

## DEPRESSION PREVALENCE AND ESTIMATION OF PSYCHOSOCIAL PARAMETERS WITHIN ADULT POPULATION IN CITY OF ZAGREB

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### SUMMARY

**Background:** There is no data on depression prevalence in Croatia. The aim of this study was to establish the prevalence and psychosocial risk factors of depression in the adult population of the Croatian capital Zagreb, particularly in patients suffering from Depressive episode (F32) and Recurrent depressive disorder (F33).

**Subjects and methods:** A cross-sectional study was performed on a representative sample for city of Zagreb drawn from 10 family physicians' offices with 17290 patients. From standardized medical files, the family physicians sorted out data of patients with depression, both Depressive episodes (F32) and Recurrent depressive disorder (F33), classified according to ICD 10. Psychosocial parameters were assessed according to the core questions for the management of psychosocial risk factors recommended by the European Guidelines on Cardiovascular Disease Prevention in Clinical Practice.

**Results:** The prevalence of depression was 2.2%. Recognized socioeconomic parameters were: female sex (74.7%), middle age 45-65 years (40.7%), married (55.3%), high school education (59.2%), retired (54.5%), and average economical status (73.6%). As regards social isolation: depressive patients were not living alone (71.5%), they had help in case of illness (80.9%), and had no problems with their partner (36.8%). Work stress parameters were estimated between 5 and 6. Life satisfaction was estimated mean  $\pm$  SD=4.57 $\pm$ 1.72. Logistic regression analysis showed a significant association between higher education and physicians' perception as "more depressed and more difficult" patients with Recurrent depressive disorder (F33). Family physicians were unfamiliar with the genealogical disease burden for 45% of depressive patients, whether they had closed confident for 21.93% and problems with partner for 30.80%.

**Conclusion:** Depression had a prevalence of 2.2%. It was poorly recognized, as were some psychosocial factors especially genealogical disease burden. This suggests the need for implementation of special intervention methods of developing the family physicians' skills in adopting the psychosocial approach to depressive patients with a focus on recognized psychosocial risk factors.

**Key words:** depression - psychosocial factors - family physicians

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### INTRODUCTION

Depressive disorders are common, chronic and expensive and thus have become a major public health problem. The World Health Organization has ranked depression in 4<sup>th</sup> place of causes of diseases worldwide, and researches shows that by 2020 Depression will, together with myocardial

infarction, be the main cause of disability (WHO Health Report 2006).

In the World Health Organization's cross cultural study about mental health in primary health care conducted in 14 cities worldwide, the average depression prevalence is 10.4%, with a range from 2.6% in Nagasaki (Japan) to 29.5% in Santiago (Chile) (Goldberg & Lecrubier 1995).

Western European countries record the one-year prevalence of depression as about 5% with double range and high co morbidity with other psychiatric and somatic diseases (Paykel et al. 2005). There is no data about depression prevalence in Croatia. According to routine statistical reports from primary care presented by the Croatian National Institute of Public Health, mental diseases are at the 10<sup>th</sup> place of morbidity in primary health care with a percentage of 3.8%. Within mental diseases depressions are not presented as separate, but included in the group “Other mental and behavioral disorders” which constitutes 19% (Silobrčić-Radić et al. 2004).

According to some authors 50% of depressive disorders are unrecognized in primary health care, and more that 70% do not have adequate treatment. Every year one in ten adults have depressive disorder and up to 20% of patients in primary health care have the criteria of Major depressive disorder (US Preventive Services Task Force 2002). The prevalence of depression depends on exposure to different risk factors, among which low socio-economical status and female sex are the most common. However women do not have mental diseases more often, but they are more prone to depression and anxiety, while men are more prone to addiction diseases and personality disorders. It is assumed that psychosocial factors such as stress, poverty, inequality, sexism, relationship problems, and low self-esteem increase women’s tendency towards depression (Stewart et al. 2004).

Socioeconomic parameters that are connected with the appearance of depression are low incomes and financial problems, unemployment, working stress, social isolation and bad living conditions. Factors like the genealogical burden and the type of personality do have some influence, but it is still unknown if they are independent factors or not (King et al. 2006).

