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Multidisciplinary of depression spectrum disorders from a health care system perspective

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Abstract:
Introduction: Depression is the leading cause of disability, and incapacity in the world and the most common mental disorder. Year after year, the incidence of this disease entity is increasing, therefore, depression is a serious challenge for modern medicine.
Aim of the study: To synthesize the knowledge of depression as a problem in modern medicine.
Material and method: A non-systematic review of scientific literature from 2012 - 2022 was carried out, according to the keyword's depression, symptoms, diagnosis, and treatment.
Results and conclusions: Depression is a psychiatric disorder showing varied symptoms lasting more than 2 weeks. Prominent among them are lowered mood, anhedonia, reduced life activities, and others. Diagnosis of depression is difficult, requiring cooperation between the

doctor and the patient. Treatment of depression is mainly based on pharmacotherapy and psychotherapy; unconventional treatment is also distinguished.

Key words: depression spectrum disorders, doctor, nurse, psychiatry, health care system

Introduction

According to the World Health Organization (WHO), depression is the leading cause of disability and incapacity worldwide and the most common mental disorder. Several percent of the adult population suffer from it during their lifetime. The disease affects women twice as often. One in ten patients presenting to their primary care physician for other ailments has full-blown depression, and twice as many suffer from isolated depressive symptoms. Unfortunately, more than half of these cases remain undiagnosed, and of those diagnosed with depression, only half receive adequate treatment. Therefore, it is extremely important for everyone (not just physicians) to know the nature and symptoms of depression and the basics of its diagnosis and treatment [1,2].

Depression is a disease that can and should be treated, its symptoms can be both recurrent and chronic. Nowadays, better, and better therapies are available, which, on the one hand, provide greater effectiveness and, on the other hand, are increasingly less burdensome [3].

Purpose of the work

The purpose of this study is to present the symptoms, diagnosis, and treatment of depressive disorders.

Material and method

The paper uses a non-systematic review of Polish and English-language literature from 2012 - 2022. Details of the review are shown in Figure 1.

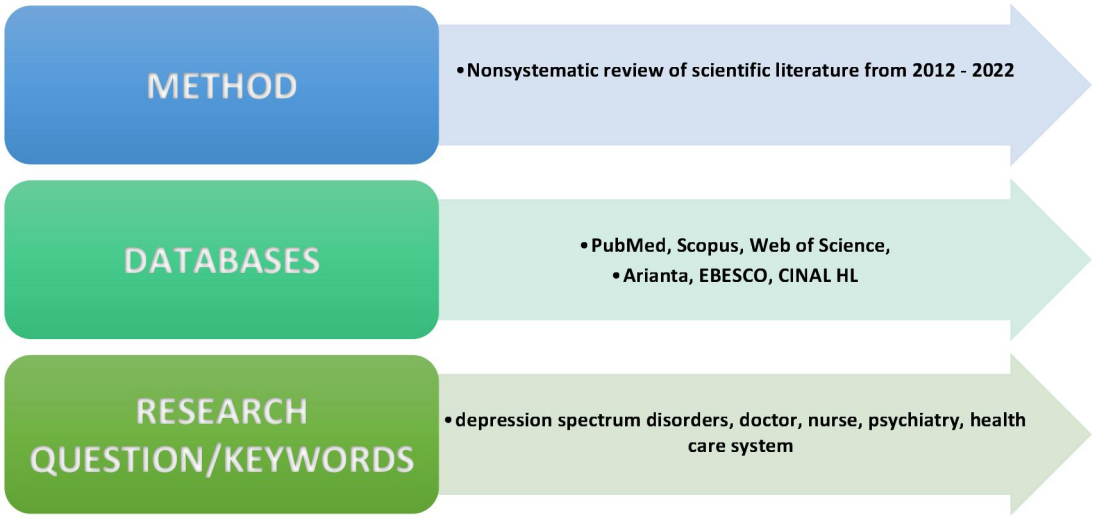

Figure 1: *Methodological scheme of the study (source: own study).*

Results

Etiology of depression

Currently, when considering the causes of mental illnesses, including depression, the so-called biopsychosocial model is often used. It considers as causes of depression, among others:

- biological factors (e.g. genetic factors, changes in neurotransmitter levels in the brain, somatic health, chronic diseases, addictions);
- psychological factors (e.g., stressful life events and ways of coping, marital, family and relationships with others);
- social and cultural factors (e.g., social support network, feelings of loneliness, work, school, material, housing situation).

