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## ORIGINAL ARTICLE

### BURNOUT SYNDROME AMONG NURSING PROFESSIONALS OF INTENSIVE UNITS IN A PUBLIC HOSPITAL

#### SÍNDROME DE BURNOUT ENTRE PROFISSIONAIS DE ENFERMAGEM DE UNIDADES INTENSIVAS EM UM HOSPITAL PÚBLICO

#### SÍNDROME DE BURNOUT ENTRE LOS PROFESIONALES DE ENFERMERÍA DE UNIDADES INTENSIVAS EN UN HOSPITAL PÚBLICO

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#### ABSTRACT

**Objectives:** determining the prevalence of Burnout Syndrome among nursing professionals of the intensive units of a public hospital and identifying stressors in the workplace. **Method:** a field research with a descriptive and an exploratory character and a quantitative approach. Data collection was carried out from the Maslach Burnout Inventory. The score of each subject was compared to the reference values for diagnosis of the Syndrome. **Results:** two professionals presented the Burnout Syndrome. It could be observed that nurses suffer more from emotional exhaustion, while auxiliaries showed reduced professional accomplishment. The stressors most frequently mentioned in the research were lack of human and material resources, lack of systematization of work, interpersonal relationships and the excess noise in the environment. **Conclusion:** the relative workload represents a risk to the health of those professionals who work in intensive care units. **Descriptors:** Professional Burnout; Nursing; Intensive Therapy.

#### RESUMO

**Objetivos:** determinar a prevalência da Síndrome de Burnout entre profissionais de enfermagem das unidades intensivas de um hospital público e identificar fatores estressores no ambiente de trabalho. **Método:** pesquisa de campo, com caráter descritivo e exploratório, e abordagem quantitativa. A coleta de dados foi realizada a partir do Maslach Burnout Inventory. A pontuação de cada sujeito foi comparada com os valores de referência para diagnóstico da Síndrome. **Resultados:** dois profissionais apresentaram a Síndrome de Burnout. Foi possível perceber que os enfermeiros sofrem mais com a exaustão emocional, enquanto os auxiliares apresentam reduzida realização profissional. Os fatores estressores mais mencionados na pesquisa foram as faltas de recursos humanos e materiais, falta de sistematização do trabalho, o relacionamento interpessoal e o excesso de ruídos no ambiente. **Conclusão:** a sobrecarga relativa ao trabalho representa um risco à saúde dos profissionais que atuam em unidades intensivas. **Descritores:** Esgotamento Profissional; Enfermagem; Terapia Intensiva.

#### RESUMEN

**Objetivos:** determinar la prevalencia del Síndrome de Burnout entre los profesionales de enfermería en las unidades de cuidados intensivos de un hospital público e identificar los factores de estrés en el lugar de trabajo. **Método:** esta es una investigación de campo con carácter descriptivo y exploratorio y el enfoque cuantitativo. La recolección de datos se llevó a cabo desde el Maslach Burnout Inventory. La puntuación de cada sujeto se comparó con los valores de referencia para el diagnóstico del Síndrome. **Resultados:** dos profesionales presentaron el Síndrome de Burnout. Se pudo observar que las enfermeras sufren más de agotamiento emocional, mientras que los auxiliares presentaran reducida realización profesional. Los factores de estrés más frecuentemente mencionados en la encuesta fueron la falta de recursos humanos y materiales, la falta de sistematización del trabajo, las relaciones interpersonales y el exceso de ruido en el medio ambiente. **Conclusión:** la carga en relación con el trabajo representa un riesgo para los profesionales de la salud que trabajan en unidades de cuidados intensivos. **Descriptores:** Burnout Profesional; Enfermería; La Terapia Intensiva.