In the literature, it is also recognized that there is a three fold higher risk of having depression, when the parents have it. But longitudinal investigations through three generations show that this risk is even higher when the depression already exists in the grandparents (Weissman et al. 2005). Therefore it is very important for genealogical burden estimation that the family genogram is available to give the physician a view

of the general problems that have influenced both the individual and the family through three generations or even more.

Longitudinal studies show that low social support can cause or worsen depression. This refers to both perceived emotional support and the size of social network. A limited number of studies support the hypothesis that depression itself predicts lower social support. Data as to whether a specific type of personality and genetic factors can directly cause depression are controversial (Lett et al. 2005). Low socio-economical status is itself a risk factor of depression and cardiovascular disease, both as one of the psychosocial risk factors and also as being well connected with risk behaviors. Low socio-economical status can be presented as level of education, occupation or income (Rozanski et al. 1999).

Also one of the risk factors for depression is marriage or having a partner. According to the studies, married people have a smaller risk of developing depression than single people, but this correlation is unclear. It is possible those happier people have a bigger chance of meeting and keeping a partner or that the support that they get in marriage or relationship has a protective effect against developing depression (Stewart et al. 2004).

At least a four fold higher rate of suicide is shown among depressed people than within the general population, with an eight fold higher rate of suicide among hospitalized depressed patients (Bostwick & Pankratz 2000). According to British national guidelines for the management of depression it is suggested that physicians, when assessing depressed patients should consider psychological, social, cultural and physical characteristics as well as the quality of the patients’ interpersonal relationships. At the same time their influence and implications on depression should be considered when physicians choose therapy or follow up depressed patients (NICE 2004).

Since there are no relevant data about the depression prevalence or psychosocial factors among the adult population in Zagreb, our aim was to establish it and find out the specific quality of the factors for the subtypes of depression- Depressive episode (F32) and Recurrent depressive disorder (F33).

## SUBJECTS AND METHODS

### Subjects

There is no exact data for prevalence of depression either for Croatia or for its capital of Zagreb. According to literature data, it was estimated that there was a probable depression prevalence of 5% (Paykel 2005), so a calculated representative sample for city of Zagreb was 17 000 inhabitants. Primary health care incorporated 95% of inhabitants (Croatian Health Service Yearbook 2006), consequently 10 family physicians' offices with an average of 1700 patients could be a representative sample. By method of random numbers, ten family physicians' offices were chosen with 17290 patients altogether. The sample included patients older than 21 years.

### Methods

From the medical records for a representative sample of 17 290 patients, depressed patients were picked out with a diagnosis of Depressive episode (F32) and a diagnosis of Recurrent depressive disorder (F33) according to ICD 10 (ICD 10 1994). The questionnaire made for this investigation consisted of data about: gender, age, marital status, educational level, occupational status, and genealogical disease burden extracted from the standard medical records. Economic status, social isolations, family and work stress and life satisfaction were estimated by GP.

Economic status was evaluated on a scale from 1 to 3 with regards to average: 1. below average; 2. average; 3. above average.

The core questions recommended by the European Guidelines on Cardiovascular Disease Prevention in Clinical Practice for the management of psychosocial risk factors (Goldberg & Lecrubier 1995) were used for the assessment:

Social isolation:

- do you live alone;
- have you a close confident (who understand you and with whom you can talk);
- have you any help in case of illness.

Family stress - do you have serious problems with your partner.

Questions about work stress: job control, job demand and adequate reward for effort on job were estimated on a scale from 1 to 10.

Life satisfaction was also estimated on a scale from 1 to 10.

### Statistical analysis

Results were presented in absolute and relative frequencies and data with normal distribution by mean and standard deviation. Differences in qualitative data were tested by the chi-square test, quantitative data were tested by the Student t-test. Correlation of investigated parameters with type of depression was estimated by logistic regression analysis.

The level of significance was set at  $P < 0.05$ .

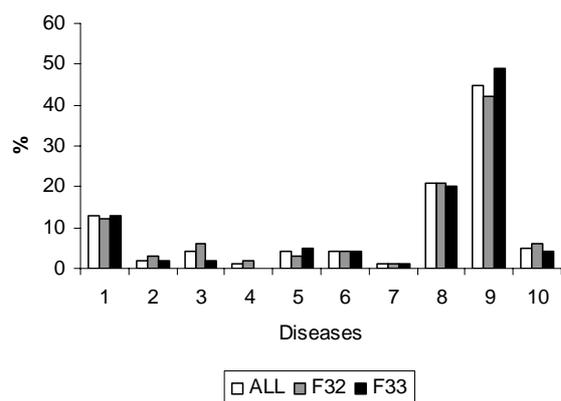
Statistical analysis was performed by the Statistical Package for the Social Sciences, version 9.0 (SPSS Inc., Chicago, IL, USA).

