

## GENERAL PRACTICE MEETING THE NEEDS FOR PSYCHIATRIC CARE IN CROATIA

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### SUMMARY

**Background:** In recent decades, general practitioners (GPs) have become critical components of mental health services. However, in Croatia the role of GPs in mental health services is still mostly perceived as "gate keeping", whereas seeking help for serious mental illnesses is mostly restricted to psychiatrists. The aim of this study is to investigate the practices and attitudes of family doctors in providing care for psychiatric patients.

**Subjects and methods:** The study included 111 GPs, working in 38 different locations in four major towns in Croatia. Data were collected using a questionnaire, specifically designed for the purpose of this study.

**Results:** By their own estimation, GPs prescribed antidepressants without a psychiatrist's recommendation in about 37% of patients who use them. Also, GPs prescribed sedatives without a psychiatrist's recommendation in about 60% of patients who use them. Although certain categories of psychiatric patients (elderly, patients with PTSD) were almost always referred to a psychiatrist, it was GPs' attitudes toward psychiatric casualties and their proneness to prescribe antidepressants and sedatives without a psychiatrist's recommendation that predicted whether a patient will be treated by himself or referred to a psychiatrist. "Interest/Competency" and "Knowledge" of the GPs positively correlated with the number of courses attended as a part of continuous medical education (CME).

**Conclusion:** Overall, the role of GPs in mental health services in Croatia is changing into a more active one, as a significant portion of patients with depression and anxiety are being treated by GPs. Personal interest and self confidence in proper knowledge and skills, in part acquired also from current CME programs, are determinants of higher autonomy of GPs in treating psychiatric patients. Psychiatrists, as active promoters of community mental health should more actively encourage their alliance with GPs, especially through offering higher quality CME courses.

**Key words:** general practice – anxiety – depression – service – antidepressants – sedatives - prescription

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### INTRODUCTION

During the last decades, the role of primary care, including general practice, in the mental care system has become more evident and general practitioners (GPs) have become perceived as critical components of the response of health services to psychiatric disorders (Sartorius 1997). However, the actual role of GPs in mental health services varies greatly from country to country, depending on the amount of resource devoted to

mental illness services, the organization of primary care practice and the inertia of the system (Goldberg 2003, Gater et al. 2005).

In Croatia, this process was delayed because of thorough political and socioeconomic changes, also influenced by the recent war. Lower socioeconomic status and culture shock in a postwar society strongly influenced the amount of resource devoted to mental illness services while increasing the actual need for it – because of the higher prevalence of trauma and stress-related mental disorders (Loncar

et al. 2004, Loncar et al. 2006, Rojnic Kuzman & Hotujac 2007, Sadock & Sadock 2003).

At the moment, insufficiently defined mental health policy has left most mental health services in a gap between general practitioners and psychiatrists. Although the care of general practitioners is highly accessible, the role of GPs in mental health services is mostly perceived as “gate keeping”, whereas seeking help for serious mental illnesses is mostly restricted to psychiatrists (Gater et al. 2005).

In the everyday practice of the general practitioner, the prevalence of patients seeking help for psychological or psychiatric problems is high (12%). It is higher compared to the prevalence of patients seeking the same kind of help from mental health experts 9.8% (Meadows et al. 2001). However, as the majority of psychiatric patients do not seek help for psychiatric problems (about 60%), but rather for somatic complaints (Munk-Jorgensen et al. 1997), family doctors are usually the first experts consulted in the help seeking process. Therefore, recognizing and proper care of patients by the first “component” of mental health services significantly influences the treatment outcome. In Croatia, which has been a traditional and patriarchal society until recently and which now is slowly developing into a modern one, this might be especially true. Because of this, the role of general practitioner in first contacts with psychiatric patients is extremely important, as mental illness is often associated with significant stigma, especially in traditional societies (Filipčić et al. 2003, Sartorius 2002).

In Croatia, an investigation about treatment of psychiatric patients in family doctor’s offices has never been performed. Our aims were to investigate the willingness of GPs to treat psychiatric patients and to prescribe antidepressants and sedatives to them without the recommendations of a psychiatrist. Also, we inquired about potential factors that could better explain the GPs’ non/willingness to treat psychiatric patients.

