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THE WORK OF THE CLINICAL PSYCHOLOGIST WITH PHYSICALLY ILL PATIENTS

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This chapter aims to provide an insight into the work of clinical psychologists working in somatic care. First, the complex interrelations between physical and mental illnesses will be reviewed, followed by a discussion of the most common comorbid mental disorders (depression, anxiety) and their complex effects in relation to chronic physical illnesses. Effective management of the complex interrelationship between body and mind also requires complex, integrated health care for people with physical illnesses who also have mental health problems. This requires a multi-disciplinary approach and work, of which liaison psychiatry is a significant example. An important member of the treatment team is the clinical psychologist, who supports somatic patients in collaboration with representatives of other disciplines, including health psychology. The remainder of this chapter focuses on his or her work and experience through case studies.

I. PHYSICAL AND/OR MENTAL ILLNESS

I.1. THE COMPLEX RELATIONSHIP BETWEEN PHYSICAL AND MENTAL ILLNESS

According to the biopsychosocial approach currently prevailing in health science, biological (genetic, hormonal), psychological (thinking, feelings, behaviors) and social (socioeconomic, environmental, and cultural) factors contribute to the pathogenesis, persistence, or prognosis of diseases (Wade & Halligan, 2017). The relationship between physical and mental illnesses is bidirectional: some chronic somatic conditions can elevate the risk of mental disorders, and mental disorders can affect health status, treatment, and outcomes (Prince et al., 2007).

I.2. CHRONIC PHYSICAL ILLNESSES AND COMORBID MENTAL DISORDERS

Among people with chronic illness, the most common mental disorders are depression (two to three times more common than in the general population; National Institute for Health and Care Excellence [NICE], 2009) and anxiety (with similar prevalence; Kariuki-Nyuthe & Stein, 2015; Scott et al., 2007). Some physical symptoms – such as sleep disturbance, loss of appetite, lack of energy, fatigue, weight loss – may be a

consequence of illness or treatment (e.g. steroids), may be interpreted as a natural response to a diagnosis of chronic physical illness, or may be signs of depression. Functional limitation brought on by persistent illness may also result in distress. This can make co-occurring mental illnesses more difficult to recognize, although they are associated with a number of serious consequences, including poorer clinical outcomes and quality of life, less effective management of physical symptoms (Benton et al., 2007; Katon, 2003; Vamos et al., 2009), repeated hospitalizations (Jiang et al., 2001), increased treatment costs, and lower employment and productivity (Hutter et al., 2010).

1.3. CO-MANAGEMENT OF PHYSICAL AND COMORBID MENTAL ILLNESS

Effective support for the mental health needs of people with chronic illnesses can, however, improve both mental and physical health. Despite this, mental health care is often lacking from health care. Moreover, different departments (e.g. mental, somatic and social care) are often separate, so that patients may get stuck in gaps between services.

1.3.1. The Nature of and the Need for Integrated Health Care

Integrated health care is the only way to overcome the above-mentioned difficulties and shortcomings. It is a unique approach in which different professionals (doctor, nurse, dietician, physiotherapist, psychologists with different specializations, social worker, etc.) share information and develop a comprehensive treatment plan (APA) based on the biological, psychological and social needs of the patient. Integrated health care is a way of putting the biopsychosocial model into practice, and is particularly important in the care of people with long-term illness, those with medically unexplained physical symptoms (e.g. chronic pain or fatigue), or those requiring immediate care for combined health problems (e.g. delirium, somatic manifestations of eating disorders, etc.) (Prince et al., 2007).

1.3.2. Liaison Psychiatry in Integrated Health Care

An important example of integrated health care is liaison psychiatry, which most often involves acute psychiatric care, but is also available in specialist hospitals and primary care for the treatment of a variety of mental health problems (e.g. self-harm, dementia, alcohol and drug abuse, behavioral disorders). Liaison psychiatry can be implemented in a *consultation model* (requesting a council) or in an *integrated model* where the liaison team is involved as part of the medical staff in care, for example in pain clinics, oncology, or geriatric wards (Stevens & Rodin, 2011).