## RESULTS

In a representative sample for Croatian capital of Zagreb, among 17 290 patients from ten GPs offices, 383 (2.2%) depressive patients were identified. The number of patients with a diagnosis of Depressive episode (F32) was 231 (60%), and with a diagnosis of Recurrent depressive disorder (F33) was 152 (40%).

Physicians were unfamiliar with the genealogical disease burden in 45% of depressed patients. The knowledge of patients with a diagnosis of Depressive episode (F32) (58%) was slightly better than for patients with a diagnosis of Recurrent depressive disorder (F33) (51%). The most frequent group of genealogical disease burden was cardiovascular diseases (13%). Mental disorders as a genealogical disease burden was present in 4% among all depressed patients, and slightly more frequent (5%) among patients with a diagnosis of Recurrent depressive disorder (F33) (5%) than among patients with a diagnosis of Depressive disorder (F32) (3%). When depression was separately presented from other mental disorders, there was an equal participation for the whole sample of depressive patients and particularly for patients with a diagnosis of Depressive episode (F32) and with a diagnosis of Recurrent depressive disorder (F33) in the genealogical disease burden with 4%, and suicide with 1% (Figure 1.).

Distribution of genealogical disease burden among all depressed patients and particularly among patients with a diagnosis Depressive episode (F32) and with a diagnosis of Recurrent depressive disorder (F33). Open bars represent all depressed patients, gray bars represent patients with a diagnosis of Depressive episode (F32), closed bars represent patients with a diagnosis of Recurrent depressive disorder (F33).



LEGEND: 1. Cardiovascular diseases; 2. Cerebrovascular insult; 3. Malignant neoplasm's; 4. Diabetes mellitus; 5. Mental disorders; 6. Depression; 7. Suicide; 8. Other diseases; 9. Not known; 10. None

**Figure 1.** Distribution of genealogical disease burden among all depressive patients (n=383) and particularly among patients with the diagnosis Depressive episode (F32) (n=231) and with the diagnosis Recurrent depressive disorder (F33) (n=152)

The most numerous group of depressed patients were middle aged from 45 to 65 years among the whole sample of depressed patients (40.7%) and also particularly among patients with a diagnosis of Depressive episode (F32) (42.0%) and a diagnosis of Recurrent depressive episode (F33) (38.8%). Following these numerically were the elderly group of depressed patients. There constituted 35% out of the whole sample of depressive patients. There was an almost equal proportion of elderly (38.2%) as the middle aged group (38.8%) among the patients with a diagnosis of Recurrent depressive episode (F33). The less numerous group of depressive patients were the youngest group under 45 years (24.3%).

The odds ratio of women to men for all groups was 3:1.

According to marital status the most numerous group of depressed patients was among married (55.3%), followed by the widowed (19.1%), followed by the single (14.9%), and least numerous were the divorced with the same order for all groups.

On analysis by educational attainment, more than half (59.2%) of the depressed patients had secondary schooling, half as many had only primary education (23.8%) and the lowest number were graduates (17.0%).

According occupational status about half (54.5%) of depressed patients were retired, these were followed by the employed (35.3%), and next the unemployed, students and housewives with the same order for all groups.

Three quarters of depressed patients (73.6%) had an average economic status. about one fifth (19.1%) above average and the less was below average (7.3%) with same order for all groups. About 85% of depressed patients in all groups were physical independent (Table 1.).

About 70% of all depressed patients and also particularly depressed patients either with a diagnosis of Depressive episode (F32) or with a diagnosis of Recurrent depressive disorder (F33) according to physicians' estimation were not living alone. For about 6% of depressed patients physicians were unaware whether they lived alone.

According to physicians' estimation more than half of depressed patients had a close confident (66.4%). For about one fifth (19.9%) of depressed patients physicians were unaware whether they had a close confident.

For about 80% of depressed patients, physicians estimated that they had a person who could help them in case of illness.