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INTRODUCTION

The nursing practice offers great satisfaction to those who exercise it; however, these professionals are inserted in working conditions that favor a higher incidence of stress than in other professions. Nursing work involves a lot of responsibility. Factors such as dealing with patients and their families, with the pain and contribute to organizational problems that nursing comprises a highly stressful profession.<sup>1</sup>

For professionals who work in Intensive Care Units (ICU) this condition worsens, since they are more exposed to painful situations like death and continuous contact with patients in critical or terminal condition. In addition, the nursing staff of these units is who is closest to the patient. The work of these units makes the nursing staff becomes a high-risk group for developing burnout syndrome.<sup>1</sup>

The nursing staff working conditions, especially in hospitals, are inadequate with regard to the specific generator of health risks environment, inadequate pay, the service accumulation, increased working hours, the tension characteristics of health services (both the nature of care provided to people at risk as the social division of labor). This hierarchy in the team health and social prestige, among other factors, are reflected in the quality of care provided to the user and the psychological distress of professionals.<sup>2</sup>

The burnout syndrome leads professionals to wear, which affects their job performance, caused by prolonged exposure to stressful situations. The worker may experience physical symptoms (constant fatigue, cardiovascular disorders); behavioral (difficulty in accepting changes, irritability); psychic (emotional lability, poor concentration); and defensive (loss of interest in work, absenteeism), which interfere negatively both on a personal level and in the professional.<sup>3</sup>

The Burnout Syndrome is characterized by multidimensional factors<sup>3</sup> that arise from the association of individual aspects with the conditions and labor relations:

- **Emotional Exhaustion:** where the professional has sense of physical and mental exhaustion, without provision of energy for any activity;
- **Depersonalization:** changes in personality, leading to a cold and impersonal contact with customers. Attitudes of cynicism, irony and indifference;

- **Reduced Professional Accomplishment:** when the worker is dissatisfied with the work activities he performs.

This paper studied the prevalence of Burnout Syndrome in professionals from the nursing staff of Intensive Care Units (ICU) and Coronary (UNICOR) of a municipal hospital in the city of Rio de Janeiro. Everyday nursing professionals end up contributing to the vulnerability and development of burnout syndrome deal with stressors in the workplace. The stressful routine lived in the working environment of these professionals and factors peculiar to the intensive care units, it is expected that most of the sample present alterations in at least one of the three multidimensional factors (emotional exhaustion, depersonalization and professional fulfillment) Syndrome Burnout, featuring a risk for the development of burnout syndrome.

Studies show that nursing professionals, being directly involved in care, are susceptible to high rates of burnout.<sup>4</sup> This fact makes this study has a significant importance for providing data that will enable further discussion on the topic in academia, enabling the introduction of measures at the institutional level that seek to reduce stressors in the workplace. It is inferred that the discussion about burnout syndrome benefits not only the professional who suffers from the syndrome, but also their customers, they need to receive quality care.

This study aims to:

- Determining the prevalence of Burnout Syndrome among nursing professionals in the intensive care units of a public hospital;
- Identifying stressors in the workplace.

METHOD

This is a field research with descriptive and exploratory character and a quantitative approach.<sup>5,6</sup> It was conducted in intensive and coronary care units of a large municipal hospital and unskilled located at 3.2 program area of the city of Rio de Janeiro.

As participants, there were included in this study nursing team members (with higher and middle education), working in day service in intensive care units (ICU) and coronary (UNICOR). The study excluded those working less than six months in these units.

For the preservation of the identity of respondents, the AE acronyms were used for the ENF and nursing assistants to nurses, followed by a number that corresponds to the

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given order of the instruments (eg AE01, AE02, ENF01, ENF02).

Data collection was carried out from an instrument divided into two parts. The first part, a questionnaire prepared by the author, contains social, demographic and professional variables such as gender, age, job characteristics and job satisfaction.

The second part of the instrument is dedicated to the evaluation of burnout syndrome by the Maslach Burnout Inventory (MBI), which has 22 items and was created by Christine Maslach in the United States.

The 22 items in MBI are subdivided into the three dimensions that characterize the burnout syndrome (emotional exhaustion, depersonalization and professional accomplishment) and adopt a score Likert ranging from zero to six, as follows: (0) never, (1) an once a year or less, (2) once a month or less, (3) sometimes during the month, (4) once per week, (5) a few times per week, and (6) every day.

