



Burnout Syndrome and the socio-demographic aspects of nursing professionals*

Síndrome de Burnout e os aspectos sócio-demográficos em profissionais de enfermagem

Síndrome de Burnout y los aspectos sociodemográficos en profesionales de enfermería

Flávia Maria de França¹, Rogério Ferrari²

ABSTRACT

Objective: To demonstrate the incidence of burnout syndrome according to sociodemographic characteristics of nursing professionals who worked in two regional hospitals in the city of Cáceres-MT. **Methods:** A quantitative, descriptive, cross-sectional study, conducted with 141 nursing professionals. To collect data, a structured questionnaire with sociodemographic data for the design was used, along with the *Maslach Burnout Inventory* (MBI). **Results:** Based on the analysis of interviews with 141 professionals, 13 (9.58%) presented with burnout syndrome, according to the MBI, and of those affected, seven (53.84%) were registered nurses and six were (46.16%) technicians / auxiliaries. In terms of the relevance of burnout syndrome as a function of sociodemographic aspects, the largest number of verified cases were female professionals with less training time, and those who were single. Similar results were observed in the literature, emphasizing the findings. **Conclusion:** This study showed the presence of burnout syndrome in nursing professionals, thus revealing the need for interventions in relation to the working conditions of nurses.

Keywords: Burnout, professional; Occupational health; Occupational diseases

RESUMO

Objetivo: Demonstrar a incidência da Síndrome de Burnout (SB) de acordo com os aspectos sociodemográficos dos profissionais de enfermagem que atuam em dois hospitais regionais, no município de Cáceres-MT. **Métodos:** Estudo de natureza quantitativa, descritivo, com delineamento transversal, realizado com 141 profissionais de enfermagem. Para a coleta de dados, foi utilizado um questionário estruturado com dados para o delineamento sociodemográfico, acrescido do instrumento *Maslach Burnout Inventory* (MBI). **Resultados:** Com base na análise das entrevistas dos 141 profissionais, 13 (9,58%) apresentaram Síndrome de Burnout, conforme o MBI, e destes acometidos 7 (53,84%) são enfermeiros e 6 (46,16%) técnico/auxiliares. Quanto à incidência da SB em função dos aspectos sócios demográficos, o maior número de casos foi verificados no sexo feminino, nos profissionais com menos tempo de formação e nos solteiros. Resultados semelhantes foram encontrados na literatura, relevando as constatações. **Conclusão:** Este estudo evidenciou que a presença da SB nos profissionais de enfermagem, revelando assim a necessidade de intervenções em relação às condições de trabalho dos enfermeiros.

Descritores: Esgotamento profissional; Saúde do trabalhador; Doenças profissionais

RESUMEN

Objetivo: Demostrar la incidencia del Síndrome de Burnout (SB) de acuerdo a los aspectos sociodemográficos de los profesionales de enfermería que actúan en dos hospitales regionales, en el municipio de Cáceres-MT. **Métodos:** Se trata de un estudio de naturaleza cuantitativa, descriptiva, de tipo transversal, realizado con 141 profesionales de enfermería. Para la recolección de los datos, fue utilizado un cuestionario estructurado con datos para el delineamiento sociodemográfico, además del instrumento *Maslach Burnout Inventory* (MBI). **Resultados:** Con base en el análisis de las entrevistas de los 141 profesionales, 13 (9,58%) presentaron Síndrome de Burnout, conforme el MBI, de los cuales 7 (53,84%) son enfermeros y 6 (46,16%) técnico/auxiliares. En cuanto a la incidencia del SB en función de los aspectos sociodemográficos, el mayor número de casos fue verificado en el sexo femenino, en los profesionales con menos tiempo de formación y en los solteros. Resultados semejantes fueron encontrados en la literatura, confirmando las constataciones. **Conclusión:** En este estudio se evidenció la presencia del SB en los profesionales de enfermería, revelando así la necesidad de intervenciones en relación a las condiciones de trabajo de los enfermeros.

Descriptorios: Agotamiento profesional; Salud laboral; Enfermedades profesionales

* Study extracted from the Master's dissertation entitled "Estudo sobre Síndrome de Burnout em profissionais de enfermagem em dois hospitais de médio porte no município de Cáceres-MT" – presented to the Health Science Faculty, University of Brasília – UnB – Brasília (DF), Brazil.