One fifth of depressed patients (19.9%) did not have partners. In only 13% the physicians estimated that they have serious problems with their partners and for about one third (31%) physicians were unaware whether they had problems with their partners. There was the same order for all groups of depressed patients (Table 2.).

One third of depressed patients (32.64%) came to the family physicians' office smiling. Significantly more smiling patients were in the group of depressive patients with a diagnosis of Depressive episode (F32) (40.3%) than with a diagnosis of Recurrent depressive episode (F33) (21.1%) (P<0.001).

Only 18.0% of depressed patients were estimated by family physicians as 'difficult patients'. Significantly more 'difficult patients' were in the group of depressed patients with a diagnosis of Recurrent depressive episode (F33) (23.7%) than with a diagnosis of Depressive episode (F32) (14.3%)(P=0.019).

**Table 1.** Sociodemographic characteristics of depressed patients (n=383) and comparison between patients with a diagnosis of Depressive episode (F32) (n=231) and with a diagnosis of Recurrent depressive disorder (F33) (n=152)

Characteristic	All		F32		F33		P*
	n	%	n	%	n	%	
Age							
<45yrs.	93	24.3	58	25.1	35	23.0	0.573
45-65yrs.	156	40.7	97	42.0	59	38.8	
>65yrs.	134	35.0	76	32.9	58	38.2	
Gender							
men	97	25.3	62	26.8	35	23.1	0.472
women	286	74.7	169	73.2	117	76.9	
Marital status							
single	57	14.9	35	15.2	22	14.5	0.997
married	212	55.3	127	55.0	85	55.9	
divorced	41	10.7	25	10.8	16	10.5	
widowed	73	19.1	44	19.0	29	19.1	
Educational level							
primary	91	23.8	59	25.5	32	21.1	0.588
secondary	227	59.2	133	57.6	94	61.8	
university	65	17.0	39	16.9	26	17.1	
Occupational status							
employed	135	35.3	80	34.6	55	36.2	0.869
unemployed	29	7.6	15	6.5	14	9.2	
retired	209	54.5	127	55.0	82	53.9	
student	8	2.1	8	3.5			
housewife	2	0.5	1	0.4	1	0.7	
Economic status							
below average	28	7.3	17	7.4	11	7.2	0.869
average	282	73.6	168	72.7	114	75.0	
above average	73	19.1	46	19.9	27	17.8	
Physical status							
independent	328	85.7	200	86.6	128	84.2	0.731
partially independent	45	11.7	26	11.3	19	12.5	
dependent	10	2.6	5	2.1	5	3.3	

\* Chi-square test

About 7% of depressed patients either with a diagnosis of Depressive episode (F32) or with a diagnosis of Recurrent depressive disorder (F33) attempted suicide, and for 11% family physicians were unaware whether they attempted suicide (Table 3.).

Job demand was estimated by family physicians as almost significant (P=0.064), but job control (P=0.023), appropriate reward for job (P=0.003) and life satisfaction (P=0.025) was estimated significantly higher for patients with a diagnosis of Depressive episode (F32) than for patients with Recurrent depressive disorder (F33) (Table 4).

Logistic regression analysis found an association between higher education, family

physicians estimation of 'difficult patients' and depressed appearance in depressed patients with a diagnosis of Recurrent depressive episode (F33) among parameters of socioeconomic factors, social isolation, life satisfaction, appearance, suicide attempt and 'difficult patients' (Table 5.).

The best estimated parameter of social isolation by family physicians was whether patients lived alone (not known for 6.27% of depressed patients), compared to whether they had person to help in case of illness (not known for 13.32% of depressed patients), and the worst estimated parameter was whether they had a close confident (not known for 21.93% of depressed patients).

**Table 2.** Parameters of social isolation and family stress among depressed patients (n=383) and comparison between patients with a diagnosis of Depressive episode (F32) (n=231) and with a diagnosis of Recurrent depressive disorder (F33) (n=152)

Characteristic	All		F32		F33		P*
	n	%	n	%	n	%	
Live alone							
yes	85	22.2	45	19.5	40	26.3	0.262
no	274	71.5	170	73.6	104	68.4	
not known	24	6.3	16	6.9	8	5.3	
Have close confident							
yes	254	66.4	158	68.4	96	63.2	0.242
no	45	11.6	22	9.5	23	15.1	
not known	84	22.0	51	22.1	33	21.7	
Help in case of illness							
yes	310	80.9	186	80.5	124	81.6	0.927
no	22	5.8	13	5.6	9	5.9	
not known	51	13.3	32	13.9	19	12.5	
Serious problems with partner							
without partner	76	19.9	47	20.3	29	19.9	0.865
yes	48	12.5	30	13.0	18	12.5	
no	141	36.8	81	35.1	60	36.8	
not known	118	30.8	73	31.6	45	30.8	

