# Chapter 5 Treatment of Burnout: Overlap of Diagnosis

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# 5.1 Introduction

The burnout process can lead to a variety of somatic and psychological symptoms that may appear in very different clinical forms in patients. The burnout syndrome can be associated with psychiatric disorders, in particular the anxiety–depression spectrum or (concerning exhaustion as a prominent symptom) disorders related to chronic fatigue syndrome. In addition, burnout can also lead to somatic disorders (von Känel 2008; Kaschka et al. 2011). The burnout syndrome does not fall into a disease category in the internationally established diagnostic manuals such as ICD-10 and DSM IV (Nil et al. 2010). Because many symptoms of burnout can be observed in other clearly classifiable disorders according to ICD-10 or DSM IV, there is a symptom overlap with other diagnoses, such as depression (Ahola et al. 2005; Kaschka et al. 2011).

Burnout develops within the framework of a certain constellation, determined by individual circumstances contributing to the burnout process and the development of the disease. The relevance of an exact diagnosis and the implications for therapy will be described in more detail in this chapter.

# 5.2 Diagnosis

In the internationally established diagnostic manuals, such as the ICD-10 and DSM IV, the burnout syndrome has only the status of a Z-Diagnosis, which reflects an additional diagnosis to the specific psychiatric disorders classified as having an F-Diagnosis (Dilling et al. 2008).

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Because of the heterogeneity of symptoms and different etiological descriptions, burnout is defined in different ways according to the theoretical models under consideration, e.g., the jobs demand resource model (Demerouti et al. 2001), the model of effort reward imbalance (Siegrist 1996), and the dual level of exchange model (Schaufeli et al. 1996). Despite different etiological constellations and the different symptoms described, these models all share a common concept: Burnout is a dynamic developing process based on the perception of chronic stress due to workload and insufficient personal resources (Freudenberger 1982; Fagin et al. 1996; von Känel 2008). A weakness of all these concepts of burnout is that a precise description of etiologically involved factors is lacking (Kaschka et al. 2011).

For the assessment of burnout, several screening tests have been developed. To date, more than 90% of studies on burnout topics have been performed with the Maslach Burnout Inventory (MBI) (Maslach et al. 1996; Kaschka et al. 2011) in spite of major shortcomings, predominantly concerning the validity of this scale (Korczak et al. 2010). The burnout syndrome has been mainly assessed by self-rating scales, in particular the MBI. Psychometric investigations reveal that only the factor of "emotional exhaustion" seems to be a consistent dimension, whereas the other two dimensions of "depersonalization" and "personal accomplishment" have not shown consistent results (Kaschka et al. 2011).

The main difference between psychiatric disorders as described by the ICD-10 and the various definitions of the burnout syndrome is that burnout is-despite numerous overlaps with psychiatric symptoms-a workplace-related social construct (Leiter and Durup 1994) rather than a cross-sectional "stationary" diagnosis. A large variety of burnout symptoms emerge as a result of this ongoing social process, which is induced and maintained by chronic stress (Appels 1997; Hodge et al. 1994). The result of this process is that very different stress-related symptoms, which can become evident on a physiological or psychological level, emerge (Pruessner et al. 1999). These symptoms can become so severe that different disorders that may achieve ICD-10 criteria might be diagnosed. Therefore, depending on the stage within the chronological model of burnout stages (Burisch 2010; Shirom et al. 2005), burnout can produce very different symptoms and at each stage the symptoms may more or less overlap with those of other disorders or even allow or require the diagnosis of other disorders (even if developed during a burnout process) (Tennant et al. 1981; Linden and Muschalla 2007; Ahola et al. 2007).

The common pathway is the common etiology that underlies the burnout process.

Based on these considerations, depression—for example—may have a burnout etiology, but can also have a completely different etiology, for instance "endoge-nous" depression that includes great vulnerability without a clear source of external stress.

# 5.3 Overlap of Diagnosis

### 5.3.1 Burnout and Psychiatric Disorders

In the latter stages of the burnout process a number of somatic and psychological symptoms severe enough for the diagnosis of a disease and for the requirement of specific treatment can be observed (Honkonen et al. 2006; Melamed et al. 2006; Sonnenschein et al. 2007).

