REVIEW ARTICLE

Burnout: a Fashionable Diagnosis

Wolfgang P. Kaschka, Dieter Korczak, Karl Broich

SUMMARY

Background: "Burnout syndrome" is now a common reason for medical excuses from work, and thus an important topic in health-related economics. Much research is still needed, however, to establish the scientific basis for this entity, the criteria by which it might be diagnosed and classified, and how it should be treated.

Methods: A systematic review of this topic, previously published as an HTA report, is presented here together with a selective overview of pertinent literature.

Results: There currently exists neither an officially accepted definition nor a valid instrument for the differential diagnosis of burnout syndrome. Its manifestations are generally considered to lie along three dimensions: emotional exhaustion, depersonalization, and reduced performance ability and/or motivation. Most of the available studies on its epidemiology and differential diagnosis provide no more than a low level of evidence for their conclusions. There have been no controlled trials of treatments for burnout.

Conclusion: High-quality controlled studies on burnout syndrome are lacking. A standardized and internationally accepted diagnostic instrument with a validated rating scale should be developed. There is also a need for epidemiological and health-economic studies on the prevalence, incidence, and cost of burnout. The etiology and pathogenesis of burnout should be studied with special regard to the possible role of neurobiological factors. Treatments for it should be studied systematically so that their effects can be judged at a high level of evidence. In view of the current lack of knowledge about what is called "burnout," the term should not be used as a medical diagnosis or as a basis for decisions regarding disability or other socioeconomic matters.

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Up until very recently, reports about being burned out, burnout victims, and burnout syndrome have been taking up a lot of space in the press. However, the burnout phenomenon also appears to be of considerable medical significance, since it is the basis of no small number of sick notes, and thus has relevance for health economics and health policy. An indication of the size of the problem can be seen from a representative survey carried out by TNS Emnid in December 2010, according to which 12.5% of all the people working in Germany felt stressed in their job. The aim of the present article is to review current understanding of burnout, on the basis of a health technology assessment (HTA) commissioned by the German Institute for Medical Documentation and Information (DIMDI, Deutsches Institut für Medizinische Dokumentation und Information), and to show that a considerable need exists for research (1). Although to date no uniform or even internationally agreed definition of burnout syndrome exists, and burnout still does not appear in the current version of the most commonly used classification systems (International Classification of Diseases 10th revision, ICD-10, and Diagnostic and Statistical Manual of Mental Disorders 4th revision, DSM-IV) (2, 3), in practice this diagnosis is being made and is being used as the starting point for further treatment. Occasionally this is done by resorting to substitute diagnoses such as "depression" or "(vital) exhaustion." Against the background of alarming statistics showing a rise in the number of days off work due to mental illness and an increase in costs due to prescriptions for psychopharmaceuticals, the major implications for health policy of this subject are obvious.

History of the term "burnout"

Burnout as a phenomenon has probably existed at all times and in all cultures. Those interested in literature will find descriptions of what we now call burnout going back as far as the Old Testament (Exodus18: 17–18) (4). Pastors speak of the "weariness of Elijah" (Schall, 1993) (4). In Thomas Mann's great novel *Buddenbrooks*, too, we recognize the matter under discussion here in the figure of Thomas Buddenbrook (4). The verb "to burn out" is used by Shakespeare at the end of the sixteenth century. The term as we understand it today appeared for the first time in 1974 in the USA, when it was used by the psychoanalyst Herbert J. Freudenberger (5) and at more or less the same time was popularized by Ginsburg (4). At first it designated the physical and psychological breakdown of (usually) volunteer workers in "alternative" aid organizations

BOX 1

Symptom clusters in burnout (modified from [4])

- **Warning symptoms in the early phase**
  - Increased commitment to goals
  - Exhaustion
- **Reduced commitment**
  - Towards patients and clients
  - Towards others in general
  - Towards work
  - Increased demands
- **Emotional reactions; blaming**
  - Depression
  - Aggression
- **Reduced**
  - Cognitive performance
  - Motivation
  - Creativity
  - Judgment
- **Flattened**
  - Emotional life
  - Social life
  - Intellectual life
- **Psychosomatic reactions**
- **Despair**

