

Burnout Syndrome among nursing staff from an emergency department of a university hospital*

Síndrome de Burnout em trabalhadores de enfermagem de um pronto socorro de hospital universitário

Síndrome de Burnout en trabajadores de enfermería del servicio de emergencia de un hospital universitario

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ABSTRACT

Objective: To identify the factors associated with the signs and symptoms of burnout among nursing staff from an emergency department of a university hospital. **Methods:** The study used a quantitative descriptive design. The sample comprised of 61 nursing staff. A self-administered structured questionnaire and the Maslach Burnout Inventory were used to collect the data. Data were analyzed with EpiInfo 2004. **Results:** Among the sample of the study, 8.2% of female participants had burnout. However, a great number (54.1%) had high risk for burnout. Only 37.7% of participants had a low risk for burnout. Factors associated with burnout include the lack of knowledge and motivation for professional development. **Conclusion:** The organization and work dynamics of the emergency department led to workload and tension, which suggested the need to develop strategies for the re-organization of the work dynamics to decrease the sources of stress. **Keywords:** Burnout, professional/nursing; Stress, psychological/nursing; Nursing team/psychology; Occupational health; Emergency medical services/nursing

RESUMO

Objetivo: Investigar sinais e sintomas de *burnout* em trabalhadores de enfermagem de um Pronto Socorro de Hospital Universitário correlacionando-os com fatores preditores. **Métodos:** Estudo descritivo quantitativo, com 61 trabalhadores de enfermagem. Utilizou-se um questionário estruturado, auto-aplicável, acrescido do instrumento *Maslach Burnout Inventory*. A análise dos dados foi feita através do Epiinfo 2004. **Resultados:** Dos 61 trabalhadores que participaram do estudo, 8,2% apresentavam manifestações de *burnout*, todos do sexo feminino, 54,1% possuíam alto risco para manifestação de *burnout* e 37,7% eram de baixo risco de manifestação da doença. Fatores como o não reconhecimento e incentivo ao desenvolvimento profissional estão relacionados com este diagnóstico. **Conclusões:** A dinâmica organizacional de um Pronto Socorro gera uma sobrecarga e tensão ocupacional sendo necessário desenvolver estratégias de reorganização do processo de trabalho diminuindo fontes de estresse.

Descritores: Esgotamento profissional/enfermagem; Estresse psicológico/enfermagem; Equipe de enfermagem/psicologia; Saúde do trabalhador; Serviços médicos de emergência/enfermagem

RESUMEN

Objetivo: Investigar signos y síntomas de *burnout* en trabajadores de enfermería del servicio de emergencia de un Hospital Universitario correlacionándolos con factores de predicción. **Métodos:** Se trata de un estudio descriptivo cuantitativo, realizado con 61 trabajadores de enfermería. Se utilizó un cuestionario estructurado, auto-aplicable, además del instrumento *Maslach Burnout Inventory*. El análisis de los datos se realizó por medio del Epiinfo 2004. **Resultados:** De los 61 trabajadores que participaron en el estudio, el 8,2% presentaba manifestaciones de *burnout*, todos del sexo femenino, el 54,1% poseía alto riesgo para manifestación de *burnout* y el 37,7% era de bajo riesgo de manifestación de la enfermedad. Factores como la falta de reconocimiento e incentivo al desarrollo profesional están relacionados con este diagnóstico. **Conclusiones:** La dinámica organizacional de un servicio de emergencia genera sobrecarga y tensión ocupacional siendo necesario desarrollar estrategias de reorganización del proceso de trabajo disminuyendo fuentes de estrés.

Descriptores: Agotamiento profesional/enfermería; Estrés psicológico/enfermería; Grupo de enfermería/psicología; Salud laboral; Servicios médicos de urgencia/enfermería

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INTRODUCTION

Technological and sociocultural development and the consequences of globalization led to benefits to the modern world and, as a consequence, brought about deep changes in the bio-psycho –social behavior of human beings, with direct interference on the quality of life of the population.