Dimensions	Reference values		
	Low	Middle	High
Emotional Exhaustion (EE)	0 - 15	16 - 25	26 - 54
Depersonalization (D)	0 - 02	03 - 08	09 - 30
Professional Achievement (RP)	0 - 33	34 - 42	43 - 48

Figure 1. Reference values for the diagnosis of Burnout Syndrome through the MBI.

The research project was referred to the Research Ethics Committees (CEP) of the Municipal Secretariat of Health and Civil Defense of Rio de Janeiro City Hall (Opinion 241<sup>st</sup> /2013 and Protocol 122/2013), and the Federal University of the State of Rio de Janeiro (CAAE: 17005813.8.0000.5285 and Opinion 289,704) and according to the terms of Resolution 466/12 of the National Health Council. Following approval of both Committees, those involved were contacted and informed of the purpose of the research, we are asked to sign the Informed Consent (IC) of those who agreed to participate.

The participant's anonymity was preserved during the study. When necessary, it will only be identified by a code, without mentioning any given unique personal identification (name, professional registration, registration, etc.). Data collection instruments are

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There was no pre-test instrument, as it has been validated for use in Brazil by Ana Maria Benevides-Pereira, in 1986.

Data collection was performed in October 2013, in the own hospital where the subjects work, and completion of the instrument was carried out by the respondents themselves.

The subjects were categorized and the data were analyzed from the total score for each subject after completion of MBI, and also through the partial score in each dimension of the MBI. The values obtained were compared with reference values (Table 01) for the diagnosis of burnout syndrome according to the Center for Studies and Advanced Research on Burnout Syndrome (NEPASB), thus allowing the identification of Burnout Syndrome in professionals surveyed, when they present high scores in emotional exhaustion and depersonalization, and low scores in Professional Accomplishment.<sup>3</sup>

archived for five years to ensure restricted access to the researchers involved, being incinerated thereafter.

RESULTS AND DISCUSSION

◆ Profile of nursing professionals interviewed

Of the professionals that meet the proposed inclusion and exclusion criteria in this study, 22 agreed to participate, 13 employees of the ICU, and nine UNICOR. Research conducted with nursing professionals, mostly present predominance of females, which can be seen in Table 1; where, of the 22 subjects, 22,7% were male and 77,2% female, with an average age of 45,2 years old, mostly single, and 59% of professionals have children. With regard to regular physical activity, only 13,6% carry out some kind of activity.

Table 1. Distribution of subjects in accordance with social and demographic variables. Rio de Janeiro, 2013.

Variables		ICU		UNICOR		Total	
		N	%	N	%	N	%
Gender	Male	3	13,6	2	9,1	5	22,7
	Female	10	45,4	7	31,8	17	77,2
Age (in years)	25-35	3	13,6	1	4,5	4	18,1
	36-45	4	18,2	1	4,5	5	22,7
	46-55	4	18,2	6	27,3	10	45,5
	56-65	2	9,1	1	4,5	3	13,6
	Single	6	27,3	3	13,6	9	40,9
Marital Status	Married / Stable Union	3	13,6	4	18,2	7	31,8
	Divorced	3	13,6	2	9,1	5	22,7
	Widower / Widow	1	4,5	0	0	1	4,5
Children	No	6	27,3	3	13,6	9	40,9
	01	3	13,6	1	4,5	4	18,1
	02 or more	4	18,2	5	22,7	9	40,9
Physical Activity	Yes	2	9,1	1	4,5	3	13,6
	No	11	50	8	36,4	19	86,4

Regarding the professional category (Table 2), participated six nurses and 16 nursing assistants. Of the total participants, 54,5% work for 21 years or more, and 59,1% have more than one job. With regard to the long time working in ICU, there are discrepancies

in the literature, as some authors believe that prolonged provides greater adjustment to the environment, while others claim that the long working hours make them stressed professionals.<sup>7</sup>

Table 2. Distribution of subjects according to professional variables. Rio de Janeiro, 2013.