Concerning psychiatric disorders, depression, anxiety, as well as adjustment disorders with depressive or mixed depressive/anxiety states, neurasthenia, and chronic fatigue syndrome should be taken into account. In addition, burnout patients frequently present with pain symptoms and tend to develop substance abuse (Weber and Jaekel-Reinhard 2000); thus, these nosological categories also need to be considered (Kaschka et al. 2011). Because of the symptoms described for burnout, the overlap with the spectrum of depression–anxiety, as well as with that of neurasthenia and chronic fatigue, seems to be the most significant (Korczak et al. 2010). Therefore, these disorders—which also overlap substantially themselves—will be specifically addressed.

# 5.3.2 Burnout and Depression

As the severity of the burnout process increases, so does the probability of developing depression. This is supported by a Finnish study showing that in hospitalized patients with intense burnout, depression is diagnosed in more than 50% of the cases (Ahola et al. 2005). In addition, an overlap between depression and the symptoms of emotional exhaustion has been found in 26% (Schaufeli and Enzmann 1998) and depression is a strong predictor of all three burnout factors (Nyklícek and Pop 2005). Therefore, burnout can constitute a risk factor for the development of depression (Korczak et al. 2010). Conversely, depression, or even hereditary load, can be a predictor of emotional exhaustion (Nyklícek and Pop 2005).

According to the ICD-10, depression (either a single episode or recurrent depression) is characterized by the main symptoms:

- · Depressed mood
- Loss of interest
- · Loss of energy

Other frequent symptoms are cognitive disturbances such as:

- Reduced attention and concentration
- Sleep disturbance
- Reduced appetite
- · Feelings of worthlessness and guilt

|   | Burnout   | Depression  |
|---|---|---|
| Concept   | Social and occupational–<br>psychological construct                           | Clinical diagnosis  |
| Etiology  | Result of a process, initiated and<br>maintained by chronic stress<br>at work | Psychiatric disorder without a distinct context                       |
| Integrative dimensions<br>of the phenomenon/<br>the diagnosis | Triad according to MBI:   | No conceptual dimensions,<br>but guiding symptoms<br>(DSM IV/ICD-10): |
|   | Emotional exhaustion  | Depressive mood   |
|   | Depersonalization/cynicism  | Loss of interest and feelings of joy                                  |
|   | Personal accomplishment   | Reduced energy  |
| Adjuvant symptoms   | According to MBI:   | Change in weight/appetite   |
|   | Exhaustion  | Sleep disturbance   |
|   | Tiredness   | Psychomotor agitation or<br>retardation                               |
|   | Reduced empathy   | Fatigue/tiredness   |
|   | Frustration   | Feelings of worthlessness<br>and guilt                                |
|   | Indifference  | Loss of concentration   |
|   | Sleep disturbance   | Suicidal thoughts or plans  |
|   | Feelings of worthlessness and failure   |   |

 Table 5.1 Comparison of burnout (according to the MBI: Maslach Burnout Inventory) and depression

Modified after Nil et al. 2010

- Loss of self-confidence
- Negative cognitions about the future
- Suicidal thoughts and acts

Depending on the number and severity of symptoms, mild, moderate or severe depression can be diagnosed (Dilling et al. 2008).

All the symptoms described can be observed in subjects with burnout. If the presenting symptoms are sufficient for the diagnosis of depression, then depression has to be diagnosed and treated accordingly (see below). Furthermore, if the anamnesis and the assessment scales provide the information that burnout underlies the cross-sectional clinical picture of depression (Table 5.1), this information should be considered and included in the therapeutic strategy (see below).

In addition to fully established depression, depressive symptoms that are not sufficient to establish the diagnosis of depression can also occur. These symptoms represent a so-called sub-threshold depression, which clearly affects patients' day-time performance and increases the risk of the development of a depressive episode or a relapse into depression (Judd et al. 1999).

#### 5.3.3 Burnout and Anxiety Disorders

Another important differential diagnosis for burnout comes from the anxiety spectrum (Linden and Muschalla 2007). In particular, subjects should be screened for generalized anxiety disorder (GAD, ICD-10 F41.1). In addition to symptoms of free floating anxiety on most days for several weeks (usually for several months) the symptoms usually involve elements of:

- Apprehension (worries about future misfortune, feeling "on edge," difficulty concentrating, etc.).
- Motor tension (restless fidgeting, tension headaches, trembling, inability to relax),
- Autonomic over-activity (light headedness, sweating, tachycardia or tachypnea, epigastric discomfort, dizziness, dry mouth, etc.) (ICD-10).

