

## Chapter 77

# Prevalence of Burnout Syndrome in health professionals from 2018 to 2021: a literature review

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### **ABSTRACT**

The Burnout Syndrome (BS) is a consequence of prolonged exposure to chronic work and interpersonal stress, the term "Burnout" translated refers to

"exhaustion" or "expression" that, in short, its conceptualization suggests three dimensions "burnout" configures exhaustion, emotional exhaustion and the feeling of derealization and/or depersonalization, resulting from excessive the demand for tasks or responsibilities. It is notorious that BS affects professions whose work depends on interpersonal relationships, in view of this, much has been studied about the propensity and involvement of health professionals, especially in the current world scenario of Sars-Cov-2. In the literature, BS is brought in close association with depressive disorders, but it is important to note that BS differs from depression, there is only a strict relationship between the rates of BS and depressive symptoms. This article is a survey of literature review of articles that address the subject. This review article aims to present the main definitions, the prevalence in health professionals, risk factor and its symptoms, in addition to exploring the diagnosis, prevention and treatment of Burnout Syndrome and verifying the impact of COVID-19 on the development of BS in patient's caregivers.

**Keywords:** Burnout syndrome; wear, emotional exhaustion, Health professionals, prevalence, COVID-19

## **1 INTRODUCTION**

The word "burnout" comes from the English language and means "burn", "exhaustion" and "exhaustion". In this sense, Burnout Syndrome (BS) is characterized by chronic work-related stress that can lead to physical and emotional exhaustion. BS is present in the lives of many health workers, becoming a serious problem for society. The damage that BS causes in the mental and physical field of health professionals has consequences for the individual level (mental and other diseases) and institutions (absenteeism, high turnover, ineffective work, among others) (Vieira and Russo, 2019).

As for the concepts and diagnostic criteria there are many divergences in the literature, but Maslach's definitions are the most widespread and validated in the scientific literature, including the diagnostic medium called "*Maslach Burnout Inventory* (MBI)". For the author, professional exhaustion has three main points: emotional exhaustion, depersonalization and ineffectiveness at work (Lubbadeh, 2020). However, several other scholars have created their own descriptions for *burnout*, as well as other questionnaires to diagnose it, thus differentiating different profiles of BS (Misiolek-Marín et al, 2020).

The signs and symptoms of burnout are progressive, starting with emotional exhaustion followed by feelings of indifference, affective distancing and feeling of incompetence (Perniciotti et al, 2020). Other symptoms that may be associated are persistent fatigue, sleep disorders, headache, muscle pain, gastrointestinal disorders, demotivation, and drug or alcohol abuse (Khosravi, 2020).

The etiology of BS is multifactorial and is related to individual characteristics, factors linked to work and discrepancies between personal goal expectation and the reality imposed by the activity performed (Perniciotti et al, 2020; Bianchi; Schonfeld; Laurent, 2018). Within the organizational sphere there are some critical points or risk factors that, if unbalanced, can increase the probability of BS. These are the workload, personal autonomy, recognition or *feedbacks*, the good relationship between the team, the sense of justice and values. The more consonance between the aspects mentioned and the individual, the better their relationship with their occupation (Lubbadeh, 2020).

The Sars-Cov-2 pandemic in 2020 brought challenges for society as a whole, especially for health care professionals. The workers of the so-called "front line" had to face the risks of contamination, lack of supplies and personnel, excessive journeys, and the distancing of their relatives for fear of infecting them. This set of factors made these individuals even more vulnerable to BS (Moura; Stolen; Sobral, 2020; Ribeiro; Scallop; Naka, 2020).

The aim of this study is to conduct a survey and analysis of scientific articles on Burnout Syndrome in health professionals from 2018 to 2021, verifying its prevalence, concepts, symptomatology, method of diagnosis, risk factors and treatment. In addition, to understand preventive actions in organizations and to verify the impact of COVID-19 on the development of BS on caregivers.

## **2 METHODOLOGY**

This is a systematic literature review, whose research was conducted in 2021. To carry out the bibliographic survey, the electronic databases were used: Virtual Health Library (VHL), Scientific Electronic Library Online (SciELO), Latin American and Caribbean Literature on Health Sciences (LILACS), PubMed and Google Scholar. The keywords used were "Burnout"; "Professional Exhaustion"; "Health Professionals"; "Covid-19" and its correspondents in the English and Spanish languages. The inclusion criteria of the texts were those that the abstract dealt with on the theme, published between 2018 and 2021, and available in full in Portuguese, Spanish and English. The articles in the title and abstract did not mention BS or health professionals were excluded. Then, the articles were thoroughly read and thirty studies were selected to make up the present review.

