Review Article

The Urgent Need for Diagnostic Criteria and Further Understanding of Burnout Syndrome

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Abstract

The term burnout is widely used and accepted worldwide, but its existence as a distinct clinical entity remains poorly understood and is the source of controversy within academic circles. The existence or nonexistence of burnout has significant implications for individuals, families, organizations, communities, and societies. There is an urgent need for further descriptive research to determine consensus-driven diagnostic criteria that will aid in high-quality research to guide nonpharmacologic and pharmacologic treatment and to aid in the development of individual, organizational, and societal prevention strategies. This urgency is driven by recent changes in the occupational-social contract and highlighted by the ongoing COVID-19 pandemic. To address this need, the authors performed a narrative, nonsystematic review to obtain an overview of the current body of literature regarding the symptoms, diagnosis, and treatment of burnout symptoms. A literature search was conducted in PubMed for relevant articles in English since 1974 with the following search terms: "occupational burnout," "professional burnout," "career burnout," "assessment," "inventory," "measure," "instrument," "diagnosis," "treatment," "guideline" in different combinations. Hand searching was also performed. Retrieved records were reviewed, and the relevant studies were summarized. Burnout, whether a distinct clinical entity or an occupationally triggered manifestation of an already defined mental health condition, is an urgent public health priority. There is peril in waiting for a follow-on epidemic of its manifestations before embarking on high-quality research into diagnostic criteria, treatment, and prevention, as this takes time. However, this information is vital for individual practitioners, health-care systems, governments, and societies to meet this pressing need.

Keywords: Adjustment disorder, diagnostic criteria, occupational burnout

INTRODUCTION

All of us have recently experienced or know someone close to us that has experienced signs or symptoms associated with "burnout:" emotional and/or physical exhaustion, poor concentration, disturbed



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sleep or eating patterns, cynicism, lack of desire to get to work, or decreased job performance. Can we, or the person we know with those symptoms, then be diagnosed with burnout?

Although the term burnout[1] has been used commonly worldwide for several decades, it remains a poorly understood entity that is the source of controversy. [2] This controversy extends even to its very existence; it is not recognized as a separate entity by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) manual^[3] but is recognized by the International Classification of Diseases, Tenth Revision (ICD-10) classification scheme under the diagnosis of work-related neurasthenia. [4] As a result, there are different approaches to treatment and prevention; some advocate for the development of rehabilitation programs and workers' compensation to treat it, such as is found in Sweden, whereas others state that it is not a distinct illness, but it is rather a depression that is job related.^[5]

It is worth noting that there are subtleties in these differences that impact clinical, organizational, and societal approaches to this poorly defined constellation of symptoms. If this symptom cluster is limited to adjustment disorder or depression that is job related, the majority of resources should be directed toward individual treatment along traditional lines, including cognitive behavioral therapy (CBT), other psychotherapies, and pharmacotherapy. If, however, it is its own disease, as some studies imply, burnout might be a problem best dealt with in a multidisciplinary approach, including the clinicians previously mentioned, but also organizational psychologists, economists, specialists in public policy, public health, and perhaps even legal academics.

Since burnout symptoms often increase during periods in which workers have increased duties or work from home tasks that blur the line between work and off time, and since they are also exacerbated by an environment of isolation and decreased contact with our social support network, it is no surprise that burnout has been highlighted by this once-in-a-generation pandemic. Through the brave efforts of many and the innovations in

vaccination and treatment, we hope that there are fewer days left in the pandemic than there are behind us. However, the impact of COVID-19 will likely continue to be felt for years to come. Individuals are reporting persistent physical symptoms that have been referred to as "long COVID," and it may well be that the enormous physical, social, economic, and psychological strains resulting from the control measures addressing the pandemic will have similar long-term impacts on the majority of us.^[6]

This study will likely raise more questions than it answers, but it is our role and responsibility as clinicians and researchers to find truth; there are entities and individuals on both sides who would seek to use burnout as a vehicle to advance their own agendas, which are based on polar opposite worldviews. As such, it is our obligation to investigate burnout in the most objective ways possible. It is our point of view that the primary research question that must be answered is: "Is burnout a distinct clinical entity, separate from adjustment disorder and depression?" If the answer is yes, then identifying pertinent questions may assist us in starting to select areas that require further research to aid in improving the diagnosis and treatment of burnout symptoms and in planning structures and programs to address these symptoms at an organization, population, and national levels.

