



RESEARCH ARTICLE

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"A STEP" OF THE *BURNOUT*: A STUDY IN HEALTH PROFESSIONALS IN THE UNIT OF INTENSIVE THERAPY

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ARTICLE INFO

Article History:

Received 17th March, 2019
Received in revised form 25th April, 2019
Accepted 10th May, 2019
Published online 30th June, 2019

Key Words:

Professional Exhaustion,
Depersonalization,
Occupational stress,
Risk factors.

ABSTRACT

Syndrome *Burnout* is a set of physical, psychological and behavioral symptoms resulting from sustained exposure to occupational stressors that lead negative consequences for the individual as a whole. Thus, this study aimed to analyze the prevalence of syndrome *Burnout* in health professionals in an Intensive Care Unit (ICU) of a Private Hospital in Vitória da Conquista, Bahia. To that end, 33 health professionals answered, between January and April 2019, the *Maslach Burnout Inventory* (MBI) questionnaire and a sociodemographic questionnaire, analyzed by correlation test. The study showed a total of 12 people with at least one high MBI score, six people with moderate to high levels in two dimensions and no cases with the three high dimensions. Emotional exhaustion was the most scored in the study, followed by depersonalization and personal fulfillment. Syndrome *Burnout* has a gradual onset and therefore early intervention should be performed to prevent the progression of symptoms and avoid negative consequences. The present study demonstrated that high levels of emotional exhaustion are at high risk for triggering *Burnout* and that having only one job can protect the sufferer from symptoms of this dimension.

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Citation: Thaís Rocha Hernandez GOMES, Rosângela Souza LESSA, Cristina Padre CARDOSO, et al., 2019. "A step of the burnout: a study in health professionals in the unit of intensive therapy", *International Journal of Development Research*, 09, (06), 28278-28282.

INTRODUCTION

Occupational stress refers to the adaptive responses that occur due to the stimuli exposed to the worker and that exceed their ability to cope (Genuíno, Gomes and Morais, 2010). The worker perceives an inability to perform the required functions, resulting in suffering and malaise (Silva, 2010). This type of stress, the longer it lasts and persists, the more it predisposes to the possibility of installing syndrome *Burnout* (SB). It is a process that develops slowly and, because it is insidious, is rarely detected in the early stages, which are usually marked by excessive and persistent tension (Guimarães, 2000). This syndrome contains three psychosocial dimensions that characterize it: emotional exhaustion, depersonalization and low personal fulfillment (Maslach, Schaufeli and Leiter, 2001).

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Emotional exhaustion refers to emotional exhaustion, reflecting energy reduction and feeling of exhaustion, since depersonalization occurs as a phenomenon of defense of the emotional load that the contact with another brings, therefore, there is distancing and lack of empathy, characterizing, to some extent, an emotional insensitivity that manifests itself with anxiety and irritability (Pêgo e Pêgo, 2016). On the other hand, low personal fulfillment is the professional's dissatisfaction with his / her performance at work, providing a feeling of incompetence and negative evaluations about himself (Carlotto, 2002). As for signs and symptoms, syndrome *Burnout* encompasses an extensive list of findings in the literature. In view of this diversity, the symptoms were subdivided into physical (headache, insomnia, muscular pain and fatigue), psychic (emotional lability, decreased attention and concentration and impatience), behavioral (neglect, tension and irritability) and loss of interest in work (Benevides-Pereira, 2002). Several professions may be affected by it, but it has been more described in the literature,

especially affecting health professionals, teachers and students (Carlotto and Câmara, 2008). Specifically, in the health area, the incidence is high in nurses, doctors of all specialties, particularly surgeons and internal physicians (Silveira et al., 2016). According to the same authors, this is due to excessive workload and unusual work shifts that can lead to sleep deprivation and difficulty in reconciling work with personal life. Intensive Care Units (ICUs) are, in particular, a cause of stress not only for patients and their families, but also for working professionals (Sobrinho, 2010). Thus, individuals working in this sector are exposed to factors that can be especially stressful, such as the high mortality rate of patients, challenging work routines and ethical issues that require difficult decisions, which corroborates the fact that care professionals intensive studies have one of the highest rates of Syndrome *Burnout* (Moss et al., 2016). This syndrome is one of the most important occupational problems of psychosocial nature, leading to a destructive process of worker's quality of life (Batista et al., 2010). Given this, it is believed that *Burnout* is a relevant problem nowadays and is often perceived only in advanced stages. Therefore, the present study aimed to analyze the prevalence of syndrome *Burnout* in health professionals working in the Intensive Care Unit (ICU), as well as the sociodemographic characteristics of the study population.

