

SHORT COMMUNICATION

DEVELOPMENT OF A CHRONIC STRESS DIAGNOSIS

Jarkko KALLIOMÄKI, MD, PhD and Gunilla BRODDA JANSEN, MD, PhD

Department of Rehabilitation Medicine, Division of Clinical Sciences, Karolinska Institutet at Danderyd University Hospital, Stockholm, Sweden

This study discusses a novel diagnosis, “stress-related exhaustion disorder”, which was introduced in Sweden in 2005. An International Classification of Diseases 10th revision (ICD-10) code, F43.8A, was specified for exhaustion disorder. Since then, there has been a remarkable increase in the number of patients diagnosed with exhaustion disorder in Sweden. The scientific basis of the diagnosis, and the putative mechanisms behind its increase, are discussed. It is hypothesized that the following factors may have promoted the increase in exhaustion disorder diagnosis: (i) the widespread perception of exhaustion disorder as a medical condition with physiological impairment of the endocrine and nervous systems, caused by external stressors; (ii) provision of healthcare resources and social insurance benefits for exhaustion disorder, without having firm evidence or guidelines on its management; (iii) highly inclusive diagnostic criteria for exhaustion disorder that overlap with the criteria for several other diagnoses (depression, anxiety disorders, chronic pain disorders), leading to possible bias towards exhaustion disorder diagnosis. The increase in exhaustion disorder does not necessarily reflect an increased stress-related morbidity in society. It is also important to consider factors related to the concept of stress as a disease, the availability and organization of healthcare and social insurance benefits, and diagnostic bias.

Key words: burnout; psychological stress; job-related stress; life stress; exhaustion.

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Correspondence address: Jarkko Kalliomäki, Department of Rehabilitation Medicine, Division of Clinical Sciences, Karolinska Institutet at Danderyd University Hospital, 182 88 Stockholm, Sweden. E-mail: jarkko.kalliomaki@ki.se

The concept of stress in medical terms originates from research by physiologists Walter B. Cannon and Hans

LAY ABSTRACT

Many of us will experience “stress”, at least at some time in our lives. It is a common view that stress sometimes becomes so severe that it causes “burn-out” or “exhaustion”. While these concepts are frequently used in everyday language, their mechanisms are poorly understood, especially regarding whether and how stress might cause exhaustion. In a single country, Sweden, an initiative was undertaken in 2005 to introduce a novel diagnosis: “stress-related exhaustion disorder”. Since then, a remarkable increase in exhaustion disorder has taken place, and it has become a major cause of disability. The question arises as to whether this reflects a true increase in stress-related disease in the population? This paper explores this question, and proposes that there are several other factors that may explain the increase in exhaustion disorder. The analysis also highlights the risks involved in creating a novel diagnosis for which solid scientific data are lacking.

Selye, respectively, in the first decades of the 20th century (review by Davies) (1). Cannon described the “fight/flight reaction”; a rapid mobilization of energy resources in emergency situations, mediated by the sympatho-adrenal system. Selye described the non-specific adaptive reaction of the body to any type of demands (“stressors”) imposed on it, characterized by 3 different phases; alarm, resistance, and exhaustion, later termed by him as the “stress response”. Selye proposed that the organism has a limited capacity to provide resistance to stressors, which might lead to exhaustion of its finite energy resources. Selye also described involvement of the hypothalamic-pituitary-adrenal (HPA) axis and release of glucocorticoids in the acute stress response. However, the pathophysiology behind the concept of energy depletion leading to long-term stress and exhaustion is poorly understood. Research has focused mainly on the HPA axis and, in recent years,

on neuroinflammatory markers, such as interleukins and cytokines (2, 3).

The concepts of stress and exhaustion have become widely used to describe negative effects on people's health, often in the context of increasing work demands. The concept of "burn-out" was coined in the 1970s and was initially described in human service or social professions (4). Burn-out has recently been included by World Health Organization (WHO) in the International Classification of Diseases 11th revision (ICD-11) as an occupational, rather than a medical condition, characterized by feelings of energy depletion, negativism about one's work situation, and reduced professional efficacy.

Swedish researchers have recognized chronic stress as an entity *per se*, independent of depression or anxiety disorders. In 2003, the Swedish Social Board of Health and Welfare presented the work of an expert consensus group, introducing the diagnosis "exhaustion disorder" (ED) and its diagnostic criteria, to be understood as a diagnostic entity separate from burn-out or depression (5). The initiative was based on research on sick-listed patients, suggesting that conditions at the workplace are common causes of chronic stress and might lead to a state of exhaustion. The presented diagnostic criteria include symptoms such as lack of mental and physical energy, impairment of concentration and memory, emotional lability, and sleep disturbance, along with physical manifestations of stress, such as pain, palpitation, and dizziness. In 2005, ED was classified under F43.8 (other reactions to severe stress), specified as F43.8A. Sweden is currently the only country that includes F43.8A in the ICD system.

