

THE CONCEPT OF BURNOUT IN THE MEDICAL FIELD: A LITERATURE REVIEW

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Abstract: *In this article we propose to carry out a review of the specialized literature with the aim of highlighting the main aspects regarding the concept of burnout, its typology and the factors that generate it; all this information will be used to determine the managerial, sociological and psychological perspectives of the concept of burnout. Also, based on the information obtained through literature research, we aim to highlight managerial models applied in the medical field and the main legislative aspects that regulate them and make their management possible. The research brings additions to the specialized literature in Romania regarding the aspects related to the psychological state of medical staff and their relationship with patients.*

Key words: *burnout, emotional exhaustion, tiredness, work motivation, work satisfaction, employee – patient relationship*

1. Introduction

Burnout has become an important problem and, at the same time, a public health challenge. In the context in which this syndrome is still somewhat unclearly defined, with no consensus regarding its diagnosis, we consider it necessary to identify risk situations and implement some preventive measures to avoid the possible damage that burnout could cause. Mentioned for the first time by psychologist Herbert Freudenberger in his book «Burnout: The High Cost of High Achievement (Freudenberger, 1974), burnout is a «complex condition associated with mental, physical and emotional exhaustion that occurs as a result of excessive accumulated long-term stress».

By reviewing the current state of research on this complex phenomenon, we aim to identify the information related to the concept, typology, measurement tools, which can later be the basis of a possible managerial model to reduce the harmful effects of burnout on the performance of employees in the field medical and to determine a better relationship between them and the patients. The research involves prospective, longitudinal approaches to explore the psychological, social and managerial aspects of

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burnout, considering that some steps have been taken in Romania to highlight the psychological state of medical staff.²

To carry out the research, the literature was reviewed, identifying the specialized articles from the Web of Science databases from the period 2018-2022. Specific stages and criteria were considered in the research process, as will be presented below.

2. Research Design

2.1. Research method

The specialized literature review was carried out in the form of a systematic narrative analysis regarding quantitative research that focused on the concept of burnout and its content. The review was developed in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, which ensure fair and transparent reporting in systematic reviews and meta-analyses (Moher, D., et al., and PRISMA Group., 2009).

2.2. Searching for information

The literature review was based on the search in the Web of Science (WOS) databases of specialized articles presenting quantitative research in the form of cross-sectional studies with reference to the concept of burnout, published in English between 2018-2022. This period was chosen because the articles from the last 5 years are considered sufficiently relevant both from the perspective of the degree of novelty of the information and from the perspective of the degree of novelty of the analyzed hypotheses. A search strategy was developed to identify relevant articles in the WOS database from the perspective of keywords (constructs) such as: burnout, work-life balance, self-esteem, stress, work environment, workforce issues, work motivation, work satisfaction, employee – patient relationship. The search was performed exclusively in sources available online, in the form of articles indexed in WOS.

2.3. Selection of information sources

The selection process was carried out in stages, the selection criteria being the following: i) article published in the magazine, ii) included in the scientific article category, iii) article with free access to the full text (open access), iv) the target population of the study includes personnel from the health care category (doctors and nurses/nurses), v) no more than 5 studies per country have been selected (elimination of repeated studies only in the context of a single country).

² See <https://www.formaremedicala.ro/sindromul-burnout-55-dintre-medicii-bucuresteni-sufera-de-stres-personal-si-52-de-stres-profesional/>; <https://www.cmb.ro/fenomenul-burnout-in-crestere/>; <https://www.medichub.ro/reviste-de-specialitate/ziarul-viata-medicala-mid-546-cmsid-102>; <https://www.dor.ro/medicii-sunt-in-burnout-ar-trebui-sa-vorbim-despre-asta/>).

All remaining (potentially relevant) studies were examined from a full-text perspective, highlighting the related conceptualization of burnout and adjacent elements (e.g. influencing factors, effects on motivation and job satisfaction, ways and tools to measure burnout of).

2.4. Extracting information

The selection of articles took into account the degree of their methodological quality, being chosen articles that present uniformity and scientific quality highlighted by: title and abstract, introduction and purpose, method and data, sampling, data analysis, ethics and error caused by subjectivity, results, transferability or generalizability, implications and utility (Hawker et al, 2002). For each selected study, the following details were extracted: the type of study (design), the country where the research was carried out, the sample size, the type of participants (personnel engaged in medical care services), the method of measuring burnout, the authors and the year of publication of the article.