## **3 PREVALENCE OF THE SYNDROME IN PROFESSIONALS**

The prevalence of BS seems to be an arduous task, both nationally and globally. The challenge is mainly in the various diagnostic criteria used, and some authors claim that there is no formal diagnosis established for *burnout* (Bianchi; Schonfeld; Laurent, 2018; Demarzo, 2020).

In Brazil, before the pandemic, it was estimated that the prevalence was 78.4% among health professionals. However, it is worth mentioning that studies focused on establishing the prevalence of BS were scarce (Ribeiro; Scallop; Naka, 2020). In the studies selected by us, according to the established period, the prevalence was in the range of 0% to 59.4%. However, some of the studies used Maslach's MBI as diagnostic criteria while the others used the Gil-Monte Burnout Syndrome Assessment Questionnaire (CESQT) (Favero; Fabbri; Almeida, 2018; Araújo et al, 2019; File; Farah; Bustamante-Teixeira, 2018; Andrade et al, 2019; Edwards; Lion; Alves, 2019).

Globally, there is no well-established prevalence for BS. The prevalences found in the analyzed studies range from 40% to 85.79% in several areas (Sanfilippo et al,2020; Chemali et al, 2019; Zhang et al, 2020a; Grover, 2019). Rotenstein et al (2018), in its systematic review selected 182 studies involving 109,328 physicians from 45 different countries between 1991 and 2018 and found a prevalence of 0% up to 80.5%. The study by Woo et al (2020) analyzed 113 articles with about 45,539 individuals for a systematic review and obtained 11.23% prevalence of BS among nursing professionals from several countries. However, the author still highlights the high heterogeneity among these studies, due to the numerous measuring instruments of BS and their corte points.

In the period from 2020 to 2021, while the coronavirus outbreak was already installed, with all the changes imposed by the pandemic, a significant increase in stress and anxiety levels of frontline professionals was observed. As in the study by Zhang et al (2020b), in which a prevalence of 73.4% of work-related stress symptoms was found in physicians working in different Chinese hospitals. Giusti et al (2020), conducted a survey of 330 health professionals in an Italian hospital and had the results that 31.9% to 35.7% had moderate to severe emotional exhaustion; 12.1% to 14.0% had moderate and severe levels of depersonalization; 34.3% to 40.1% had moderate and severe d levels and reduced personal performance.

More robust studies with a large sample group, seeking the prevalence of BS among health professionals during the COVID-19 pandemic, are still quite scarce, and this type of pesquisa is still necessary later. Moreover, it is necessary that health managers seek ways to prevent BS in their health centers, especially at this time so delicate for humanity. Reducing occupational stress, taking an association with the mental health of its workers and creating a functional work environment are very important steps to reduce the occurrence of BS among caregivers (Sharifi; Asadi-Pooya; Mousavi-Roknabadi, 2020).

#### **4 DEFINITIONS OF BURNOUT SYNDROME**

The American psychoanalyst Herbert J. Freudenberger was one of the first scholars to bring the term "burnout" to designate the snare caused by work, especially in health professionals. In 1974, the author published his observations on both the exhaustion of co-workers and his own (Perniciotti et al, 2020). In Freudenberger's description he uses the dictionary definition to establish the concept of "burnout", and then wears out, exhausted, loses his strength by excessive demanda of tasks or responsibilities (Koutsimani; Montgomery; Georganta, 2019).

Christina Maslach, an American social psychologist, devoted herself to studying BS having her first work on the subject published in 1976. In 1981, Maslach and Jackson defined BS as emotional exhaustion associated with depersonalization and low professional achievement (Perniciotti et al, 2020). Emotional snare is perhaps the main point of BS, characterized by intense fatigue and unconscious attitudes and withdrawal from hostile situations. Depersonalization or cynicism deals with the feeling of indifference and dehumanization that BS can lead, affecting the relationship between professional and client. On the other hand, the loss of personal fulfillment seems to be related to both exhaustion and depersonalization and can lead to low work incomes (Vieira and Russo, 2019).

It is also worth mentioning that the authors mention the higher probability of BS occurring in the group of professionals working with "human services". In this same article is presented the "*Maslach Burnout Inventory (MBI)*", a diagnostic method for BS widely used to the present day, which ended up consolidating the concept of BS of the authors in the scientific environment (Vieira and Russo, 2019). Subsequently, MBI was improved and the need to create more specific versions of the questionnaire was perceived according to the axis of the profession (Perniciotti et al, 2020).

For Pines and Aronson, BS would be a state of physical, emotional and mental exhaustion, which does not extend to work extending to various areas of life. The author and collaborators also built an evaluation instrument that they named "*Burnout Measure (BM)*" (Lubbadeh, 2020). In addition, another definition is given by Shirom and Melamed that BS would be a response to chronic stress, characterized mainly by the gradual exhaustion of internal energies, emotional exhaustion, physical fatigue and cognitive fatigue. The authors created yet another means of measuring the condition, the "*Shirom-Melamed Burnout Measure (S-HBM)*" (Pallich et al, 2020).