MATERIALS AND METHODS

The present study had an exploratory and descriptive character, with a quantitative and cross-sectional design, between January and April 2019, covering 33 health professionals from the Intensive Care Unit (ICU) of a private hospital in the city of Vitória da Conquista, Bahia, in the macro-region of the Southwest of the State. This hospital serves the population of all southwest of Bahia and part of the west, south and north of Minas Gerais. The professionals in the research were in the middle, technical and higher levels, with an employment relationship of at least 90 days. To meet the objectives proposed in the present study, the data were collected through the application of the socio demographic questionnaires, prepared by the authors, and the Maslach Burnout Inventory (MBI) in the Human Services Survey (MBI-HSS) version, translated and validated by Lautert (1997). The MBI is an evaluation instrument composed of 22 affirmations about feelings and attitudes that the professional can have and encompass the three dimensions of syndrome *Burnout*. Such affirmations are evaluated as to the perception of their frequency for the interviewee who assigns a score in the scale of 0 to 6, 0 being used for "never" and 6 "every day". Thus, professional exhaustion is evaluated by nine affirmations, depersonalization by five, and personal fulfillment by eight. To characterize the high, moderate and low levels, the scores used in the Maslach study (Maslach and Jackson, 1981) were used as reference. Thus, in the dimension of emotional exhaustion, a score greater than or equal to 27 suggests high level, from 17 to 26 moderate level and less than 16, low level. Already for depersonalization, results greater or equal to 13 establish high level, from 7 to 12 moderate level and less than 6, low level. On the other hand, the score for personal accomplishment follows the opposite direction, that is, scores from 0 to 31 indicate high level, from 32 to 38, moderate and greater or equal to 39, low level. Concerning the sociodemographic questionnaire, the following variables were used: gender, professional level (medium, technical and higher), marital status (single, married, divorced and stable union), number of employment links (only one or more than

one) and hours weekly work. The results found from the MBI questionnaire were interpreted according to the criteria of Ramirez et al. (1996) that define *Burnout* in the presence of the three dimensions with high level and, in this work, the dimensions of moderate to high were considered to characterize the predisposition to SB. In addition, the criteria of Grunfeldt et al. (2000) that establishes the need for only one dimension characterized as high level for diagnosis. To analyze the data, we used association measures with the aid of R software (Core Team, 2013). The measures used were Chi-square test and Prevalence Ratio and took into account the sociodemographic data and the results obtained by MBI. In addition, the absolute frequencies and percentages were calculated, aiming to describe the data obtained in the present study. The study was approved by the Research Ethics Committee of the Faculdade Independente do Nordeste, with the opinion under number 2,960,908. To meet ethical requirements, the Free and Informed Consent Terms (TCLE) were applied to all participants and explained the objectives and purposes of the research.

RESULTS AND DISCUSSION

The study showed that the majority of the health professionals participating in the research belong to the female sex. More than 60% of respondents say they are married and work at a higher level. As for the weekly workload, more than half reported working between 20 to 40 hours per week and the same amount reported having only one job (Table 1). In relation to *Burnout*, when considering the criteria of Ramirez et al. (1996), the correlation between the three dimensions, as well as the relationship between these dimensions and the sociodemographic variables, were not statistically significant. This result is similar to that obtained in a study carried out with nursing professionals in intensive units (Da Silva, 2015). On the other hand, most of the literature shows prevalence rates of *Burnout* varying between 3.0% and 7.0% in physicians and nurses of ICUs (Sobrinho et al., 2010, Zanatta and Lucca, 2015, Tironi, 2016). If we take into account the criteria used by Grunfeldt et al. (2000), about 12 people (36.36%) are exposed to SB, showing that these interviewees presented high scores in at least one of the three dimensions analyzed. When evaluated in this conceptual reference, the prevalence of *Burnout* increases considerably in the present study and other studies (Sobrinho et al., 2010, Da Silva, 2015, Galindo et al., 2012, Zanatta and Lucca, 2015).