It is also advisable to study the interrelationship of the above-mentioned factors, as they often occur simultaneously. Most often, mental illness, including depression, is the result of the interaction of several different factors belonging to several of the categories [4,5,6].

Symptoms of depression

Symptoms of depression are quite diverse, they include, first, gradual loss of enjoyment of life and feeling of pleasure, reduction of life activities, gradual loss of previous interests, difficulty in undertaking various activities and actions, depressive thinking, anxiety, increasing sense of loss of meaning in life, the meaninglessness of life, sense of hopelessness, thoughts of resignation, thoughts of death [7,8].

Gradual loss of enjoyment of life and feelings of pleasure, the ability to enjoy things and events that were previously experienced as joyful, until they disappear completely (anhedonia). Decrease in mood and ruminations, combined with indifference ("I'm all the same with what's happening and what will happen"), a sense of emptiness. Sometimes volatile (labile), irritable mood, difficulty in controlling mood and sadness (having a deep and penetrating character, experienced most of the time), crying, which is increasingly difficult to control, and sometimes inability to control one's own emotions, impulsiveness inconsistent with previous behavior [9,10,11].

Reduction of life activities, gradual loss of previous interests, difficulty in undertaking various activities and actions, up to extreme abandonment of these activities (abulia) - for example, inability to get out of bed, perform the simplest hygienic activities, such as dressing, washing, combing hair. Gradual loss of vital energy and decreased sensitivity to emotional stimuli (apathy). Increased fatigability, chronic fatigue with reduced daily activity. Sometimes psychomotor agitation with a sense of increased internal tension, restlessness, and an inability to find one's place [12,13].

Depressive thinking is a pessimistic appraisal of one's past, present, and future, loss of self-esteem, lowered self-esteem, and a sense of being worthless, and unnecessary. Sometimes depressive delusions (false judgments that the patient believes to be true, despite futile attempts to confront them with reality) about feeling guilty, being sinful, punished, condemned, or about poverty, poverty, lack of any prospects for oneself and family. The presence of such delusional thoughts is an absolute indication for consultation with a psychiatrist [14,15].

Although anxiety is not a typical symptom of depression, it very often accompanies it. Although the patient has a sense of constant anxiety, it is difficult for him to determine what he is specifically afraid of (indeterminate anxiety). Anxiety is often chronic, its intensity

gradually increases and decreases (slow-flow anxiety) and is often located by the patient somewhere in the center of the body, for example, in the chest [16,17].

An increasing sense of loss of meaning in life, the meaninglessness of life, a sense of hopelessness, thoughts of resignation, and thoughts of death. This can range from a desire to die by natural means ("I would like to fall asleep and never wake up again," "I ask God to die," "I would like to succumb to some kind of accident") to thoughts of committing suicide. Suicidal thoughts often occur against the will of the patient, who tries to cope with them, ignoring them, but over time this becomes increasingly difficult. Often then the patient "cries out for help," including by informing those around him. In extreme cases, the patient begins to think about the specific way he will commit suicide (suicidal tendencies). It can be planned in detail, but it can also be impulsive - unplanned and sudden. Thoughts of resignation, death, and suicide are also absolute indications for psychiatric consultation [18,19].

During the depression, there are often other less typical complaints that often hinder proper diagnosis and are sometimes the cause of diagnostic errors, listed in Table 1 [20,21,23].