BOX 2

Burnout phase model (from [8])

- Compulsion to prove oneself (excessive ambition)
- Working harder
- Neglecting own needs
- Displacement of conflicts and needs
- No longer any time for non-work-related needs
- Increasing denial of the problem, decreasing flexibility of thought/behavior
- Withdrawal, lack of direction, cynicism
- Behavioral changes/psychological reactions
- Depersonalization: loss of contact with self and own needs
- Inner emptiness, anxiety, addictive behavior
- Increasing feeling of meaninglessness and lack of interest
- Physical exhaustion that can be life-threatening

such as Free Clinics, therapeutic communes, women's refuges, and crisis intervention centers. Without mentioning burnout explicitly, Bäuerle (6) gave a very accurate description of the phenomenon resulting from experiences in supervising social education workers and social workers. She observed "the reduction in psychological resilience only halfway through their career; the appearance of a resigned attitude and resentment as a consequence of having more demanded of them than is humanly possible; the formation of an authoritarian character structure and a tendency to repressive behavior as a consequence of professional disappointments; an inner withdrawal from all people and all human problems as a defense mechanism on the part of those who – without receiving any help themselves – spend their professional lives having to find socially acceptable solutions for difficult personalities in hopeless situations."

Whereas the descriptions from the late 1960s are clearly colored by the social attitudes of those years, at the beginning of the present century Farber (7) points to a remarkable change in the form of burnout. He describes the classical burnout victims of the 1970s and 1980s as people who failed to reach unrealistically high altruistic goals, people who, at least on the surface, had been idealists. Individuals of that kind seem to have become the exception today. In contrast, he says, "Today's burnout stems largely from pressure to fulfill the escalating requirements of others, or from the intense competition to be better than others in the same organization or company, or from the drive to make more and more money, or from the feeling that something that one obviously deserves is being withheld" (4). In the first category, overlaps with the concept of the helper syndrome, developed by Schmidbauer (e1), are unmistakable.

Definition

There is at present no generally valid, internationally agreed definition of burnout. This review therefore presents causal factors and development models that are intended to show what the term "burnout" comprises.

Symptoms

The symptomatology of burnout proves, on close inspection, to be extremely complex; after all, the syndrome has now been described in around 60 professions and groups of people. A synopsis by Burisch (4) refers to 202 publications. From these, he condenses a list of symptoms divided into seven clusters. Since the complete list is very long, not very specific, and apparently not entirely without self-contradiction, a shortened version is given here (*Box 1*).

Freudenberger (8) attempted to describe the chronological development of a burnout syndrome in a 12-stage model (*Box 2*).

The factors blamed for causing burnout are, as one might expect, multifarious. In the literature, the required conceptual distinction between disposing,

moderating, triggering, and perpetuating factors is rarely made (4). Connections with neighboring areas, some of which have been better researched, have therefore been foregrounded, e.g., work-related stress (9), learned helplessness (10), or learning theory (11). Following Fischer (12), a division into personality-related and environment-related etiological factors has proved plausible and practicable (4) (*Figure*).

Etiopathogenetic models and measuring instruments

The factors identified by different authors in agreement as etiological for burnout are summarized in *Box 3*.

Psychological explanatory models have been developed that take these factors into account. Because of their especial clarity, the "demand–control" model (13) and the "effort–reward imbalance" model in particular (14) have become to a certain extent well-known.

A number of screening instruments are now available that serve to "measure" burnout syndrome (or, rather, register it in a semiquantitative way). The most frequently used are the Maslach Burnout Inventory (MBI) (15, 16) and the Tedium Measure (17), later renamed the Burnout Measure. The MBI in its original form consists of 22 items divided into three scales:

- emotional exhaustion (EE, 9 items)
- depersonalization (DP, 5 items), and
- personal accomplishment (PA, 8 items).

In later editions the MBI was expanded to 25 items rated on a frequency scale (from "never" to "every day", see the example in *Box 4*).