The World Health Organization (WHO) recently updated the definition for burnout, being "a syndrome conceptualized as a result of chronic workplace stress that has not been successfully administered." Moreover, the central symptoms would be exhaustion or exhaustion of energies, mental distancing from work, negativism or cynicism in relation to work, as well as low professional efficiency. SB is inserted in the 10th edition of the International Classification of Diseases (ICD-10) in the field of problems related to the organization of its way of life and, currently, it was also included in the ICD-11 that should enter into force in 2022 with the modifications of concepts mentioned above (WHO, 2019).

## **5 RISK FACTORS**

Professions in which workers are subjected to stressful situations tend to be a risk factor for BS. Especially in those where interpersonal contact is involved, as with health professionals, public security, education, prison officers, and others. In this sense, the responsibility in the patient's health care, itself, already generates a concern in physicians, making them prone to the manifestation of BS. This added to the increase in the number of cases brought to justice who question the propaedeutics of the professional,

generates an increase in pressure and collection of the doctor who, in most cases, already has a significant level of self-requirement. ( MOREIRA et al, 2018)

As for risk factors, studies classify them into four areas: those related to organization, individual, society and work itself. Thus, in relation to the organization, there is a high charge for productivity, competitiveness among professionals who still have long journeys with constant contact with biological, chemical, physical risks in the work environment. Often the absence of autonomy and inefficient communication are also triggers for the development of exhaustion (NASCIMENTO)

With reference to the individual, it was observed that the pattern is related to certain personality types. Thus, individuals with high expectations of the profession, perfectionists and pessimists are risk factors for BS. It was observed that overinvolvement is also a cause, because empathic, sensitive and altruistic professionals have greater difficulty in dealing with poor prognoses. The third scope refers to the work that is carried out.

Thus, the constant need to make difficult decisions generates moral and ethical implications, which also involve the communication of bad news to family members. This added to the frustration at the evolution of a severe condition, generate stressful impacts that, if maintained for a long time, can trigger the feeling of incompetence towards work activities. Finally, actions of society have been addressed that are factors in the development of BS. Among them are the recurrent judicialization of medicine that demonstrates a lack of social support tied to cultural values and norms. (NASCIMENTO, MOREIRA et al, 2018)

## **6 SYMPTOMATOLOGY**

The initial study on Burnout syndrome reported symptoms related to feeling exhausted, irritation, lack of emotional energy, and lack of stimulation. In addition, fatigue, depression, irritation and inflexibility were included as belonging to the symptomatological picture of BS. Over the years, research has revealed different signs and symptoms for this syndrome until, in 2019, the WHO defined and standardized the perspective of continuous and intense stress caused by work activity, composed of three dimensions: emotional exhaustion, depersonalization and lack of professional achievement. Moreira HA; Who

The first dimension is exhaustion, which is based on a feeling of emotional overload and physical impact. Cynicism, or depersonalization, is the second dimension, in which the individual begins to assume a cold and cynical attitude towards his responsibilities. This mental distancing from work has as a consequence of exhaustion and is followed by feelings of negativism with dehumanized and impersonal attitudes in the treatment of co-workers and patients. Thirdly, there is a feeling of ineffectiveness, that is, the inadequacy for the activity practiced. (CHOWDHURY, 2018)

Exhaustion is the basic component of Burnout and the most analyzed of the three aspects. Thus, it was argued the elimination of the other two components, due to the concept of exhaustion being able to contemplate the stress manifested in burnout. However, if cynicism and ineffectiveness were removed, it

would be impossible to understand the impacts that this syndrome also has in relation to interpersonal relationships. KOGA Et al; . (CHOWDHURY, 2018)

In addition, among health professionals diagnosed with Burnout, the effects of this syndrome on physical health can be observed. Among them is fatigue, headache, hypertension, sleep alterations, gastrointestinal, respiratory, dermatological, menstrual, sexual and muscle joint pain. With regard to attitudes related to work, it was observed the abuse of drug use, ludopathy, dietary alterations, increased violent attitudes, decreased productivity and organization capacity. (SILVA et al, 2018)

## **7 DIAGNOSIS**

Burnout syndrome is a consequence of chronic work stress, Silva 2010 established stages for syndrome starting from self-affirmation, extreme dedication, discouragement and disinterest to personal and essential needs such as personal care, eating, sleeping. The second stage presents itself in physical manifestations such as tiredness, mental exhaustion, mood and behavior changes, devaluation of life, depression, and may evolve to burnout syndrome, which in short represents the final stage that the individual enters into physical and mental collapse.