1.4. ROLE OF THE CLINICAL PSYCHOLOGIST IN SOMATIC CARE

The integration of the work of the clinical psychologist into multidisciplinary health care is essential for several reasons:

- I. through diagnostic work, he or she addresses the biological, psychological and social aspects of the illness, thus helping to improve access to quality care and reduce the cost of care;
- II. facilitates smooth communication and collaboration between colleagues;
- III. ensures that the patient has access to all necessary treatments, including the most effective ones, and helps to stimulate motivation to recover;
- IV. alleviates anxiety and stress related to the illness, allows the prevention of depression, and thus has an overall positive impact on treatment (Azad & Mahmud, 2014; Wahass, 2005).

Psychologists working in somatic care can be involved in both inpatient and outpatient care. Although the profile and focus of physical treatment may vary depending on the disease group (e.g. dermatology vs. surgery), the work of clinical psychologists always involves mental health assessment and diagnosis, as well as psychological interventions. The assessment of the condition involves a review of the patient’s or the illnesses profile and possible treatment goals (Vincze & Perczel-Forintos, 2019). The aim of psychodiagnostics is to establish the correct diagnosis, answer differential diagnostic questions, accurately identify comorbid mental disorders (e.g. depression, anxiety, substance abuse, cognitive decline, somatization, illness anxiety), and assess suicidal vulnerability. Questionnaires and tests will be administered, which will allow for follow-up in later stages of treatment. The most commonly used instruments and procedures for assessment and psychodiagnosis are listed in Table 1.

Table 1 Instruments and procedures used in diagnostic and assessment work

Beck Depression Inventory (Beck et al., 1961), Zung Self-Rating Depression Scale (Zung, 1965)
Hopelessness Scale (Beck et al., 1974)
Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983)
Beck Anxiety Inventory (Beck et al., 1988), Spielberger's State Trait Anxiety Inventory (Spielberger et al., 1970)
Short Health Anxiety Inventory (Salkovskis et al., 2002)
Fear of Negative Evaluation Scale (Watson & Friend, 1969)
Dysfunctional Attitude Scale (Weissman, 1979)
Cognitive Emotion Regulation Questionnaire (Garnefski & Kraaij, 2007)
SCID -5-CV Structured Clinical Interview (First et al., 2018), Motivational Interview (Miller & Rollnick, 1991)
Projective techniques: e.g. Rorschach test, drawing tests
Others: disease specific questionnaires e.g. Dermatological Quality of Life Index (Finlay & Khan, 1994)

So-called *low-intensity psychological interventions* are forms of care that provide effective but minimal intervention for mild to moderate mental health problems, often in the form of self-help books, internet-based programs, short telephone consultations, thereby increasing accessibility, flexibility and cost-effectiveness of treatment (Bennett-Levy et al., 2010). They are highly adaptable to somatic care, as they can be easily adapted to different forms of care (inpatient, outpatient) and to the changing complexity and severity of patients' needs and illnesses (Purebl, 2018; Vincze & Perczel-Forintos, 2019). In addition, psychologists can support patients' recovery through a variety of interventions, such as cognitive behavioral therapy, relaxation, supportive therapy, interpersonal therapy, crisis intervention and group therapy, according to their professional and methodological qualifications. The interventions aim to promote behavior change, improve patient cooperation (diet, exercise), adaptive coping strategies, helping the patient to adapt to the new way of life caused by the illness, relieving the tension, stress and anxiety associated with the trauma of the illness, and treating comorbid mental disorders (depression). The psychological tasks vary at different stages of the disease. For example, during prehabilitation (preparation for surgery), functional capacity, coping and support for relatives are the primary focus; during the progression of the disease, addressing adherence problems, psychoeducation, stress reduction are emphasized, and terminal conditions also require a different focus (e.g. addressing pain and helplessness) (Azad & Mahmud, 2014). The psychologist can also facilitate doctor–patient communication and the achievement of an effective partnership in treatment.

