Study of the Use of Psychiatric Drugs in Primary Care

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Objective. To get to know the profile of use of antidepressants (AD) and tranquilizers-hypnotics (T-H) in primary care in Catalonia.

Design. Transversal, observational, epidemiological study of prescription-indication.

Location. Health centres in Catalonia, Spain.

Participants. Included, using consecutive sampling, patients on treatment with AD and/or T-H.

Measurements. The variables studied were: age, sex, type and number of drugs, treatment schemes, reason for prescribing, and the health professional who initiated it.

Results. 1613 drugs were evaluated: 43% were AD and 57% were T-H. The sub-groups most prescribed were: selective serotonin reuptake inhibitors (SSRI) (31.6%) and short half-life (32.9%) and long half-life (19.8%) benzodiazepines (BZD). We included 998 patients, 76% of the participants were women. The average age was 52.24 years (range, 16-96). 19.9% (n=199) received treatment with AD only, 34.3% (n=342) with T-H only, and 45.8% (n=457) combined treatment. The mean number of drugs per patient was 1.6. The main reasons for prescribing were: major depression or dysthymia (60.2%; n=417) for AD and generalised anxiety (33.3%; n=306) and insomnia (23.9%; n=220) for T-H. 39.8% (n=268) of the AD and 51.0% (n=441) of the T-H had been prescribed for more than 1 year.

Conclusion. The described profile of the use of psychiatric drugs suggests the need to reconsider the over-prescribing of BDZ and improve coordination between psychiatrists and primary care doctors.

Key words: Antidepressants. Tranquilizers. Hypnotics. Primary care.
Introduction

The prevalence of psychiatric illness in the general population is 30%.1 Of this population, 2% could have depression, 10% with anxiety disorders and 8% mixed symptoms of depression and anxiety.2-4 In primary care (PC) it is estimated that 20% of the patient population could present with a depressive disorder and that 30% of the psychiatric visits in PC are secondary to symptoms of generalised anxiety.5,6 There is an under-diagnosis of depressive illnesses and often the patients diagnosed and treated do not receive sufficient doses and treatment times.5

An increase in the use of antidepressants (AD) in Spain has been reported in recent years, particularly due to the use of selective serotonin reuptake inhibitors (SSRI). This fact could be due to the following factors: a) under use of the classic AD associated with the high incidence of secondary effects or their potential lethality in cases of overdose; b) the better safety profile of SSRI; and c) a widening of the indications for AD, as well as using this group of drugs for the treatment of poorly defined symptoms.4,5,7,8

At the same time as the increase in the use of AD, an increase in the use of benzodiazepines is also detected, particularly those with a short half-life, which is not in keeping with the trends in other European countries.9-11

In Catalonia, the obtaining of data on the use in defined daily doses/1000 inhabitants/day (DDD) has provided evidence of an increase use of BZD and AD in recent years. The objective of this study is to get to know the profile of use of AD and tranquilizer-hypnotics (T-H) in PC in Catalonia and find areas for improvement.

Patients and Methods

A transversal, observational, epidemiological study of prescription-indication has been carried out in the primary care services (PCS) of Baix Llobregat Litoral (BLL) and Mataro-Maresme (MM) of the Catalanian Institute of Health, during the months of February and March 2002. The doctors from these 2 PCS were requested to include, by consecutive sampling, 10 patients who attended the clinic and who were on treatment with AD and/or AH. The participation by the doctors was voluntary and the analysis of the responses was anonymous.

The selection of the sample of doctors was different in the 2 PCS. In the BLL PCS, all the doctors in the area were included (n=133) and in the MM PCS a simple random sample of 42 doctors out of a total of 113 were selected, calculated from the DDD of fluoxetine in 2001.

The AD were classified as: classic, second generation, SSRI, and other AD, and the T-H as: short half life of elimination (t1/2) BZD, long t1/2 BZD, and other tranquilizers.

The variables analysed were: age and sex of the patients, type and number of AD and T-H prescribed, treatment scheme, main reason for the prescription, and the professional who initiated it. To contrast the validity of the sample with the reference population, the uses of AD and T-H (percentages of DDD from the same period as the study) of each PCS were compared with those obtained in the study sample.

A descriptive analysis of the profile of use of the different psychiatric drugs and their distribution according to age and sex was carried out. For the comparisons the $\chi^2$, the Student t test, and analysis of variance was used, depending on the type of variable. Statistical significance was established at 5%.

Results

A 58.3% response (102 professionals) was obtained, with a total of 998 patients included. 1613 drugs were evaluated, of which 43% (n=693) were AD and 57% (n=920) T-H. In Figure it is seen that the profile of use of the different active principles in the sample studied was similar to the
data of use (DDD) obtained in the 2 PCS during the period of the study, except for lorazepam and sertraline (less in the sample) and dipotassium clorazepate (more in the sample).

**Patient Characteristics**

In Table 1 the comparative demographic characteristics between the 2 PCS of BLL and MM are shown. The majority were women (76%). The mean age was 52.2 years (range, 16-96) and was higher in the MM PCS.

