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Identifying patients with depression in primary healthcare

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ABSTRACT

Introduction

It is estimated that in 2015 in Poland 1 878 988 patients suffered from depression. Depressive disorder is associated with a significant decrease of life quality. Untreated depression can be fatal, as it is a recognized risk factor for a suicide attempt. Thus, identification of patients with symptoms of depressive disorder in primary healthcare is very important, as rapid implementation of treatment can prevent unfavorable depression effects.

Objective

The aim of this study is to present ways of identification patients with depressive disorder and screening tools suitable for primary healthcare setting.

Results

Careful physical examination and history taking are highly important in depression case finding. Patients may present with many uncharacteristic somatic complaints. Moreover, there are some group of patients that are at higher risk of depressive disorder. The most important one includes patients with other mental disorders; previous history of depression and familial predisposition to depression. There are many depression screening tools. The most popular are Patient Health Questionnaire, Beck Depression Inventory and Geriatric Depression Scale.

Conclusions

Many individuals, finally diagnosed with depressive disorder, meet their family doctor for uncharacteristic complaints. This is highly important for primary care physicians to be acquainted with most common somatic manifestations of depression. In primary care setting PHQ-2, PHQ-9 can be successfully used. BDI-PC also appears as measure suitable for family physicians. Geriatric population should be assessed with use of shorter version of GDS, but PHQ-2, and PHQ-9 are also recommended for this age group.

Keywords: Depressive Disorder, Screening, Primary Health Care

INTRODUCTION

It is estimated in 2015 in Poland 1 878 988 patients suffered from depression (being 5,1% of whole population). Depressive disorder is associated with significant decrease of life quality. WHO estimates loss of health and everyday functioning caused by depression as 330 423 Total Years Lived with Disability (YLD). Thus, depressive disorder is assessed to be responsible for 8,2% of total YLD in Poland [1]. The occurrence of depression negatively affects the social functioning of individuals. It is well known that this affective disorder is associated with unemployment, negative parenting behaviors [2, 3], reduced quality of marital relationship [4]. Depressive disorder in individuals also correlates with higher levels of absence from work and results in lower incomes [5]. Apart from social and economic problems, depression is a risk factor of physical illness. There is some evidence that depression should be considered as an risk factor of cardiovascular disease [6], diabetes [7], chronic pain [8]. The pathophysiology of this phenomenon is not fully known, possibly lifestyle and widely all health behaviors undertaken by patients suffering from depression may be a key to understanding role of depression in development of physical illness. Finally, untreated depression can be fatal, as it is a recognized risk factor for a suicide attempt [9]. What is more, it has been proved the vast majority of people suffering from depression worldwide, visit their family doctor (often with not characteristic complaints) [10]. Thus, identification of patients with symptoms of depressive disorder in primary healthcare is very important, as rapid implementation of treatment can prevent unfavorable depression effects.

OBJECTIVE

The aim of this study is to present ways of identification patients with depressive disorder and screening tools suitable for primary healthcare setting.

RESULTS

PHYSICAL EXAMINATIONA AND HISTORY TAKING

There is some evidence that in case of diagnosing mental disorders in primary care strategy called case-finding is effective [11], the essence of this diagnostic approach is to take clinical suspicion on the basis of the presented symptoms that the examined patient may suffer from depression. This strategy is effective if general practitioner is acquainted with diagnostic criteria of the disease. According to ICD-10 classification [12], diagnosis of depression requires presence of 4 or more (from 10) symptom for at least two weeks. Symptoms must include 2 or more of: (1) depressed mood, (2) anhedonia (feeling of pleasure and the range of interests are reduced) and (3) energy loss (increased fatigability, diminished activity). Other symptoms are: (4) reduced concentration and attention, (5) reduced self-esteem and self confidence, (6) ideas of guilt and unworthiness, (7) bleak and pessimistic views of the future, (8) ideas or acts of: self-harm or suicide, (9) disturbed sleep, (10) diminished appetite. The picture of sleep disorder are quite characteristic. Patients have no problems with falling asleep, but they wake up early (a few hours earlier than usual) with fear of what will happen this day and dreaming of pessimistic ideas of the upcoming day. Usually mood is more depressed in the mornings. In many patients pronounced psychomotor inhibition, weight loss and loss of libido are observed. There is also other disease unit like atypical depression. Diagnosed one may experience irritability, hypersomnia, increased appetite (including carbohydrate drawing) and weight gain, interpersonal rejection sensitivity and leaden paralysis (heavy, leaden feelings in arms or legs). Suspicion of depression is most often made on the basis of the presence of psychological symptoms such as depressed mood, concentration problems or accompanying anxiety. However, almost two thirds patients who were eventually diagnosed with depression presented chiefly with somatic symptoms and more than 50% suffered from multiple nonspecific, unexplained somatic symptoms [13]. During the survey conducted among many European nations, somatic complaints were in the first three most commonly reported problems among depressive patients (1. place (76%)– low mood, 2. (73%) tiredness, lack of energy and 3. (63%) sleep disturbances). Taking suspicion of clinical depression based on the above-mentioned symptoms may be problematic to the family doctor, however, they are listed among the diagnostic criteria for depression in ICD-10 classification. However, there are some other