Burnout from the medical point of view: an unfinished concept

Psychiatry as a medical science has so far avoided addressing the phenomenon of burnout, whether because it is put off by the fuzzy definition of the syndrome, or because the overlaps between it and established psychiatric diagnoses such as depression or adaptation disorder seemed so large that it appeared unnecessary to validate burnout as a diagnostic entity. As a result, burnout is not even mentioned in DSM-IV, and in ICD-10 it is listed in the residual category "Z 73, problems related to life management difficulty" as "burnout: state of vital exhaustion." So far as the authors know, there is no intention to include it in DSM-V or ICD-11.

If one follows the argument of a Finnish work group (e2), which found clear overlaps between burnout and depression, a possible consequence might be to introduce a category of "depression spectrum disorders," analogous to the category "schizophrenia spectrum disorders" common in Anglo-American psychiatry, and to subsume burnout in that. Other authors see burnout more as a risk factor for developing depression (e3).

HTA report "Differential Diagnosis of Burnout Syndrome"

Burnout is associated with considerable subjective suffering, health problems, and reduced performance (or accomplishment) at work. At the same time, recent years have seen a marked increase in the prescription of antidepressants and a rise in days off work due to mental illness. It is the individual, social, and economic consequences of this that show the urgent importance of the diagnosis and differential diagnosis of burnout syndrome for public health policy.

Given the lack of a valid diagnostic procedure, all figures provided in this context must be regarded as largely speculative.

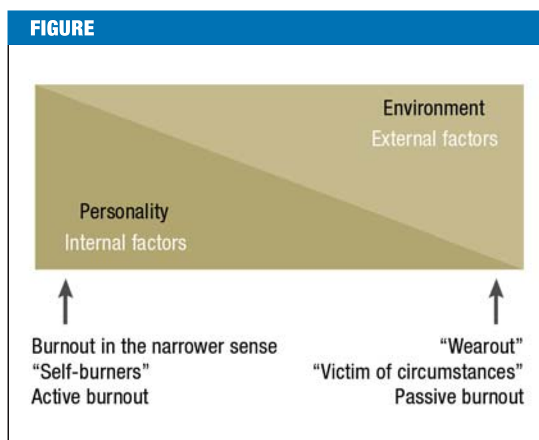
To date the scientific literature has treated burnout predominantly as a work-related syndrome consisting of the dimensions of emotional exhaustion, depersonalization or cynicism, and reduced accomplishment. Since we do not have a generally valid definition, we might speak of a "fuzzy quantity." Competing burnout measuring instruments exist, and for the differential diagnosis the only resource is catalogs of symptoms with a high degree of generality. Not only the psychological and neurobiological mechanisms underlying the various symptoms, but also the associations with other illnesses are largely unexplained. In addition, we know almost nothing about the psychosocial consequences for the victims of burnout themselves, and the effects on others (e.g., patients, clients, colleagues).

Accordingly, the tasks set out in the HTA reports covered three thematic areas (1):

Medical research questions

- How is burnout diagnosed? What criteria are relevant?
- What disorders are particularly relevant to, or are under discussion in relation to, the differential diagnosis?
- Are differential diagnoses presented in the diagnostic instruments?

FIGURE



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The precondition for the development of burnout is a complementary interplay of factors immanent in the personality and those conditioned by the environment *(Box 3)*. Burnout in the narrower sense, characterized by excessive, idealistic expectations of oneself, and "wearout" (i.e., by excessive external demands) represent the extremes of a continuum (4).

BOX 3

Internal (personality-related) and external (environmental) etiological factors for burnout

- **Internal factors/personality traits**
  - High (idealistic) expectations of self, high ambition, perfectionism
  - Strong need for recognition
  - Always wanting to please other people, suppressing own needs
  - Feeling irreplaceable; not wanting/able to delegate
  - Hard work and commitment to the point of overestimation of self and becoming overburdened
  - Work as the only meaningful activity, work as substitute for social life

- **External factors**
  - High demands at work
  - Problems of leadership and collaboration
  - Contradictory instructions
  - Time pressure
  - Bad atmosphere at work; bullying
  - Lack of freedom to make decisions
  - Lack of influence on work organization
  - Few opportunities to participate
  - Low autonomy/right to contribute opinions
  - Hierarchy problems
  - Poor internal communication (employers, employees)
  - Administrative constraints
  - Pressure from superiors
  - Increasing responsibility
  - Poor work organization
  - Lack of resources (personnel, funding)
  - Problematic institutional rules and structures
  - Lack of perceived opportunities for promotion
  - Lack of clarity about roles
  - Lack of positive feedback
  - Poor teamwork
  - Absence of social support

- How valid and reliable are the diagnostic instruments?