## SUBJECTS AND METHODS

### Questionnaire

The questionnaire was specifically designed for the purpose of the study after consulting the recent literature. After it was completed, we submitted it to a consultant statistician for analysis. Although the basic structure was the same, the

statistics’ expert helped us to form questions suitable for data analyses. To ensure validity 5 independent medical students were asked to choose 20 positive and 20 negative statements from an initial 100. In the final version 8 statements were chosen on the basis of their discriminative capacity. In the final version, the questionnaire consisted of three sections. The first section included general information about each participant, the second section evaluated attitudes of each participant (using ranging statements: strongly disagree, partially disagree, don’t disagree/don’t agree, partially agree, strongly agree, don’t know), and the third section contained information on treatment approaches to patients with depression and anxiety disorders.

### Sampling

In this study 111 family doctors according to the list of the Croatian Institute of Public Health were included. The family doctors were recruited from 38 localizations from all four major regions in Croatia (Zagreb (n=66), Rijeka (n=16), Osijek (n=13) and Split (n=16). Participants were randomly selected and stratified according to the localization of their service and the number of patients they treat (1300, 1301 - 1700 and 1701 and more patients per capita). All participants were asked to fill a questionnaire by an independent interviewer, a medical student. All interviews were performed in the period of January and February 2006, in person, in the family doctors offices. The response rate was 78%.

This investigation complies with the principles of the Declaration of Helsinki.

### Data analysis

The relationship between general data and treatment choices was analyzed using correlation tests (Pearson or Spearman, two tailed, as appropriate). For the analysis of attitudes, principal component analysis was performed using all 8 statements. After the components were identified, we tested their correlation with the type of treatment approach and general data of the participants. Binary logistic regression was used to predict the type of patients who would be referred to a psychiatrist by the GPs.

P values of less than 0.05 were considered statistically significant. All statistical analyses were carried out using SPSS 11.5 (SSPS inc., Chicago, IL, USA) statistical software package.

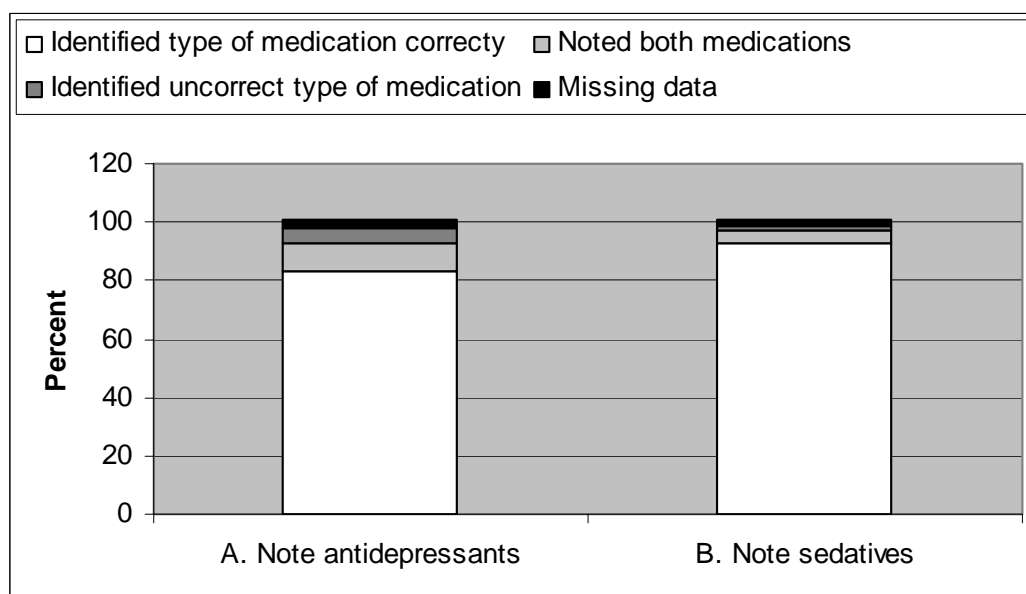
## RESULTS

### Prescription of antidepressants and sedatives by GPs

In this sample, GPs had a mean (+/-SD) of 1778+/-38 insured patients per capita. The estimated median of patients who were continuously treated with antidepressants was 40, Interquartal range (IQR)=75. In about 37% of these patients (estimated median of 15, IRQ=20), antidepressants were prescribed by the GP, without the recommendation of a psychiatrist. Interestingly, only 26 participants (25%) have never changed an antidepressant prescribed by a psychiatrist, whereas the others have, mostly (47%) in the last month. The median of patients who were treated with sedatives is 100, IRQ=188. In about 60% of these patients (estimated median 60, IRQ=130), sedatives were prescribed by GPs.