atypical manifestations of depression, making patients present to his general practitioner. These include headaches, gastrointestinal problems, as well as generalized pain or chronic back or articular pain [14]. It was also found that dyspnea, chest pain, palpitations, heartburn, dysesthesia and dizziness were more frequent in depression diagnosed patients [15]. Some groups of general population more often report somatic symptoms. These include women [16] (especially pregnant [17]) and elderly people [18].

Depression in elderly has a little different clinical picture. In terms of psychological symptoms, complaints about irritability and nervousness predominate [19]. There are equally frequent complaints about cognitive impairment [20] and dementia can be a mask of depression. Patients report anxiety, difficulty in falling asleep and present hypochondriac complaints, while symptoms characteristic of depression included in the ICD-10 classification often are unnoticeable [21].

Moreover, there are some group of patients that are at higher risk of depressive disorder. The most important one includes patients with other mental disorders; previous history of depression and familial predisposition to depression. The other are chronic diseases significantly reducing quality of life (Parkinson's disease, Alzheimer disease, chronic obstructive pulmonary disease [22], diabetes [23], severe heart failure, chronic pain), terminal illnesses (cancer, HIV infection) and pregnancy and postpartum period as well. Moreover, elderly patients with multimorbidity and low level of everyday functioning are at higher risk of depression development. Severe, sudden changes in life (like death of a spouse), loss of job [24] may also predispose to the development of depressive symptoms. Screening in those groups may notably improve identification of depressed patients.

SCREENING TOOLS

THE PATIENT HEALTH QUESTIONNAIRE (PHQ-2 and PHQ-9)

The Patient Health Questionnaire-2 (PHQ-2) [25] is an ultra short screening tool. This measure seems to be a useful and time-saving tool suitable for primary healthcare setting. It consists of two first questions of the Patient Health Questionnaire-9 [26]. These inquires concern depressed mood and anhedonia over the time of past two weeks. Patient can score 0-3 points for each question, depending on the frequency of the symptom. The aim of this questionnaire is to assess a patient initially. The main advantage of this test is a brief time of performance (takes less than 2 minutes) and comparable effectiveness to longer instruments, such as the Beck Depression Inventory [27]. The PHQ-2 has 97% sensitivity and 67% specificity in adults [28]. If patient scores 2 or more points, his result is positive and then the PHQ-9 should be completed [29].

The PHQ-9, consists of 9 questions. The additional questions in comparison to PHQ-2 instrument concern: fatigability, sleeping disorder, problems with appetite, feelings of worthlessness, problems with concentration, psychomotor agitation or retardation, suicidal thoughts and behaviors. It takes 2-5 minutes to implement. It has three different way of application: as a confirmation of PHQ-2 diagnosis, independent screening tool and measure monitoring treatment. The PHQ-9 has 61% sensitivity and 94% specificity in adults [30]. The cut-off point is scoring 10 points, scoring 20 points indicates for severe depression.

THE BECK DEPRESSION INVENTORY-II AND THE BECK DEPRESSION INVENTORY-PC (BDI-II AND BDI-PC)

The Beck Depression Inventory-II (BDI-II) [31] is a 21-item questionnaire. It is one of the most widely used screening tools for depression. It is used for self-assessment by the patient. The interest of this measure is past two weeks and now. Inquiries relate to affective (mood, satisfaction, guilt, anhedonia), cognitive and somatic symptoms (changes in appetite, body weight, sexual problems, sleep disturbances) of depression. Patient can score 0-3 points for each question, depending on the intensity of the symptom. It takes 5-10 minutes to complete. The BDI-II has 94% sensitivity and 92% specificity in adults test in primary care [32]. The cut-off point is scoring 18 points.

The Beck Depression Inventory-PC (BDI-PC) [33] is a shorter version of BDI-II. It consists of only 7 questions. From the full tool the queries relating to somatic symptoms were removed and the issues of a reduced mood, pessimism, feeling of failure, anhedonia, self-dislike, criticalness and suicidal behaviors were addressed. It takes fewer than 5 minutes to perform this test. Its sensitivity was assessed as 97% and 99% specificity rates in primary healthcare adults [34]. The cut-off score is 4 points. It is appropriate to be used in general practice as it is brief in application and has good validity.