The discrepancy between the results obtained, according to each literature, is due to the absence of a consensus for suspected Syndrome *Burnout* (Galindo, 2012, Da Silva, 2015, Lima, Teixeira and Farah, 2018) criteria may underestimate the prevalence of SB in the population studied (Zanatta and Lucca, 2015). However, when analyzing the data, considering the dimensions with moderate to high indexes, we noticed a predisposition of six (18.18%) of the individuals surveyed to present SB. Of these, 66.67% are women, 83.33% have only one job, 66.67% are married or have a stable union, and 66.67% have a workload of between 20 and 40 hours a week. The high risk for *Burnout* in female subjects was confirmed in the literature and emphasized the influence that the double journey, that is, housework and maternity, together with the greater tendency to emotional involvement with patients in relation to men, may have on the life of women (Galindo, 2012, Lima, Teixeira and Farah, 2018).

Table 1. Sociodemographic characteristics of health professionals in an Intensive Care Unit, 2019

Variables	Frequency (n = 33)	%
Sex		
Male	11	33.30
Female	22	66.70
StateCivil		
Single	07	21.30
Married	23	69.70
Divorced	02	06.00
Stable Union	01	03.00
Professional		
Level		
Technical	13	39.40
Superior	20	60.60
Weekly load		
20 to 40 hours	17	51.50
41 to 60 hours	07	21.20
61 to 80 hours	08	24.30
More than 81 hours	01	03.00
Employment		
More than 1	15	45.50
Only 1	18	54.50

Source: Research Data

Table 2. Evaluation of each dimension of the Maslach Burnout Inventory in health professionals of an Intensive Care Unit

Isolated Dimensions	Frequency (n = 33)	(%)
Emotional Exhaustion		
High	9	27.3
Moderate	10	30.3
Low	14	42.4
Personal Achievement		
High	3	9.1
Moderate	9	27.3
Low	21	63.6
Depersonalization		
High	4	12.1
Moderate	6	18.2
Low	23	69.7

Source: Research Data.

Table 3. Reason for Prevalence of each sociodemographic variable in relation to the Emotional Exhaustion dimension of the questionnaire Maslach Burnout Inventory in health professionals of the Intensive Care Unit

Sociodemographic Variable	Prevalence Ratio
Sex	1
Professional Level	1.05
Employment	0.83
Hourly Load	1.16
Civil Status	1.05

Source: Research Data.

The fact that only one job has been scored as a high risk for SB in this work is divergent from the literature (Barros *et al.*, 2008), Rossi, Santos and Passos, 2010, Fernandes, Nitsche and De Godoy, 2017, Lima, Teixeira and Farah, 2018, Marques *et al.*, 2018). Both studies conducted with physicians and nursing professionals working in the ICU, as well as Primary Care professionals, revealed the association between greater risk for *Burnout* in those with two or more employment links. This is because they can increase the weekly workload, in addition to providing a new environment with a new team, which requires emotional adaptations. This divergence, therefore, leads us to believe that the working environment in which the study was carried out, adding to the stressors inherent in the ICU, has particular characteristics that predispose the symptoms of the syndrome. Research has shown a higher prevalence of *Burnout* in intensivist professionals who dedicate more than 40 hours per week to work activity (Fernandes, Nitsche and De Godoy, 2017, 2018).

