Mental disorders in somatic diseases: psychopathology and treatment

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ABSTRACT
The prevalence of various mental disorders (especially anxiety syndromes, personality disorders, and addictions – somatoform, conversion and dissociative, dysthymic and depressive) during the life span reaches even up to 30% in the general population. It is significantly higher among people suffering from various diseases due to a variety of complex reasons, such as acute or chronic reaction to severe illness, suboptimal adaptation to hospitalization or disability, side effects of pharmacotherapy, and hormonal or metabolic changes. In all likelihood, physicians of all specialties have at least a few patients with mental disorders, which are either independent of or are secondary to a treated disease. These disorders may often substantially decrease the quality of life and the progress of treatment and rehabilitation.

Introduction
In clinical practice, the cooccurrence of mental diseases and somatic disorders is rather a rule than an exception. From the earliest times, it is known that man is a psychophysical unity. For many years, the notion “psychosomatic diseases” has been used, now giving way to the view that psychological factors play a substantial role in almost all types of health problems. It has been proved that psychological factors, such as personality, behavior, or emotions, can affect the reactions of the body and modify the risk of various somatic conditions, i.e., those affecting physical and bodily state (infectious diseases, cancer, autoimmune diseases, allergies, cardiovascular diseases, diabetes, etc.). On the other hand, the presence of both acute and chronic somatic disease is a risk factor for mental state decompensation (here, it is worth recalling the former concept of exogenous psychosis developed by Karl Bonhoeffer) and especially for developing anxiety disorders, adjustment disorders, acute or chronic stress response, and lowered mood sometimes in the form of depressive disorders. Depressed mood in a situation of severe somatic disease should obviously be considered as a natural reaction, but, regardless of this, many studies have shown a higher incidence of depression syndrome or single depressive symptoms in people suffering from serious somatic diseases compared with the general population. Symptoms of depression (not necessarily in the sense of the presence of an affective disorder) or diagnosis of other mental disorders, particularly chronic somatization disorders, can be detected in more than 40% of hospitalized patients.

The coexistence of mental disorders and a chronic somatic disease have serious health effects. It has been documented that, for example, depressive symptoms (low mood and related decrease in the will to life, loss of hope for a cure, etc.) have a negative effect on the course and prognosis of many diseases and on mortality (e.g., in patients after myocardial infarction), cause subjective suffering, reduce the quality of life, and slow down. Patients with mental disorders are less likely to start rehabilitation, are more reluctant than people with the same somatic disease but without mental disorders to return to their everyday activities, more frequently quit their jobs and apply for disability pension. The diagnosis and treatment of a somatic disease is often delayed by apathy, passiveness, and lack of motivation. Therefore, the assessment of the mental state and providing psychological care to patients with psychopathological symptoms should be an important part of treatment. This applies in particular to patients after surgery, especially when it goes wrong and the worse course causes increased levels of anxiety.
Somatoform disorders  In internal medicine practice, the symptoms of anxiety can be encountered mainly in two situations. First, in patients reporting “somatic” symptoms, or rather symptoms in the form of somatoform disorders (including somatization, hypochondria, autonomic dysfunction, etc.), in whom a somatic disease has been excluded; and second, in patients with a diagnosed somatic disease with concomitant somatic anxiety. In the first case, the symptoms are purely functional, i.e., they do not have a somatic background. These problems were first described by Da Costa during the Civil War. He observed that in soldiers subjected to significant physical and emotional exertion, vegetative disorders, palpitations, hyperventilation, anxiety, and fear occurred. The set of such symptoms is called “irritable heart syndrome” or “cardiac neurosis”; by analogy, also the term “stomach neurosis” was coined (however, many psychiatrists consider these terms to be inadequate – neurosis can be diagnosed in a person rather than in an organ).

Panic disorder at emergency departments and general internal medicine clinics  The most common nonsomatic symptom reported by patients to the internist (especially a cardiologist, pulmonologist, gastroenterologist) is a panic anxiety disorder, typically in the form of severe symptoms of anxiety accompanied by a strong activation of the sympathetic nervous system, identified by patients as imminent myocardial infarction, asthma attack, or simply dying. Panic disorder can cause significant disability and is often associated (bidirectionally) with impaired functioning in everyday life. Other situations in which an internist, and especially a cardiologist, sees a patient in a state of anxiety, is either the coexistence of anxiety disorders and heart disease or anxiety secondary to exacerbation of coronary artery disease. The most common example is fear in myocardial infarction (in 16% to 25% of the patients, severe anxiety precedes other signs of heart attack), and the severity of anxiety is not related to the degree of myocardial damage.