To bring structure to this far-ranging problem, this study is divided into sections based on diagnosis, individual treatment on the basis of burnout (as defined by Maslach, Schaufeli, and Leiter) or adjustment disorder/major depression related to work, and finally end with the philosophical questions raised, with their corresponding potential solutions.

METHODS

This is a narrative, nonsystematic review to obtain an overview of the current body of literature regarding the symptoms, diagnosis, and treatment of burnout symptoms. A literature search was conducted in PubMed for relevant articles in English since 1974 with the following search terms: "occupational burnout," "professional burnout," "career burnout," "assessment," "inventory," "measure," "instrument,"

"diagnosis," "treatment," "guideline" in different combinations. Hand searching was also performed. Retrieved records were reviewed, and the relevant studies were summarized. The authors drafted and discussed the manuscript and agreed on the final version.

RESULTS

Diagnosis

There is currently no international consensus on diagnostic criteria for burnout. If it is indeed job-related depression, it will follow by logic that screening and assessment tools for depression, such as the Patient Health Questionnaire (PHQ)-2 and 9, Beck Inventory, and DSM-5 criteria, would be sufficient. However, if it is a distinct disease entity, unique screening and assessment tools would be required. In the medical model, the existence of a gold standard, such as a tissue confirmation of disease, aids in the development of diagnostic tools. How is that best done in the mental health setting? A group of 50 experts and researchers from 29 countries recently published a definition of occupational burnout using the Delphi method, [7] but the report noted the presence of the burnout-depression overlap and the need to involve a larger expert panel that includes more countries.

The National Board of Health and Welfare in Sweden has developed criteria for exhaustion disorder, which is used to clinically determine the presence of burnout when developed in response to occupational stress [Table 1].

Maslach, Schaufeli, and Leiter's initial descriptive work led to the development of the Maslach Burnout Inventory (MBI), which is the most widely used instrument for assessing the presence of burnout symptoms. [8,9] Because of the nature of burnout, however, this has resulted in criticism from some that this is a circular construct: "As a consequence of the dominant position of the MBI, this questionnaire and the Maslach definition of burnout have become two sides of the same coin: Burnout is what the MBI measures, and the MBI measures what burnout is." [10] This has led others to develop other instruments such as the Copenhagen Burnout Inventory (CBI), [10] the Karolinska Exhaustion Disorder Scale (KEDS), [11]

Table 1: Exhaustion disorder: National board of health and welfare in Sweden criteria

Physical and mental symptoms of exhaustion during at least 2 weeks. The symptoms have developed in response to one or more identifiable stressors present for at least 6 months

The clinical picture is dominated by markedly reduced mental energy, as manifested by reduced initiative, lack of endurance, or increased time needed for recovery after mental effort

At least four of the following symptoms have been present, nearly every day, during the same 2-week period

Concentration difficulties or impaired memory

Markedly reduced capacity to tolerate demands or to work under time pressure

Emotional instability or irritability

Sleep disturbance

Marked fatigability or physical weakness

Physical symptoms such as aches and pains, palpitations, gastrointestinal problems, vertigo, or increased sensitivity to sound

The symptoms cause clinically significant distress or impairment in occupational, social, or other important respects

The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a physical illness/injury (e.g., hypothyroidism, diabetes, infectious disease)

and the Occupational Depression Inventory. [12] A recent systematic review examined the psychometric properties of the MBI, Pines' Burnout Measure (BM), the Psychologist Burnout Inventory (PBI), the Oldenburg Burnout Inventory (OLBI), and the CBI. The researchers reported the findings of 19 studies, 15 of which addressed the MBI, and one each for the BM, PBI, OLBI, and CBI. The review reported OLBI as having the most complete validation, followed by CBI, MBI, BM, and PBI. A limitation, which is reflected in the reported GRADE levels of evidence, was that the quality of evidence for sufficient content validity was moderate for LBI and CBI and very low for the other instruments. [13]

Because it was the first assessment tool, the MBI has been translated into multiple languages, and different versions of tare available to generalize what was initially a health services-focused instrument to the general public. Examples of this are the MBI-General Services (MBI-GS), MBI-Educators Survey, and General Survey for Students.^[14] Some of the newer assessment tools still need to be validated in other cultures, languages, and occupations.