Regarding the diagnostic criteria used in the identification of BS, the Maslach Burnout Inventory-Human Service Survey (MBI-HSS) is the most used method currently used (TRIGO, T. R. 2011). The concept of MBI was translated as "beneficiaries" and "insensíveis". The change in behavior and decreased productivity are criteria to be investigated, from this observation is made the evaluation with a qualified professional. In addition, HR should be aware of increased turnover, absenteeism and work accidents. (BENEVIDES-PEREIRA, 2003).

Currently, the lack of knowledge about BS brings to the fore the importance of the discussion on the subject, even more given to the fallacies of the lack of definition about the diagnostic criteria associated with the lack of consensus that hinders the identification of the disease and its prevalence index. Even with the use in The MBI-HSS it is necessary to identify the criteria used for classification, as well as scale and its frequency.

The MBI-HSS has been used in several countries, is intended for health service professionals, and its structure refers to three evaluative parameters: Emotional Exhaustion (EE) in which complaints about exhaustion are evaluated at a subscale; Depersonalization (ED) measures criteria such as lack of empathy and the subscale of Personal Achievement (PR) that considers feelings of competence and professional self-realization (MASLACH, 2002).

This inventory is a questionnaire, made through self-completion, characterized by score scales as: "never, sometimes, every day". It comprises 22 items 9 related to EE, 5 to ED and 8 to PR. In turn the MBI-HSS is varied according to the country, the original American scale divides in intensities ranging from mild, moderate to severe, the scores of the subscales are not added, because an individual investigation of the three parameters is made. In view of this, burnout is conceptualized categorically.

## 8 TREATMENT

According to Frazão (2012) the treatment for BS should be conducted with the use of medications and therapies, promoting self-knowledge, safety and social interaction. Even though BS is a pathology that differs from depressive disorder, BS is considered as a subjective experience of the individual that implies psychophysiological consequences, therefore drug treatment usually consists in the use of antidepressants and anxiolytics to reduce the feeling of disability of the individual.

After diagnosis, standard treatment is therapy focused on the fretting of stressing agents in the workplace (CARLOTTO, 2009). Other interventions should be done collectively, since Burnout has psychosocial characters. The Ministry of Health (2001) considers that the treatment consists of the multidisciplinary of medical, pharmacological and psychotherapeutic assistance, however psychosocial interventions. In addition to multidisciplinary intervention, a change in the lifestyle of this professional is necessary, to implement the practice of physical exercises and relaxation (FERRARI, 2013).

## 9 PREVENTIVE MEASURES

As mentioned above, the WHO (World Health Organization) "defines health as a complete state of physical, mental and social well-being", given the importance and relevance of burnout the WHO considers as a problem of public health, dismembering an individual presupposition concept for a collective and multidimensional dimension in order to create prevention strategies. As a result, the National Guideline Clearinghouse recommends that hospitals, clinics and health establishments lack strategies for creating therapeutic relationships between the health professional and the work environment in the doctor-patient relationships in order to contribute to stress prevention and Burnout.

For the prevention of work stress, it is necessary to reorganize the individual and collective structures of workers, with the valorization of interpersonal and individual relationships. For this, educational and therapeutic actions are needed in an individual, collective and organizational way. According to Trindade (2010) situations that affect workers' health need an extensive discussion since professional training.

It is necessary to first identify which are the stressful elements of the work environment and which strategies to be adopted to cope with BS (FREURY, 2010). The author also says that it is necessary to adopt healthy habits, regulate eating and sleep hours, invest in leisure activities, know how to manage time, learn to be more flexible and finally move away from stressing agents.

In addition to individual strategies, it is necessary to develop collective activities, which aim to interrelate team members, contributing to service quality and prevention of work stress (TRINDADE, 2010).

## 10 FINAL CONSIDERATIONS

Although there are few precise and uniform data indicating the prevalence of Burnout syndrome, it is undeniable that this phenomenon linked to work has affected health professionals more and more. Especially in the year 2020 and 2021 with the presence of the pandemic caused by SARS COV-2, which further aggravates the feeling of exhaustion in workers facing pressure, excessive workloads, feeling of impotence in the face of consecutive deaths that occurred, characteristics that are factors of risk in most studies analyzed.

In addition, it was observed the difficulty of a standardization of definition and concepts of the syndrome, something that hinders the diagnosis and consequently, research. Thus, in 2019, the WHO placed BS in the international classification of diseases. This attitude may help in future research on the subject. Finally, regarding the prevalence and characteristics of burnout syndrome in the pandemic caused by the SARS-OV virus, further studies are needed in this regard.



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