The most commonly prescribed antidepressants were paroxetine (n=66), sertraline (n=38) and fluvoxamine (n=25), whereas the most commonly prescribed sedatives were alprazolam (n=100), oxazepam (n=74) and diazepam (n=62). The prescription of antidepressants correlated strongly with the prescription of sedatives (Spearman=0.578,  $p<0.001$ ). Those who prescribed antidepressants or sedatives themselves rarely changed the prescription from a psychiatrist (Spearman=0.391,  $p<0.001$  and Spearman=0.220,  $p=0.026$ , respectively).

Only 3 participants have never prescribed an antidepressant, and 2 have never prescribed a sedative without the recommendation of a psychiatrist. Of those who have, the majority correctly identified the pharmacologic group (antidepressant or sedative) of the most prescribed medications (Figure 1).



**Figure 1.** GPs responses to questions: A. "Which antidepressants do you usually proscribe?" and B. "Which sedatives do you usually proscribe?"

Principal component analysis identified 3 components out of all statements on attitudes, which were referred to as Interest/competency; Knowledge and Questioning. The statements producing each component are shown in Table 1.

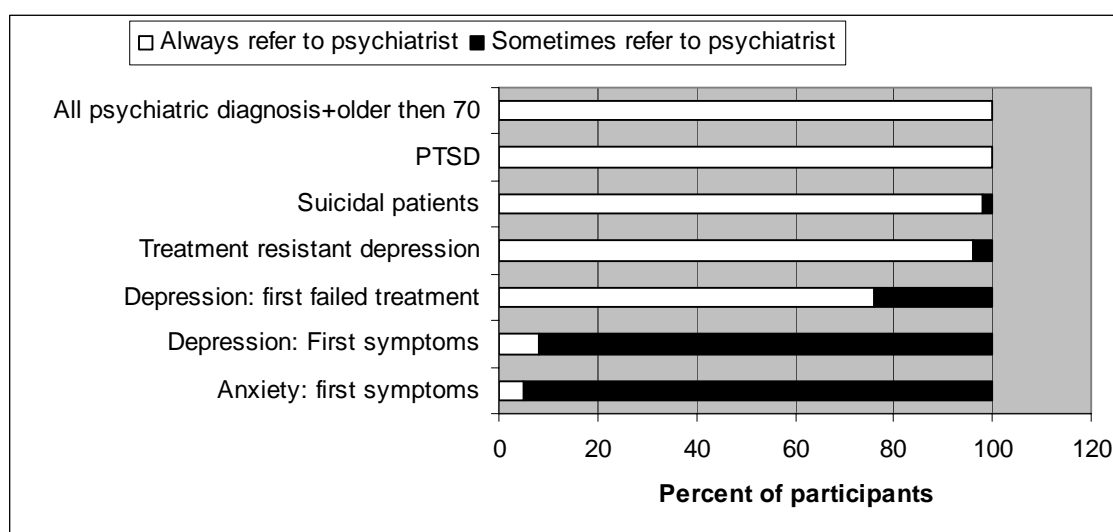
We further analyzed correlations of the three components with other data. Spearman correlations revealed the following: Feeling of "Knowledge" was significantly positively correlated with the number of patients to whom the GPs prescribed an antidepressant without a psychiatrist's recommendation (Spearman=0.303,  $p=0.002$ ). Interestingly,

when participants were asked to range the time frame when they have last changed the psychiatrists' prescription and prescribed another type of medication (from 1-5: in the last month, last three months, last six months, more than last six months and never, respectively), a significant negative correlation with the feeling of «Knowledge» (Spearman=-0.245,  $p=0.016$ ) and a statistically significant positive correlation with the component «Questioning» was observed (Spearman=-0.254,  $p=0.012$ ).