Considering that human beings are a duality working in a unity, the body produces changes in the mind that act on the body. Currently, life, full of stress, agitation and concerns is a source of disorders and psychosomatic disorders. To reach the balance between health and well-being, human beings use protective resources⁽¹⁾. The constant use of undesirable defense forms and the persistence of the unbalance between health and well-being lead to psychosocial disorders.

Work organization has an impact on men's psychic apparatus and, in some conditions, cause suffering related to their individual history which contains projects, hopes, desires that are not accounted for⁽²⁾. Thus, new disorders develop due to the changes in the world of work.

One of the consequences on workers' psychic apparatus is the burnout syndrome that corresponds to the emotional answer to situations of chronic stress due to intensive work relations with other people, or when professionals present great expectations regarding their professional development and dedication to the career and cannot achieve the expected compensation⁽³⁻⁴⁾.

The development of this syndrome is due to a gradual process of mood swing and discouragement followed by physical and psychological symptoms. Workers lose the sense of their relationship with work and things are not important to them anymore. The syndrome presents three components: emotional exhaustion with the presence of emotional and/or physical exhaustion, depersonalization observed by emotional cynicism and lack of affection, and reduced personal accomplishment⁽⁵⁾.

Burnout syndrome is presented through four class of symptoms: physical, when workers present constant fatigue, difficulties sleeping, inappetence and muscular pain; psychological observed by lack of attention, memory changes, anxiety and frustration; behavioral, identified when individuals neglect work, present occasional or instantaneous irritability, inability to focus, increase in conflicting relations with colleagues, long pauses for rest, problems with complying with work hours; and defensive, when workers tend to isolate themselves, when they feel omnipotent, when quality of work is poorer and they present a cynical attitude^(4,6).

According to the Ministry of Social Welfare, in 2007, 4.2 million individuals were removed from their duties, and 3,852 individuals were diagnosed with Burnout syndrome⁽⁷⁾.

As an intern on Nursing Services Management, during a training at the ER from a University Hospital, I was part of the nursing team and, consequently, I have experienced the difficulties in interpersonal relationship, I have seen how they cope with severe clinical situations, how to approach families and the lack of confidence and even lack of power in dealing with life situations that are crucial to other human beings.

Thus, the present study aimed at investigating Burnout signs and symptoms among nursing staff in Emergency care at a University Hospital, correlating them with predictors.

METHODS

This is a descriptive study with a quantitative approach defined as a systematic survey on problems, features and phenomena observed in the population studied⁽⁸⁾.

The study population was formed by 67 nursing staff working at the Emergency Room at the Regional do Norte do Paraná University Hospital (HURNP) from October to November 2007, eight were nurses and 59 were technicians and nurse assistants who gave their written consent and worked in the four working shifts.

HURNP is the biggest public hospital is the north of Paraná and the 3rd greatest teaching hospital in the South Region of the country. It is a supplementary entity from the State University of Londrina-PR, with 306 beds, all available to the Single Health System. It receives referrals for all medical fields; there is high technology equipment in an old building with several adjustments. It is part of the state system for urgency and emergency care, care for high risk pregnancy and it is a reference for high complexity.

For data collection, we have used the self-applied structured questionnaire proposed by a study⁽⁶⁾, which records sociodemographic data, professional data, leisure information, organizational burnout predictors, and some symptoms related to the disease. We have also added 22 questions from Maslach Burnout Inventory (MBI), that identifies the symptoms of Burnout syndrome dividing it in three components; questions 1 to 9 identify the level of emotional exhaustion, questions 10 to 17 relate to personal accomplishment and questions 18 to 22 relates to depersonalization. MBI was created by Christine Maslach, a psychologist and professor in California-USA, and validated in Brazil in 2001⁽⁹⁾. (Annex 1)

Scoring of all items surveyed adopts Likert scale ranging from 0 to 6: (0) never, (1) once in a year or less, (2) once in a month or less, (3) some times in a month, (4) once in a week, (5) some times in a week, (6) every day.

Instruments answered were coded and typed at Epiinfo 2004, version 3.3.2. For analysis of data related

to MBI, we added up each component (emotional exhaustion, depersonalization, and reduced personal accomplishment). Values obtained were compared with the reference values of the Center of Advanced Studies on Burnout Syndrome (NEPASB), presented on Chart 1.