The mean of drugs per patient was 1.6±0.71. 50.2% (n=501) of the patients only took one drug, 39.2% (n=391) 2, 9.2% (n=92) 3, and 1.4% (n=14) took 4.

The prescribing of AD was higher in women (n=509; 67.7%) than in men (n=142; 59.9%) (P=.028). No differences were observed in the T-H according to sex. As can be seen in Table 2, 45.8% of the cases received combined treatment, which was higher in women (48.3%) than in men (38%) (P=.019).

The patients who only received one tranquilizer treatment had a higher mean age (56.6±16.7 years) than those who took only AD (50.2±17.6 years), or combined treatment (49.9±16.1 years) (P<.001).

On analysing the data according to PCS, treatment with only AD was higher in the BLL PCS, while treatment with only T-H was higher in the MM PCS. This difference was significantly different (Table 2). No differences were found in combined treatment between the PCS.

**Treatment Characteristics**

The most prescribed therapeutic sub-groups were the SSRI (31.6%), the short t1/2 BZD (32.9%), and the long t1/2 BZD (19.8%), with no differences between the PCS (Table 2).

The AD most used were fluoxetine and paroxetine. The most prescribed T-H were alprazolam, lorazepam, diazepam, and dipotassium clorazepate (Table 3).

The combinations most used were: fluoxetine and paroxetine with alprazolam (n=47 and n=45, respectively) or lorazepam (n=25 and n=21, respectively).

The AD were indicated by the PC doctor in 45.7% and by the PC psychiatrist in 33.1% (Table 4). The professional who initiated the prescribing of AD was the PC doctor on more occasions in the BLL PCS compared to MM (49.7% as opposed to 36.3%; P=.04). The prescribing of SSRI was carried out by the PC doctor in 55.3% of cases, while the prescribing of classic AD and other AD were initiated in the majority of occasions by the PC psychiatrist (36.6% and 60%, respectively).

The T-H were initiated in 49.1% by the PC doctor and 30% by the PC psychiatrist (Table 4). By sub-group, the PC doctor was the one who initiated the majority of treatments with short t1/2 BZD in 49.6%, long t1/2 BZD
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The main reasons for prescribing were chronic depression-dysthymia (35.8%) and major depressive episodes (24.4%) for AD and generalised anxiety (33.3%) and insomnia (23.9%) for the T-H (Table 5).

On further analysing the reason for prescribing according to therapeutic subgroup it can be seen that the major depressive episode along with chronic depression-dysthymia were the main reasons for prescribing SSRI, as well as the AD and T-H (61.2%, 49.3%, and 63.5%, respectively). As regards the T-H it is observed that generalised anxiety is the main reason for prescribing long t1/2 as well as short t1/2 BDZ (41.3% and 31.6%, respectively). The main reason for prescribing the other BDZ was insomnia (60.9%).

40.1% (n=268) of the AD and 51.5% (n=441) of the T-H had been prescribed for more than 1 year. No differences in the length of treatments were found between PCS.

As regards the AD, when the prescription was started by the PC doctor, the duration of treatment at the time of collecting the data was <3 months in 49.2% (n=148) and >1 year in only 22.6% (n=68). If the prescription was initiated by the PC psychiatrist, in 14.7% (n=32) it was <3 months and in 67.6% (n=169) >1 year.

As for the T-H indicated by the PC doctor, 39.3% (n=164) had been prescribed for up to 3 months and 37.6% (n=157) for more than 1 year. Of those prescribed by the PC psychiatrist, 12.8% (n=32) had a duration of <3 months and in 67.6% (n=169) >1 year.

Fixed doses were used in 99.1% (n=659) of the AD and in 81.0% (n=715) of the T-H, no differences being detected as regards the indication. 99.3% (n=434) of the combined treatments were also prescribed in fixed doses.
In the present study, the population characteristics, as well as the profile of the use of psychiatric drugs, are similar in the 2 geographic areas studied. The population on treatment with psychiatric drugs is middle-aged, mainly female and the majority of patients receive treatment with T-H only, or combined with AD. The age of the patients receiving treatment with T-H is higher than those who receive AD.

The larger percentage of women being treated agrees with results from other published studies. The possible causes of this could be a higher prevalence of psychiatric illnesses in the female population or a greater frequency of visits to the PC centres.

The greater use of T-H found, as compared to AD, has also been reported in similar populations. In a study on the use of psychiatric drugs in PC a greater use of BZF as compared to AD was detected, a difference which was higher than the data obtained in the present study.

It is observed that a larger number of prescriptions originate from the PC doctor than the other specialists, although this is lower than that recorded in other studies (56% and 68%). The AD most prescribed are the SSRI. The majority of its prescribing has been initiated by the PC doctor, while the psychiatrist initiated the prescription of the classic AD and other AD. This profile of use is similar to that reported in another study.

In our study, the duration of treat-
What Is Known About the Subject

- The high prevalence of psychiatric illness in the general population and in primary care clinics.
- The increase in Spain of the use of antidepressants, due to the use of selective serotonin reuptake inhibitors.
- The increase and high use of benzodiazepines, particularly due to the use of those with a short half-life of elimination.