THE GERIATRIC DEPRESSION SCALE AND THE FIVE-ITEM GERIATRIC DEPRESSION SCALE (GDS AND FIVE-ITEM GDS)

The Geriatric Depression Scale (GDS) [35] is a 30-item questionnaire with two answer options to choose from (yes / no), patient can score 1 point for each inquiry. It is suitable to be implemented as screening tool in primary care. Respondents should fill the GDS independently. It consists of queries covering period of past week about mood, activities, assessment of the past and the views on future. There is also a question about energy, willingness to leave home and comparison of one's own health with other members of the community. It takes 10 to 15

minutes to use the tool. GDS is reported to have a 100% sensitivity and a 84% specificity [36]. The cut off grade is 10 points.

The Five-Item Geriatric Depression Scale (Five-Item GDS) [37] is a shorter version of GDS. Short time of administration is considered as a main advantage in the primary care setting. Completing the questionnaire takes less than 5 minutes. There is some evidence the Five-Item GDS as effective as longer scale, with 97% sensitivity and 85% specificity. The cut-off score is 2 points.

CONCLUSIONS

Depression is common in the worldwide society. Many individuals, finally diagnosed with depressive disorder, meet their family doctor for uncharacteristic complaints. This is highly important for primary care physicians to be acquainted with most common somatic manifestations of depression. These include tiredness, lack of energy, sleep disturbances, headaches, gastrointestinal problems, generalized pain or chronic back or articular pain, dyspnea, chest pain, palpitations, heartburn, dysesthesia and dizziness. Particular attention should be paid to some risk groups of patients at a higher risk of depression development, mainly elderly or suffering from chronic diseases. There are many depression screening tools available. In primary care setting PHQ-2, PHQ-9 can be successfully used. BDI-PC also appears as measure suitable for family physicians. Geriatric population should be assessed with use of shorter version of GDS, but PHQ-2, and PHQ-9 are also recommended for this age group [38].

References:

1. Depression and Other Common Mental Disorders Global Health Estimates, World Health Organization, http://apps.who.int/iris/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf;jsessionid=CD84DD410E0C759ECD8E1269B57BCCC9?sequence=1 /accessed 07.07.2018/

2. Lovejoy MC, Graczyk PA, O'Hare E, Neuman G. Maternal depression and parenting behavior: a meta-analytic review. Clin. Psychol. Rev. 2000; 20:561–592.

3. Wilson S, Durbin CE. Effects of paternal depression on fathers' parenting behaviors: a metaanalytic review. Clin. Psychol. Rev. 2010; 30:167–180.

4. Kronmuller KT, Backenstrass M, Victor D, Postelnicu I, Schenkenbach C, et al. Quality of marital relationship and depression: results of a 10-year prospective follow-up study. J. Affect. Disord. 2011; 128:64–71.

5. Kessler RC, Heeringa S, Lakoma MD, Petukhova M, Rupp AE, et al. Individual and societal effects of mental disorders on earnings in the United States: results from the national comorbidity survey replication. Am. J. Psychiatry. 2008; 165:703–711.

6. Van der Kooy K, van Hout H, Marwijk H, Marten H, Stehouwer C, Beekman A. Depression and the risk for cardiovascular diseases: systematic review and meta analysis. Int J Geriatr Psychiatry. 2007;22:613-26.

7. Knol MJ, Twisk JW, Beekman AT, Heine RJ, Snoek FJ, Pouwer F. Depression as a risk factor for the onset of type 2 diabetes mellitus. A meta-analysis. Diabetologia. 2006;49:837-45.

8. Conwell Y, Duberstein PR, Cox C, et al. Relationships of age and axis I diagnoses in victims of completed suicide: a psychological autopsy study. Am J sychiatry. 1996;153:1001–1008.

9. Reid MC, Williams CS, Concato J, Tinetti ME, Gill TM. Depressive symptoms as a risk factor for disabling back pain in community-dwelling older persons. J Am Geriatr Soc. 2003;51: 1710-7.

10. Patel V. (2001) Cultural factors and international epidemiology. Br Med Bull 57: 33–45

11. The effectiveness of case-finding for mental health problems in primary care. Br J Gen Pract 2005;55:665 – 9.

12. http://apps.who.int/classifications/icd10/browse/2016/en#/F30-F39 /accessed 07.07.2018/

13. Simon GE, Von Korff M, and Piccinelli M. et al. An international study of the relation between somatic symptoms and depression. N Engl J Med. 1999 341:658–659.

