Assessing Psychosocial Factors in Depressed Patients – Accordance of Patient’s and Physician’s Assessment

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ABSTRACT

Aim of this study was to investigate the differences in the assessment of psychosocial factors by depressed and non depressed patients, and their congruence with physicians’ assessment for both groups. The cross-sectional study was conducted in three family physicians’ practices in Zagreb, Croatia, during 2007. Sample of depressed patients included 76 patients out of 85, and randomized comparison group of 189 out of 235. Questionnaire recommended by the European Guidelines on Cardiovascular Disease Prevention in Clinical Practice was used for the assessment of psychosocial factors. Depressed patients significantly more frequently reported about social isolation ($p_{alone}=0.013$; $p_{close\, confident}=0.005$; $p_{help}=0.001$), family stress ($p<0.001$), work stress ($p_{appropriate\, reward}=0.029$) and lower life satisfaction ($p<0.001$) than non depressed. Their worse psychosocial functioning was noticed by family physicians who assessed social isolation ($p_{alone}=0.013$; $p_{close\, confident}=0.032$), family stress ($p<0.001$) and life satisfaction ($p<0.001$) significantly lower for depressed patients than for the random sample. Incongruence between family physicians and depressed patients’ assessment was valued by physicians to be of higher economic status ($p<0.001$), and more intense family stress ($p<0.001$). Assessment of psychosocial factors varied within the group of depressed patients and the random sample assessed either by themselves or by physicians. Congruence between family physicians and non depressed patients in the assessment of observed psychosocial factors was better than between physicians and depressed patients.

Key words: depression, psychosocial factors, general practitioner

Introduction

According to the World Health Organization’s Report, if the current trend of demographic and epidemiological transition continues, the burden of depression will increase to 5.7% of the total burden of disease by the year 2020, what will label depression as a second leading cause of disability adjusted life years (DALYs) lost after cardiovascular disease.

Depression occurs in up to a quarter of general practice attendees. Its’ prevalence is determined by exposure to risk factors that precipitate or maintain episodes of the disorder. Depression itself and same psychosocial risk factors for depression (low socioeconomic status, social isolation and lack of social support, stress in work and in family life) were identified in the European Guidelines for Prevention of Cardiovascular Diseases as independent risk factors of first event and worsening the prognosis in cardiovascular and heart disease (CHD). These factors may act as barriers to treatment adherence and well being of patients and population. Life satisfaction as a parameter of well being is also strongly affected in depression.

Family history of major depressed disorder (MDD) has been documented in numerous studies with a two-fold increased risk of MDD in the first-degree relatives of depressed patients. Nearly 60% of the grandchildren with 2 generations of depression have some psychiatric disorder, and positive family history has also important role in the development CHD.
Having in mind prevalence and predicted trend of depression and cardiovascular diseases, family physicians should be familiar with all mentioned psychosocial risk factors. In 1974 the Leeuwenhorst Group proposed «the model of primary health care provider», which included comprehensive and continuous health care of chosen population. Therefore, he or she should have knowledge on emotional, social and biological factors in the development of disease. If this was true, general practitioners would recognize more than a fifth to a half of psychosocial problems accompanying the disorder (the percentage depends on the type of problem, previous general knowledge about the patient, and his socio demographic characteristics).

On the other hand, depressed patients very often do not give data on psychosocial aspects of functioning because of distortions in thinking which includes pessimism, helplessness, hopelessness, inadequate social skills and isolation, disabling adequate health care.

The aim of this study was to investigate the differences in the assessment of psychosocial factors by depressed and non depressed patients, and their congruence with family physicians’ assessment for both groups.

According to the previously reported findings, it was expected that assessment of psychosocial factors would be different between depressed and non depressed patients, and probably incongruent between family physician and depressed patients.

Recently developed algorithm of predictive risk factors for depression in primary health care included psychosocial risk factors. Scoring CHD risk in primary prevention did not include psychosocial factors although they were recognized and recommended for assessment. Tendency in contemporary medicine is a widely usage of algorithm in different domains which should incorporate psychosocial parameters due to more and more accepted biopsychosocial approach in medicine. On the other side, the role and renewal of primary health care is recognized in the newest World Health Organization’s Report.

So it was very important to know whether family physicians’ assessment is congruent with patients’ self assessment and to choose one or another depending on our aim – having objective or subjective assessment.

**Subjects and Methods**

**Setting**

This cross-sectional study was conducted among 4700 patients in care of three family physicians’ practices in Zagreb, Croatia, during 2007.

**Subjects**

From standardized medical records for family medicine all patients with Depression diagnosis were selected, wherever they received diagnosis by psychiatrist or family physician. From 85 depressed patients with the diagnosis of Depressed episode (F32) or Recurrent depressed disorder (F33) according to ICD 10, 76 (89.41%) accepted to participate in our study. The sample of 5% of patients was chosen randomly from each practice. Out of 235 patients 190 (80.85%) participated in the study.