All these symptoms may be found in clients with burnout etiology. GAD is not easy to diagnose given that the overlap with depression and other anxiety disorders (as well as with alcohol or drug abuse) is frequent (Wittchen et al. 1994). In addition, other anxiety disorders, such as agoraphobia (ICD-10 F40) or social phobia (ICD-10 F40.1) should be considered.

Adjustment disorder (ICD-10, F43.2), which may be reflected by prolonged depressive reactions (F43.21) or mixed anxiety and depressive reactions (F43.22), is further frequent diagnosis. Characteristic of an adjustment disorder is that a clear social stressor is responsible for the symptoms observed (Dilling et al. 2008). If changes in the workplace or increased workload can be detected at the beginning of symptom development, according to ICD-10 an adjustment disorder should be diagnosed and treated. The close relationship between job-related burnout and depressive disorders, including adjustment disorders, has been described in detail by Ahola et al. (2005).

### 5.3.4 Burnout and Sleep Disturbance

Patients with burnout syndrome frequently suffer from sleep disturbance and complain about the lack of the recreational value of their sleep (Rosen et al. 2006). In polysomnographic studies reduced sleep continuity and disturbed sleep architecture with less slow-wave and increased shallow sleep have been found (Melamed et al. 1999; Grossi et al. 2003; Söderström et al. 2004). In addition, increased day-time sleepiness and tiredness were also observed (Ekstedt et al. 2006). Furthermore, not only was burnout associated with disturbed sleep, sleep disturbance has also been identified as a risk factor for burnout syndrome (Sonnenschein et al. 2007). Sleep disturbance can be due to a primary sleep disturbance or is an indicator of a variety of diseases (Blythe et al. 2009; Doghramji 2010). In particular, as sleep disturbance can be an indicator of depression, anxiety, diseases of the chronic fatigue spectrum, and somatic disorders, an intense differential diagnostic process covering all these aspects is required (von Känel 2008).

# 5.3.5 Chronic Fatigue Syndrome and Related Disorders

Based on the prominent symptom of exhaustion, which belongs to one of the three dimensions of the MBI, burnout can take on the form of chronic fatigue syndrome (CFS, also known as myeloencephalitis) (Kaschka et al. 2011). This disorder has been discussed widely, but is not yet included in the ICD-10 classification. The cause of CFS is still unclear, but it has been linked to mild adrenocortical insufficiency, probably resulting from a viral infection (Glaser and Kiecolt-Glaser 1998; Wessley and Powell 1989). It should be emphasized that in about 50% of patients with CFS major depression is also diagnosed (Afari and Buchwald 2003).

Corresponding ICD-10 psychiatric disorders that are related to CFS are neurasthenia (ICD-10; F48.0) and somatoform disorder (F45), as patients with somatoform disorder present with a variety of somatic complaints, e.g., gastrointestinal, cardiovascular, genitourinary, skin, and pain symptoms.

If the criteria for somatoform disorder or neurasthenia are fulfilled, patients should be diagnosed accordingly.

All symptoms with somatic causes should be thoroughly assessed. In particular, pain is a frequent symptom; thus, all the differential diagnoses of pain (somatic and psychological) should be evaluated. It is important to know that the category of the somatoform disorder (F45) should only be considered if no somatic cause of the symptoms observed could be detected.

Concerning neurasthenia, distressing complaints of feelings of exhaustion after minor mental effort and persistent and distressing complaints of feelings of fatigue and bodily weakness after minor physical effort are present. There is a broad overlap of symptoms, with patients demonstrating a burnout process in the latter stages (Weber and Jaekel-Reinhard 2000). Based on the fact that all the symptoms of tiredness, reduced energy, exhaustion, sleep disturbance, and pain are nonspecific, the exclusion of a physical illness is mandatory. Therefore, systematic somatic examinations, including the assessment of laboratory parameters, should be performed at the beginning of the diagnostic process.

### 5.3.6 Neurobiological Parameters as Indicators of Burnout

There are a number of different definitions and concepts of stress. In particular, stimulus-related stress concepts and response-related stress concepts can be classified. The stress reaction can be assessed on a physiological or a psychological level (Janke 1974), but symptoms of burnout emerge on a behavioral, phenomeno-logical level. To date, no physiological markers specifically indicating a burnout process have been available. However, the burnout syndrome can be regarded as a phenomenon of stress and stress-related physiological variables can be objectively assessed (see below) (Nil et al. 2010).