¹ Master of Health Sciences, Professor of the Nursing Department, State University of Mato Grosso – UEMAT – Alta Floresta (MT), Brazil. Assistential Nurse at "Hospital Regional de Cáceres – Cáceres (MT), Brasil. MT.

² Academic member of the Course in Medicine, "Universidade Estácio de Sá" – UNESA – Rio de Janeiro (RJ), Brazil.

INTRODUCTION

Stress is a concern worldwide, leading to the World Health Organization (WHO) considering it a global epidemic in 1995⁽¹⁾. Amid the studies developed on the subject of stress, reports appeared about the Burnout Syndrome, defined as a Syndrome, in which the worker loses the sense of relationship with work so that things are no longer important⁽²⁾.

Burnout was recognized as an occupational risk for professions that involve health care, education and human services⁽²⁾; that is to say, it particularly affects professionals in the area of services, or care-givers, when they are in direct contact with the users. From this aspect, the work of nursing professionals is pointed out.

The syndrome may be understood as a process of three dimensions: the first is emotional exhaustion, characterized by lack of energy and a feeling of emotional depletion; the second, depersonalization, is defined as lack of sensitivity and hardness when responding to persons receiving the individual's services, and the third, low professional achievement, which refers to a reduction in the feeling of competence as regards working with persons⁽³⁾.

Nursing is a professional area that requires scientific technical knowledge, directed towards human and holistic care, in addition to which the nurse needs various skills: cognitive, interpersonal and psychomotor skills based on theoretical knowledge. Therefore, today nursing is considered a vital and indispensable component of medical care service⁽⁴⁾.

There have been increasing demands on the technical-scientific capacity of nursing professionals. On the other hand, however, these workers are offered low remuneration and work overload. Therefore, in the work environment it is possible to observe psychic alterations that lead to a state of emotional exhaustion, loss of interest in the persons who would have to be helped; and finally, low professional and personal productivity⁽⁵⁾.

At work, there are a growing number of stress inducing situations. This concern results from including the individual in this context, considering that the work, in addition to enabling personal growth, transformation, recognition and independence, may also cause problems, dissatisfaction and lack of interest.

According to the Ministry of Social Security, in 2007, 4.2 million persons were laid off work, and of these, 3,852 were diagnosed with Burnout Syndrome⁽⁶⁾.

In Brazil, Decree No. 3,048 of May 1999, approved the regulation of Social Security Annex II, dealing with Pathogenic agents that cause professional diseases⁽⁷⁾. Thus, item XII of the table of work-related mental and behavioral disturbances was referred to as synonym for Burnout, and in classification CID-10, it was given Code Z73.0.

Over the course of history, there has been progressive concern about working conditions, the professional's personal satisfaction and well being, in addition to the

interference of work in the worker's health. Therefore a new model of health policies has arisen, which brought with it the discussion with respect to the Worker's Health, demanding the introduction of new practices.

Human beings are subject to various stressful situations that may arise throughout life. The nursing team is routinely exposed to physical and mental overload by the demands of its work, such as emergency situations that impose tasks that overload the professionals. This situation is potentiated even further by working hours that are frequently extensive, duplicated and sometimes accompanied by shifts.

In spite of the situation presented, there have been few studies conducted in Brazil, investigating the health problems faced by these workers⁽⁸⁾, associating them with the sociodemographic characteristics of each person.

In view of the foregoing discourse, the aim of this study was to verify the incidence of the Burnout Syndrome, according to the sociodemographic aspects of the nursing professionals who work in the "Hospital Regional Dr. Antônio Fontes" and in "Hospital São Luiz", both in the municipality of Cáceres, Mato Grosso, Brazil.

METHODS

This was a descriptive, non experimental study, with a cross-sectional design, with focus on the Burnout Syndrome and sociodemographic aspects of nursing professionals in the hospital network.