Chart 1 – Values of the MBI scale developed by the Center of Advanced Studies on Burnout Syndrome, 2001

Components	Cut-off points		
	Low	Medium	High
Emotional exhaustion	0 - 15	16 - 25	26 - 54
Depersonalization	0 - 02	03 - 08	09 - 30
Personal accomplishment	0 - 33	34 - 42	43 - 48

Source: Benevides-Pereira, 2001⁽⁹⁾.

MBI's manual uses as a principle for burnout diagnoses a high score for emotional exhaustion and depersonalization and a low score for personal accomplishment. Therefore, burnout occurs when professionals fit in these three components. The risk for developing this syndrome will be determined after assessing all dimensions, to measure the possibility of respondents to present the disease⁽⁶⁾.

Other items such as predictors and somatic symptoms were assessed through simple percentage regarding the frequency reported by respondents.

The research project has been approved by the Ethical Committee in Research involving Human Beings of the State University of Londrina/Regional Norte do Paraná University Hospital, registered under the Authorization # 278/07.

RESULTS

The sample was formed by 61 workers because one nurse was on a medical leave, three nursing assistants were on vacation, and two refused to take part in the study.

Assessing the sociodemographic chart, female gender was prevalent (72.1%), 58.6% were in a stable relationship with partner, and 77.0% had children. Predominant age group was 30 to 39 years old (41.0%), with an average of 41.8 years; extremes were from 24 to 63 years, with a 7.8 standard deviation.

Regarding professional characteristics of the population, 11.5% were nurses, 31.1% technicians, and 57.4% were nursing assistants. Most employees were in statutory position (95.0%), with 36 weekly hours of work and 6.6% were changing their position. Among the employees studied, 14.7% worked over 40 hours/week, because they also worked in another institution. Regarding schooling of the technical staff, 26.2% were nursing undergraduates.

As for most common scores found for each component, 55.7% of the professionals had a low score for emotional exhaustion, 37.7% had average score and 37.7% presented high score for personal achievement.

Regarding the limits established by NEPASB, 21.3% of the professionals presented high score for emotional exhaustion, 32.8% presented high score for depersonalization, and 26.2% presented low score for personal achievement, these characteristics establish the diagnoses for the presence of burnout.

Among the 61 employees researched, 8.2% (one nurse, two nursing technicians and two nursing assistants) presented signs and symptoms of burnout. The remaining, 54.1% presented high risk for burnout, and 37.7% low risk for disease onset.

Regarding predictors for burnout development, having activities that demand more time than workers thought they had corresponded to 33.4% of the population studied. After statistical analysis of all factors, when Mann Whitney's test was applied, only the fact that the institution valued and acknowledged the work developed, as well as invested in and encouraged professional development of its employees was significantly different between the group with high risk of disease onset or with signs and symptoms and the group with low risk for disease onset, with a $p=0.010$, and the first group presented median equal to 2 (once a month), lower than the second group, whose median was 6 (every day).

Regarding symptoms from the work process, there was greater predominance of feeling little time for themselves (47.5%), followed by shoulder and neck pain (31%), feeling mental exhaustion (26.2%), sleeping troubles (21.5%) and state of continuous speed (21.4%).

As for free time, 67.2% of the participants answered they performed some kind of physical activity in their free time, and 36.6% reported several kinds of activities, 21.9% reported sleeping, and 14.6% reading. In a smaller number, activities such as watching television, playing soccer, going to the movies, surfing the Net, going to church, and fishing have been mentioned. Regarding physical activity, 47.6% of the participants reported they practiced it, 69% more than two days a week; walking was reported by 60% of the workers and 20% informed they practice gymnastics on a fitness center.

DISCUSSION

The word stress cannot be mistaken by burnout in its concepts and differences, since stress occurs from the body reactions to aggressions from different sources that can disturb the internal balance of human beings⁽¹⁰⁾. Burnout is the answer to chronic work related stress involving attitudes and negative behavioral changes

related with the context of work, with no consideration to the human side^(5,11). In the case of nursing staff, it affects recipients, the institution and work itself when methods to cope fail or are not enough⁽⁵⁻⁶⁾.