What This Study Contributes

- The population on treatment with antidepressants and/or tranquilizers-hypnotics is middle aged and mainly female. The majority receive treatment with tranquilizers and/or hypnotics.
- It highlights the high proportion of patients on combined treatment (antidepressants and tranquilizers/hypnotics) and on fixed doses.
- The duration of treatment with tranquilizers-hypnotics is prolonged, since more than half were prescribed for more than 1 year.

The increase and high use of benzodiazepines, particularly due to the use of those with a short half-life of elimination.

The high proportion of patients on combined treatment is emphasised, much higher than the 25.8% found in another study. On the other hand, in another study carried out to determine the pattern of use of BZD and AD in the elderly, a combined use (50%) similar to that reported in our study was found. Combined treatment could be justified at the beginning of the depression but, once the latency period of the AD has passed (4-6 weeks), it would be expected to withdraw the T-H. Therefore, the high percentage of combined treatments, which could correspond to inappropriate maintenance treatment with T-H, is surprising.

This study has certain limitations, such as the possible bias in the participation of the doctors, by being voluntary. It can have a possible bias on the selection of subjects by having selected those who had a prescription similar to that recommended in PC or in those who might have had a higher initiation of prescription by the specialist. In this sense, the similarity obtained between the profile of the active principles of our sample and those prescribed in our areas would be in favour of the representivity of the sample.

The transversal design itself limits the conclusion as regards the variables such as treatment times, which could be underestimated or overestimated. The shorter duration of treatment with AD prescribed by the PC doctor could be due to the higher frequency of those patients visiting the health centres at the start of treatment.

The high use of T-H, as well as the profile of use of AD and T-H detected in our population, suggests the need to develop strategies in our PC centres to reconsider the prescribing of psychiatric drugs, in terms of reducing the prescription and duration of the different T-H, as well as to improve the coordination between the PC psychiatrists and doctors. In this sense, a line of work could be the production of a performance and referrals protocol agreed between the different professionals involved in the problem of the various mental illnesses.

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References

The high prevalence of psychiatric illnesses in primary care clinics requires taking diagnostic and therapeutic decisions, hastily in many cases. To evaluate and diagnose problems of anxiety and depression in the short space of time available, involves a challenge and a clinical ability linked, without a doubt, to the knowledge and experience of the family doctor. The psychotherapeutic possibilities (even those called short) are not very feasible in the context of Spanish primary care and the systematic referring of all patients with this illness to the public mental health services is clearly non-viable and unnecessary. For all this, the family doctor has to understand and sensitively manage, in accordance with the scientific knowledge and recommendations, the 2 pharmacological groups used in the treatment of depressive and anxiety syndromes: antidepressants in their different forms and benzodiazepines.

The use of benzodiazepines among the Spanish population is very high. The 2003 National Health Survey, carried out by the National Institute of Statistics and the Ministry of Health, showed that the percentage of people who had taken, in the previous 2 weeks, tranquilizers, relaxants and sleeping pills, that is to say, benzodiazepines, was quite considerable: 12.79% of the population >16 years took them. As the age of the population increases, the use was higher (24.13%; 15.15% males vs 30.2% females) (Table). In effect, the levels of benzodiazepines taken in the Spanish adult population is worrying. Vedia et al, authors of the article “Study of the Use of Psychiatric Drugs in Primary Care,” present similar data on the predominance of the use of psychiatric drugs among women and the high prescription of benzodiazepines over long periods. The long term use of benzodiazepines has important consequences in several cognitive areas: visuospatial ability, speed of processing and verbal learning. While the cognitive function improves on withdrawing the use benzodiazepines, this does not reach the previous level and permanent sequelae are maintained. For this reason, all the prescribing doctors must periodically review the patients who habitually take benzodiazepines in order to evaluate the opportunity and possibility of carrying out a phased withdrawal, as well as the viable options.

The increase in the use of selective serotonin reuptake inhibitors (SSRI) has been general and corresponds with a higher diagnosis of depressive syndromes and generalised anxiety, as well as a better tolerance by the patients. For years, the recommendations for the early detection and a pharmacological approach, with appropriate doses and the correct duration, of depressive symptoms have been endorsed by international recommendations. The American Academy of Family Physicians, in a recent document ba-
sed on the US Preventive Service Task Force, recommended the carrying out of 2 sifting questions which could help to approach a diagnosis of depression: in the last 2 weeks have you felt depressed or without hope? and in the last 2 weeks have you had little interest or no motivation to carry out your activities? Later, the diagnosis should be confirmed using the standardised instruments. To carry out this approach is feasible and necessary for the family medical practice.

A standard for improving the quality of prescribing can clearly be established, which may lead to the decreased use of the benzodiazepines and a higher use of antidepressants. To inform the doctors that the correct pharmacological approach to the depressive and anxiety syndromes should be a task undertaken to improve the quality of the use of psychiatric drugs.

References