**Table 1.** Attitudes of participants - forming three components

Statement	Component		
	1 Interest/Competency	2 Knowledge	3 Questioning
Have interest in treating patients with depression or anxiety	0.796	-0.012	0.129
Feel that the majority of his/her patients with depression would recover without the medications and only with supportive psychotherapy or with changed life circumstances	0.001	0.025	0.965
Have excellent knowledge on antidepressants	0.147	0.793	-0.138
Does not like to treat a patient with depression or anxiety by himself	-0.649	-0.355	0.008
Have enough knowledge treat patients with depression or anxiety	0.371	0.676	-0.009
Feel competent to treat patients with depression or anxiety	0.575	0.442	0.129
Does not treat patients with depression or anxiety without recommendation of a psychiatrist	-0.734	-0.111	0.244
Confident that can help patients with depression or anxiety without the help of a psychiatrist	0.014	-0.750	0.139

Rotated Component Matrix(a): Varimax with Kaiser Normalization.



**Figure 2.** Determinants of GPs referral to psychiatrist

### Predictors of GPs' referral to a psychiatrist

The majority of participants reported that they would treat patients with first onset of depressive or anxiety disorder, but virtually none of them would treat patients with PTSD or elderly patients with any psychiatric diagnosis, but would refer them to a psychiatrist (Figure 2). GPs with high scores on "Interest/Competency" were more likely to refer patients who had treatment resistant depression to a psychiatrist (OR=0.456, CI=0.275-0.757, p=0.002). Higher estimated number of prescribed antidepressants (OR=0.831, CI=0.719-

0.960, p=0.012) and sedatives (OR=1.01, CI=1.001-1.018, p=0.023) without a psychiatrist's recommendation, and higher scores on "Knowledge" (OR=0.140, CI=0.035-0.563, p<0.001) and "Questioning" (OR=3.338, CI=1.030-10.815, p=0.044) predicted that a patient with somatic illness and depression would be referred to a psychiatrist. Interestingly, the pressure associated with the health insurance policies predicted GPs' to referral to psychiatrists only in the case of patients with PTSD (OR=0.711, CI=0.504-1.002, p=0.051, borderline statistical significance).

### The influence of education on GPs' approach to their treatment of psychiatric patients

Participants attended a mean (+/- SD) of 2.8 +/-2.4 courses/lectures on depressive or anxiety disorders as a part of continuous medical education (CME) during the last year. Components "Interest/Competency" and "Knowledge" correlated with the number of courses on CME (Spearman = 0.329,  $p=0.001$  and Spearman = 0.213,  $p=0.033$ , respectively).

More attended CME courses predicted that patients with somatic illness and depression (OR=2.140, CI=1.415-32.239,  $p<0.001$ ), patients with long term depression (OR=1.371, CI=1.012-1.858,  $p=0.041$ ) and with PTSD (OR=0.783, CI=0.623-0.984,  $p=0.036$ ) would be referred to a psychiatrist.

### DISCUSSION

The estimated percent of patients receiving antidepressants and long term sedative/hypnotic medication is about 3% and 10%, respectively, which is comparable to other European countries (Bellantuono et al. 2002, Hausken et al. 2004, Percudani et al. 2004). However, it should be noted here that these data are estimates by GPs, and not data obtained by counting from medical records. Considering the higher prevalence of mood and anxiety disorders (including PTSD) in Croatia compared to common data (Loncar et al. 2004, Loncar et al. 2006, Rojnic Kuzman & Hotujac 2007, Sadock & Sadock 2003, Prorokovic et al. 2005), the question arises whether the coverage of antidepressants is adequate or is too low. It is possible that these data reflect the lack of information about the recommended treatment for anxiety disorder – therefore sedatives instead of antidepressants are used for PTSD or anxiety/depression related dysphoria or insomnia in the long term, without a rational reason for prescribing. By their own estimation, GPs prescribed benzodiazepines without a recommendation of a psychiatrist in about 60% of all patients using them. However, a substantial number of GPs could not identify correctly whether a drug is an antidepressant (about 15% of those participants who have prescribed any psychiatric medication at least once) or sedative (about 6% of participants who have prescribed any psychiatric medication at least once).