TREATMENT

Bauernhofer et al. used the ICD-10 criteria of work-related neurasthenia, the MBI-GS, the Beck

Depression Inventory, and the Recovery-Stress Questionnaire for Work to perform a cluster analysis to define three subtypes of burnout symptoms and found that the severity of burnout symptoms was related to subtypes. The burned-out subtype had the highest level of depression and worse recovery/resources-stress balance when compared to the exhausted/cynical and exhausted subtypes. They suggested that the burned-out subtype, because of its more severe symptomatology, would be more likely to benefit from psychotherapy and possibly antidepressants.^[15]

This was counterbalanced by a review that reported that there are physiological differences between patients experiencing burnout and major depression, citing studies that showed the dexamethasone suppression test does not suppress cortisol in major depressive disorder but results in hypersuppression of cortisol in burnout and posttraumatic stress disorder (PTSD). Since antidepressants affect the expression and function of corticosteroid receptors in the brain, the authors of that review suggested that antidepressant use in burnout may be deleterious and advocated for the use of saliva testing for cortisol before initiating treatment.^[16]

From a therapy standpoint, Farber presented a compelling argument that subtyping can direct the construction of an individualized therapeutic treatment strategy for burned-out teachers, recognizing that there are differences in cognitive approaches to refocus and redefine success.^[17]

The Dutch practice guidelines for managing adjustment disorders proposed dividing the treatment of symptoms into three phases of recovery: (1) crisis and understanding, which promoted rest and education, (2) insight, in which the clinician(s), patient, and a representative from the patient's workplace make an inventory of possible solutions, and (3) rehabilitation, where roles that have been stopped during the crisis are at least partially resumed.^[18] These guidelines were based on a cluster randomized controlled trial.^[19] This study was included in a systematic review for the treatments of adjustment disorder that also found some low to very low-quality evidence for CBT,

psychodynamic psychotherapy, relaxation-based therapy with various protocols, as well as a short-term benefit from selective serotonin reuptake inhibitors, benzodiazepines, and phytase.^[20]

Similar to the Dutch guidelines, a study of two burnout interventions in Finnish female white-collar workers showed that perceived increased job control through a 1-year intervention that combined individual and organizational rehabilitation activities decreased exhaustion and cynicism as a result of burnout symptoms when compared to a traditional individually focused intervention.[21] A shorter 5-week study in the Netherlands showed that involvement of the patient's supervisors led to a perception by patients of support from within their organization, which resulted in perceived improvements in job equity and a decrease in burnout symptoms and intention to pursue a different job.[22] These studies suggest that successful treatment of burnout symptoms should incorporate multidisciplinary inventions between clinicians, patients, and their workplaces.

DISCUSSION

The existence or nonexistence of burnout as a separate entity has significant implications for individuals, families, organizations, communities, and societies. These implications have been brought to the forefront by a growing awareness and discussion of systemic inequalities and the debate over how to address the growing local and global inequality of wealth distribution. Those at the highest risk of burnout are our essential workers, who prepare and deliver our food, care for our sick, and keep society running. This has become even more visible in the age of COVID-19. A recent systematic review and meta-analysis demonstrated an overall prevalence of adverse psychological responses, including PTSD, depression, and anxiety, of up to 26% in areas hard-hit by COVID-19.[23] This is likely exacerbated by the other impacts of COVID-19, which include the closure of schools, which led to parents of school-aged children having an increased share of schooling-related responsibilities and childcare, oftentimes with the ad hoc implementation of online school. Using the

"Job Demand Inventory" theory, the more stressors with the same or diminished level of resources, the more likely symptoms of burnout syndrome are likely to manifest.

Returning to our primary question, we as a global society need to determine whether burnout exists as a distinct disease. If it does, multiple further questions are raised, such as whether there are subtypes of burnout, as suggested by numerous studies^[24-26] and whether these are distinct to the individual, or if they rather reflect different stages of the burnout cycle.^[27] This knowledge should lead to better diagnostic precision, which in turn should lead to research to identify better treatment and thus lead to improved outcomes.

Uncertainty remains about how burnout should be treated, with the roles of psychotherapy and medication yet to be defined. This uncertainty extends to the existence of subtypes and whether particular subtypes should be treated or rehabilitated differently. We have presented some evidence regarding the benefit of multidisciplinary interventions (psychology, psychiatry, primary care, and occupational health), and there is likely a contribution to be made by the disciplines of public health, economics, and health-care administration. Government-funded entitlement to compensation in those who suffer burnout is available in Sweden and the Netherlands, but other countries need to decide whether they will follow this direction or whether businesses should share in or bear the costs. If organizations, can be proved to, either through intentional policies or neglect, contribute to burnout, they could be made to share in the costs of treatment and rehabilitation.