Cardiac patients  A patient with coronary artery disease and chronic heart failure is also exposed to anxiety and depression, which thus have to be considered in cardiac care as well.

Depression contributing to cardiovascular disease is a major clinical problem both due to its frequent occurrence and serious health effects. Numerous studies have confirmed a strong relationship between depressive disorders and the risk of development and unfavorable course of coronary artery disease and myocardial infarction. Depression is also commonly comorbid and is strongly associated with increased mortality, morbidity, reduced health status, and other adverse outcomes, including rehospitalization and functional decline in patients with congestive heart failure. However, depressive symptoms are difficult to recognize in this population. Usually, mild or moderate levels of depression with nonspecific clinical symptoms and predominance of physical complaints may lead to misinterpretation of depressive psychopathology as signs of a poor physical state or drug-induced side-effects.

Asthma and panic disorder  Similarly, panic disorder frequently cooccurs with asthma, particularly severe and aspirin-induced asthma, and the resulting negative psychological factors may lead to asthma exacerbations and poor control. Asthma and panic attacks are associated with reduced sense of the meaning of life. Both asthma and panic attacks seem to be related to psychical traumas, initiating multiple maladaptive defense mechanisms. This often leads to significant difficulties in the cooperation between a doctor and a chronically ill patient (e.g., difficulty in pacifying a patient during a panic attack and asthmatic breathlessness in the case of a catastrophic interpretation of somatic sensations).

Diabetes and depression  Similar difficulties in treatment (e.g., in compliance with dosage recommendations and diet) are encountered in patients with diabetes, especially those with insulin-dependent diabetes. Therefore, it is not surprising that anxiety disorders related, to some extent, to chronic disease and to the above maladaptive defense mechanisms affect, next to depression, a significant proportion of patients with diabetes. It is estimated that about 40% of diabetic patients have lowered mood states and about 25% have more severe depression that requires psychopharmacological treatment. Despite the high prevalence of depression in diabetic patients (and impaired glucose tolerance in depressive patients) and the proven adverse effects on glycemic control and disease course, which often requires initiation of combined therapy, still the two-thirds of diabetic patients with depression do not receive antidepressant therapy. This is even more disturbing because it has long been known that an effective treatment of depression may improve glycemic control and reduce the risk of cardiovascular complications, thus improving patients’ survival.

Unlike the long-term metabolic effects of hyperglycemia, the effects of hypoglycemia are rather sudden and life-threatening: loss of concentration, dizziness, and fainting result in constant fear and attempts to “control the problem” by reducing an insulin dose, etc.

Renal failure and liver insufficiency as serious psychiatric problems  Another important issue are mental disorders in kidney diseases (primarily severe depressive syndromes but also dementia, psychosis, and various less severe anxiety and adjustment disorders). Psychiatric symptoms that are resistant to treatment occur also in liver diseases. Moreover, these diseases are associated with neuropsychological symptoms such as encephalopathy, confusion, and coma.
Gastrointestinal psychogenic complaints  Difficulties in the diagnosis and treatment of gastrointestinal functional disorders also need to be mentioned. They are frequently present in numerous neurotic disorders such as anxiety in the form of phobia (ICD-10 classification code, F40), other anxiety disorders (F41), and somatoform disorders (F45), especially in autonomic dysfunctions of the gastrointestinal tract (F45.31 and F45.32).

Lowered pain threshold  Anxiety and depressive feelings enhance pain and lower the pain threshold, and a strong association between mood disorders and chronic pain is also expressed in an increased risk of suicidal thoughts and behaviors.

Obesity and its psychological background  Another serious problem of internal medicine is obesity, which indeed is the plague of our times. It is not a coincidence that nowadays two epidemics exist side by side – obesity and depression. For many people, obesity is becoming not only a health problem, but also a social challenge. Obese people are convinced that they are less likely to be employed and to progress in their careers, that they are less socially attractive, and are generally worse than other people. Moreover, they feel rejected and lonely and are often subjected to cruel taunts, especially among teenagers. This – as in vicious circle – causes further weight gain. In obese women, a high level of dissatisfaction with their appearance is observed along with a distorted self-image and negative attitude to the body.

This, in turn, reduces their motivation to overcome the stressful situation. Low mood, just as fear and anger, frequently triggers the mechanism of “stress eating”, leading to obesity and causing women to feel unattractive, worse, and guilty.