14. Ohayon MM, Schatzberg AF. Using chronic pain to predict depressive morbidity in the general population. Arch Gen Psychiatry 2003; 60:39-47.

15. Yamamoto K, Shiota S, Ohno S et al.: A diagnosis of depression should be considered in patients with multiple physical symptoms in primary care clinics. Tohoku J Exp Med 2013; 229: 279-85.
16. Beltrus PA, Elmore SK, Hamilton PA: Women and somatization: unrecognized depression. Health Care Women Int, 1995; 16(14)-.287-297.
17. Kelly, R.H., Russo, J., & Katon, W. Somatic complaints among pregnant women cared for in obstetrics: normal pregnancy or depressive and anxiety symptom amplification revisited?. General Hospital Psychiatry, 2001, 23, 107-113
18. Drayer RA, Mulsant BH, Lenze EJ, Rollman BL, Dew MA, Kelleher K et al. Somatic symptoms of depression in elderly patients with medical comorbidities. Int J Geriatr Psychiatry 2005;20:973-982.
19. Shulman RW. The serotonin syndrome: a tabular guide. Can J Clin Phanuaco. 1995; 2: 139-44.
20. Zisook S. Depresja w późnym wieku. Medycyna po Dyplomie. 1997; 6: 175-82
21. Brown R.P., Sweeney J., Loutsch E., Kocsis J., Frances A. Involutional melancholia revisited. A. J. Psychiatry. 1984; 141: 24-8.
22. Coventry PA, Bower P, Keyworth C, et al. The effect of complex interventions on depression and anxiety in chronic obstructive pulmonary disease: systematic review and meta-analysis. PLoS One 2013; 8: e60532.
23. Mezuk B, Eaton WW, Albrecht S, Hill-Golden S. Depression and type 2 diabetes over the lifespan: A meta-analysis. Diabetes Care 2008; 31:2383-2390
24. Tennant C. Life events, stress and depression: a review of recent findings. Aust N Z J Psychiatry 2002; 36:173-82.
25. Kroenke K, Spitzer RL, Williams JB. The Patient Health Questionnaire-2: validity of a two-item depression screener. Med Care. 2003; 41(11):1284–1292.
26. Spitzer RL, Kroenke K, Williams JB. Validation and utility of a self-report version of the prime-MD: the PHQ primary care study. Primary Care Evaluation of Mental Disorders. Patient Health Questionnaire. JAMA. 1999;282(18):1737–1744.
27. Mitchell AJ, Coyne JC. Do ultra-short screening instruments accurately detect depression in primary care? *Br J Gen Pract*. 2007;57(535):144-151.
28. Whooley MA, Avins AL, Miranda J, et al. Case-finding instruments for depression. Two questions are as good as many. *J Gen Intern Med*. 1997;12(7):439-445.
29. Arroll B, Goodyear-Smith F, Crengle S, et al. Validation of PHQ-2 and PHQ-9 to screen for major depression in the primary care population. Ann Fam Med 2010;8:348–53.

30. Nease DE Jr, Maloin JM. Depression screening: a practical strategy. *J Fam Pract*. 2003;52(2):118-124.
31. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. Arch Gen Psychiatry 1961; 4:561-71.
32. Arnau RC, Meagher MW, Norris MP, Bramson R. Psychometric evaluation of the Beck Depression Inventory-II with primary care medical patients. Health Psychol. 2001;20(2):112–9.
33. Beck AT, Guth D, Steer RA, Ball R. Screening for major depression disorders in medical inpatients with the Beck Depression Inventory for Primary Care. Behav Res Thera. 1997;35:785-91.
34. Steer RA, Cavalieri TA, Leonard DM, Beck AT: Use of the Beck Depression Inventory for Primary Care to screen for major depression disorders. Gen Hosp Psychiatry 1999; 21: 106 – 11.
35. Yesavage JA, Brink TL, Rose TL, Lum O, Huang V, Adey M, et al. Development and validation of a geriatric depression screening scale: a preliminary report. J Psychiatr Res 1983;17:37-49.
36. Lyness JM, Noel TK, Cox C, et al. Screening for depression in elderly primary care patients. A comparison of the Center for Epidemiologic Studies-Depression Scale and the Geriatric Depression Scale. Arch Intern Med 1997; 157:449–454.
37. Hoyl MT, Alessi CA, Harker JO, et al. Development and testing of a five-item version of the Geriatric Depression Scale. J Am Geriatr Soc. 1999;47: 873–8.
38. Watson LC, Pignone MP. Screening accuracy for late-life depression in primary care: a systematic review. *J Fam Pract*. 2003;52(12):956-964.