\* Chi-square test

**Table 3.** Appearance, 'difficult patients', and suicide attempts among depressed patients (n=383) and comparison between patients with a diagnosis of Depressive episode (F32) (n=231) and with a diagnosis of Recurrent depressive disorder (F33) (n=152)

Characteristic	All		F32		F33		P*
	n	%	n	%	n	%	
Appearance							
smiling	125	32.6	93	40.3	32	21.1	<0.001
depressed	258	67.4	138	59.7	120	78.9	
'Difficult patient'							
yes	69	18.0	33	14.3	36	23.7	0.019
no	314	82.0	198	85.7	116	76.3	
Suicide attempt							
yes	26	6.8	16	6.9	10	6.6	87<
no	315	82.3	194	84.0	121	79.6	
not known	42	10.9	21	9.1	21	13.8	

Chi-square test

**Table 4.** Job stress parameters and life satisfaction among depressed patients and comparison between patients with a diagnosis of Depressive episode (F32) and with a diagnosis of Recurrent depressive disorder (F33)

Job stress	Depression	N	$\bar{x}$	sd	P*
Job demand	F32	78	6.28	2.20	0.064
	F33	50	5.52	2.08	
	all	128	5.97	2.18	
Job control	F32	76	5.92	2.52	0.023
	F33	49	4.91	1.95	
	all	125	5.50	2.35	
Appropriate reward	F32	77	5.82	2.30	0.003
	F33	48	4.60	1.90	
	all	125	5.32	2.22	
Life satisfaction	F32	216	4.79	1.78	0.025
	F33	140	4.36	1.67	
	all	356	4.57	1.72	

\*Studentov test

**Table 5.** Association of socioeconomic factors, social isolation, life satisfaction, appearance, suicide attempt and ‘difficult patients’ (logistic regression analysis) with diagnosis Depressive episode (F32)

	B	P	OR	95% C.I.
Age	0.01	0.654	1.0	(0.99 - 1.02)
Gender	0.19	0.535	1.21	(0.66 - 2.20)
Marital status	-0.13	0.359	0.88	(0.66 - 1.16)
Educational level	0.56	0.021	1.74	(1.09 - 2.78)
Economic status	0.03	0.918	1.03	(0.61 - 1.73)
Physical independence	0.08	0.865	1.08	(0.44 - 2.63)
Live alone	-0.42	0.252	0.66	(0.32 - 1.35)
Have close confident	0.34	0.487	1.40	(0.54 - 3.66)
Help in case of illness	-0.05	0.936	0.95	(0.28 - 3.27)
Life satisfaction	0.04	0.670	1.04	(0.87 - 1.24)
Appearance	1.06	0.002	2.89	(1.49 - 5.56)
‘Difficult patient’	-0.67	0.057	0.51	(0.26 - 1.02)
Suicide attempt	0.28	0.602	1.32	(0.47 - 3.73)

B=-0.53; SE = 0.12; P<0.001

The worst estimated parameter –not known by family physicians in about one third of depressed patients (30.80%) was whether they had serious problems with their partners.

Family physicians were unfamiliar with suicide attempts in 10.96% of depressed patients.

Family physicians were unfamiliar with job stress parameters in about 14% of depressed patients.

Life satisfaction was not estimated only for 7% of depressed patients (Table 6.).