Economic research questions

- What are the economic costs of differential diagnosis in relation to burnout?

Ethical research questions

- To what extent are burnout patients stigmatized?
- Do burnout victims have a negative effect on their patients/clients?

Method

Methodologically the HTA report is a systematic review in which 36 electronic literature databases were searched for the relevant search terms. The search covered publications in English and German for the period 2004 to 2009 inclusive. Single searches were then carried out on medical, health economic, legal, and ethical aspects of the subject. In addition to the systematic literature search, the authors carried out a search by hand. The methodological quality of the medical publications was assessed on the nine-point scale of the Oxford Centre of Evidence-Based Medicine, Levels of Evidence (2006) (levels 1A, 1B, 2A, 2B, 2C, 3A, 3B, 4, and 5). In addition, the methodological quality of the studies was evaluated using checklists from the German Scientific Working Group "Technology Assessment for Health Care" (GSWG).

Results

The literature searches identified a total of 852 publications. Of these, 826 were on medical topics, 102 on economic questions, and 88 on legal questions. Of the 826 medical publications, only 25 met the inclusion criteria, and of these only two were awarded an evidence level better than 4. Of the 102 publications on economic subjects, not one met the defined inclusion criteria. Of the ethical and legal publications, one study met the inclusion criteria; its methodological quality was assessed at level 4.

The HTA report concludes that there is at present no standardized, generally valid procedure by which to diagnose burnout syndrome. It refers to the fact that in the studies analyzed, mainly written self-evaluation instruments were used, chief among them the Maslach Burnout Inventory (MBI). However, the question whether it is really possible to diagnose burnout syndrome with this instrument cannot be reliably answered on the basis of the studies included, since in many of them no cut-off values are given, and where such values are provided, they are determined arbitrarily, not on the basis of a scientifically based test construction (1). The dimension "emotional exhaustion" is verified to be a constant feature of burnout, whereas the study results regarding the dimensions "depersonalization" and "personal accomplishment" appeared heteroge-neous, reducing the significance of these two dimensions. One group of authors (8) suggests, for the third dimension

of burnout, introducing the term "inefficiency" instead of "personal accomplishment."

In regard to differential diagnostic distinctions, the studies analyzed discussed in particular the association between burnout and depression, and between burnout and the concept of "persistent exhaustion" (corresponding to the "chronic fatigue syndrome" of Anglo-American medicine), and between burnout and alexithymia (the inability to perceive feelings in oneself or others, or to express them in words). Correlations between individual constructs are repeatedly reported. The correlation between burnout and depression appears to be particularly relevant, since here there is obviously a broad area of overlap, and burnout is at least a risk factor for the development of depression (1, e3).

There are no differential diagnostic screening instruments integrated into any of the current burnout measuring instruments (Maslach Burnout Inventory, MBI; Shirom Melamed Burnout Questionnaire, SMBQ; Oldenburg Burnout Inventory, OLBI; Copenhagen Burnout Inventory, CBI; School Burnout Inventory, SBI) (1). These instruments—if adapted for each population studied, in terms of language and culture and of specific occupations—form a three-dimensional burnout construct consisting of the three components emotional exhaustion, depersonalization, and reduced personal accomplishment (or dissatisfaction with personal accomplishment).

There is an association between burnout and cardiovascular, musculoskeletal, cutaneous, and allergic diseases (19), and in the prospective sense with type II diabetes mellitus (20) and hyperlipidemia (21). Somatic co-morbidity increases with the severity of the burnout (19). The individual neurobiological and psychobiological mechanisms underlying the physical effects of burnout are still unknown (e3). Some authors report neuroendocrine, hemostatic, and inflammatory changes in burnout patients, which do not essentially differ from those found in other chronic stress conditions, post-traumatic stress disorder, or depression (1). For example, raised inflammatory markers are reported, such as are occasionally found in depressive illnesses (22).