Variables		ICU		UNICOR		Total	
		N	%	N	%	N	%
Occupation	Nurse	3	13,6	3	13,6	6	27,3
	Nursing Assistant	10	45,4	6	27,3	16	72,7
Chose to work in intensive care	Yes	12	54,5	5	22,7	17	77,2
	No	1	4,5	3	13,6	4	18,1
Time in Office	Up to 10 years	4	18,2	1	4,5	5	22,7
	11 - 20 years	4	18,2	1	4,5	5	22,7
	21 years or more	5	22,7	7	31,8	12	54,5
Another job	Yes	8	36,4	5	22,7	13	59,1
	No	5	22,7	4	18,1	9	40,9
Weekly Work Load	30 - 39hs	1	4,5	1	4,5	2	9,1
	40 - 49hs	3	13,6	3	13,6	6	27,3
	50 - 59hs	0	0	2	9,1	2	9,1
	60hs or more	9	40,9	3	13,6	12	54,5

Another alarming fact was the number of professionals who have weekly working hours exceeding 60 hours (54,5%) adding up all their work activities. This can generate a high wear rate, since the rest period between shifts will be reduced, interfering with their family and social life, leisure and physical activities, which could contribute to the promotion of health and quality life of this professional. The need to have multiple employment relationships due to low salaries compromises the physical and mental health of all components of the health team, interfering with quality of care.<sup>8</sup> In addition, do some recreational activity or hobby such as having the habit of reading, or spending time with

family are strategies that provide an escape from the individual in relation to daily work, avoiding the appearance of burnout syndrome.<sup>9</sup>

The stressors most frequently mentioned by the research subjects were grouped into five categories: lack of human resources; lack of material resources; lack of systematic work through protocols and routines; interpersonal relationship; and excessive noise produced by monitors, mechanical ventilators and pumps continuous infusion equipment commonly used in intensive care units. These results are consistent with several studies showing that the lack of resources, interpersonal

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relationships, excess noise in the environment, and industry dynamics favor the emergence of stress, affecting the health professional.<sup>9-12</sup>

The stressors most cited by the professionals of the survey were lack of human resources (54,5%), followed by lack of material resources (50%) and interpersonal skills (50%), despite all the subjects claiming to relate "well" or "Very well" with the multidisciplinary team. However, it was considered in interpersonal relationships category not only the relationship between the nursing staff, but also the relationship with other team professionals such as doctors, physiotherapists, nutritionists and

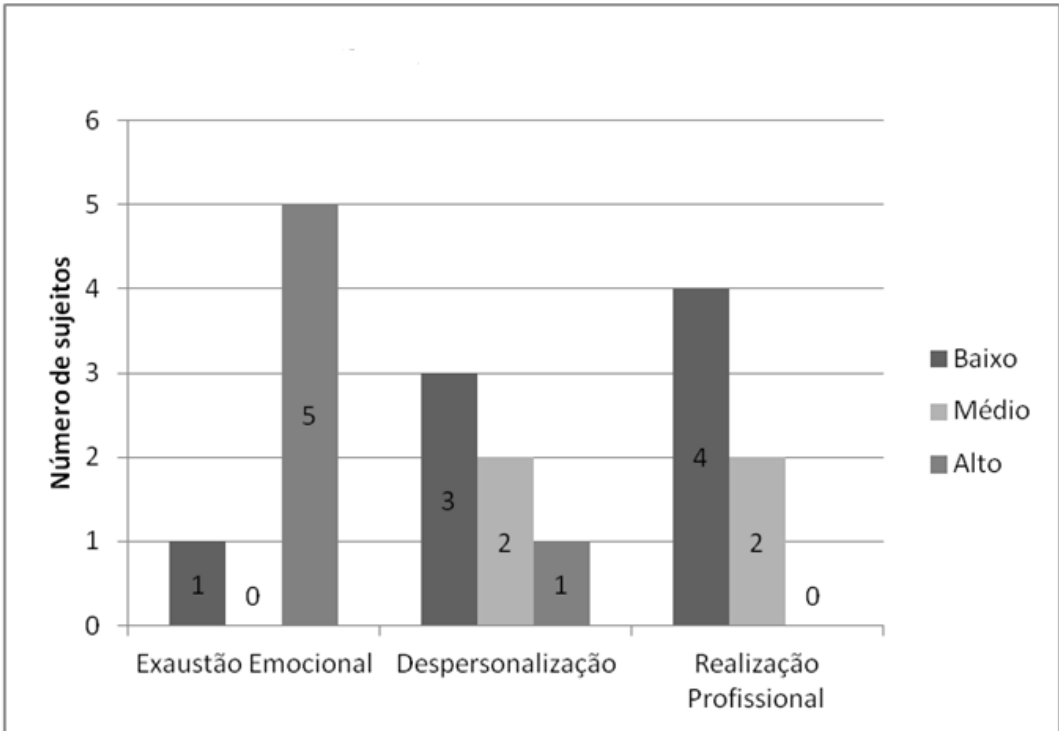
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psychologists in addition to the relationship with patients and their families.<sup>7</sup>