Weight gain, overweight, and obesity are also frequent complications in the treatment of mental disorders. The opposite phenomenon may also be observed, namely, the development of depressive symptoms in obesity-related somatic diseases, such as type 2 diabetes, coronary heart disease, or cerebrovascular disease. However, the background of this association is not homogenous: three groups of factors responsible for the cooccurrence of obesity and depression (and other mood disorders) can be specified. First, there are the iatrogenic factors. Some antidepressants cause weight gain (e.g., tricyclic antidepressants, mianserin, mirtazapine); obesity is also a serious adverse effect of atypical antipsychotic drugs. On the other hand, some drugs used in the treatment of obesity-related diseases may cause symptoms of depression (of note, there are well-documented reports indicating that statin use reduces the risk of depression in coronary patients, contrary to previous opinions). Second, it is known that the incidence of obesity in the general population has been increasing since the 1970s. At the same time, mood disorders are becoming more and more prevalent in younger populations, and together with eating disorders and obsessions contribute to the higher prevalence of all the diseases discussed above. There is also a subtype of depression, known as atypical depression and characterized by an increased appetite, focused particularly on carbohydrate intake and, consequently, causing weight gain.

Anorexia and orthorexia  A completely different condition, which also requires intensive cooperation between internists and psychiatrists, is anorexia nervosa – a life-threatening, excessive, uncontrolled weight loss associated with impaired self-esteem and sense of gender. For internists, medical repercussions of anorexia range from amenorrhea to severe complications of secondary osteoporosis. In this context, proanorexia, which encourages children and young women to become anorexic, especially on the Internet, may seem shocking. As a result, “well-informed” patients extort prescriptions for thyroid hormone from their doctors, look for medications on the black market, or take excessive amounts of “fitness” preparations. We frequently encounter patients using laxatives or drugs that cause vomiting and dehydration (e.g., prescribed by several doctors at the same time). All these behaviors result from a completely distorted body image that patients frequently have trying to live up to modern standards promoted by the media.

Internists should also be alerted to a relatively new but increasingly common eating disorder, namely, orthorexia. Patients with orthorexia eat only selected “healthy” foods, dietary supplements, etc.

Peer compliance  Mental disorders and internal diseases coexist and adversely affect one another on multiple levels. Decision-making difficulties, a drop in motivation, anxiety, and a tendency to isolate oneself from the society may lead to deterioration in a doctor-patient relationship, irregular visits, noncompliance (a typical example are patients who continue smoking after myocardial infarction), and delays in diagnosis and treatment. On the other hand, severe chronic somatic diseases may cause psychological stress associated with the need to adapt to limitations, pain, and discomfort.

High comorbidity rate and underdiagnosis of mental disorders  Despite their high prevalence among patients with somatic diseases, mental disorders are often undiagnosed and thus left untreated (e.g., in patients with ischemic heart disease and comorbid depression, the latter is recognized only in 25% of the patients and treated only in 12.5%). The diagnosis of depression, somatization, or anxiety disorder in patients treated for a somatic disease can cause numerous difficulties. The classic symptoms of psychic disorders should definitely
be considered. But patients often display mainly uncharacteristic symptoms, with the domination of somatic over psychic symptoms (for example because patients assume, right or wrong, that the internist is not interested in their mental state). Common complaints include fatigue, insomnia, loss of appetite, general discomfort, and malaise as well as concerns about one’s own health. Such problems can easily be ascribed just to a somatic disease although great care is required to recognize the state of the patient as psychogenic—a result of somatization or conversion. A doctor who is not a psychiatrist focuses on symptoms and physical abnormalities rather than on the assessment of a patient’s emotional state. Also, a patient who comes to a doctor expects questions about somatic symptoms; there is no habit of discussing personal fears and sorrows. Such confessions are often considered as funny, embarrassing, and not deserving attention. As a consequence, patients with a variety of psychic disorders, such as depression, anxiety, and especially somatization and hypochondria, become frequent users of medical facilities generating increased healthcare costs (such patients are often described as “frequent utilizers” or “frequent attenders”, and the phenomenon as “doctor shopping”).

Rejecting the psychogenic nature of a disorder by patients informed about the absence of somatic causes in the presence of psychogenic somatization symptoms has a multiple background. There are various defense mechanisms at work as well as unconscious reluctance to deal with the real (resulting from the difficulty of understanding the causes lying in psychological disorders) and resistance to accept the seemingly illogical and often awkwardly given information: “Your are healthy; the pain is not real.” This, in the light of the intensity of sensations strengthened by the so called somatosensoric amplification or catastrophic interpretation, seems to be quite understandable if we look from the perspective of a patient.