The research was conducted on the premises of the Regional Hospitals of Cáceres "Dr. Antônio Fontes" (HRCAF) and "São Luiz" (HSL), located in the municipality of Cáceres, Mato Grosso, Brazil. HSL is a private institution accredited by SUS. HRCAF is a public, state, regional reference institution in the Southeast of the State of Mato Grosso for urgency and emergency and meets the demand of 22 municipalities in the region. The sample of this study was composed of 141 nursing professionals, belonging to three hierarchical levels (nursing assistant, nursing technician and nurse), working at HRCAF and HSL.

To include the subject in the study the following selection criteria were adopted: all the professionals had to be in activity, and had to voluntarily accept to participate in the research. The exclusion criteria comprised those that were on vacation, sabbatical leave, sick leave for health treatment, maternity leave or off work for professional qualification, such as master's or doctoral courses, and those who did not wish to participate in the research.

After this, the employees were previously informed and individually approached during the work shift, and were notified about the Term of Free and Informed Consent, which they signed after having read it and agreed to participate in the study.

The nursing contingent of HRCAF, according to the Human Resources department, is composed of 141

nursing professionals (22 nurses, 73 nursing technicians and 46 nursing assistants). However, with the exclusion criteria, only 89 professionals at HRCFAF (16 nurses, 55 nursing technicians and 18 nursing assistants) participated in the study. At HSL, the nursing team was composed of 144 nursing professionals (21 nurses, 89 technicians and 34 nursing assistants). However, the distribution of professionals participating in the study at HSL, after applying the exclusion criteria, consisted of 52 persons (14 nurses, 32 nursing technicians and 6 nursing assistants). Therefore, the sample of 141 persons participating in the study consisted of 89 nursing professionals from HRCFAF and 52 nursing professionals from HSL.

For data collection, a self-administered questionnaire was used as the research instrument, which corresponded to delineating the profile of the interviewees. It was composed of 14 closed questions that were prepared taking into account the dichotomous attribute and continuous variables.

Dichotomous variables – gender, working hours, dual employment tie. Attribute variables – sector of hospital where the interviewee works, professional category, educational level, weekly work load and employment tie. Continuous variables – age range, time of work in the unit and time since professional graduation.

In addition, the instrument Maslach Burnout Inventory (MBI), composed of 22 questions was used. The MBI is a self-administered instrument, to be answered by means of a five-point frequency scale that goes from one (never) to five (always). The inventory is composed of 22 items that evaluate the three dimensions independently of one another, which are: Emotional Exhaustion (9 items), Depersonalization (5 items) and Professional Achievement (8 items).

The score in each subscale was obtained by means of the sum of the respective values. For this purpose, in the subscale of Emotional Exhaustion (EE), a score equal to or higher than 26 was considered indicative of a high level of exhaustion; the interval 16 – 25 corresponded to moderate values, and values equal to or lower than 15 would indicate a low level of exhaustion.

In the subscale of Depersonalization (DE), a score equal to or higher than 13 would be a high level; between 7 – 12 a moderate level, and a score equal to or lower than 6 a low level of depersonalization.

The subscale of Professional Achievement (PA) presents an inverse measure; that is to say, scores equal to or lower than 31 indicate a low feeling of professional achievement, and consequently, a high level of exhaustion. Scores between 32-36 indicate a moderate level of achievement and the sum of scores over 36, a high level of professional achievement; that is to say, a low level of exhaustion.

When high scores are obtained in Emotional Exhaustion and Depersonalization, and a low score in

Professional Achievement, it suggests the presence of the Burnout Syndrome.

The information from the answered instruments were codified, digitized and processed in an Excel® spreadsheet. Therefore, analyses of the responses were performed with the software System Statistical Package for the Social Sciences (SPSS)® version 15.0. for Windows®.

After this, the results were analyzed by descriptive statistics of the data (mean, standard deviation, median, percentage and incidence), and presented in the form of tables, using the SPSS 15.0. program.

To compare the variables the non parametric Chi Square (χ^2) test was applied, and for this a level of significance of 5% probability ($\alpha < 0.05$) was adopted.

The present study was developed with the consent of the hospitals in question, and approved by the Ethics Committee for Research in Human Beings of the Health Science Faculty of the University of Brasilia CEP/FS-UnB, on June 8, 2003 Report No. 052/10.