By their own estimation, GPs prescribed antidepressants without a psychiatrist's recommendation in about 37% of patients using them. According to these data, we found a higher percent compared to the results reported by Gater et al. (2005) who found that antidepressants were seldom prescribed to those with mood disorders (5%) and neurotic disorders (8%). It should be noted however, that these differences could result from the different methodology applied – in the study by Gater et al. (2005) the study participants were psychiatric patients whereas in this study they were GPs. A more optimistic view would be that our results reflect the tendency of general practitioners to become an active provider of mental health services, rather than retain a role of "gate keepers".

The portion of patients to whom GPs prescribed an antidepressant without a psychiatrist's recommendation correlated with their subjective feeling of knowledge and competency about treatment of depression and anxiety. Additionally, subjective feeling of interest in psychiatric casualties, knowledge and competency about treatment of depression and anxiety, as well as more autonomous prescription on antidepressants and sedatives were predictors of a more "rational" treatment approach - and led the GP to refer patients with more complicated depressions - like treatment resistant patients or those with somatic co-morbidity to specialists.

Since more attendance of CME courses led to a subjective feeling of knowledge and competency of GPs, and afterwards to their proneness to prescribe antidepressants without psychiatrists' recommendations, as well as to their better decision making in the overall treatment process, it would be wise to continue this collaboration. However, there was no difference in the number of attendance to available CME courses and in the percent of those who wrongfully identify the drugs' group (antidepressants or sedatives). It appears that attending to CME courses which are currently available in Croatia in the field of psychiatry confers the subjective feeling of competence and knowledge and may have a real impact on the GPs decision to prescribe psychiatric drugs. However, an effort should be made to evaluate and perhaps improve the quality of the CME courses, currently available in Croatia.

In our study, determinants of GP's referral to a psychiatrist were suicidality, age (elderly patients with any psychiatric diagnosis) and the diagnosis

of PTSD. Those patients were almost always referred to a psychiatrist. While suicidal patients are considered a psychiatric urgency, the high rate of elderly patients' referral to psychiatry services could indicate that the current organization of elderly care in Croatia is inconsistent and inefficient. At the moment, it appears that an increasing burden of care of an aging population with mental disorders has fallen on the secondary care system which is poorly specialized in the specific problems of elderly. More research, including cost analyses are needed to explore whether other mental health services including primary care or adequately educated elderly care specialists would provide an overall better care.

A extremely high rate (100%) of referral of patients with PTSD to secondary psychiatric services could be due to the difficulty of treatment, especially considering the high rate of co morbidity and suicidal ideation (Kozaric-Kovacic & Borovecki 2005, Zoricic et al. 2003), but also reflect other paramedical and social issues, such as compensation pension claims (Kozaric-Kovacic et al. 2004). That might explain why the pressure associated with the health insurance policies predicted the GP referral to psychiatrists with all patients with PTSD.

This study had several limitations. By using a questionnaire, we reduced the objectivity of a number of data derived from it, as some answers rely mostly on the subjective perceptions and estimations of GPs. Although we included GPs stratified by their number of patients per capita and from 38 different locations and from all four major region in Croatia, this sample might not represent all GPs in Croatia, especially those working in rural areas.

## CONCLUSION

Overall, the role of GPs in mental health services in Croatia is slowly changing into a more active one, as a growing proportion of patients with depression and anxiety are being treated by GPs, without a recommendation of a psychiatrist. Personal interest and self confidence in proper knowledge and skills, in part acquired from current CME programs are determinants of higher autonomy of GPs in treating psychiatric patients. However, GPs are unwilling to treat certain psychiatric patients, which in part depends upon the clinical presentation of the illness (severity and

urgency) and also on categories which might be perceived as reserved for psychiatrists (PTSD) or other specialists (elderly patients with any psychiatric diagnosis).

Psychiatrists, as active promoters of community mental health, should be more active in encouraging their alliance with family doctors, especially by offering better communication and higher quality CME courses.

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