Therefore, the diagnosis should be based on the examination of and a contact with a patient with a thorough evaluation of his or her mental state and psychological problems. Attention should also be paid to additional features such as depressive thinking style (pessimistic content appearing in patients’ evaluation of themselves, their environment, and lives) or subjective assessment of the quality of life. Psychiatric disorders can be suspected when frequent and repetitive visits to the doctor occur unjustified by the somatic state and characterized by nonspecific, changeable somatic complaints, lack of improvement after routine treatment, and non-compliance. Here, a dramatic example of clinical patients can be given who take nonpsychiatric medications incorrectly not only because of psychosis but even because of seemingly harmless neurotic symptoms (for example, a patient with dissociative memory problems took several overdoses of antihypertensive drugs and required hospitalization).

**Treatment issues** Coexistence of a somatic disease can make the treatment of psychic disorders more difficult, but in most patients it will be effective. Adequate combined therapy may not only suppress the psychopathological symptoms but also positively affect the course and prognosis of a somatic disease, allowing a patient to undergo rehabilitation and return to a normal life. Similar observations have been made even in the field of oncology. When planning the treatment, apart from the use of psychotherapeutic interventions and/or pharmacotherapy, a simultaneous treatment of the primary disease is vitally important. Frequently, the effectiveness of treatment improves the functioning of a patient and reduces the psychopathological symptoms (a typical example would be the normalization of thyroid hormone levels).

A common issue in internal medicine are psychoses complicating steroid therapy of, for example, autoimmune and allergic diseases, and mental disorders associated with thyroid dysfunction.

Although it is always advisable to consult the cases of mental disorders with a psychiatrist, internists should possess at least some basic psychiatric knowledge to be able to recognize these disorders. Moreover, it seems that no one can replace internists in activating some nonspecific therapeutic factors in the treatment of their patients, for example by psychologically competent communication about their condition and prognosis and motivation to cooperate, which increases patients’ hope, reduces anxiety, and improves mood.

In the treatment of more severe depressive disorders, pharmacotherapy is essential. Contrary to many prejudices reinforced by the side effects of older tricyclic antidepressants (i.e., their cardio-toxicity), contemporary clinical data allow us to recommend antidepressive treatment in depression comorbid with somatic illnesses. However, randomized clinical trials in this population of patients are still needed. In most trials assessing the efficacy of antidepressants, coexistence of any severe somatic disease is an important exclusion criterion. There are only few exceptions: the most famous including the Sertraline Antidepressant Heart-Attack Randomized Trial (SADHART) and Safety and Efficacy of Sertraline for Depression in Patients with CHF (SADHART-CHF), concerning the safety of sertraline in depressive patients with coronary artery disease and congestive heart failure, respectively. In somatoform disorders, anxiety disorders, and less severe depressive syndromes, beside antidepressants (gradually replacing benzodiazepines), psychotherapy is a common recommendation. Referral to a psychiatrist or psychiatrist requires particularly polite and precise communication, because patients are usually completely unaware of the fact that their
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Zaburzenia psychiczne w chorobach somatycznych: psychopatologia i leczenie

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SŁOWA KLUCZOWE
depresja, lęk,
somatyzacja,
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STRESZCZENIE
Rozpowszechnienie rozmaitych zaburzeń psychicznych (przede wszystkim zespołów lękowych oraz zaburzeń osobowości i uzależnień – występujących pod postacią somatyczną, konwersyjnych i dysocjalnych, dystymicznych i depresyjnych) w dowolnym momencie życia sięga w populacji ogólnej nawet 30%. Wśród chorych jest ono oczywiście znacznie większe z wielu złożonych powodów, takich jak ostra lub przewlekła reakcja na ciężką chorobę, niewystarczająca adaptacja do hospitalizacji lub niepełnosprawności, działania niepożądane farmakoterapii, zaburzenia hormonalne czy zmiany metaboliczne. Z dużym prawdopodobieństwem można stwierdzić, że każdy lekarz bez względu na specjalizację ma wśród swoich pacjentów przynajmniej kilka osób z zaburzeniami psychicznymi – współwystępującymi niezależnie od leczonej choroby lub wtórnymi wobec niej. Zaburzenia te często znacznie obniżają jakość życia, postępy leczenia i rehabilitacji.