Role of general practitioner in assessing mental health problems in rural population: Lithuanian experience

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Abstract

Introduction: The aim of this study was to analyze the prevalence of mood disorders in primary care and to identify associated sociodemographic variables.

Methods: All patients (n=1235) excluding the ones with psychological and psychiatric disorders were asked to fill in the standard diagnostic WHO-5 Well-being Scale. Data was analyzed by logistic regression analysis.

Results: The response rate was 82.3%. Gender, age, educational level, marital status and employment status were predictors of mood disorders. Mood disorder was diagnosed in 38.4% of men and 51.9% of women. The risk of mood disorder was higher in women (OR = 1.87, 95%CI = 1.11-3.14) than men, in older than young people (OR = 2.23, 95%CI = 1.79-6.32), in those with lower educational status (OR = 4.33, 95%CI = 1.52-12.38), in divorcees (OR = 8.18, 95%CI = 2.33-28.71), widowers (OR = 4.45, 95%CI = 1.26-15.72) and unemployed (OR = 5.2, 95%CI = 1.93-14.01).

Conclusion: Mood disorders have a high prevalence in Lithuanian people who consult primary care. Thus, general practitioners should pay particular attention to diagnosing mood disorders. WHO-5 well-being scale is simple, sensitive and acceptable tool for the diagnosis of mood disorders.

Key words: mood disorders, prevalence, primary care, socio-demographic characteristics.

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Introduction

Recent changes have influenced the mental health of the population in European countries in transition. Problems such as social and economic instability, unemployment, migration and loss of social relations have contributed to a very poor state of public mental health. This expresses itself in an increasing spread of drug abuse, alcoholism and suicides.[1-3] Among the Baltic countries the highest increase in the suicide rate has been estimated to occur in Lithuania. Furthermore, the suicide rate in Lithuania (42.1 cases per 100,000 residents) has become the highest not only in Europe but in the world as well.[4]

A number of studies have shown that one of the major causes of suicide is depression.[5,6] Patients with primary depression consult with the physicians of various specialties regarding variety of somatic and vegetative symptoms.[7-9] These atypical presentations may delay accurate diagnosis, as a result; the illness is often diagnosed only after clear manifestations become evident. Primary mental disorders are then not treated in a timely and adequate fashion. Even in Western European countries, depression is inadequately diagnosed and treated.[10-13] The number of prolonged, treatment resistant cases of depression is increasing worldwide. It is very important that not only psychiatrists, but also general practitioners recognize early mental disorders. As primary care physicians learn to recognize depression and treat it using state-of the-art methods, suicides may be reduced.

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There is also great potential to improve health and quality of life for millions of patients, to achieve cost savings and to reduce medical expenditures. The data from the Swedish general practitioners' Educational Program for Prevention and Treatment of Depression have shown a correlation between increased physician knowledge about the diagnosis and treatment of patients with mental disorders and reduced suicide rates.[14] Evidence from the literature indicates that patients prefer to be seen in primary care settings, either because of easy access or less stigma.[7] Consequently, experts in the WHO European Office have developed a new standardized diagnostic questionnaire, the "WHO-5 Well-being scale", and suggested its use by primary care professionals for mental health screening.[15] In the context of a countrywide integrated mental disease prevention project, this diagnostic questionnaire was suggested to general practitioners working in a regional primary care centre in Lithuania.

The aim of this pilot study was to analyze the prevalence of mood disorders in primary care and to identify associated sociodemographic variables.

Materials and Methods

Study design and sample size

This cross-sectional study was conducted in a region of Lithuania for one month. All patients (n=1235) excluding the ones with psychological and psychiatric disorders were asked to fill in the standard diagnostic WHO-5 Well-being Scale (Appendix 1). Data was analyzed by logistic regression analysis. The required number of patients was 1500. The response rate was 82.3% (1235/1500).