Several of the analyzed studies point out that negative effects of burnout can appear not only in those directly affected, but also in people around them. For example, one study showed that doctors with high burnout values report more treatment errors than do doctors without burnout. Conversely, the risk of burnout increases when a treatment error occurs (23).

Treatment and prevention

Approaches to treating burnout syndrome must be guided by the severity of the syndrome. If it is slight, measures such as changing life habits and optimizing work–life balance are recommended. According to Hillert and Marwitz (24), these should be concentrated on three factors:

- Relief from stressors
- Recuperation through relaxation and sport

BOX 4

Maslach Burnout Inventory, 25-item version (modified from [16])

- I feel emotionally drained from my work.
- I feel used up at the end of the work day.
- I feel fatigued when I get up in the morning and have to face another day on the job.
- I can easily understand how my patients/clients feel about things.
- I feel I treat some patients/clients as if they were impersonal objects.
- Working with people all day is really a strain for me.
- I deal very effectively with the problems of my patients/clients.
- I feel burned out from my work.
- I feel I am positively influencing other people's lives through my work.
- I have become more callous toward people since I took this job.
- I worry that this job is hardening me emotionally.
- I feel energetic.
- I feel frustrated by my job.
- I feel I am working too hard on my job.
- I don't really care what happens to some patients/clients.
- Working with people directly puts too much stress on me.
- I can easily create a relaxed work atmosphere with my patients/clients.
- I feel exhilarated after working closely with my patients/clients.
- I have accomplished many worthwile things in this job.
- I feel like I am at the end of my rope.
- In my work, I deal with emotional problems very calmly.
- I feel patients/clients blame me for some of their problems.
- I feel similar to my patients/clients in many ways.
- I am personally involved with my patients'/clients' problems.
- I feel uncomfortable about the way I have treated some patients/clients.

- "Return to reality" in terms of abandoning external ideas of perfection (4).

If the burnout is severe, psychotherapeutic interventions are recommended, as are antidepressants, preferably combined with psychotherapy (4, 25) (Broich, K: Diagnostik des Burnout-Syndroms: Erfahrungen aus der ärztlichen Praxis. 11th Health Technology Assessment Symposium, Cologne, 17–18 March 2011, Abstracts, p. 8). In the psychotherapeutic interventions, a general approach not limited to any specific school is usually recommended, though with the emphasis on cognitive behavioral therapy. Since no controlled studies have yet been carried out, however, the effectiveness of these interventions must remain an open question (1, e4).

To prevent burnout syndrome, in addition to the approaches already mentioned, the main measures are those relating to health promotion in the workplace, the introduction of working time models, and the implementation of supervision sessions (1). This brings into the picture a social component of burnout, which requires a rethink that will lead to changes in the world of work in terms of all-round humanization.

Nevertheless, given the inadequate validation of burnout and the deficits in research that have been indicated, this term should not be used at present as a diagnosis or as a reason for a sick note or for early retirement. Instead, it is advisable for the time being to use the generally accepted and better defined categories of ICD-10 or DSM-IV.

Conflict of interest statement
Professor Kaschka has received reimbursement of expenses from Servier Deutschland GmbH, Bristol Myers Squibb, and Merz Pharmaceuticals GmbH. The other authors declare that no conflict of interest exists.

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KEY MESSAGES

- Because of its wide health care policy and socioeconomic implications, the problem of burnout should be picked up and worked on by the psychiatric profession as a scientific, diagnostic, and therapeutic challenge.
- Burnout is usually triggered by conflicts at work. For this reason, health promotion measures in the workplace have a meaningful role in prevention.
- Current knowledge shows burnout to be a precursor of or a risk factor for depressive illness.
- The first indications of biological correlates of burnout have been identified, although these require further research.
- In the current state of knowledge and of the debate, the term "burnout" should not be employed as a diagnosis or as a reason for giving a sick note or for early retirement.

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