Moving on to prevention, there is an urgent need to identify effective, low-cost ways to prevent or lessen the burden of burnout or work-related neurasthenia. Ancient patterns of life may be instructive in this area. For example, Islam teaches the importance of maintaining a balance between work and rest in taking care of one's emotional and physical health. The Jewish scriptures teach the importance of a weekly rest day, called the Sabbath, for the good of people, [27] along with Sabbath-years

and the year of Jubilee. [28] Although previous studies have shown the connection between religiosity and burnout among medical practitioners, further research is needed to understand the connection between religious well-being and burnout in other occupations and to identify interventions to reduce burnout.^[29] In the secular setting, Microsoft found that in Japan, a 4-day work week led to increased productivity and revenue while reducing costs.[30] However, it may not always be the case that fewer workdays lead to financial benefit. In addition, some occupations such as stay-at-home parents or caregivers are not formally financially compensated, which raises the question of whether there is a role for universal basic income or progressive tax structures to address these funding shortfalls. In places in the world where the right of workers to organize is not legally recognized and workers' rights not legally defined, protective mechanisms are needed to ensure workers' physical and mental health. The preventive role for resilience training or other positive psychology interventions in schools and the workplace also remains to be defined, especially as assembly-line type work and a growing emphasis on short-term productivity have become commonplace.

Research methodology to answer these questions depends on the development of precise and reliable diagnostic criteria. Given the lack of global health-care resources, these criteria should be open source and available at no cost to clinicians and researchers globally. We have noted the disturbing trend of placing diagnostic instruments such as the Mini–Mental Status Examination and Montreal Cognitive Assessment behind paywalls. While we agree that developers of such instruments should be allowed to see the fruits of their hard labor and be recompensed for any related expenses, we can also see how that stunts the progress of research and treatment that affects the good of millions of people worldwide.

Once we have further knowledge, the capacity of health systems needs to be created or increased to effectively treat the anticipated increased number of patients suffering from COVID-19-related burnout symptoms and their associated diagnoses. There

is an urgent need for service planning^[31] and the identification of funding mechanisms.

CONCLUSIONS

Burnout, whether a distinct clinical entity or an occupationally triggered manifestation of an already defined mental health condition, is an urgent public health priority. There is peril in waiting for a follow-on epidemic of its manifestations before embarking on high-quality research into diagnostic criteria, treatment, and prevention, as this takes time. However, this information is vital for individual practitioners, health-care systems, governments, and societies to meet this pressing need.

Authors' contributions

JK conceived the idea for this review. All authors participated in the literature review and were involved in the writing of each draft and approved the final version.

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Conflicts of interest

There are no conflicts of interest.

Compliance with ethical principles

Prior ethical approval is not required for review articles and editorials.

REFERENCES

- 1. Freudenberger HJ. Staff burn-out. J Soc Issues 1974;30:159-65.
- Friberg T. Burnout: From popular culture to psychiatric diagnosis in Sweden. Cult Med Psychiatry 2009;33:538-58.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders-5. Arlington, Texas, United States: American Psychiatric Association; 2013. p. 70.
- World Health Organization. The ICD-10 Classification of Mental and Behavioral Disorders: Clinical Descriptions and Diagnostic Guidelines. Geneva, Switzerland: World Health Organization; 1992.
- Bianchi R, Schonfeld IS, Laurent E. Is it Time to Consider the "Burnout Syndrome" A Distinct Illness? Front Public Health 2015;3:158.
- Mogassabi W, Mogassabi W, Saliba M, Emam RM, Ibrahim WH. Mental health of health-care workers during the COVID-19 pandemic. Ibnosina J Med Biomed Sci 2020;12:258-63.
- Canu IG, Marca SC, Dell'Oro F, Balazs A, Bergamaschi E, Besse C, et al. Harmonized definition of occupational burnout: A systematic review, semantic analysis, and Delphi consensus in 29 countries. Scand J Work Environ Health 2021;47:95-107.
- Maslach C, Jackson SE. The measurement of experienced burnout. J Occup Behav 1981;2:99-113.
- Maslach C, Jackson SE, Leiter MP, Schaufeli WB, Schwab RL. Maslach Burnout Inventory. Vol. 21. Palo Alto, CA: Consulting Psychologists Press; 1986. p. 3463-4.
- 10. Kristensen TS, Borritz M, Villadsen E, Christensen KB. The Copenhagen