Nursing has been classified by the Health Education Authority as the fourth most stressful profession. Additionally, it is hard to establish the different roles of the profession and, consequently, sometimes it is not acknowledged by people, increasing depersonalization of workers with regards to their profession⁽⁵⁾.

Studies show that people with greater education are more prone to burnout. In the present study, only one out of eight nurses presented burnout signs. Another variable observed in this study is related with marital status and having children or not. According to the authors^(6,11), being married or in a stable relationship and having children is associated with lower tendency to burnout. It is also important to notice that women have presented higher scores for emotional exhaustion⁽¹¹⁻¹²⁾.

As the predominant age group ranged from 30 to 39 years old, it is suggested that professionals presenting medium and low risk for burnout onset are those with professional maturity and who cope better with stressful situations^(6,11). These personal characteristics are not individual triggers of the phenomenon, but facilitators or inhibitors of the action of stressful agents⁽¹²⁾.

When 33.4% of the studied population referred they felt "they had more activities than they could handle", we have observed that the amount of people allocated for this sector is small in comparison to the demand of activities they perform. Possibly, this relationship is influenced by the care model adopted in an emergency room which leads to overload of movements and occupational tension, with a constant need to make immediate and efficient decisions, making the nursing staff feel that the work is not rewarding. Working with "lives at risk" requires professionals to control their actions so they can feel confident and essential to the team. Additionally, overcrowd is frequent in this type of service due to lack of effectiveness in primary and secondary care.

These issues are essential when authors^(6,11,13-14) show that organizational aspects such as work overload, lack of control, insufficient rewards and conflicts of value may influence the quality of work, to a greater extent when compared to the relationship with the patient. The excess of work may gradually produce emotional, creative or physical exhaustion, reducing workers' energy to be efficient, their health, and well being. When the work is classified as stressful, which is a characteristic of an E.R., burnout symptoms are expected responses⁽⁵⁾.

The reduced number of nursing professionals is directly connected with excess of work. In addition to that, dissatisfaction with wages worsens the situation,

making professionals look for other registered job with a consequent increase in monthly working hours⁽⁵⁾.

Another relevant aspect that must be approached is that the Emergency Room where the study was conducted started in July 2007 a new care model to users, named *Sistema de Acolhimento e Avaliação com Classificação de Risco* (Welcome and Assessment System with Risk Classification), recommended by the Ministry of Health to care for patients according to the level of complexity rather than to the order of arrival⁽¹⁵⁾. With a relative significant frequency, patients that need more complex care wait for a room in the Intensive Care Unit. These patients present several therapy needs and, most the times, they cannot perform self-care, and communicate⁽¹⁶⁾.

Situations found by professionals of difficult recovery or no recovery from patients can lead to a huge feeling of professional dissatisfaction. Not being ready to deal with death can also cause a feeling of powerlessness^(11,17).

Workers suffering from emotional and physical exhaustion have also mentioned chronic health problems such as insomnia, tension, headache, high blood pressure, ulcer, and greater susceptibility to the flue and colds⁽⁶⁾. The literature^(6,12) mentions that physical exercises reduce tensions, thus, minimizing stress and keeping health conditions in the workplace.

It is also important to mention that the studied population was formed mostly by women, which can express an emotional feature related to the female gender⁽¹⁸⁾.

CONCLUSIONS

From the data presented, we feel the need for greater attention in the management of nursing workers' health, as they present greater physical and psychological ties with patients/family, that is, a more effective relationship with these people. From an organizational standpoint, professionals with burnout may present consequences to the work process, affecting the quality of care provided. In this study, professionals with burnout were not the majority (8.2%), but those with tendency to present this problem were a significant percentage (54.1%).

The organizational work dynamics at an E.R. leads to overload of movement and occupational tension, and it is necessary to monitor periodically mental and physical health of these workers to develop strategies to reorganize the work process decreasing stressful sources.

Therefore, burnout syndrome can be avoided, as long as the culture of the organization favors taking measures to prevent chronic stress with the action of multidisciplinary teams in a perspective to rescue affective characteristics from the routine of care providers.