**Table 6.** Family physicians' not known parameters of depressed patients (n=383) and comparison between patients with a diagnosis of Depressive episode (F32) (n=231) and with a diagnosis of Recurrent depressive disorder (F33) (n=152)

Characteristic	All		F32		F33		P*
	n	%	n	%	n	%	
Social isolation							
Live alone	24	6.27	16	6.94	24	6.27	0.658
Have close confident	84	21.93	51	22.08	33	21.71	0.967
Help in case of illness	51	13.32	32	13.85	19	12.50	0.820
Serious problems with partner	118	30.80	73	31.60	45	20.60	0.763
Suicide attempt	42	10.96	21	9.09	21	13.81	0.200
Job stress							
job demand	19	12.93	12	13.33	7	12.08	0.984
job control	22	14.97	14	15.56	8	14.04	0.917
appropriate reward	21	14.29	13	14.44	8	14.04	0.939
Life satisfaction	27	7.08	15	6.49	12	7.89	0.748

\* $\chi^2$  -test

## DISCUSSION

Depression prevalence for Croatian capital of Zagreb was 2.2% i.e. one fourth of the worldwide depression prevalence in primary health care according World Health Organization's multicultural study (10.4%) (Goldberg & Lecrubier 1995) and half of the average West European's depression prevalence (5%) (Paykel et al. 2005). About 40% of depressed patients with a diagnosis

Recurrent depressive episode (F33) in our study is in accordance with literature data predicting that 40-70% of depressed patients will have a diagnosis of Recurrent depressive episode (F33).

In our study, family physicians were unfamiliar with the genealogical disease burden for 45% of depressed patients. This could partly be the reason why mental diseases, together with separately presented depression and suicide was included in the genealogical depression burden as

only 9% in our study, while in the literature, a positive family history is present in 39% of depressed patients (Kendler et al. 2001). Psychological disturbances have their roots in previous generations and keep their high position in the scale of pathological conditions (Blažeković-Milaković 1997). Insufficiently used genograms in primary health care militated against the notification of subtle discrepancies in psychophysical status of patients and prevented follow up through generations.

Our depressed patients were mainly middle aged from 45 to 65 years. Age is in accordance with previous European data with the highest depression prevalence among the older middle aged (from 50 to 64 years) (Lavikainen 2000), but recently research has found the highest depression prevalence among the elderly (Taqui et al. 2007). In the literature, it is recognized that depression predictors are nuclear family, female, divorced i.e. single, unemployed and with lower educational level (Taqui et al. 2007). This is in discordance, except for female gender, with our findings depressed patients who are mostly married, retired, with secondary schooling, and with no parameters of social isolation. In our study, only 13% of depressed patients had serious problems with their partner, but for one third, the family physicians could not estimate.

Research of socioeconomic and marital status as risk factors for recurrent depression found that gender, low socioeconomic status, and unmarried marital status increase the prevalence of depression, but not for recurrent depression, as shown also in our study. The only difference in sociodemographic parameters between the depression subgroups in our study was that depressed patients with a diagnosis of Recurrent depressive disorder (F33) were older and with a higher educational level than depressed patients with a diagnosis of Depressive episode (F32).

Depressed mood, sadness, and tearfulness are part of the clinical picture of depression (The WHO health report 2006) so it was surprisingly that one third of our depressed patients came into the family physician's office smiling, and only one fifth were perceived by physicians as "difficult patients". These characteristics as well as their biomedical education, and short time of consultation could mislead family physicians into making a wrong diagnosis and prescribing

inappropriate therapy. Depressed patients with a diagnosis of Recurrent depressive disorder (F33) had a significantly more depressed appearance and were more perceived by physicians as "difficult patients" than patients with a diagnosis of Depressive episode (F32).

Depression is recognized as one of the most frequent mental disorders associated with suicide (The WHO health report 2006), and for 3 to 4% of depressed patients suicide is an outcome of depression. Suicide attempts were present in 7% of our depressed patients.

Family physicians estimated job demand among depressed patients about 6, job control about 5.5 and job reward about 5.3 in scale from 1 to 10. Significantly lower job stress parameters were estimated for depressed patients with a diagnosis of Recurrent depressive disorder (F33) than with a diagnosis of Depressive episode (F32). Data from the literature discussing whether job control or job demand has a more negative influence on employees' psychological health is controversial (Lindström 2005, Bosma et al. 1997).

The life satisfaction in depressed patients was estimated in the middle on a 1-10 Likert scale, but the patients with a diagnosis of Recurrent depressive disorder had a much lower score as shown in the literature with a linear connection between life satisfaction and depressive symptoms (Koivumaa-Honkanen et al. 2004). Furthermore, the logistic regression analysis has found a connection between higher education and Recurrent depressive disorder (F33), as well as a connection of this diagnosis with the perception of a patient as "more depressive and more difficult", than the patients with Depressive episode (F32). In the literature, comparison of depression subgroups connects deeper symptoms, higher heritage tendency, and older age with Recurrent depressive disorder (F 33) (Hollon et al. 2006).