RESULTS

The data in Table 1 show the results of the sociodemographic variables for recognition of the studied population.

Table 1 – Sociodemographic characteristics of the nursing professionals of the Regional Hospitals: Dr. Antônio Fontes and Hospital São Luiz in Cáceres-MT, 2010. n=141

	Frequency n (%)
Gender	
Female	119 (84.40)
Male	22 (15.60)
Age-range	
20 – 40 years	103 (73.05)
41 – 60 years	31 (21.99)
Not informed	7 (4.96)
Marital status	
Single	49 (34.75)
Married	82 (58.15)
Others	10 (7.10)
Professional Category	
Nurse	30 (21.30)
Technician	87 (61.70)
Assistant	24 (17.00)
Children	
No children	34 (24.1)
With children	107 (75.90)
Educational Level	
Middle School Level	91 (64.54)
University Level	49 (34.75)
Not informed	01 (0.71)
Family Income	
2 to 4 minimum wages	94 (66.67)
5 to 10 minimum wages	46 (32.62)
Not informed	01 (0.71)
Total	141 (100)

When analyzing the data found with regard to gender, it was perceived that 119 (84.40%) of the respondents were workers of the female gender and 22 (15.60%) of the male gender.

In the age-range distribution of the studied population, age ranged from 20 to 60 years, with a mean of 35.5 years, with no difference between men and women. As regards age, the professionals analyzed, 103 (73.05%) were in the age-range from 20 to 40 years and 31 (21.99%) of the professionals between 41 and 60 years of age.

With reference to marital situation, 49 (34.75%) workers were single, 82 (58.15%) married, and 10 (7.10%) in other forms of conjugal union. Of the 141 interviewees, with regard to professional category, 87 (61.70%) professionals performed the work of nursing technician, 30 (21.30%) were nurses and 24 (17.00%), nursing assistants.

Among the professionals analyzed 34 (24.10%) reported that they had no children, and 107 (75.90%) said they had children. As regards educational level, 91 (64.54%) professionals had a Middle School educational level and 49 (34.75%), had a University Education.

Table 2 – Incidence of Burnout Syndrome, according to the sociodemographic aspects of the nursing professionals from the Regional Hospitals Dr. Antônio Fontes and Hospital São Luiz in Cáceres-MT, 2010. n=141

Variables	Burnout		MBI %	PR	IC (95%)	χ^2	p-Value
	Yes	No					
Gender							
Female	13	106	10.9				
Male	0	22	0.00				
Total	13	128					
Age-range							
20 to 40 years	6	97	5.8				
41 to 60 years	7	24	22.6				
Not informed	0	7					
30 to 40 X 41 to 60 years				0.26	0.09-0.71	7.64	0.005
Total	13	128					
Marital status							
Single	7	42	14.3				
Married/Stable Union	5	77	8.53				
Others	1	9					
Single X married				2.34	0.79-6.98	2.47	0.115
Total	12	129					
Children							
No children	4	30	11.7				
With children	9	98	8.41				
Without X with children				1.40	0.46-4.26	0.35	0.556
Total	13	128					
Educational Level							
Completed Middle Schooling	6	85	6.59				
Completed University Education	7	42	14.2				
Completed College Education							
Mid.Sch. X Univ.Educ.				0.46	0.16-1.30	2.24	0.134
Total	13	128					
Family Income							
2 to 4 minimum wages	7	87	7.4				
5 to 10 minimum wages	6	40	13.0				
Not informed		1					
2 to 4 X 5 to 10 years				0.57	0.20-160	1.15	0.283
Total	13	128					

PR– Prevalence ratio; IC– Interval of confidence; χ^2 –Chi-square /test hypothesis; p-value – significance

The data in Table 2 show the relationship between the Burnout Syndrome and sociodemographic aspects of the nursing professionals studied.

According to the results presented in Table 2, with reference to the incidence of Burnout considering gender, a higher incidence of the Syndrome occurred in the female sex, 13 (10.9%).

When considering the classification of the results obtained of Burnout System considering age, greater predominance was observed among the older professionals, seeing that of the 31 workers aged between 41 and 60 years, 7 of them (22.6%) presented the syndrome, and of the 103 aged between 20 and 40 years, there were 6 (5.8%), subjects with Burnout, therefore, there was significant difference between the ages ($p = 0.005$).

