
RESEARCH LETTER

Patterns of antidepressants prescriptions in a large Italian old population

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INTRODUCTION

Depression is the most common psychiatric illness suffered by persons all over the world. Very old persons are particularly prone to significant symptoms of depression. An increase in disability and cognitive impairment, a fall in socioeconomic status, and the high proportion of women who survive their partner's death might explain this pattern (Rozzini *et al.*, 1997). Most studies show a depressive symptoms prevalence that varies from 20–50% according to the site of the investigation. Available European studies suggest that between 4.6–8.8% of the general population may be experiencing an episode of major depression at any one time (Copeland *et al.*, 2004).

According to the increasing rate of diagnosis of depression, data also show an increasing rate of drug treatment, but scanty data are available on the appropriateness of prescriptions and on the possible influences of extraclinical factors. In this framework our study evaluates the rate of antidepressant prescription in elderly persons living in a large region of the Northern Italy.

METHODS

Antidepressants prescriptions were retrieved from Brescia Local Health Authority database. The data-

base provides the information for each reimbursed prescription (antidepressants are freely prescribed by the Italian NHS), including the patient code. All data were collected from the 1 January to 30 June 2006.

For the aim of the study, population has been divided in four age groups: (a) <65; (b) 65–74; (c) 74–84 and (d) >84. Prevalence of antidepressant users was calculated in each age group. The antidepressants consumption in men and women, and according to their living site: in urban, i.e. living in the town of Brescia, and suburban areas, i.e. living in rural areas or in towns smaller than 10,000 inhabitants was also analysed.

RESULTS

During the study period 61,036 individuals were prescribed antidepressants, yielding an overall prevalence of 5.7% (see Table 1). The prevalence of prescriptions rose with age in both sexes, with highest rates in old and very old individuals: the proportion of treated under 65 years was 3.8%, in subjects from 65–74 years the rate of treatment was 10.8%, 17.0% in age class 75–84, and 18.8% when subjects over 84 years were considered.

Furthermore women received antidepressant treatment more frequently than men. The overall proportion of females under treatment was 7.7%, twice higher than the rate detected in men (3.5%).

Table 1 also describes differences in antidepressant prescriptions in urban and suburban areas. Results

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Table 1. Rate of antidepressant prescriptions according to age, gender and living site

	Age groups				Total (n = 1,070,824) %
	<65 (n = 875,806)	65–74 (n = 106,408)	74–84 (n = 68,693)	>84 (n = 19,917)	
	%	%	%	%	
Males	2.5	7.2	12.3	15.5	3.5
Females	5.2	13.9	19.7	19.8	7.7
Urban	4.3	11.8	19.1	22.5	6.8
Suburban	3.7	10.6	16.3	17.5	5.3
Total	3.8	10.8	17.0	18.8	5.7

% refers to the total number of citizens in each age group (n).

documented a 6.8% prescription rate in individuals living in the urban area, while it is 5.3% in rural areas. The highest differences in antidepressant rate of prescription were recorded in individuals over 84 years, 22.5% in urban areas and 17.5% in rural ones.

DISCUSSION

Our study has detected that antidepressant prescription rates increase with age, that, regardless of age, women are more likely to be treated for depression than men, and finally that antidepressants seem to be more prescribed in urban areas than in rural ones.

Our survey indicates that antidepressants prescription sharply increases with age. Obviously we are unable to evaluate if depression is well treated. Diagnosis of depression in elderly persons is not easy: several studies have suggested an age-related difference in the pattern of symptoms of depression that can make the diagnosis more complicated (Alexopoulos, 2005) and could explain why depression in old age especially when mild, is often underdiagnosed or misdiagnosed. As a consequence many depressed elderly persons are not treated.

As expected, the prevalence of antidepressants consumption is higher in women than in men; a meta-analysis of pooled data from nine centres in Europe gave an overall prevalence of depression among gender consistent with the differences found in the present study (i.e. twice the rate in females than in males) (Copeland *et al.*, 2004).

Antidepressants prescriptions rates could be higher in urban than in suburban areas according to a different depressive morbidity in different living sites. In fact, in urban settings a higher risk of depression is reported due to low community relationships and social isolation (Wang, 2004). The larger diffusion of antidepressants in urban areas could also be due to its higher medical sensitisation. Rural medical care is

largely provided by generalists, while residents commonly have less specialists, health-related technologies, and other health and social services than persons in urban areas. Moreover, a previous survey has reported that generalist physicians are less likely than mental health specialists to provide care that meets current recommendations (Probst *et al.*, 2006).

There are several limitations to our study. Because this survey is limited to Brescia area, it is difficult to compare our findings with those from other parts of the world. However, a recent survey on antidepressants use conducted in another urban and suburban area (Verona, northern Italy) found a similar rate of antidepressants prescription (i.e. 5.3%) (Tansella, personal communication; 21 September 2007). Furthermore, in this study we are not able to measure several important factors that may affect differences in drug utilisation, the appropriateness of treatment and the quality of mental health service in rural and urban areas.

CONFLICT OF INTEREST

None known.

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