Evaluation of mood disorders

Before the study, two independent translators translated the questionnaire from English into Lithuanian and vice versa. The translations were confirmed by WHO experts. All general practitioners working in the primary care centre

were instructed on how to use and evaluate the data gathered using the WHO-5 Well-being Scale.

The WHO-5 Well-being Scale has been derived from the WHO-28 Well-being Scale which again has been based on the Zung Questionnaire and Psychological General Well-being Scale.[16,17] The standard diagnostic WHO-5 Well-being Scale is simple, sensitive and acceptable tool for the diagnosis of mood disorders. It consists of five questions to be completed by the patient in the physician's waiting room. Each statement is scored from 0 to 5. In evaluation every answer is multiplied by 4 and a total score between 0-100. Higher scores show better well-being and the scores below 50 show mood disorder.

Sociodemographic characteristics

The patients were divided into four groups by age (25-34, 35-44, 45-54, >55), two groups by place of residence (urban, rural), three groups by educational status (primary, secondary and university graduate), four groups by marital status (single, married, divorced and widowed) and four groups by status of employment (employed, student, unemployed and retired).

Statistical Analysis

Data were analyzed using the statistical package for the Social Sciences for Windows version 11.0 (SPSS Inc). The analyses include descriptive statistic and logistic regression. The chi-square test and logistic regression were used. Odds ratio was used for the association between the above-mentioned independent variables and mood disorders (OR). Confidence intervals (CI) for estimates were calculated at the level of 95%. The results were considered to be statistically significant when $p<0.05$.

Results

The response rate was 82.3%. Of the 1235 respondents 814 (65.9%) were women, and 421 (34.1%) men. The patients' ages ranged from 18 to 84 years. Of patients, 12.2% of respondents were in the youngest (25-34) age group, 25.8% in the age group 35-45, 23.7% in the age group 45-54, and 38.3% in the oldest age group (>55 years). The mean age of males and females did not differ. Almost half of men (47.4%) and women (52.8%) were secondary school graduates, 29.0% of men and 24.6% of women were primary school graduates and 23.6% of men and 22.6% of women were university graduates. Approximately two thirds of respondents (62.5%) lived in urban and one third (37.5%) in rural areas. The majority (72.5%) of respondents were married. One in every ten respondent was divorced or widowed (11.3% and 10%, respectively).

Prevalence of mood disorders

Logistic regression analysis revealed that patients' gender, age, educational, marital and employment status were predictors of mood disorders (Table 1). The risk of mood disorder was higher in women (38.4% vs.51.9%, OR=1.995%CI=1.11-3.14, p=0,05) than men, in older than younger people (OR=2.2, 95%CI=1.79-6.32), in those with lower educational status (OR=4.3, 95%CI=1.52-12.38), in divorcees (OR=8.2, 95%CI=2.33-28.71), widowers (OR=4.5, 95%CI=1.26-15.72) and unemployed (OR=5.2, 95%CI=1.93-14.01) (Table 1).

The majority of mood disorders in men were diagnosed in >55 year old group (56.7%) and in women in 45-54 year old group (61.4%).

Mood disorder was diagnosed in 34.3% of men and 49.6% of women living in urban and in 39.9% of men and 56.5% of women living in rural areas however the difference was not significant.

Fewer men with higher levels of education had mood disorders. While 75.7% of men with primary and secondary education had mood disorders, only 14.3% of men with university education had the disorder. There was no significant relation between women's educational status and mood disorders. It is notable that the less educated people had a greater chance of a mood disorder.

Although mood disorders were mostly diagnosed in widowers there was no significant difference between marital status and mood disorders in women. One in every two married (54.4%), divorced (56.7%), and widowed (47.4%) woman, and one in every three single (34.1%) woman suffered from mood disorders. Divorced people and widowers had a greater likelihood of suffering from a mood disorder (8.2 and 4.5 times higher, respectively).