Table 2. The patient's psychodiagnostic test scores before (objectively BPPV-free) and after psychological treatment

<i>Scale/name of inventory</i>	<i>Scores before treatment</i>	<i>Scores after treatment</i>
<i>Dizziness Handicap Inventory</i> (Jacobson & Newman, 1990; Szirmai et al., 2018)	58	26
<i>Beck Anxiety Inventory (BAI)</i> (Beck et al., 1988)	30	2
<i>Beck Depression Inventory (BDI)</i> (Beck et al., 1961)	14	7
<i>Perceived Stress Scale (PSS-10)</i> (Cohen et al., 1983)	22	18

2. CASE PRESENTATION

A patient in her late twenties – let's call her Johanna – visits a clinical psychologist with prolonged complaints of dizziness on the advice of a specialist. Four months prior to presentation, the patient consulted her general practitioner for several weeks of alternating headache-dizziness symptoms, who referred her to a specialist. The patient's

blood count was normal, ophthalmologically and otorhinolaryngologically she was healthy, and a cranial MR scan, to reassure the patient, was also negative. In the otoneurologic outpatient clinic, which specializes in the investigation and treatment of the function of the vestibular system, the consultant doctor diagnosed *benignus paroxysmalis positionalis vertigo* (BPPV).

BPPV is a disorder of the inner ear in which a sudden change of position of the head results in a spasmodic, rotational vertigo lasting less than one minute (Bhattacharyya et al., 2017). The designation “benign” indicates that there is no underlying serious central nervous system disorder, and the prognosis is encouraging. First described in 1921 by Róbert Bárány, the etiology of the disease is controversial. The most widely accepted theories argue that vertigo is related to calcium crystal particles in the ear being dislodged from their normal location and floating in the posterior semicircular canal or adhering to an inappropriate location (Szirmai, 2010). BPPV is the most common vestibular dysfunctions, accounting for the symptoms of about 24% of people seeking medical help for dizziness (Kim et al., 2021). Its lifetime prevalence is 3.6% in women and 1.6% in men (von Brevern et al., 2007), and has a high recurrence rate (50% within 10 years, mostly in the first year, mostly in women; Brandt et al., 2006). Its most common acute symptom, which can be differentially diagnosed, is circular nystagmus, provoked by the so-called Dix-Hallpike maneuver (a special sudden backward tilt of the body and rotation of the head) (Muncie et al., 2017). Although BPPV can heal spontaneously, it usually requires therapy, most commonly so-called particle-repositioning specific exercises such as the Epley or Semont maneuver (Kim et al., 2021).

By the time Johanna came for otoneurologic examination, the characteristic nystagmus was no longer present, but the nature of her complaints suggested the presence of BPPV. (This was subsequently confirmed by a recurrence.) The doctor prescribed balance training (practicing situations that cause discomfort), neck massage and first herbal extracts with sedative effects, followed by selective serotonin reuptake inhibitor (SSRI) type medication (the patient had a bad experience with the drug that directly acted on the dizziness). At the same time, noticing the patient's anxiety and the so-called *chronic subjective dizziness*, which was less organically justifiable, he gave her the clinical psychologist's contact, which the patient, who had always known herself to be “the nervous type”, happily accepted.

On the first interview, a slim, tall, well-groomed, extremely polite young woman appeared who was eager to meet expectations. Her main symptom was that she was hampered by dizziness in a number of situations: when getting out of bed, walking up and down stairs, bending down, playing sports, cleaning, and in crowds; she avoided those that were not essential. She also had concentration problems and working in front of a monitor also triggered her symptoms. All these caused frustration and depression and affected her interpersonal relationships.