◆ **Prevalence of Burnout Syndrome among nurses and nursing assistants**

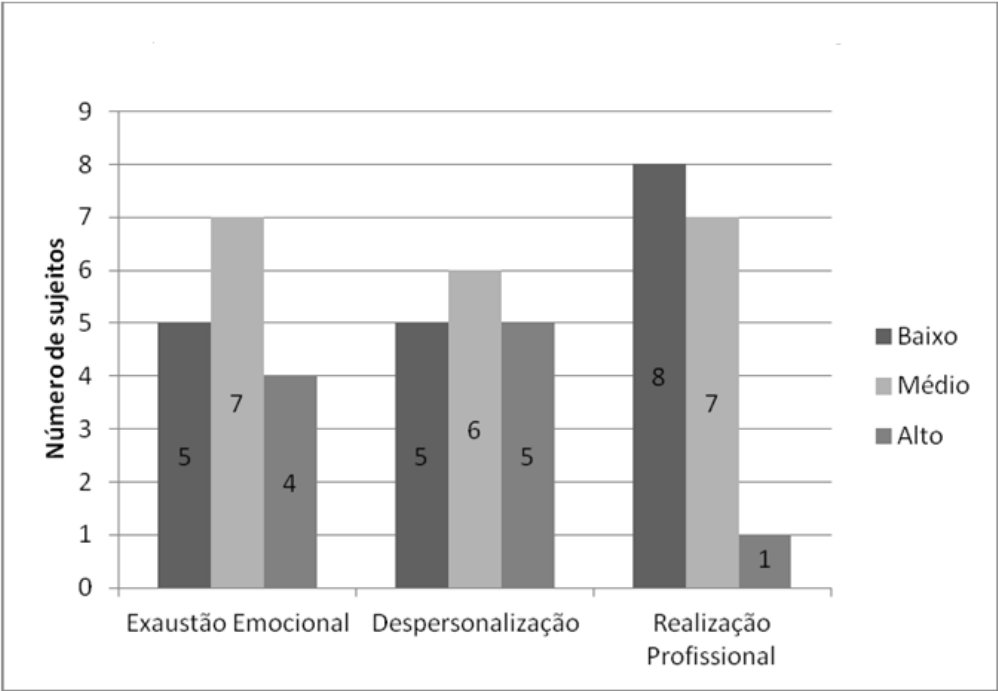
In seeking to identify the existence of signs and symptoms of burnout syndrome through the MBI instrument, it was revealed that they are present in much of the nursing staff of the ICU and UNICOR.

In Figure 2, it can be seen that nurses experience more frequently emotional exhaustion, followed by low professional satisfaction and depersonalization.



**Figure 2.** Distribution of nurses in the three dimensions of Burnout Syndrome according to the score obtained in the MBI. Rio de Janeiro, 2013.

Already nursing assistants experience more often the low job satisfaction, and similar rates of emotional exhaustion and depersonalization, as can be seen in Figure 3.



**Figure 3.** Distribution of nursing assistants in the three dimensions of Burnout Syndrome according to the score obtained in the MBI. Rio de Janeiro, 2013.