In contrast, this study identified a high risk for SB in professionals with a maximum workload of 40 hours. This fact corroborates the hypothesis that aspects conditioned by the work environment contribute to the evolution of the syndrome. Studies indicate a greater propensity to develop *Burnout* in single individuals, based on the premise that people who have stable partners have a greater capacity to deal with emotional problems (Oliveira and Pereira, 2012). However, there is no consensus for this association (Zanatta and Lucca, 2015), since the literature demonstrates the same result of this study: married or stable union people had a higher risk for SB (Rossi, Santos and Passos, 2010; Zanatta and Lucca, Marques *et al.* Table 2 presents the frequencies and percentages of the three dimensions analyzed by the MBI questionnaire, being emotional exhaustion, depersonalization and personal fulfillment. The results obtained in each dimension of the syndrome confirm the decreasing order of affection that is proposed in the current literature. Thus, emotional exhaustion

appears with higher scores at a high level, followed by depersonalization and, finally, personal fulfillment (Santos, Alves and Rodrigues, 2009, Galindo *et al.*, 2012, Tironi *et al.*, 2016). The existence of phases in the development of *Burnout* emphasizes the gradual establishment of the syndrome, in this way, the worker can suffer frustrations due to unmet expectations, where the enthusiasm and interest of the beginning of the profession give rise to physical and mental symptoms such as, fatigue and irritability, and, at the most critical stage, shows apathy and negative feelings about self-performance (Maslach, Schaufeli and Leiter, 2001). Thus, emotional and labor overload triggers physical and mental fatigue as a reaction to stress, generating difficulty to perform the proposed activities and persistent tension (emotional exhaustion) (Marques *et al.*, 2018). In view of these symptoms, the professional tends to develop an emotional insensitivity, and consequently to adopt cold and cynical attitudes towards patients (Tironi *et al.*, 2016). And, when the feeling of failure and inefficiency appears, the individual tends to present a diminished sense of personal fulfillment (Barros *et al.*, 2008). It is seen that emotional exhaustion fits as the first dimension to be elevated, high-level scores for this dimension indicate a picture *Burnout* about to be installed (Galindo *et al.*, 2012; Tironi *et al.*, 2016). In the interviewed individuals, in this research, we noticed that nine of them have a high score in this dimension, equivalent to 75% of professionals who presented at least one high level dimension, determining that these people possess at least a high risk factor for SB. Table 3 presents the prevalence ratios for the sociodemographic variables in relation to the emotional exhaustion dimension. Analyzing the number of employment links, specifically in relation to emotional exhaustion, it was possible to suggest that having only one job acts as a protective factor for the development of symptomatology related to this dimension, corroborating with the literature (Rossi, Santos and Passos, 2010).

Having more than one job may be associated with the need to improve pay income, so the professional, in addition to physical overload, finds himself in a situation that may increase the need to create more effective coping strategies emotional. When we analyze the hourly variable, we can say that the risk of developing emotional exhaustion is proportional to the number of weekly hours dedicated to work, that is, professionals who have exhausting hours are more likely to develop the symptoms of the studied dimension. Reinforcing conclusions from studies that reveal high scores for professionals who accumulate more than 60 hours a week (De Melo *et al.*, 2014). It is believed that those who work the most have less free time for leisure, family contact and predispose to sedentarism, factors that help in the development of chronic stress.

Conclusion

In order to characterize Syndrome *Burnout*, it is necessary for the professional to present symptoms of the three dimensions (Ramirez *et al.*, 1996). However, the prevalence of high scores on Emotional Exhaustion shows that these individuals are overworked and exhausted, increasing the chance of initiating symptoms of the other dimensions, and thus setting up *Burnout*. Despite the small number of interviewees, the research was able to identify that having a single employment bond acts as a protective factor and the strenuous weekly workload acts as a risk factor for the manifestation of

emotional exhaustion. In addition, it demonstrates the influence that the work environment provides, predisposing the development of signs and symptoms described in Syndrome *Burnout*. In addition, when considering the insidious installation of the syndrome, professionals with moderate to high scores should be taken into account in the analyzed dimensions of the MBI questionnaire, in order to avoid progression with preventive measures, such as occupational therapies, practice of physical exercises and decrease of the weekly workload.

Acknowledgments: We thank the hospital, the scenario used to conduct the research, the space provided and the health professionals participating in the research.

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