In contrast to the stress concept of Selye, who described the stress reaction as a general adaptive syndrome (GAS; Selye 1950), the further development of stress concepts includes personality factors (Janke 1974; Hemmeter 2000), emotions (Henry 1992), and coping styles (Lazarus and Folkman 1984) as intermediate variables responsible for different stress reactions to a given stress stimulus. While Henry's model of stress response relates behavior and emotions (anxiety, depression, aggression) to different biological reactions (adrenaline, cortisol, testosterone), the interaction model of Lazarus focuses on the individual appraisal of stress situations and coping styles. The inclusion of these mediator variables allows a more differentiated and individualized understanding of the stress reaction, with clear implications for an individually adapted therapeutic strategy (Hemmeter 2000).

Only a few studies have assessed physiological responses in burnout patients. In these studies increased morning awakening cortisol levels and increased heart rates have been found (Melamed et al. 1999; Grossi et al. 2003). Pathophysiological reactions may provide an explanation as to why burnout is also closely associated with physical illness, allergic disorders (Honkonen et al. 2006), type II diabetes (Melamed et al. 2006), and hyperlipidemia (Shirom et al. 1997). The somatic comorbidity increases with the severity of the burnout syndrome (Honkonen et al. 2006).

In addition to these indirect hints of a pathophysiological association among burnout, stress, and somatic disorders, the psychobiological mechanisms are extremely unclear and require intense research. In particular, the impact of coping styles and personality factors, including susceptibility to stress, should be examined.

# 5.4 Therapy of Burnout Symptoms and Depression-Related Disorders

With reference to the above-mentioned assessment, diagnosis, and differential diagnosis of burnout, there is no specific treatment for burnout.

If no ICD-10 diagnosis can be given, because of the lack of symptoms fulfilling the criteria, but symptoms and/or warning signs of a burnout constellation are present, individual symptoms should be evaluated with respect to a burnout constellation and treated (or coached), in order to prevent the progress of the burnout process and the development of clinically manifest disorders.

In general, the treatment of burnout syndrome requires a symptom-oriented approach with respect to somatic complaints and the integration of strategies of occupational psychology and medicine. Therefore, the treatment of burnout syndrome necessitates an interdisciplinary approach, including medical and psychological expertise, as well as social support at work and in the private domain (Weber and Jaekel-Reinhard 2000).

Based on the aforementioned overlap of symptoms and diagnosis, the following treatment recommendations are offered.

# 5.4.1 Treatment of Sleep Disturbance

Sleep disturbance is frequent in burnout patients (Sonnenschein et al. 2007). Impaired sleep is a risk factor for stress-related disorders, in particular depression (Baglioni et al. 2011), but also for cerebrovascular (Meier-Ewert et al. 2004; Gottlieb et al. 2004) and metabolic disorders (Gottlieb et al. 2005). In addition, sleep disorders are associated with impaired performance and quality of life (Kamel and Gammack 2006). Therefore, sleep disturbances as a primary cause can lead to a burnout symptomatology with exhaustion, tiredness, and reduced performance.

If specific sleep disorders such as sleep apnea, which can intensify under stress, altered nutrition, weight increase, and substance abuse, are ruled out—probably by a polysomnographic assessment—the treatment of sleep disturbance follows an exact pattern, with sleep hygiene and behavioral modification as the first option and hypnotic medication (see below) the second (Riemann et al. 2003; Hemmeter and Thum 2009; Najib 2006). Chronobiological treatments, such as light therapy, may provide some benefit, especially if tiredness and daytime sleepiness are present (Cajochen 2005, 2007).

If nonpharmacological interventions are not sufficient, hypnotic medications can be applied. In this case, for the short-term treatment of sleep disturbance (up to 4 weeks) benzodiazepine hypnotics or—better—benzodiazepine analoga, the socalled Z-drugs (zolpidem or zopiclone) can be applied (Becker 2006; Najib 2006; Hemmeter and Thum 2009).

If the treatment of sleep disturbance is necessary for a longer period, sleeppromoting antidepressants, such as trimipramine, mirtazapine, trazodone, and agomelatine, or sleep-promoting antipsychotics, such as quetiapine, may be applied (Hemmeter 2011).

Treatment with antidepressants is recommended, if symptoms of depression and/or anxiety are present. In all cases, however, pharmacological hypnotic treatment should be performed for the shortest duration and the lowest effective dosage possible.