It was noteworthy that employment played a great role in mood disorders. All unemployed men (100%) and the majority of unemployed women (80.0%) were diagnosed as having a mood disorder. The fewest mood disorders were diagnosed in women who were students (16.8%) and in employed men (22.5%). The odds ratio shows that retirees were 3.7 times and unemployed people 5.2 times more likely to have mood disorder than those employed.

Table 1: Determinants of mood disorders

Determinants		OR	CI, 95%	p
Gender				
	Man	1.00		
	Woman	1.87	1.11-3.14	0.05
Age				
	25-34 years	1.00		
	35- 44 years	1.25	0.56-1.74	0.12
	45- 54 years	1.70	0.94-2.56	0.06
	>55 years	2.23	1.79-6.32	0.05
Educational status				
	University	1.00		
	Secondary	4.09	1.69-9.90	0.05
	Primary	4.33	1.52-12.38	0.05
Marital status				
	Married	1.00		
	Divorced	8.18	2.33-28.71	0.05
	Widowed	4.45	1.26-15.72	0.05
Employment				
	Employed	1.00		
	Student	0.08	0.02-0.40	0.05
	Unemployed	5.2	1.93-14.01	0.05
	Retired	3.65	1.71-7.80	0.05

OR: odds ratio; CI: confidence interval

Discussion

The high prevalence of mood disorders in our study, particularly in certain socioeconomic groups, may be related to political and economic transition causing rapid changes in Lithuanian society.

Our findings on the relationship between gender and mood disorders were similar to those in other studies.[18-20] The higher prevalence of mood disorders among women may be due to the tendency of women to acknowledge health problem and seek professional help more than men. On the other hand, this higher prevalence of mood disorders in women could also be explained by genetic and biological factors and the role of women in society.[20,21]

WHO statistics showed a direct association between age and mood disorders. Children, adolescents and the elderly suffer more from mood disorders.[22] Our study found a greater likelihood of mood disorders in older (>55 years) patients. This relation could be explained partly by the fact that older people have more medical problems leading to mood disorders as well as higher utilization of primary care. The prevalence of mental disorders has been shown

substantially higher in frequent users of medical services (up to 50% or higher).[23]

Socioeconomic conditions have significant effects on mental health.[16,19] Unemployed, less educated and isolated people have poorer mental health and well being than those in other groups. Our results have also shown that living alone, having lower educational status or being unemployed increases the likelihood of mood disorders. This may be due to the economic status as people with lower educational status may be unemployed more often. Unemployment may also directly affect the mental health and well-being of patients.

Strengths and limitations

The first weakness of our study is its cross-sectional nature, which precludes the possibility of an evaluation of causality. The WHO-5 Well-being Scale guided our hypothesis on relationships between mood disorders and gender, age, employment status, marital status and educational level. Future longitudinal or case-control studies should be carried out to explore causal relationship. The second limitation concerns the use of a self-administrated questionnaire which is less expensive compared to face-to-face interviews but although the scale was constructed in an easy language it has still the disadvantage of misunderstanding. It is also possible that people with mental health problems were more interested in the questions and therefore more liable to answer a questionnaire. This might explain the high prevalence of mood disorders in primary care centre patients.

Consequently, more attention should be paid to the elderly, the unemployed and people with lower educational status to improve the management of mental health of the population in our region. The WHO-5 Well-being Scale is a very simple, sensitive and acceptable mental health diagnostic test enabling primary care professionals to diagnose mood disorders. It is also very important to encourage people with mental health problems to consult physicians to receive appropriate support or treatment.

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Appendix: The WHO-5 Well-being Scale

Over the last two weeks…	All of the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
I have felt cheerful and in good spirits.	5	4	3	2	1	0
I have felt calm and relaxed.	5	4	3	2	1	0
I have felt active and vigorous.	5	4	3	2	1	0
I have felt fresh and rested when I wake up.	5	4	3	2	1	0
My daily life has been filled with things that interest me.	5	4	3	2	1	0

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