Following the use of the search inference "burnout in healthcare" at the level of the WOS database for the interval 2018-2022, 2303 studies were identified. After removing a number of 401 papers that were not classified as scientific articles, there are 1902 studies classified as scientific articles. We removed 445 studies that were not available in full text at no additional cost. Out of 1457 studies published in the open-access regime, 1227 works were included in the category of scientific journal articles. 189 papers were eliminated that did not address a sample consisting of staff exclusively engaged in health care services (doctors, nurses, nurses). From the total of 1038 papers, 77 papers were eliminated which proved to be reviews of specialized literature, of the systematic review type. The exclusion of a number of 911 papers from the final analysis was achieved by applying the criterion of keeping a maximum of 5 papers for each country (eg: China 73, Italy 42, Spain 39, etc.) and the criterion of using the same methods/tools measuring burnout. In total, 50 studies were included in the systematic literature review. For this article, we selected two relevant keywords in the research: stress and emotional exhaustion (Table 1).

Table 1

Two of the most relevant keywords found in research

Key-words	Authors	Research type	Countries/Occupation of participants	Method of measuring burnout
stress	1. Abdelhafiz, A. S., et al., (2020) 2. Bagley, C., Abubaker, M., and Sawyerr, A.. (2018); 3. Cotel, A., et al., (2021); 4. Giusti, E.M. et al. (2020), Di Monte, C., et al. (2020); 5. Hoffman, R., and Bonney, A.	cross-sectional research conducted by (electronic) survey	1. Egypt/doctors; 2. England/nurses; 3. Romania.doctors, nurses; 4. Italy/doctors, nurses; 5. Australia/doctors; 6. Jordan/pediatric nurses; 7. Portugal/doctors; 8. Spain/doctors, nurses and others;	Maslach Burnout Inventory Human Services Survey

Key-words	Authors	Research type	Countries/Occupation of participants	Method of measuring burnout
	(2018), Dobson, H., et al., (2021); 6. Khatatbeh, H., et al. (2022); 7. Lapa, T., et al. (2018), Nobre, D. F. R., et al. (2019); 8. Ruiz-Fernández, M.D., et al. (2020), Lázaro-Pérez, C., et al. (2020); 9. Mahmoudi, S., et al. (2020); 10. Miguel-Puga, J.A., et al. (2020); 11. Ogunsuji, O. et al. (2022); 12. Paiva, B.S.R., et al. (2021); 13. Park, S. Y. et al. (2020); 14. Roslan, N.S., et al. (2021); 15. Tan, B., et al. (2020).		9. Iran/nurses; 10. Mexico/doctors, nurses, technical support or healthcare staff; 11. Nigeria/surgeons and residents; 12. Brazil/nurses, oncology department; 13. R. of Korea/doctors, nurses; 14. Malaysia/doctors, nurses, medical laboratory technologists; 15. Singapore/doctors, nurses;	
emotional exhaustion			1. 85 countries/nurses and doctors; 2. Canada/doctors, nurses; 3. Italy/nurses and doctors; 4. Australia/resident doctors; 5. India/doctors, nurses, paramedics, administrative staff, support staff; 6. Jordan/pediatric nurses; 7. Poland/nurses from 23 hospitals; 8. Singapore/resident anesthetists; 9. China/nurses, doctors; 10. Spain/doctors, nurses; 11. Japan/doctors, nurses; 12. Brazil/nurses, oncology department; 13. R. of Korea/doctors, nurses; 14. USA/doctors; 15. Malaysia/doctors, social workers, medical laboratory technologists; 16. Myanmar/doctors; 17. Turkey/doctors, nurses; 18. Pakistan/doctors; 19. Chile/nurses; 20.	Maslach Burnout Inventory (MBI)

Table no 1. The conceptualization of burnout in the systematically analyzed framework

Source: Research done by the author

3. Burnout Concept in the Medical Field

The increase in the level of complexity of the activities and their related volume led to the appearance and manifestation of some phenomena that affected the state of health. Among these, a phenomenon first noted in 1974 by Herbert Freudenberger, who studied emotional distress and chronic fatigue among volunteer workers at free drug addiction clinics in New York City, stands out. He used the name „burnout” associating it with „the state of mental and physical exhaustion caused by professional life” (Reith, T. P., 2018).

