno de ansiedad generalizada. CIE-10. Consulta de psiquiatría ambulatoria. Motivo de consulta. Prevalencia.

# INTRODUCTION

Anxiety disorder, together with the depressive one, are the most frequent psychiatric disorders. In 2004, the prevalence-year in Europe was 6% and prevalence-life 13.6%<sup>1</sup>. Within these disorders, Generalized Anxiety Disorder (GAD) is one of the most common, it also being the most frequent in primary care<sup>2</sup>. GAD is very frequently associated to other mental disorders and has a large impact on the patient's quality of life<sup>3</sup>. The combination of genetic, biological, socioeconomic and work factors may influence in the appearance of GAD. In addition, in the case of women, they suffer

it with a frequency that is up to two times greater than men<sup>1,4</sup>. Presentation age as primary disorder may be early, but when it is secondary to another anxiety disorder, it appears at around 30 years of age, the risk being extended until the middle of the 50th decade of life<sup>5</sup>. Prevalence rates are high in the middle adult age and in the elderly but relatively low in adolescents, there being a significant correlation between suffering GAD and being over 24 years of age, separated, widow, divorced, unemployed or housewife<sup>2,6</sup>.

Population prevalence-year in the United States is 3.1%, life-prevalence going from 5.1% to 5.7%<sup>6,7</sup>. In Europe, according to the ESEMeD study data, prevalence-year of GAD is 1% and prevalence-life 2.8%<sup>1</sup>. In primary care, prevalence of GAD is round 8% in different industrialized countries according to the World Health Organization (WHO)<sup>2,7</sup>, this being much higher than the population ones and indicates that patients suffering GAD use these health services frequently. In fact, according to the ESEMeD study, two thirds of the individuals who have suffered have any mental disorder in the last 12 months and have gone to any health service consult a primary care physician<sup>8</sup>.

There have been few studies have been conducted on prevalence of GAD in our country. That is why the ESEMeD study is important. It provides values on population prevalence-year of 0.5% and of prevalence-life of 1.95%, the last prevalence data available in primary care being 7.3%<sup>10</sup>. However, the nationwide clinical prevalence in Mental Health consultations is unknown, which is why this study was conducted (LIGANDO study), that is, in order to determine the prevalence nationwide, and by gender, of GAD in mental health out-patient clinics as well as the reason why these patients consult.

# **METHODS**

This is an epidemiological, cross-sectional and multicenter study to determine the clinical prevalence and reason

for consultation of GAD in Mental Health out-patient clinics. A national wide representative samples made up of 312 psychiatrics randomly selected by regional quotas according to their weight in the general population participated. Each participant consecutively recorded the first 17 patients who came to the office for any reason between October and December 2006, collecting demographic characteristics, reasons for consultation and presence of GAD diagnosis according to ICD-10 criteria (WHO, 1992). The study was approved by an ethics committee (EC) and was governed by the basic ethics principles contained in the Declaration of Helsinki (Tokyo, 2004). All the patients were asked to give their oral informed consent to analyze their data.

Clinical prevalence was calculated by the direct method, in the general population, by gender and age group, calculating the 95% confidence intervals. Relative frequency expressed in percentage was determined for the reason of consultation. The Student's t test was used for comparison by groups in the quantitative variables and the  $\mathrm{Chi}^2$  test for qualitative variables. Descriptive statistics was made for the demographic parameters, using the SAS® statistical program, version 8.2.

# **RESULTS**

A total of 20,347 patients (59.1% women) whose mean age was 44.8 ± 15 were seen by 312 psychiatrists participating in the study. The diagnosis of the patient was not reported in 385 cases. Of the remaining 19,992, 2,743 (13.7%; 95% CI: 13.3%-14.2%) had a previous diagnosis of GAD according to the ICD-10. Table 1 shows the total prevalence and prevalence by age groups and gender. A significantly greater prevalence of GAD was observed in women than in men (15.4% versus 11.3%, respectively; p < 0.0001) and specifically until 55 years, this becoming similar in both genders after that age (table 1). Equally, there were significant differences by age. Thus, the groups with the greatest prevalence were those between 25 and 34.9 years and between 35 and 44.9 (15% and 15.5%, respectively, for both genders

| Table 1 Prevalence of total GAD, by age, by gender and by age and gender |                    |                    |                   |         |
|--|--------------------|--------------------|-------------------|---------|
| Age group (years)  | Global             | Woman              | Man               | р       |
| < 25   | 12.9% (11.3; 14.7) | 16.6% (14.1; 19.3) | 8.5% (6.6; 10.9)  | <0.001  |
| 25-34.9  | 15% (13.9; 16.1)   | 17.8% (16.3; 19.5) | 11.5% (10; 13)    | < 0.001 |
| 35-44.9  | 15.5% (14.5; 16.5) | 17.7% (16.3; 19.2) | 12.4% (11; 13.9)  | < 0.001 |
| 45-54.9  | 14.1% (13.1; 15.2) | 15.9% (14.4; 17.4) | 11.5% (10; 13.2)  | < 0.001 |
| 55-64.9  | 12.1% (11; 13.4)   | 12.5% (11; 14)     | 11.6% (9.8; 13.6) | 0.484   |
| ≥ 65   | 9.3% (8.2; 10.6)   | 9.7% (8.2; 11.2)   | 8.7% (6.8; 11)    | 0.470   |
| Total  | 13.7% (13.3; 14.2) | 15.4% (14.8; 16.1) | 11.3% (10.6;12)   | < 0.001 |

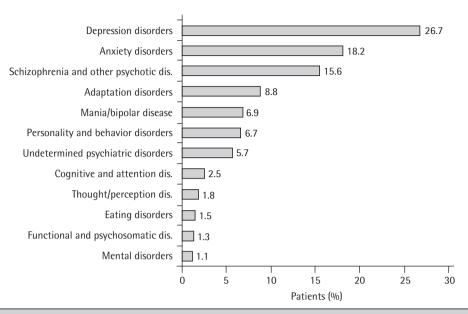


Figure 1 Reasons for psychiatric out-patient consultation with frequency > 1%.

as a whole), the age groups of  $\geq$  65 years having the lowest prevalence (9.3%).