**Method**

Questionnaire was prepared for this investigation and consisted of questions about: gender, age, marital status, educational level, occupational status, genealogical burden of disease, economic status, social isolations, family and work stress and life satisfaction.

Economic status was evaluated in scale form 1 to 3 with regards to the average: 1. below average, 2. average, 3. above average.

Core questions recommended by the European Guidelines on Cardiovascular Disease Prevention in Clinical Practice for the management of psychosocial risk factors were used for assessment of:

- social isolations:
  - do you live alone
  - do you have close confident (who understand you and with whom you can talk)
  - do you have 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 the job effort were estimated on the Likert scale from 1 to 10.

Life satisfaction was also estimated on the Likert 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 socioeconomic status and family stress between depressed patients and the control group assessed by physicians and self assessed were tested by $\chi^2$-test, and differences in work stress and life satisfaction were tested by Mann Whitney test.

Compatibility of physicians’ assessment and self assessment of either depressed patients or the control group to socioeconomic status and family stress was analyzed by Sign test. Job stress and life satisfaction were analyzed by Wilcoxon test.

Compatibility of assessment genealogical disease burden between physician and depressed and non depressed patients was analyzed by Fischer test.

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

Statistical analysis was performed by the Statistical Package for the Social Sciences, version 13.0 (SPSS Inc., Chicago, IL, USA).
Results

All observed sociodemographic characteristic of depressed patients were significantly different than of the randomized comparison group. Depressed patients were mostly women ($p=0.045$), according to marital status mainly divorced and widowed ($p<0.001$), two thirds with secondary schooling ($p=0.038$), and more than half retired ($p<0.001$) (Table 1).

Most of the patients from both groups assessed by physicians and self assessed were having average economic status. Physicians assessed two folds more patients with below economic status (8%) within the group of depressed patients than in the random sample (4%) and the same was for above economic status (depressed patients 7% vs. random sample 3%) (Table 2). Depressed patients self assessed their economic status as being significantly poorer ($p<0.001$) than in random sample (Table 2).

Significantly ($p=0.013$) more depressed patients live alone than in the random sample. Depressed patients had significant lack of close confident assessed by physicians ($p=0.032$) and also by themselves ($p=0.001$). Depressed patients significantly lack any person to help in case of illness ($p=0.001$) only by self assessment. Serious problems with a partner significantly existed within depressed patients assessed by themselves and also by physicians ($p<0.001$) (Table 2).

Physicians did not know for three depressed patients whether they had a close confident and any person to help in case of illness or not.

Physicians assessed for 23 (31%) depressed patients that they had no partners vs. 29 (15%) from the random sample, but depressed patients self assessed for 29 (39%) with no partners vs. 28 (14%) in the random sample.

Physicians did not know for 17 (22%) depressed patients if they had a partner vs. 29 (15%) from the random sample.

Physicians did not know for 1 (0.5%) depressed patient if she lived alone vs. 11 (6%) from the random sample.

Depressed patients assessed significantly ($p=0.029$) less reward for effort in work than among the random sample (Table 3). Life satisfaction was significantly lower for depressed patients ($p<0.001$) assessed by themselves and by physicians than in the random sample (Table 3).

Physicians dedicated significantly more attention to mental diseases within genealogical diseases for depressed patients ($p=0.019$) than non depressed. Physicians were almost equally unfamiliar with cardiovascular diseases as the most frequent group of genealogical diseases for both groups (66% of depressed patients vs. 64% of non depressed patients). Physicians were unfamiliar with genealogical diseases burden in general for 41% of depressed patients’ vs. 47% of non depressed patients (Table 4).

Significant disagreement ($p<0.001$) was found between physicians and depressed patients in assessment of economic status and serious problems with a partner. Slightly better agreement was between physicians and examinees from the random sample in assessment of patients living alone, having close confident, having help in case of illness, having more serious problems with partner than with depressed patients (Table 5).

### TABLE 1
SOCIODEMOGRAPHIC CHARACTERISTICS OF DEPRESSED PATIENTS (N=76) AND CONTROL GROUP (N=189)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No. of depressed patients ** (%)</th>
<th>No. of patients in control group** (%)</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>17 (22.36)</td>
<td>68 (35.97)</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>59 (77.63)</td>
<td>122 (64.02)</td>
<td>0.045</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>5 (6.58)</td>
<td>30 (15.87)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>37 (48.68)</td>
<td>126 (66.67)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Divorced</td>
<td>18 (23.68)</td>
<td>13 (6.88)</td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>16 (21.05)</td>
<td>20 (10.58)</td>
<td></td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>12 (15.79)</td>
<td>24 (12.7)</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>54 (71.05)</td>
<td>113 (59.26)</td>
<td>0.038</td>
</tr>
<tr>
<td>University</td>
<td>10 (13.16)</td>
<td>53 (28.04)</td>
<td></td>
</tr>
<tr>
<td>Occupational status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>27 (35.52)</td>
<td>114 (60.32)</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>3 (3.95)</td>
<td>12 (6.35)</td>
<td></td>
</tr>
<tr>
<td>Retired</td>
<td>45 (59.21)</td>
<td>59 (31.21)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Student</td>
<td>1 (1.32)</td>
<td>2 (1.06)</td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td></td>
<td>2 (1.06)</td>
<td></td>
</tr>
</tbody>
</table>