Of the total of the 22 respondents, 9 (40,9%) professionals have a high level of emotional exhaustion, are suffering from or at work, have sense of physical and mental exhaustion, and have no energy available to perform any activity. Six (27,3%) professionals experience such symptoms rarely; however seven (31,8%) have an average level of emotional exhaustion, experience their symptoms sometimes what should be considered a warning sign.<sup>7</sup>

By analyzing the instruments of the nine subjects who had high levels of emotional exhaustion, it can see that the most affected category are nurses working for more than 21 years, have more hours to 60 hours a week. In addition, waste 60 minutes or more at home transportation to the workplace.

The depersonalization of typical situations are experienced by 6 (27,3%) professionals, among them are the emotional hardening of professional, changes in personality, which leads to a cold and impersonal contact with customers and coworkers. Eight (36,4%) professionals have an average level of depersonalization, which indicates that some professionals may already be experiencing some moments of emotional distancing, impatience and indifference, an alert signal. Other 8 (36,4%) had a low level of depersonalization, or experience a few times their symptoms.

The professionals identified with high level of depersonalization, for the most part are nursing assistants, are in the age group 46-55 years old working in this job for over 21 years, have hours between 40 and 49 hours per week, and spending 60 minutes or more on the path to the place of work.

The dimension that has the highest impact on nurses of this study was to professional fulfillment. Only 1 (4,5%) professional feel fulfilled professionally. Other professionals, 9 (40,9%) are in the warning range, while 12 (54,5%) already have reduced job satisfaction.

The reduction of professional achievement significantly affects the nursing assistants and nurses aged 46-55 years old, just beginning their careers and have greater workload to 60 hours per week.

Of the professionals who have alterations in at least one dimension of Burnout Syndrome according to the reference values of Figure 1, it was observed that most are female, single, and chose to work in the intensive care unit. The female is a predisposing factor to burnout syndrome as a result of the dedication activities related to family life and household activities.<sup>13</sup> Despite recognizing the benefits of regular physical activity, it was noticeable that most do not have the habit to practice physical exercises.

Of the 22 subjects who participated in the survey, two had high scores in emotional exhaustion and depersonalization, and low job satisfaction score, these characteristics that establish the diagnosis for burnout syndrome. This result is contrary to the study in the Annapolis/GO, which was not observed decreased job satisfaction in any of the professionals who participated in the survey, with no diagnosis of burnout syndrome among respondents.<sup>14</sup>

In addition, most of the subjects showed a change in at least one dimension of burnout syndrome, making it necessary to adopt preventive measures to prevent such



professionals will develop Burnout Syndrome over time.

## CONCLUSION

With this study, we observed that the relative burden to the work poses a risk to the health professionals who work in intensive care units due to wear situations they face in their day-to-day. This wear is mainly due to lack of resources, both human and material, lack of systematization of nursing care, the excess characteristic noise of an intensive care unit produced by audible alarms of the devices that shoot all the time, and the excess of persons moving in the environment. Thus, it can be considered that the burnout syndrome arises primarily from the unique working environment problems.

To devise a plan to prevent the occurrence of burnout syndrome, this must be individualized in order to verify that each employee feels in the workplace and lists as exhausting and stressful. Supervisors need to be open to workers' complaints, maintaining a constant dialogue, allowing immediate intervention regarding the stressors in the workplace in order to minimize its effects on workers' health.

The professional, in turn, must acquire healthy lifestyle through regular physical activity, maintaining balanced diet, enjoy the leisure and sleep well.

Health care organizations need to give more attention to the health of workers by implementing more flexible ways of organizing their work process, in addition to providing human and material resources, periodically evaluate the production according to the goals of the institution. The promotion of continuing education, promotion of leisure moments during work, facilitation of clearances and vacation scale, offer the possibility of on-call exchange to allow the professional to have a social life and participate in the family's social life are some measures that promote the welfare of professional and can prevent the start of the disease; also call for the development of professional rehabilitation strategies in psychological distress related to work. The search for the origin of suffering at work should be done periodically allowing the professional to find strategies to solve it, so that its action takes place in a more pleasant way and without suffering.

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