Figure 1 shows the reasons why at least 1% of the 20,347 patients came to the mental health out-patient clinic. The most frequent reason was depression symptoms (26.7%), followed by anxiety symptoms (18.2%). Figure 2 shows the reasons for the consultation, separated according to the presence of GAD. The most frequent cause of consultation by patients with GAD was anxiety disorders and/or symptoms with 71.4% of the patients, followed by depression disorders with 9.7% of the patients. Among the patients not diagnosed of GAD, anxiety disorders and/or symptoms accounted for 9.9%, the most frequent reason being depression disorders (29.5%).

# DISCUSSION

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In Spain, the few existing studies on GAD prevalence are population-based within the primary care context. Up to now, no study has ever been done on its clinical prevalence in Mental Health out-patient clinics on a national level. Our prevalence results, of 13.7%, greater than those observed in primary care (7.3%), suggest that there is greater access to the mental health services in Spain than in other countries and that these are used by the patients affected. This result may also reflect the fact that not all the cases that occur are diagnosed in primary care. In many cases, due to the somatization and comorbidity of the patients with GAD, its prevalence is underestimated in this setting. In addition, the patients who are not well controlled are referred to the psychiatry setting, which receives the most severe and treatment refractory cases.

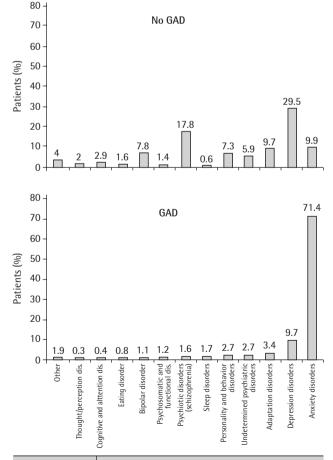


Figure 2 Reasons for consultation of the patients according to presence of generalized anxiety disorder (GAD) diagnosis.

The clinical prevalence found reflects the national prevalence since a random sample of psychiatrists from the entire territory selected by quotas according to the population weights of each regional national wide participated. The results show significant differences regarding age and gender. By age, the prevalence is low in those under 25 years of age (12.9%), that having the greatest prevalence being in the mean adult age of 25 to 55 years (14.1%-15.5%). This progressively decreased after that age, as was to be expected<sup>1,6</sup>. In the general population, the ESEMeD study shows that the highest prevalence of any anxiety disorder corresponds to the age of 18 to 24 years. This prevalence decreases in mean ages and goes up again at ages 50-64 years and then finally decreases after 65 years of age. Then, there seems to be a certain discrepancy between the clinical prevalence in relationship with age and the population. However, it must be considered that the results of the ESEMeD study correspond to «any» anxiety disorder and not to GAD specifically. In addition, the ESEMeD study used the DSM-IV for the diagnosis and the study presented herein used the ICD-10, whose results do not correspond exactly with those obtained in clinical interviews9. On the other hand, there is a greater tendency to consult with a professional as the patient's age increases, with a peak at 35-49 years8. If we compare our results with the population prevalence specifically for GAD of the United States, our results reflect the differences that are observed in the different ages of the United States population, in spite of the different GAD diagnostic criterion used. Prevalence-life of GAD (DSM -IV criterion) in the United States study was higher in the means age than in those under 29 and older than 60, as occurred in our study<sup>6</sup>. By gender, prevalence in women was significantly greater than in men (15.4% versus 11.3%) but does not reach double the prevalence as occurs in almost all the population prevalence studies, including the ESEMeD. It must be taken into account that men are more reluctant than women to establish medical contact and that this also has more influence in the fact that there was a previous diagnosis by the primary care doctor before going to a psychiatrist<sup>11</sup>. This implies that the male population who comes to the psychiatrist is a selection from the general population with a more severe stage of the disease, so that the prevalence rate in men in this context approaches that of the women.

The most frequent reasons why the patients come to the consultation were depression disorders (26.7%) followed by anxiety symptoms (18.2%). This confirms the results of most of the mental health studies that indicate that depression is the most common mental disorder followed by that of anxiety<sup>9</sup>. It is important to stress that within the patients who come to the consultation without a previous diagnosis of GAD, there is 10% who consult for symptoms characteristic of this disorder so that its diagnosis thus unknown prior to that time.

In conclusion, the prevalence of GAD in mental health out-patient clinics is higher than expected, the groups having the greatest prevalence being women from 25 to 45 years of age. The most frequent reasons for consultation in these sites are depression disorders followed by those of anxiety. The symptoms characteristic of the patients with GAD account for two thirds of the consultations. Thus, one out of every 3 patients consults for a reason other than that of their diagnosis. Finally, 10% of the patients who visit the psychiatrist who had not been diagnosed of GAD prior to that time suffer it.

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