With reference to marital status, 7 (14.3%) of the single individuals were pointed out as being in a state of Burnout, followed by 5 (8.53%) of the married individuals.

As regards the Burnout syndrome when considering whether the individuals had children or not, professionals without children were affected to a larger extent (11.7%), when compared with those who had children (8.41%). With reference to educational level, there was a predominance of the syndrome in professionals who had completed University education (14.2%), and with reference to family income considering the syndrome, it was observed that the professionals most affected (13.0%) were those with an income between 5 and 10 minimum wages.

DISCUSSION

The results obtained in this research showed that in the studied population, as regards the sociodemographic aspect considering the Burnout Syndrome, there was a higher percentage in the female gender in the age-range between 41 and 60 years, with single marital status, in professionals without children, with completed university education and family income between 5 and 10 minimum wages.

The predominance of women who work in the health area has been shown in many studies^(4,9) that have observed that care activities have frequently been performed by women.

Similar to the results found in the present study, one research⁽¹⁰⁾ demonstrated that out of 61 workers who participated, five (8.2%) presented manifestations of Burnout, and all of them were women.

In another research on the Burnout Syndrome, the age group that was most affected was between 30 and 58 year, and there was predominance of the group under 35 years of age⁽¹⁰⁾. In another record, the age-range between 35 and 49 years⁽¹¹⁾ predominated, which was similar to the results found in the present study, characterizing professionals with a certain professional maturity, and greater control in situations of stress⁽¹²⁾.

Studies⁽⁴⁻¹³⁾ conducted have mentioned that the high mean age is an important factor for the development of mental or occupational disturbances, because of the diminished capacity to adapt to stressful conditions at work. These studies have shown that the index of capacity to work is greatly affected by age.

As far as the marital situation is concerned, in order to be validated as factors that trigger the syndrome, the results found deserve more in-depth study as regards the couple relationship quality. This is because there is no consensus in the literature about whether the marital condition interferes in or triggers the Syndrome. Some authors have affirmed that married life contributed to their developed⁽¹⁵⁾, others that this condition presents less tendency to manifest the symptoms^(11,16), moreover, there are those that believe that this condition is not related to Burnout.⁽¹⁷⁾

In a certain research⁽¹⁸⁾, it was found that among married nurses, the majority presented high levels of Burnout. The result obtained in the present research showed that single persons were more affected by the Syndrome, going in an opposite direction to that reported in the literature⁽⁴⁻¹⁸⁾.

As regards having or not have children, the certain research⁽¹⁹⁾ mentioned that the satisfaction of being a father or a mother is a possible reason for a lower index of mental diseases such as the Burnout syndrome. These observations are corroborated by another study⁽²⁰⁾ that affirmed that subjects with children presented lower indices of emotional exhaustion. Nevertheless, the results found in this research diverge from the literature and point out that professionals without children were shown to be more affected by the Syndrome.

With regard to educational level, a certain study⁽⁶⁾ demonstrated that person with a higher educational level have greater probability of developing Burnout, which is similar to that shown in the present research, in which professionals with completed University education were shown to be more affected by the Burnout syndrome.

FINAL CONSIDERATIONS

The results showed that the nurses showed higher levels of professional exhaustion, since the predominance of the syndrome was evident in professionals who had completed a university education.

In spite of nurses presenting lower involvement with patients hospitalized in the hospital institutions, they showed an intense emotional overload in their day to day work, as they are responsible for the good working of the health care service, in which they supervise the other nursing professionals and are under constant pressure from the hospital administration and organization, in addition to the doctors with regard to patient care.

The nursing team, the largest hospital work force, goes through stressful situations that lead

one to assure the need for proposing organizational changes in the work environment, with the purpose of diminishing these factors that end up interfering in the worker's health. The work must not consist of a heavy burden or source of misfortune or displeasure. To the contrary, it should provide persons with the conditions to develop their potentialities and self-realization.