Subsequent research on this phenomenon (Maslach, 1981) led to the most commonly used definition of burnout, described as a work-related syndrome comprising emotional exhaustion, depersonalization, and reduced feelings of personal accomplishment in the work domain (Pawłowicz-Szlarska, E., et al., 2022). The person is no longer able to "burn out" or be productive enough to meet expectations at work.

The phenomenon associated with burnout has experienced an explosive evolution in recent years, becoming a specific element of the professional environment that in 2019 was included in the International Classification of Diseases-ICD 11. The effects at the economic and social level, quantified at the global level are impressive - the decrease in productivity , personnel changes and compensation costs collectively exceeding USD 300 billion annually (Adlakha, D., 2019). This evolution of the burnout phenomenon has also been favored by a series of changes related to the concrete ways in which today's adults engage in work - a considerable increase in the number of employed workers who have a sedentary behavior - office work and other occupations with activity reduced – adults currently have an average of 9.5 hours per day of sedentary time (this also includes travel time spent sitting in motorized vehicles or leisure time spent in front of computers and televisions); a significant increase in the amount of work assigned to a typical employee, with recent estimates indicating that a full-time worker works between 38.9 and 40.5 hours per week (Adlakha, D., 2019).

The conceptualization of the burnout syndrome, at the level of the 50 articles selected for review following the systematic analysis, synthetically highlights the following situation (Table no. 2):

Table 2

The prevalence of definitions given to the concept of burnout in the articles selected for review

Burnout concept definition	No articles
Syndrome associated with the three levels (specific approach and measurement with the MBI questionnaire - Maslach Burnout Inventory) Emotional exhaustion Depersonalization Low personal achievement	23
Condition characterized by chronic stress and depression, associated with the intention to leave the job	7

Burnout concept definition	No articles
Syndrome described by ICD-11 through the three dimensions – energy depletion, mental distancing, cynicism and negativism towards the workplace, low self-efficacy	11
State of physical, emotional, and mental exhaustion resulting from long-term involvement in work situations that are emotionally demanding.	5
Burnout is a dimension of mental health along with anxiety, depression and fear	1
Precursor to serious problems such as job dissatisfaction, work-family conflicts and even leads to depression, anxiety, stress, ruminative thinking and lack of life satisfaction	1
A set of non-specific medical-biological and psychosocial symptoms that develop during work activity as a result of excessive energy demand	1
Burnout is considered the opposite of staff engagement, with a high level of physician burnout and a lack of engagement negatively affecting patient care	1

Source: *Own research*

The early approach that Maslach and Jackson developed in 1981 with the proposal of the Maslach Burnout Inventory (MBI), in which the authors highlighted the three dimensions that have become classic - emotional exhaustion, depersonalization and low personal accomplishment (Maslach, C., and Jackson, S. E., 1981; Maslach, C., and Leiter, M. P., 2021), underlies most definitions found in the literature. Thus, several definitions of the concept of burnout have been stated that highlight different characteristics of burnout:

- „A state of physical, emotional and mental exhaustion resulting from long-term involvement in work situations that are emotionally demanding” (Schaufeli, W. B., and Greenglass, E. R., 2001);
- A psychological syndrome of emotional exhaustion, depersonalization and a reduced sense of personal achievement that can occur in people working with different categories of public in specific contexts (Kupcewicz, E., and Jóźwik, M., 2020);
- A work-related syndrome characterized by depersonalization, emotional exhaustion and low personal achievement, leading to harmful professional and personal consequences (Lim, W. Y., et al., 2019);
- A psychological syndrome caused by chronic work-related stress and consisting of three components: emotional exhaustion, cynicism (depersonalization) and feelings of reduced professional efficacy (personal accomplishment). (Nagasaki, K., et al., 2022).

A syndrome arising from work-related stress and characterized by emotional exhaustion and depersonalization (eg, feeling numb or detached from patients). (Dyrbye, L.N., et al., 2020).

The concern for the problem of burnout that affects the medical staff in recent years is justified both by the effect of specific internal factors for the well-being of the staff, as well as by some factors at the level of institutions - the low quality of medical services towards patients and the risk of errors made by affected employees (Dijxhoorn, A.F.Q., et al., 2021).