*p*Z*²-test

**Age (years. X±SD): depressed patients=56.0±14.06; control group=49.3±14.01
Physicians did not know for 1 patient (0.5%) if she lived alone and had help in case of illness within the random sample, and for 17 patients (22%) if they had serious problems with their partners.

Significant disagreement ($p<0.001$) was found between physicians and examinees from the random sample in assessment of job control and job demand and also in the assessment of life satisfaction ($p=0.001$) (Table 6). Significant disagreement was found between physicians and depressed patients in the assessment of job demand ($p=0.002$) and job control ($p=0.026$) (Table 6). Life satisfaction was assessed identically by physicians and depressed patients (Table 6).

**Discussion**

The principal finding of this study was that psychosocial factors were assessed differently by depressed and non depressed patients. Physicians’ assessment also varied regarding the observed factors within these groups. Incongruence between family physicians and depressed patients assessment was valued by physicians to be of higher economic status, more intense family stress, and lower job stress’ parameters (job control and demand) than self assessed by the patients.

It is present in literature that subjects with depressive symptoms reported more health, functional and
psychosocial problems\textsuperscript{12}. Literature also reports incongruence between physicians’ assessment and patients’ self assessment either within patients with depressive symptoms in assessment their symptoms, or within non depressed patients in assessment of health related quality of life in palliative care, and in assessment of the severity of the disease\textsuperscript{13–15}.

Confusing finding in our study was that family physicians were unfamiliar with genealogical burden of diseases in general for more than 40% of their patients. However particular knowledge about genealogical burden of mental diseases was pretty good especially for depressed patients, as well as it is documented in literature that depression has been linked to a family history of various types of psychopathology, including any mental illness, affective disorders in general, and major depression in particular\textsuperscript{16}. One important implication is that MDD in the grandparental generation is associated with increased risk to grandchildren even in the absence of parental MDD\textsuperscript{17}, what obviously implicates greater importance of genealogical follow up (genogram), and not only routinely taken history.

In our study, impressive agreement was between physicians and especially non depressed patients in the assessment of economic status. Physicians were not so familiar with parameters of social isolation neither in our study nor in literature\textsuperscript{7}.

Literature reports that at least one third of the patients in general practice have psychosocial problems that they perceive as influencing their present health. Their reasons for non-disclosure included unwillingness to discuss psychosocial problems with anyone at all, belief that family physician is not the appropriate person to talk to, and concern about the aspects of their relationship with their own family physicians\textsuperscript{18}.

In spite of the status syndrome i.e. deteriorating influence of job stress parameters on health status being well documented in literature, congruence in assessment job stress and job control between physicians and both groups either depressed or non depressed was poor in our study\textsuperscript{19,20}. Physicians assessed lower control and lower demand at work for depressed patients than for non depressed as it was also self assessed by depressed patients. Data from literature, whether job control or job demand had more negative influence on employees’ psychological health is controversial\textsuperscript{21,22}. In our study, congruence between physicians and both groups of patients in assessment appropriate reward for effort at work was pretty good. Obviously, physicians dedicate more attention to monthly income as a parameter of economic status in communication with patients, and monthly income is also perceived by Croatian citizens as important parameter of subjective assessment of well being and life satisfaction\textsuperscript{23}.

Impressive agreement was between physicians and depressed patients in the assessment of life satisfaction, better than between physicians and non depressed patients, what implicates the importance of life satisfaction in diagnosing depression\textsuperscript{24}.

This study is just a part of the research on implementation of questionnaire for depression in primary care.