The best estimated parameter of social isolation by family physicians was whether the patient lived alone, the worse estimated parameter was whether they had a person to help them in case of illness, and for one fifth of depressed patients physicians could not estimate whether patients had a close confidant. These data confirm the well known fact that diagnosing the psychological disorders with the biomedical approach adopted through traditional under-graduate education is insufficient, and that a psychosocial approach is

necessary for recognizing and diagnosing these disorders.

The same problem has appeared in the estimation of family stress, in spite of the family physician's definition as a person who is considered to know their patients personal, family and occupational circumstances. For only 13% of their patients, did physicians estimate problems with their partners and for one third they were unaware of information from which such a fact could be determined.

In the literature it is well known that physicians need to have a better knowledge of socio-economical parameters such as working ability, family structure and income source for the patients' but in practice, they barely know them. For evaluation of some parameter like economical status and patients' perception of working ability it is important to know the patient better, but poor knowledge of educational status occurs because such knowledge is considered irrelevant (Gulbrandsen et al. 1998). When the issues are psychosocial problems, such as problems with a partner for example, one third of patients do not discuss them with their physicians, either because they consider them inappropriate or these problems are not considered worth talking about (Bushnell et al. 2005).

The physicians have not identified suicide attempts in 10% of patients, and business stress parameters in 13%. The best estimated parameter was life satisfaction in 93%; partly because we insisted on its estimation.

It is obvious that there is need for family physicians to understand better the parameters that increase vulnerability and tendency towards depression, and actively search for depression, while avoiding common clinical errors, either by giving a false diagnosis or by missing the diagnosis of real depressions (Remick 2002).

From clinical experience we know that some problems are readily communicated by the patients, while others stay hidden. That implies a need for educational interventions of family physicians in order to train them in the patient-doctor relationship in order to improve this relationship and therefore to enable disclosure not only of consciously hidden problems but also, from a psychological perspective, especially the part which is still being denied and which is unconscious (Šupe et al. 2005).

Recent research reveals that family physicians who have a wider perception of their role in resolving mental health problems have neither an objectively nor a subjectively increased workload (Zantinge et al. 2006), which has begun to challenge the paradigm about family physicians' not being able to resolve mental health problems in their everyday work, because it is time consuming.

A serious limitation of this study was the impossibility of distinguishing the depression grade according ICD 10 into mild, moderate and severe depression among either the patients with Depressive episodes or Recurrent depressive disorder, because of imprecise coding either by family physicians or by psychiatrists in the medical records. The other limitation was that it was not taken into consideration how long the patients have been in the care of the family physicians, which can be expected to have great influence on the physicians' knowledge of psychosocial parameters.

## CONCLUSIONS

This study demonstrated poorly recognized depression with a prevalence of 2.2% within adult population of city of Zagreb.

Knowledge of genealogical disease burden of only 55% of depressive patients was insufficient and shows the need for a wider implementation of the genogram to enlighten genealogical biopsychosocial circumstances.

Recognized socioeconomical risk factors for depression were: middle age (45-65 years), and within patients with diagnosis Recurrent depressive disorder (F33) equal middle and older age, female, mostly married, retired and with average economic status.

There is a need for further research especially a quality study of the parameters recognized among depressive patients in our study which were in discordance with the literature data: no social isolation, mostly average economical status and secondary schooling education.

Particular attention has to be focused on patients without a depressive appearance and not perceived as difficult patients by physicians in order not to miss a diagnosis of depression.

The best estimated parameter of social isolation by family physicians was whether the patient lived alone, the worst estimated parameter was whether they had a person to help them in case

of illness, and for one fifth of depressed patients physicians could not estimate whether patients had a close confidant. Physicians had no knowledge of whether 10% of patients had attempted suicide or of the working stress parameters for 13% of patients.

Poorly recognized family relationships demonstrated the fact well known in the literature that for good quality work in primary care medicine continuity in health care and well as knowing the patient is not enough. Through developing a good physician - patient relationship, the consultation will attain all good quality parameters.

These findings imply implementation of special intervention methods of developing the family physicians' skills in the psychosocial approach to the depressed patient with a focus on recognized psychosocial risk factors.

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