Table 1. *Less common symptoms of depression with their brief characteristics (source: own compilation)*

Symptom	Brief characteristics
Attention deficit disorder	A sense of deterioration in memory and cognitive function gradually subsides with the progressive treatment of depression and improvement in mood.
Sleep disturbances	Depression, they are often manifested by difficulty falling asleep and staying asleep, sleep is often shallow, and intermittent. Also characteristic of depression is frequent waking in the morning hours (3:00-5:00 am) with the ability to fall back asleep with less severe depression, or with the inability to fall back asleep in people with severe depression. Sleep disorders in cases of depression can also occur in the form of excessive sleepiness both at night and during the day. It is then difficult to awaken from night sleep, with patients claiming to "sleep all night and all day" with short breaks.
Reduction or loss of appetite, excessive craving	Patients often say that they are eating by force, forcing themselves because they know they must, or that the food is tasteless. This is sometimes accompanied by significant weight loss (several pounds in a month). Sometimes, however, depression can be accompanied by excessive cravings, overeating unusual for previous behavior (especially with sweet foods), which, combined with lack of physical activity, can lead to weight gain. In this situation, we speak of so-

	called atypical depression.
Decrease in libido (sexual desire)	Lack of desire for sex in both women and men is common in depression. Reduced or lost interest in the sexual sphere can exacerbate depressive feelings of diminished self-esteem, femininity, masculinity, attractiveness. And this, in turn, can reciprocally affect even more diminished libido. Sexual life does not give pleasure or satisfaction. This can further exacerbate the experience of depression. Sexual dysfunction accompanying depression usually resolves with mood improvement with treatment with appropriate medications.
Disorders of the sexual cycle and menstrual disorders	They occur mainly in women.
Daily fluctuations in mood	Patients usually feel worse in the morning, midday and find it very difficult to start the day. In the evening hours, they have the impression of slightly better mood and activity. In the process of progressive depression treatment, the evening hours of better well-being "lengthen" toward first the midday hours and then the morning hours. But there are also patients with depression who feel better in the morning hours than in the evening, or who have no sense of daily fluctuations in their mood.

If depressive symptoms of minor or moderate severity persist for 2-4 weeks, regardless of the underlying causes, psychiatric consultation is indicated. If their severity is significant, psychiatric consultation should take place as soon as possible. If depressive symptoms last only 2-3 days, but their occurrence recurs frequently or cyclically (e.g., monthly), a visit to a psychiatrist is also indicated [24].

The following conditions, among others, should prompt an examination for depression: chronic (i.e., lasting more than a month) insomnia, chronic pain, chronic somatic diseases (e.g. diabetes mellitus, ischemic heart disease, and pre- or post-heart attack conditions, hypothyroidism and hyperthyroidism), neurological diseases (including stroke), unexplained somatic symptoms, frequent visits to the doctor with no diagnosis or improvement in the patient's well-being, postpartum period, substance abuse and addiction, severe stressful life events [25, 26, 27].

Even in the case of the appearance of isolated suicidal thoughts over which the patient has a sense of control, without suicidal tendencies - urgent psychiatric consultation and the initiation of appropriate treatment and management are necessary - regardless of the duration of depressive symptoms. It is not always necessary for a person with suicidal thoughts to be hospitalized psychiatrically (fear of hospitalization is then a common reason for avoiding a visit to a psychiatrist). The psychiatrist, examining the patient, evaluates, among other things, the patient's mental state, the risk of suicide, the severity of suicidal thoughts and the

possibility of coping with them, and the possibility of support from surrounding people. He also evaluates the course and effectiveness of the patient's previous treatment and decides on his further treatment in an outpatient setting, or possibly refers him to psychiatric hospitalization [28, 29].

Increased suicidal thoughts and tendencies are a condition of an immediate threat to health and life. It is then imperative to report immediately to a psychiatrist in a mental health clinic or another outpatient unit, or if this is not possible, to the emergency room of a psychiatric hospital directly. In this case, a referral for psychiatric hospitalization is not necessary [30].