It is considered imperative to reflect and develop studies with respect to this subject, in order to gain better understanding of the factors that contribute to the health/disease process of nursing workers in hospital institutions. In addition, groups of reflection must be developed with in-depth theoretical knowledge, to follow up the programmed actions with a view to improving the working conditions of nursing in the studied institutions.

REFERENCES

- Lipp ME. [Emotional stress: contribution from internal and external stressors]. *Rev Psiquiatr Clín (São Paulo)*. 2001; 28(6): 347-9. Portuguese.
- Murofuse NT, Abranches SS, Napoleão AA. [Reflections on stress and Burnout and their relationship with nursing]. *Rev Latinoam Enferm* 2005; 13(2): 255-61. Portuguese.
- Carlotto MS, Palazzo LS. [Factors associated with burnout's syndrome: an epidemiological study of teachers]. *Cad Saúde Pública*. 2006; 22(5):1017-26. Portuguese.
- da Rosa C, Carlotto MS. Síndrome de Burnout e satisfação no trabalho em profissionais de uma instituição hospitalar. *Rev SBPH [Internet]*. 2005 [citado 2012 Jul 5]. Disponível em: <http://pepsic.bvsalud.org/pdf/rsbph/v8n2/v8n2a02.pdf>
- dos Santos FE, Alves JA, Rodrigues AB. Burnout syndrome in nurses in an Intensive Care Unit. *Einstein (São Paulo)*. 2009; 7(1 Pt 1): 58-63.
- Jodas DA, Haddad MC. Burnout Syndrome among nursing staff from an emergency department of a university hospital. *Acta Paul Enferm*. 2009; 22 (2):192-7.
- Trigo TR, Teng CT, Hallak JE. [Burnout syndrome and psychiatric disorders]. *Rev Psiquiatr Clín*. 2007; 34(5): 223-33. Portuguese.
- Moreira DS, Magnago RF, Sakae TM, Magajewski FR. [Prevalence of burnout syndrome in nursing staff in a large hospital in south of Brazil]. *Cad Saúde Pública*. 2009; 25(7): 1559-68. Portuguese.
- Pires JC, Macêdo KB. [Organizational culture in Brazilian public organizations]. *Rev Adm Pública*. 2006; 40(1):81-105. Portuguese.
- Lautert L. [The professional fatigue: empirical study with hospital nurses]. *Rev Gaúcha Enferm*. 1997; 18(2):133-44. Portuguese.
- Gil-Monte P. El Síndrome de Quemarse por el trabajo en enfermería. *Rev Electrónica InterAção Psy*.2003;1 (1):19-33.
- Menegaz FDL. Características da incidência de burnout em pediatras de uma organização hospitalar pública [dissertação]. Florianópolis: Centro de Filosofia e Ciências Humanas da Universidade Federal de Santa Catarina; 2004.
- Faria AC, Barboza DB, Domingos NAM. [Absenteeism due to mental disorders in the nursing in the period from 1995 to 2004]. *Arq Ciênc Saúde*. 2005;12 (1):14-20. Portuguese.
- Barboza JL, Berezini R. Burnout syndrome in nursing undergraduate students. *Einstein (São Paulo)*. 2005; 5(3): 225-30.
- HahnMary K, Carlotto S. [The Burnout Syndrome in monitors that act in a foundation of special protection]. *Diversitas Perspectiv Psicol*. 2008; 4(1):53-62. Portuguese.
- Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu Rev Psychol*. 2001; 52 (1): 397-422.
- Benevides-Pereira AM, Moreno-Jiménez B. O Burnout e o profissional de psicologia. *Rev Eletrónica InterAção Psy*.2003; 1(1): 68-75.
- Magalhães RA, Glina DM. [Prevalence of Burnout in public hospital doctors in São Paulo]. *Saúde Ética Justiça*. 2006, 11(1/2): 29-35. Portuguese.
- Ritter RS, Stumm EM, Kircher RM. [Burnout analyses about professionals of an emergency unit of a general hospital]. *Rev Eletrónica Enferm*. 2009;11(2):236-48. Portuguese.
- Carlotto MS, Nakamura AP, Câmara SG. Síndrome de Burnout em estudantes universitários da área da saúde. *Psico (Porto Alegre)*. 2006; 37(1): 57-62.