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ANNEX 1

Questionnaire to identify Burnout Syndrome

Sociodemographic Data	Date of the interview: ____/____/____ Gender <input type="checkbox"/> F <input type="checkbox"/> M
	Birth date: ____/____/____ Age _____ Profession: _____
	Marital Status: _____ Children: <input type="checkbox"/> yes <input type="checkbox"/> no
	Work situation: <input type="checkbox"/> temporary <input type="checkbox"/> registered <input type="checkbox"/> _____
	# of weekly hours: _____ Work shift: <input type="checkbox"/> morning <input type="checkbox"/> afternoon <input type="checkbox"/> night (D)
	Schooling: <input type="checkbox"/> completed high school <input type="checkbox"/> undergraduate <input type="checkbox"/> specialization <input type="checkbox"/> master degree <input type="checkbox"/> PhD
Professional Data	Are you readjusted? <input type="checkbox"/> Yes <input type="checkbox"/> no If you are, what is the reason? _____
	Do you have another job? <input type="checkbox"/> yes <input type="checkbox"/> no If you do, how many? _____
	Profession: _____ What time do you do this work? _____
	How many weekly hours do you dedicate to work? (approximately) _____
	How many justified absences did you have this month? _____
	Month/year of the last vacation: _____
Leisure activities	Do you attend college or another course? <input type="checkbox"/> yes <input type="checkbox"/> no What? _____
	What do you like to do in your free time? _____
	Do you practice any sports? <input type="checkbox"/> yes <input type="checkbox"/> no
	If you do, which sport? _____ How many times a week? _____
Score from 0-6 the following items according to your feelings and symptoms:	
0- never	4- once a week
1- once a year or less	5- some times in a week
2- once a month or less	6- every day
3- sometimes in a month	
Predictors	
1. The activities I perform demand more time than I have in a work day.	Score
2. I feel I can control the procedures and care that I am assigned for in the place I work.	
3. The place where I work acknowledges and rewards accurate diagnoses, care and procedures performed by employees.	
4. I notice that the place I work is sensitive to its employees, valuing and acknowledging the work developed. It also invests in career, and encourages professional development of its employees.	
5. I clearly see that there is respect in the relationships in my institution (among the work team and the coordinators).	
6. In my work I can perform a work that I consider important.	
What do you feel due to work? (somatic symptoms)	
1. Headache.	Score
2. I get easily irritated.	
3. I have loss or excess of appetite	
4. High blood pressure.	
5. Shoulder or neck pain.	
6. Chest pain.	
7. Sleeping difficulties.	
8. I feel mentally exhausted.	
9. I have sexual difficulties.	
10. I feel I have little time for myself.	
11. Overall fatigue	
12. Minor infections.	
13. Increase the use of alcohol, cigarette or chemical substances.	
14. Difficulty with memory and concentration.	
15. Stomach problems	
16. Allergy problems.	
17. Continuous state of speed.	
18. Not feel like starting anything.	
19. I lose my sense of humor.	
20. I have colds and the flue.	
21. I lose the sex drive.	
Maslach Burnout Inventory (MBI)	
Answer the following questions using the same scoring	
1. I feel used up at the end of a work day.	Score
2. I feel that I am at the end of my rope.	
3. I feel emotionally drained from my work.	
4. I feel frustrated by my job.	
5. I feel burned out from my work.	
6. I feel I am working too much on my job.	
7. Working with people directly puts too much stress on me.	
8. Working with people all day is really a strain for me	
9. I feel tired when I get up in the morning and have to face another day on the job.	
10. I feel very energetic.	
11. I feel exhilarated after working closely with my recipients.	
12. I can easily create a relaxed atmosphere with my recipients.	
13. I feel I'm positively influencing other people's lives through my work.	
14. I deal very effectively with the problems of my recipients.	
15. I can easily understand how recipients feel about things.	
16. In my work, I deal with emotional problems very calmly.	
17. I have accomplished many worthwhile things in this job.	
18. I have the feeling some recipients blame me for their problems.	
19. I feel I treat some recipients as if they were impersonal objects.	
20. I've become more callous toward people since I took this job.	
21. I don't really care what happens to some recipients.	
22. I worry that this job is hardening me emotionally.	