At the time, Johanna was living a double life between her parents and her fiancé, who lived in a two-generation house with his parents. Her relationship with her future mother-in-law and father-in-law was full of conflict, and she says that she was *'nervous from the moment she stepped into the street'*. She had a university degree and worked in an administrative job as a team leader. Two months before applying for the job, there had been a change of boss and they expected the return of a female colleague she did not like, which made her *'nervous well in advance'*. Within ten months, one family member had fallen seriously ill, and another had died. Her history also revealed a tendency for anxiety and somatization (regular diarrhea before tests). Her psychological-psychiatric history is uneventful. Her mental status is characterized by a changing mood and behavioral signs of anxiety. Diagnostic measures indicated severe impairment in quality of life related to dizziness, moderate anxiety, mild depression and slightly (but not significantly) higher than average perceived stress (see Table 3), which lead to a diagnosis of F4180 *Other specific anxiety disorder* based on clinical picture and test results. Johanna was motivated for psychological support, so we contracted her for ten 50-minute supportive therapy sessions, enriched with cognitive behavioral therapy elements, on a weekly outpatient basis, supported by social security. The therapeutic goal was to reduce anxiety (with the potential for spontaneous resolution of already mild mood symptoms). The patient's diary of her thoughts revealed the most anxiety-provoking situations (e.g. escalator in a mall, standing for an hour while being introduced to the new boss), the negative automatic thoughts that emerged in them (*"Dizziness is coming"*, *"It will never go away"*, *"I have a brain tumor"*) and the underlying cognitive distortions (fortune telling). The diary also showed that travelling on a weekly basis was stressful, while the home environment and certain activities (such as gardening) were calming, and that this was reflected in symptoms: stronger on more stressful days and weaker on more pleasant days. A six-month pathobiogram showed a parallel between negative life events and the development of symptoms.

Targeted interventions were possible to make at the intervention points highlighted above: restructuring of negative automatic thoughts (*"This is a curable disease that can go away with treatment"*; *"Although I feel dizzy, there is nothing to suggest that there is a malignant process going on in my body"*), metacognitive awareness of cognitive biases (*"I tend to think the worst immediately, but it is worthwhile to examine the truth of my thoughts"*), learning relaxation, consciously incorporating pleasant activities into the patient's lifestyle, and finally behavioral trials (deliberate engagement in avoidance situations in ascending order of the anxiety hierarchy). Johanna learned to make her anxiety bearable, her sense of vulnerability to its symptoms decreased, she gradually resumed activities she had previously neglected, the success of which positively reinforced her entrepreneurial spirit. During treatment, a relapse associated with an emotionally stressful event (All Soul's Day), although frightening (*"a chasm into which I am falling"*), gave her the opportunity to normalize the relapse and prepare for possible

new ones. By the end of the therapy, the patient's deterioration in quality of life related to dizziness had gone from an initial severe to mild, her anxiety and depressive symptoms had become negligible, and her perceived stress level had also decreased (see Table 3).

During the therapy, a doctor-psychologist consultation on the course and prognosis of the disease was carried out on several occasions, initiated from both sides, with the patient's knowledge and consent. Reduction of the SSRI dose was considered safe by the specialist only after a longer period of stability. During two years of follow-up, the patient's dizziness returned significantly on three occasions: once in the context of a follicular tonsillitis, once in the context of a recurrence of BPPV (this time diagnostically verifiable), and once in the context of the death of a close acquaintance. Otherwise, at the time of writing, Johanna's condition is compensated, she has stopped taking psychotropic medication and she is not experiencing anxiety caused by anticipating recurrence.

2. DISCUSSION

Johanna's disease was not diagnosed in primary care, and she reached the appropriate specialist care too late to confirm BPPV with certainty. Sometimes there are delays in the management of patient pathways and the delay in diagnosis increases patient distress. In Johanna's case, the trigger for the hypersensitivity of the vestibular system was BPPV, but the persistence of dizziness was more likely due to the stress of the disease, the lack of knowledge of what caused the symptoms, and the phobic reaction to stimuli provoking dizziness. Avoidance reduced stress in the short term, but in the long term it led to the entrenchment of fears, a reduction in living space and social contacts, and overall, a severe deterioration in quality of life.