# 5.4.2 Daytime Sleepiness

Sleep disturbance as well as depression, neurasthenia, and chronic fatigue syndrome, for example, may be associated with increased daytime sleepiness. Therefore, it is important to know whether daytime sleepiness is the consequence of an existing sleep disturbance or a symptom of depression, neurasthenia or other disorders. In this case, in particular, the primary disorders, such as depression (see below), have to be treated and sleep disturbance has to be corrected. A further psychopharmacological option is the application of stimulating antidepressants or stimulants, such as modafinil, which reduces daytime sleepiness (Beck et al. 2010). In the case of parallel pain symptoms, SSRIs, the SNRI duloxetine or the calcium channel modulating GABAergic substance pregabalin may exert beneficial results (Legros and Bazil 2003).

#### 5.4.3 Treatment of Depression

The main differential diagnosis in the latter stages of the burnout process is depression, probably associated with suicidality (Ahola et al. 2007; Kaschka et al. 2011). In addition, sleep is disturbed in more than 90% of patients with depression (Riemann et al. 2001). If depression is diagnosed the treatment should be performed according the established guidelines for the treatment of depression (e.g., the World Federation of Biological Psychiatry guidelines; Bauer et al. 2007). These recommend psychotherapy for the mild states of depression and psychotherapy combined with antidepressant medication for moderate and severe depression.

Treatment for depression is always an integrative therapy that includes socioand psychotherapy, as well as antidepressant medication.

Concerning antidepressant medication, different treatment options are available that should be applied according to the symptomatology of the patient within the framework of the current guidelines. A large number of antidepressants within different classes are available (Gründer and Benkert 2011). The choice of treatment should take the criteria of efficiency and side effects into consideration. Currently, the following substances are recommended:

- Selective serotonin reuptake inhibitors (SSRIs)
- Dual-action selective serotonin and noradrenaline reuptake inhibitors (venlafaxine and duloxetine) (SNRIs)
- The noradrenergic and specifically selective serotonergic-acting (NaSSa) antidepressant mirtazapine

All these substances are effective and have no or few anticholinergic side effects compared with the traditional tricyclics (Stahl 2008).

The application of antidepressants in depressed patients with a history of burnout may be of great relevance, as it is well known that antidepressants have the capacity to dampen effects on the major stress hormone system (endocrine system) of the organism, the hypothalamus–pituitary adrenals (HPA-) axis with its peripheral parameter cortisol (Holsboer 2001), and are able to increase the brain-derived neurotrophic factor (BDNF) (Duman et al. 1997). This mechanism leads to the reversal of stress-induced atrophy of the hippocampal neurons (probably reflecting a biological basis for cognitive impairment in depression and burnout) and may therefore be particularly important in stress-related depressive symptoms, especially with cognitive impairment.

The selection of a specific antidepressant is guided by the symptoms of the patient. In the presence of agitation and sleep disturbance a sedative-acting and sleep-promoting antidepressant may be the preferred treatment, such as mirtazapine and others (see above) (Holsboer-Trachsler 2009). However, as atypical symptoms of depression, such as daytime sleepiness, reduced energy, and hypersomnia may also be present in burnout patients, SSRIs, as well as the phytopharmacon St. John's wort, may be more effective than other antidepressants (Murck 2002).

A main pillar of the treatment of burnout-related symptoms and the abovementioned disorders is psychotherapy. For the treatment of depression and anxiety cognitive behavioral therapy (CBT) is predominantly the preferred treatment, based on the number of evidence-based studies (Voderholzer and Hohagen 2010).

The basic premise of cognitive behavioral therapy is that our thoughts—not external events—affect the way we feel. Therefore, CBT focuses on the correction of the dysfunctional thoughts and beliefs and the dysfunctional behavior that may lead to depression (Beck et al. 1979). In a second step, cognitive therapy is aimed at changing the pessimistic ideas, unrealistic expectations, and critical self-evaluation that create and sustain depression, and at identifying the patient's critical life problems as well as helping to develop positive life goals and a more positive self-assessment. In a third step, problem-solving therapy is aimed at modifying the areas of the person's life that are creating significant stress and contributing to the depression (Beck et al. 1979).

In addition to pharmacotherapy and psychotherapy, adjuvant treatment strategies can be applied. Based on sleep disturbance in depression, the importance of circadian rhythm abnormalities has been recognized. Adjuvant chronobiological strategies, such as sleep deprivation or bright light therapy (in particular in seasonal depression), improve therapy response, at least in subgroups of depressed patients (Wirz-Justice et al. 2009).