The symptoms of ED overlap considerably with those of generalized anxiety disorder (GAD) and depression. A major difference in criteria is the specification of an aetiology for ED; that the symptoms have developed due to external stressors that have been present for at least 6 months. Importantly, according to the diagnostic criteria, stressors are not limited to work-related stress. Possible pathophysiological mechanisms were discussed, based on Cannon and Selye's concepts of stress, homeostasis, energy depletion and exhaustion. The natural course of ED was considered likely to show high inter-individual variability. No therapeutic guidance was given, except for a general recommendation of rehabilitation and successive return to work.

The impact of the diagnosis of ED in Sweden has been overwhelming, especially in the last decade, with an ever-increasing demand of healthcare and social insurance benefits. Stress-related diagnoses (ICD-10; F43) are now a leading cause of disability and sick leave from work (6). During the last 10 years, the number of days on sick leave for F43 diagnoses has increased 4-fold.

What mechanisms are driving this expansion in stress-related diseases? Is it a true increase in stress-related morbidity in society, revealed when it is acknowledged with a medical diagnosis? That has been the common as-

sumption. Different causes have been suggested, related to a change in lifestyle, with busier and more compressed schedules of work and private lives, continuous access of others to our lives due to the development of social media, and down-prioritization of recovering, health-promoting activities, and sleep.

It is possible that there is a true increase in chronic stress and exhaustion in society, but the highly inter-related factors described below may also be behind the increased prevalence of ED.

PERCEPTION OF EXHAUSTION DISORDER AS A MEDICAL CONDITION

The common understanding of ED, as reflected by the discourse in media and popular science, by opinions expressed by scientists, healthcare providers and laypeople, is dominated by a view that stress is hazardous to health, potentially damaging many organ systems, and should therefore be avoided. Two common narratives on stress and exhaustion may be especially important. One is the perception that the typical natural course of ED is one of a "crash" followed by a long period (months to years) of exhaustion. The other is that long-term stress induces impairment of cognition and memory, possibly due to (reversible) brain dysfunction. The scientific results in this area are diverse and difficult to translate to the clinical situation (see reviews in (3) and (7), and a study of cognition in ED) (8).

If the experts describe the stress reactions in our lives in terms of a medical condition caused by, e.g. dysfunctions of endocrine or nervous systems, this may create worries and preoccupation with bodily signals. If they further suggest avoidance strategies for managing stress, people may react by heightened awareness of stress symptoms and start avoiding activities that could be associated with, or interpreted as, alarming stress signals to the body. Such cognitive and behavioural mechanisms may be of importance in maintaining symptoms (9).

LACK OF EVIDENCE-BASED TREATMENT FOR EXHAUSTION DISORDER

Evidence for treatment recommendations for ED is scarce, and expert views differ widely. Resting and avoiding stressors until experiencing recovery from ED, have been suggested by some experts in the field. This creates expectations on physicians to prescribe sick-leave, sometimes for long periods.

The few clinical studies that have been conducted on ED suggest that cognitive behavioural therapy (CBT) and/or measures aiming for return to work may be helpful in treatment of ED (see references in Lindsäter (10)). During the last 6 years, multi-professional rehabilitation programmes have been provided for ED in the Stockholm

region. Intriguingly, ED as a cause of sick leave has increased during this period in Stockholm, following the same rate of increase as the rest of the country (6).

VALIDITY OF THE DIAGNOSIS OF EXHAUSTION DISORDER

ED is difficult to differentiate from other common psychiatric diagnoses. Thus, an individual with, e.g. GAD or depression might, instead, be diagnosed as having ED. Combined diagnoses, such as ED and depression/GAD, are also common. Many patients with chronic pain syndromes, e.g. fibromyalgia, may have a clinical presentation similar to ED. More rapid access to healthcare and rehabilitation, and longer sick leave benefits for ED lead to a risk of bias towards the diagnosis of ED, in favour of other possible diagnoses with similar criteria or clinical presentations.

Furthermore, the diagnostic criteria for ED open the potential for many types of long-standing external stressors as being causative. Thus, “private” stressors have become understood as common causes of ED. These may consist of problems, such as family relationships, illness or disease of children or relatives, personal losses, and grief. Patients sometimes refer to the total burden of having small children, and both the patient and his/her partner having full-time employment. Thus, ED has a high recognition factor for many people of productive age.

CONCLUSION

In summary, the remarkable increase in stress-related morbidity that has occurred in Sweden can be traced back to the above-mentioned expert consensus report from 2003 (5), and the implementation of a novel diagnosis and concept of how to understand and define psychiatric

disease, i.e. that externally imposed stressors of life may lead to impairment in the endocrine and nervous systems, creating long-standing exhaustion.

An infrastructure has been built up to provide social insurance benefits and healthcare for stress-related morbidity, based on unclear scientific premises. This development, together with the highly inclusive diagnostic criteria of ED, may well have contributed to the expansion of this diagnosis.

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