A significant percentage of patients suffering from vertigo show symptoms of depression and/or anxiety. This percentage can range from 11-18% (Kim et al., 2016) up to 63.4% (Garcia et al., 2003), depending on the scale cut-offs used. Patients with comorbid dizziness and distress may have symptoms long after their vestibular function has been compensated by objective measures (Yardley, 2000). What's more, BPPV patients with psychiatric symptoms are significantly more likely to relapse within six months than others with only physical symptoms (Wei et al., 2018). In contrast, patients with greater resilience, sense of coherence and life satisfaction are less likely to develop secondary somatoform vertigo (Tschan et al., 2011).

The relationship between vertigo and psychological-psychiatric problems is bidirectional:

- a) *Psychological factors may contribute to the development of vertigo.* Anxiety may manifest as a subjective sense of imbalance (in which case no objective abnormality in vestibular function is observed; Szirmai, 2011). Hyperventilation with a psy-

- chological background may also lead to dizziness through excessive oxygenation (a diagnostic criterion for panic attacks). Even balance disorders with an organic background and objective symptoms are more common in anxious than non-anxious people. A population-based retrospective cohort study in Taiwan, for example, found that patients with anxiety disorders were more than twice as likely to develop BPPV than healthy individuals (Chen et al., 2016). In an Italian study, those diagnosed with BPPV had significantly more negative life events in the year prior to diagnosis than in matched healthy controls (Monzani et al., 2006), so stress could also turn out to be a trigger. This may also be related to the significant overlap between the anatomical regions and neurotransmitters responsible for the functioning of the vestibular system and emotional states (Balaban et al., 2011).
- b) *Dizziness can lead to psychiatric problems.* The loss of balance is frightening for patients, and in the absence of an explanation, they might end up catastrophizing the situation. Patients experiencing balance system disorders often imagine that they are suffering from a terminal illness (Szirmai, 2011). Patients may become avoidant (even to the extent of agoraphobia) of situations that may cause dizziness, and their living space is often reduced, their social contacts are impaired, and their quality of life deteriorates. In the longer term, this can easily lead to depression (Kozak et al., 2018).

It can be deduced from II.) that if the organic disease is treated properly, the psychological symptoms can be alleviated without psychotherapy. Indeed, in a Turkish study of a small group, successful physical treatment of BPPV significantly reduced patients' anxiety levels (Gunes & Yuzbasioglu, 2019). Similarly, in a Chinese study, anxiety, depression, and quality of life scores 3 months after BPPV treatment were significantly better than before treatment (Zhu et al., 2020). However, in the absence of spontaneous remission, patients need to be treated psychologically, because follow-up studies have shown that whether dizziness becomes a long-term disability depends more on psychological than physical factors (Staab, 2006).

In Johanna's case, an improvement in psychological indicators and an increase in the patient's level of everyday functioning were confirmed. The therapy did not aim at exploring the genetic and life-history background of the disposition for anxiety, at modifying the patient's interpersonal functioning (e.g. the need to conform), at deepening the understanding of the causes of stress in the work environment and at resolving them. In a somatic setting, long *trait-change* therapies are rarely possible, and instead short, problem-oriented, symptom-reducing and *state-change* support takes place. Yet, when psychological problems are associated with physical illness, improving quality of life and restoring health is a moral obligation. In Hungary, too, the stigma surrounding psychological aspects is decreasing slowly but encouragingly, and more and more doctors and patients are open to psychological help – which is, of course,

not always necessary. This also requires the psychologist to demonstrate the legitimacy of his work in a demystified way that is easy for both doctor and patient to follow, if possible, using proven effective methods. This complex approach is the closest we can come to the renaissance of the holistic approach and to curing the person and not the disease.

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