If an adjustment disorder with depressive and/or anxiety symptoms is diagnosed, psychotherapy, as described above, is the major treatment.

# 5.4.4 Treatment of Anxiety Symptoms

If anxiety symptoms are prominent in patients with burnout (Linden and Muschalla 2007), an anxiety disorder, in particular GAD, has to be considered. GAD has to be treated intensively by means of psychotherapy, predominantly CBT and psychopharmacology (Bandelow et al. 2008).

The guidelines of the World Federation of Societies of Biological Psychiatry (WFSBP) of 2008 recommend various treatment options by evidence level A, including antidepressants (SSRIs and SNRIs), the atypical antipsychotic quetiapine, the benzodiazepines diazepam and lorazepam, and the GABAergic substance pregabalin (Bandelow et al. 2008).

The preferred treatment for other anxiety disorders, such as social phobia and agoraphobia, is CBT, whereas pharmacological treatment may be applied only temporarily as an adjunctive treatment.

# 5.5 Chronic Fatigue Syndrome and Neurasthenia

For chronic fatigue syndrome (CFS) and the related ICD-10 disorders neurasthenia and somatoform disorder, no clear evidence based pharmacological treatment or cure exists. Therefore, treatment has to be symptom-oriented and individually adapted, focusing on the major symptoms, exhaustion and reduced energy for neurasthenia and pain for somatoform disorder, which both overlap with CFS. According to the recommendations of the National Institute for Health and Clinical Excellence (NICE 2007), CFS should be treated in an ambulatory setting with CBT and increasing activation. In addition, the correction of sleep disturbance—if present—is necessary.

#### 5.5.1 Stress Reduction Strategies

In addition to psychotherapy and psychopharmacological treatments focusing on the reduction of arousal and stress in general, other treatments can be applied, including relaxation techniques such as autogenic training or progressive muscle relaxation (PMR; Golombek 2001), mindfulness-based stress reduction (MBSR; Williams et al. 2007), and the training of emotional competence (TEK; Berking 2010), which are all aimed at decreasing hyper-arousal and stress (Weber and Jaekel-Reinhard 2000). In addition, moderate physical exercise, which has shown beneficial effects in major depression (Dunn et al. 2005), may also help as an additional treatment factor for the improvement of physical stress regulation and coping in burnout.

Furthermore, specific psychotherapeutic strategies focusing on coping successfully with stress (stress management) and/or on the strengthening of self-confidence and self-competence that have been successfully used for the treatment of depression, can be applied (Lambert 2003; Kaluza 2005).

In the case of milder symptoms failing to fulfill the criteria for an ICD-10 diagnosis a break from work—bringing the patient out of the stressful surroundings (time out)—may also be beneficial (von Känel 2008).

# 5.5.2 Treatment Options Focusing on the Burnout Process as an Etiological Factor

For practitioners it is important to detect and evaluate the specific stress factors at the subject's workplace. Nevertheless, in addition to an individually adapted therapeutic strategy specifically focusing on the circumstances of the potentially stressful environment, the assessment and integration of social factors (Stenlund et al. 2007), and the individual's ability and resources to cope with stress are necessary for successful and lasting therapy. Interventions designed to specifically counteract burnout deal with organization at work, including the reward system, and with strategies that strengthen the individual's coping strategies and resources (Siegrist 1996; Weber and Jaekel-Reinhard 2000). Given the difficulty in separating occupational and non-occupational stress—especially in the later stages of the burnout process—social support not only at work, but also in the private domain, is important (Weber and Jaekel-Reinhard 2000). This implies that support by family members—based on a systemic approach—should be included in the therapy (Burisch 2010).

In summary, burnout comprises a variety of phases, ranging from minor mood disturbance and autonomic dysfunction to psychiatric disorders and somatic diseases. Because of the lack of an established algorithm for diagnosis and the broad overlap of symptoms with other ICD-10 disorders—in particular with depression—burnout is more of a workplace-related social construct than a disease. However, the stress-related development of symptoms is a dynamic ongoing process that has to be interrupted by specific interventions related to the burnout process in addition to established treatments of ICD-10 disorders, such as depression. These interventions should include work-related organizational strategies as well as individual treatments focusing on stress management and the strengthening of self-confidence together with social support at home and in the workplace. These burnout- and stress-related interventions should not only be applied reactively in severe cases, but also in a preventive manner at the appearance of the first warning signs.

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