- Burnout Inventory: A new tool for the assessment of burnout. Work Stress 2005;19:192-207.
- Beser A, Sorjonen K, Wahlberg K, Peterson U, Nygren A, Asberg M. Construction and evaluation of a self rating scale for stress-induced Exhaustion Disorder, the Karolinska Exhaustion Disorder Scale. Scand J Psychol 2014;55:72-82.
- Bianchi R, Schonfeld IS. The occupational depression inventory: A new tool for clinicians and epidemiologists. J Psychosom Res 2020;138:110249.
- Shoman Y, Marca SC, Bianchi R, Godderis L, Van der Molen HF, Canu IG. Psychometric properties of burnout measures: A systematic review. Epidemiol Psychiatr Sci 2021;30:e8.
- Maslach C, Schaufeli WB, Leiter MP. Job burnout. Ann Rev Psychol 2001;52:397-422.
- Bauernhofer K, Bassa D, Canazei M, Jiménez P, Paechter M, Papousek I, et al. Subtypes in clinical burnout patients enrolled in an employee rehabilitation program: Differences in burnout profiles, depression, and recovery/resources-stress balance. BMC Psychiatry 2018;18:1-3.
- Kakiashvili T, Leszek J, Rutkowski K. The medical perspective on burnout. Int J Occup Med Environ Health 2013;26:401-12.
- 17. Farber BA. Tailoring Treatment Strategies for Different Types of Burnout. Paper Presented at the Annual Convention of the APA. 106th ed. San Francisco, CA: Proceedings of the Annual Convention of the American Psychological Association; 1998.
- Van der Klink JJL. Van Dijk FJ. Dutch practice guidelines for managing adjustment disorders in occupational and primary health care. Scand J Work Environ Health 2003;29:478-87.
- Van der Klink JJ, Blonk RW, Schene AH, van Dijk FJ. Reducing long term sickness absence by an activating intervention in adjustment disorders: A cluster-randomized controlled design. Occup Environ Med 2003;60:429-37.
- O'Donnell ML, Metcalf O, Watson L, Phelps A, Varker T. A systematic review of psychological and pharmacological treatments for adjustment disorder in adults. J Traumatic Stress 2018;31:321-31.
- Hainan M, Kinnunen U, Pekkonen M, Kalimo R. Comparing two burnout interventions: Perceived job control mediates decreases in burnout. Int J Stress Mgmt 2007;14:227-48.
- Van Dierendonck D, Schaufeli WB, Buunk BP. The evaluation of an individual burnout intervention program: The role of inequity and social support. J Appl Psychol 1998;83:392-407.
- Arora T, Grey I, Östlundh L, Lam KB, Omar OM, Arnone D. The prevalence of psychological consequences of COVID-19: A systematic review and meta-analysis of observational studies. J Health Psychol 2020:1359105320966639.
- Leiter MP, Maslach C. Latent burnout profiles: A new approach to understanding the burnout experience. Burnout Res 2016;3:89-100.
- Boersma K, Lindblom K. Stability and change in burnout profiles over time: A prospective study in the working population. Work Stress 2009;23:264-83.
- Hätinen M, Kinnunen U, Pekkonen M, Aro A. Burnout patterns in rehabilitation: Short-term changes in job conditions, personal resources, and health. J Occup Health Psychol 2004;9:220.
- Holy Bible: New International Version. Grand Rapids, Michigan: Zondervan Publishing; 1973. Exodus 20:8-11.
- Holy Bible: New International Version. Grand Rapids, Michigan: Zondervan Publishing; 1973. Leviticus 25:1-28.
- Haghnegahdar M, Sharma P, Hubbard KP, White WA. The influence of religious belief on burnout in medical students. Mo Med 2021;118:63-7.
- Eadicicco L. Microsoft Experimented with a 4-Day Workweek, and Productivity Jumped by 40%. Business Insider; 2019. Available from: https://www.businessinsider.com/microsoft-4-day-work-weekboosts-productivity-2019-11#:~:text=Microsoft%20found%20that%20 implementing%20a, effect%20on%20productivity%20and%20 creativity. [Last accessed on 2021 May 30].
- Arnone D. Mental health services in the wake of COVID-19 and opportunities for change. Br J Psychiatry 2020;217:726.