### Table 5

**CONGRUENCE BETWEEN PHYSICIANS’ AND PATIENTS’ ASSESSMENT OF SOCIOECONOMIC STATUS AND FAMILY STRESS IN DEPRESSED PATIENTS (N=76) AND CONTROL GROUP (N=189)**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Depressed (No=76)</th>
<th>Control group (No=189)</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic status</td>
<td>61 (81.3)</td>
<td>162 (85.7)</td>
<td>0.248</td>
</tr>
<tr>
<td>Live alone</td>
<td>63 (84.0)</td>
<td>174 (92.1)</td>
<td>0.118</td>
</tr>
<tr>
<td>Have close confident</td>
<td>66 (88.0)</td>
<td>185 (97.8)</td>
<td>0.625</td>
</tr>
<tr>
<td>Help in case of illness</td>
<td>60 (81.1)</td>
<td>179 (94.8)</td>
<td>0.344</td>
</tr>
<tr>
<td>Serious problems with partner</td>
<td>45 (81.1)</td>
<td>163 (86.3)</td>
<td>0.344</td>
</tr>
</tbody>
</table>

*Sign test

### Table 6

**CONGRUENCE BETWEEN PHYSICIANS’ AND PATIENTS’ ASSESSMENT OF JOB STRESS AND LIFE SATISFACTION IN DEPRESSED PATIENTS AND CONTROL GROUP**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Depressed – ($\bar{X}$±SD)</th>
<th>Control group – ($\bar{X}$±SD)</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job demand (27/114)</td>
<td>6.48±2.28</td>
<td>5.26±1.26</td>
<td>0.002</td>
</tr>
<tr>
<td>Job control (27/114)</td>
<td>5.59±2.61</td>
<td>4.67±1.82</td>
<td>0.026</td>
</tr>
<tr>
<td>Appropriate reward (27/114)</td>
<td>3.93±2.29</td>
<td>4.33±0.92</td>
<td>0.226</td>
</tr>
<tr>
<td>Life satisfaction (76/189)</td>
<td>5.43±2.03</td>
<td>5.43±1.57</td>
<td>0.817</td>
</tr>
</tbody>
</table>

*Wilcoxon test
Participation of only three family physicians was serious limitation of this study. Randomized comparison group and group of depressed patients differed in sociodemographic characteristics, what should be take in result’s consideration. In spite of that, we think that our findings are valuable and we recommend further research on a bigger sample and implementation of a qualitative study. We did not take into consideration the duration of patients in care of family physicians. The importance of a lasting relationship between general practitioners and their patients is well documented. It is worthwhile because it leads to better quality and better outcomes i.e. better comply, rely less on emergency services, less hospitalization and more satisfaction with care.

In our study, assessment of psychosocial factors varied within the group of depressed patients and the random sample assessed either by themselves or by physicians. Congruence between family physicians and non depressed patients in the assessment observed psychosocial factors was pretty good. Exceptions were assessment of genealogical burden of diseases and work stress parameters and family physicians should be more aware about this.

However congruence in assessment psychosocial factor for depressed patients between them and family physicians was poor; therefore it should be taken into consideration aim-having objective or subjective assessment to choose one or another.

The problem exists and needs further investigation in the assessment of psychological factors, for example algorithm for risk predictive factors for depression or primary prevention of CHD, within sample not previously screened for depression.

REFERENCES


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Cilj ovog rada je bio istražiti razliku u procjeni psihosocijalnih čimbenika od strane depresivnih i nedepresivnih pacijenata te podudarnost liječnikove procjene s obje grupe. Presječno istraživanje je provedeno u tri ordinacije obiteljske medicine u Zagrebu, tijekom 2007. Uzorak depresivnih pacijenta je bio 76 pacijenta od 85 izabranih metodom slučajnog izbora, a uzorak nedepresivnih 189 od 235. Za procjenu psihosocijalnih čimbenika korišten je upitnik preporučen u Evropskim smjernicama za prevenciju kardiovaskularnih bolesti u kliničkoj praksi. Depresivni pacijenti značajno više javljaju o socijalnoj izolaciji \( \text{psam}=0,013 \), bliskim osoblju \( \text{pbliska osoba}=0,005 \), pomoći \( \text{pomoć}=0,001 \), obiteljskom stresu \( p<0,001 \), poslovnom stresu \( \text{padekvatna naknada}=0,029 \) i slabijem zadovoljstvu životom \( p<0,001 \) nego nedepresivni. Njihovo lošije psihosocijalno funkcioniranje je prepoznato i od liječnika koji su procjenili značajno niže parametre socijalne izolacije \( \text{psam}=0,013 \), bliskim osoblju \( \text{pbliska osoba}=0,032 \), obiteljskom stresu \( p<0,001 \) i zadovoljstvu životom \( p<0,001 \) za depresivne pacijente u odnosu na nedepresivne. Nepodudarnost između procjene liječnika i depresivnih pacijenata očitovala se u procjeni višeg ekonomskog stanja \( P<0,001 \) i većeg obiteljskog stresa \( P<0,001 \) od strane liječnika. Psihosocijalni čimbenici su različito procjenjeni od samih depresivnih i nedepresivnih pacijenata, a različito su ih procijenili i liječnici za obje skupine. Podudarnost procjene je bolja između liječnika i nedepresivnih pacijenata nego između liječnika i depresivnih pacijenata.