Persistent work-related stress can eventually lead to burnout. Thus, burnout is seen as a complex process that develops gradually, from the absence of symptoms to mild

symptoms and finally to severe symptoms of exhaustion (Dijxhoorn, A.F.Q., et al., 2021). ICD-11 describes burnout as a syndrome with three dimensions: exhaustion or energy depletion, mental distancing or cynicism and negativism towards the work role, and reduced self-efficacy. ICD-11 highlights the cognitive aspects of burnout, but the syndrome is not in the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) (Clinton, M., et al., 2022).

Currently there are new attempts to define tools for measuring burnout and implicitly its definitions. Thus, we can talk about the burnout assessment tool (Burnout Assessment Tool) - B.A.T. The new definition of burnout, on which B.A.T is based, operates with the measurement of four dimensions: exhaustion, emotional impairment, cognitive impairment and mental distance. In addition, burnout is accompanied by psychological distress, psychosomatic complaints and depressed mood. (Schaufeli WB, De Witte H., AND Desart S., 2019; Schaufeli, W. B., Desart, S., AND De Witte, H., 2020).

From the point of view of the specificity that burnout has in the health field compared to other fields, research has confirmed that the intention to change one's profession, to end one's career, early retirement (Hämmig, O., 2018), and high staff turnover rate (Willard-Grace, R., et al., 2019) are related to health care burnout. Research has also revealed that some medical specialties are considered to be more exposed to the risk of developing burnout, such as family medicine.

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primarily using the Maslach Burnout Inventory (MBI). Burnout symptoms, as measured in the MBI, showed wide ranges of “high emotional exhaustion” (3%–49%), “high depersonalization” (1%–48%), and “low sense of personal accomplishment” (3%–85%). Other studies reveal as content of burnout symptoms: (Irkhin, Y., et al., 2020)

- a) emotional and physical exhaustion, lack of energy;
- b) increased mental distance, negativism, cynical attitude from the workplace and its beneficiaries;
- c) the low level of personal achievements and the progressive decline in professional efficiency.

A particular aspect worth mentioning is that there is evidence that susceptibility to burnout is influenced by pre-existing personality variables (Langelaan, S., et al. 2006). This hypothesis deserves a whole series of investigations oriented in this direction, being extremely promising also from the perspective of identifying effective strategies to eliminate the burnout syndrome.

A series of recent research indicates that, despite the fairly extensive literature that has addressed the concept of burnout, there are new attempts to define burnout measurement tools and implicitly definitions of it. Thus, we can talk about the burnout assessment tool (Burnout Assessment Tool) - B.A.T. The new definition of burnout, on which B.A.T is based, operates with the measurement of four dimensions: exhaustion, emotional impairment, cognitive impairment and mental distance. In addition, burnout is accompanied by psychological distress, psychosomatic complaints and depressed mood. (Schaufeli WB, De Witte H., and Desart S., 2019; Schaufeli, W. B., Desart, S., and De Witte, H., 2020).

4. Conclusions

Burnout is a complex phenomenon that affects public institutions, companies, individuals and even states of the world. The dynamics that labor relations currently have and the technological evolution, which requires a continuous effort to adapt employees, are permanent challenges even from the perspective of the evolution of burnout itself. The medical field also has a special prevalence in relation to the burnout syndrome, given the specific working conditions, the nature of the work performed - intensively vocational and highly qualified -, the ever-increasing demands on health systems around the world, all this amplified by global phenomena such as the COVID-19 pandemic. Considering these considerations, the research of the burnout syndrome, starting from the concept itself, becomes relevant from the perspective of filling an empty "space" in the local literature, as well as from the perspective of the importance that the subsequent identification of a decision-making model that diminishes the effects of burnout can have for the management of hospital institutions in Romania.

As it results from the research carried out up to this level, the concept of burnout benefited from an exhaustive approach in foreign literature, but it was not approached at a conceptual level in Romanian literature. In this context, the literature research aimed to analyze this concept through the prism of definitions that have been formulated over time, presenting the typology and some psychological, social and

managerial aspects. In addition to the systematic presentation of information regarding the concept, an aspect that brings value is the one related to the perspectives of using the information from this research, namely the relation of a decision-making model that diminishes the effects of this syndrome. Institutional decision-makers can and do use the research results directly, for the foundation of their own managerial models capable of managing burnout.

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