Among the risk factors for suicide, the high intensity of feelings of hopelessness should be mentioned first and foremost. Other features of depression that require special attention from both medical personnel and those around the patient are shown in Figure 2 [31].

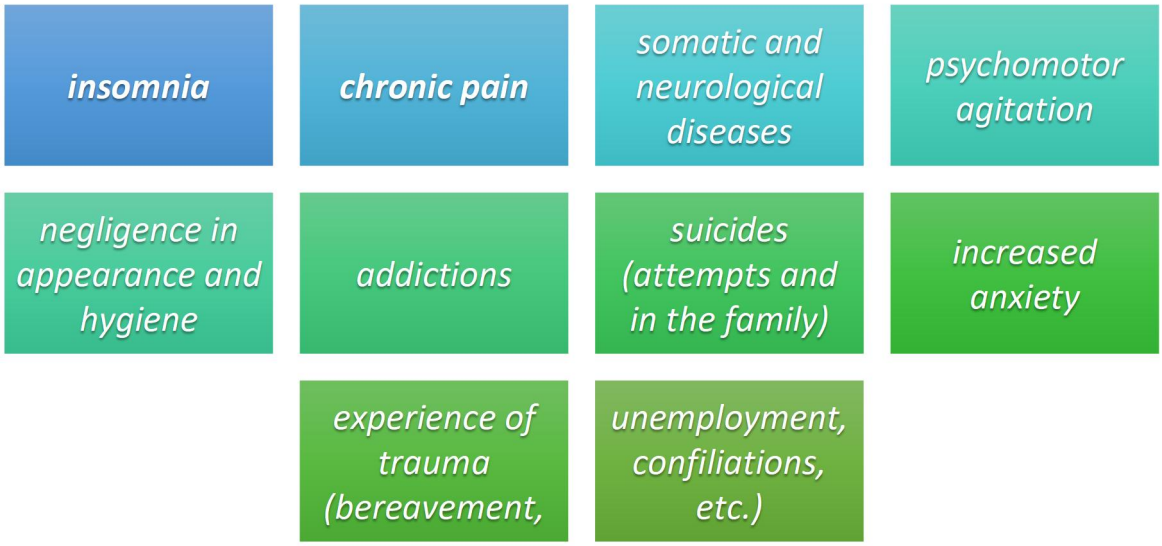

Figure 2. *Symptoms of depression requiring special attention of health care system staff (source: own study)*

Diagnosis of depression

In the case of depression, the primary diagnostic method to establish a diagnosis is a thorough psychiatric examination and interview (talking to the patient, and if possible, also to his relatives/guardians) [32].

The diagnosis or suspicion of depression can be established by any physician, not just a psychiatrist. A quick screening test consisting of 2 questions can help:

1. Over the past month, have you felt a reduction in your interests or an impaired sense of pleasure?
2. During the past month, have you felt sad, depressed, or hopeless?

A positive answer to one question should prompt a more thorough examination of depression [33].

It is also important to diagnose any comorbid psychiatric disorders (e.g., anxiety, substance abuse). It is important to assess somatic health and perform a set of laboratory tests to rule out or confirm systemic disorders that may be the cause of or co-occur with depression (e.g., hypothyroidism or hyperthyroidism) [34,35].

If depression is present, a follow-up visit to the patient's general practitioner and/or specialists in other medical fields is also indicated to fully evaluate the patient's condition and assess the previous treatment of chronic somatic diseases present [35].
Sometimes depression is a symptom of another mental disorder - in such a situation, the bipolar affective disorder is most often involved. Thus, based on the patient's history, the presence of periods of elevated mood and behavior associated with increased energy, activity, ingenuity, endurance of exertion, and decreased need for sleep, among other things, typical of this disease, occurring outside of depression, is excluded or confirmed. Such periods, depending on the severity and number of symptoms, are called hypomania or mania [36,37].

Special questionnaires and tests are also used in the diagnosis of depression, including the Beck Depression Inventory, Hamilton Depression Scale, and Montgomery-Aberg Scale. Without a psychiatric examination, questionnaire testing alone is not sufficient to diagnose or rule out depression, but it helps assess its severity and monitor the course of its treatment [38, 39].

Treatment of depressive disorders

The goal of treating depression is to resolve symptoms and restore functioning to pre-disease levels (remission) and prevent relapse. The patient should be a partner during treatment. The doctor should encourage him to self-observation, formulate his own goals and ask questions. All this serves to improve compliance and cooperation in the treatment process. The choice of method and treatment also depends on the patient's preferences. It is also important to educate the patient and his family about the causes, symptoms, course, duration, and consequences of this disease. The patient and his relatives should know the importance of taking the medication regularly, as a break in treatment is the first step to relapse. Until symptoms are in remission, visits to the doctor should be made even every 1-2 weeks, and then once a month [40,41].
The treatment of depression should be comprehensive, i.e. combine both pharmacological methods (properly selected antidepressant drug(s)) and psychotherapy (and/or other forms of therapy or therapeutic classes) and psychoeducation [43].

Pharmacotherapy (antidepressants) - medications should be selected according to the patient's symptoms, considering the side effect profile, comorbidities, and any other medications the patient is taking. This should be a joint decision between the doctor and the patient. Antidepressants are not addictive. They should be taken daily as prescribed by the doctor. Improvement may be felt only after 2-4 weeks of pharmacotherapy. The properly administered pharmacological treatment gives a satisfactory improvement in about 70% of patients after the first treatment. In the remaining patients, if there is no improvement, the antidepressant drug(s) are changed and sometimes supportive drugs from other groups are introduced. Medications should not be discontinued without consulting a doctor, even when feeling better, as this can cause withdrawal symptoms and relapse of depression. Mild side effects of pharmacotherapy are relatively common, but usually, resolve quickly. The occurrence of stronger or more troublesome side effects requires consultation with a doctor. Nowadays there are very modern and safe preparations that can be used for a long time. Some of them do not react to alcohol and taking many of them is not a contraindication to driving [43,44,45].

In a depressive episode, cognitive-behavioral, solution-focused, supportive psychotherapy is particularly recommended. Often patients, especially at the beginning of depression treatment, are unwilling or unable to undertake psychotherapy. Sometimes, too, having already improved their mental health with drug treatment, they have no further motivation to continue such psychotherapy. Rarely, in strictly justified cases, treatment of depression begins with psychoeducation (education and discussions with the patient about

depression) and/or psychotherapy (and therapeutic classes) and waits with the inclusion of drug treatment. Examples of such situations include mild depression and depression during pregnancy [46].

Phototherapy is a method with proven efficacy and high safety, used for seasonal depression, i.e., occurring during the autumn-winter and/or winter-spring seasons. It involves repeated exposure to light of a certain intensity [47].

Electroconvulsive therapy is an effective and safe method of treatment, usually used when properly administered pharmacotherapy has failed, including when the patient's condition requires intervention, but the administration of medication is contraindicated, or when the depression and its effects threaten the patient's life [48,49].

It is also worth paying attention to adequate nutrition and physical activity. Regular moderate-intensity physical exercise (i.e., exercise during which the patient can talk but is no longer able to sing) can be an effective way to improve mood and may be a valuable component of combination treatment for depression [50, 51].

Conclusions

1. Depression is a disease that can and should be treated, but due to the serious consequences of depressive symptoms, it should not be taken lightly.
2. Treatment of depression should be started as soon as possible; this allows to achieve better treatment results and prevent relapse.
3. The decision on the initiation and method of treatment and the type of therapy is made by the doctor together with the patient.
4. As a rule, treatment is not very burdensome.
5. Treatment is long-term, so it is very important to cooperate with the doctor and follow the recommendations.

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