

# Burnout in nursing residents\*

BURNOUT EM RESIDENTES DE ENFERMAGEM

BURNOUT EN RESIDENTES DE ENFERMERÍA

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## ABSTRACT

Nursing residents may experience physical and emotional exhaustion from the daily life of attending the Program. The aim of this study was to determine the Burnout incidence among Nursing Residents. An investigative, descriptive, analytical, longitudinal-prospective study was conducted with 16 Residents over two years. The Maslach Burnout Inventory was used, translated and validated for Brazil, as well as a sociodemographic/occupational data tool. Of all residents, 17.2% showed high rates in Emotional Exhaustion and Depersonalization; 18.8% showed impaired commitment in Personal Accomplishment, 75% of which belonged to specialty areas, such as Emergency Nursing, Adult and Pediatric Intensive Care. Age and specialty area were positively correlated with Personal Accomplishment. One of the Residents was identified with changes in three subscales of the Maslach Burnout Inventory, thus characterized as a Burnout Syndrome patient. Nursing Residents have profiles of disease. Knowing these factors can minimize health risks of these workers.

## KEY WORDS

Nursing.  
Burnout, professional.  
Occupational health.

## RESUMO

Enfermeiros Residentes podem experimentar desgaste físico e emocional decorrentes do cotidiano da Residência de Enfermagem. O objetivo deste estudo foi determinar a incidência do Burnout em Residentes de Enfermagem. Realizou-se um estudo exploratório, descritivo, analítico e longitudinal-prospectivo com 16 Residentes, no período de dois anos. Utilizou-se o Maslach Burnout Inventory traduzido e validado para o Brasil e um instrumento de dados sociodemográficos/ocupacionais. Dos Residentes, 17.2% mostraram valores elevados em Exaustão Emocional e Despersonalização; 18.8% comprometimento em Incompetência/falta de Realização Profissional, dos quais 75% pertenciam às especialidades de Pronto Socorro, Unidade de Terapia Intensiva Adulto e Pediátrica. Idade e especialidade correlacionaram-se positivamente com a Incompetência/falta de Realização Profissional. Identificou-se um Residente de Enfermagem com alteração nas três subescalas do Maslach Burnout Inventory, sendo caracterizado como portador da Síndrome de Burnout. Os Residentes de enfermagem possuem perfis de adoecimento. Conhecer esses fatores pode minimizar os agravos à saúde desse trabalhador.

## DESCRIPTORES

Enfermagem.  
Esgotamento profissional.  
Saúde do trabalhador.

## RESUMEN

Los Enfermeros Residentes pueden experimentar desgaste físico y emocional derivado del trabajo cotidiano de la Residencia de Enfermería. El objetivo de este estudio fue determinar la incidencia del Burnout en residentes de enfermería. Se realizó un estudio exploratorio, descriptivo, analítico y longitudinal-prospectivo con 16 Residentes, en el período de dos años. Se utilizó el Maslach Burnout Inventory traducido y validado para Brasil y un instrumento de datos sociodemográficos/ocupacionales. 17,2% de los Residentes mostraron valores elevados en Agotamiento Emocional y Despersonalización, respectivamente; 18,8% compromiso en Incompetencia/falta de Realización Profesional, entre estos, 75% pertenecían a las especialidades de Emergencias, Unidad de Terapia Intensiva de Adultos y Pediatría. Edad y especialidad se correlacionaron positivamente con Incompetencia/falta de Realización Profesional. Se identificó a un Residente de Enfermería con alteración en las tres sub-escalas del Maslach Burnout Inventory, caracterizándose como portador de Síndrome de Burnout. Los Residentes de Enfermería poseen perfiles de sufrimiento. Conocer tales factores puede minimizar los trastornos de salud de dichos trabajadores.

## DESCRIPTORES

Enfermería.  
Agotamiento profesional.  
Salud laboral.

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## INTRODUCTION

Nursing residency has consolidated itself over time as an important opportunity for newly graduated nurses to acquire professional qualifications. It is a form of in-service training that enables the residents to improve professionally and obtain the title of specialist in a chosen field. The existence of this type of program was found in many places in Brazil according to a bibliographic search. Nonetheless, a discussion has emerged concerning the routine of Nursing Residents.

A cross-sectional study<sup>(1)</sup> was previously conducted about Nursing Residency and its repercussions on health-related quality of life (HRQL) for a group of residents. The Medical Outcomes Study 36 - Item Short-Form Health Survey (SF-36) was used and *emotional aspects, vitality and mental health* were the most compromised. No difference was found between the 1<sup>st</sup> (R1) and 2<sup>nd</sup> (R2) years of residency and among the 12 fields of specialization, although the Cardiology, Ophthalmology and Oncology specialties had, in absolute terms, a larger number of compromised individuals.

Burnout Syndrome was described in the 1970s in the field of psychology by the American psychiatrist Herbert Freudenberg. He used the term regarding the observation of idealistic young volunteers working with addicted individuals in the New York City<sup>(2)</sup>.

In 1976, the psychologist Christina Maslach, while studying the emotional responses of helping professionals, used the term to put into colloquial language what Californian lawyers described about their peers who gradually lost their professional interest and responsibility<sup>(2)</sup>.

In the health field<sup>(3)</sup>,

Burnout Syndrome is a response to chronic occupational stress, very frequent among health professionals, and one of the main pathologies of psychosocial origin affecting them because it results in an important rate of absenteeism and abandonment of profession.

Several studies addressing Burnout and its implications for the routine of nurses have been conducted<sup>(4-5)</sup>. The present discussion addresses the reason studying Burnout is relevant. The fact is that helping professions are especially susceptible to high rates of Burnout and organizations are increasingly concerned with the quality of life, well being and physical health of their collaborators because Burnout seriously affects both the occupational and the personal spheres. As a result, the occupational health of health professionals can affect both the quality of care delivery and their degree of professional training<sup>(3,6-7)</sup>. Given the preceding discussion<sup>(1)</sup>, this subject needed to be more deeply examined.

## OBJECTIVE

- To prospectively determine the incidence and predisposing factors for Burnout in Nursing Residents

## METHOD

Exploratory-descriptive and analytical-prospective study carried out at the Federal University of São Paulo. The 16 nursing residents represent the population in the Specialization Course in Nursing - Residence Modality in the period 2004-2005. Participants were included after they signed informed consent forms and the Ethics Research Committee of the Institution approved the project (protocol nº 0051/04).

### Data collection

The study participants answered the Maslach Burnout Inventory (MBI) and a questionnaire addressing socio-demographic/occupational data developed by the authors.

The MBI is composed of 22 items divided into three sub-scales in which high scores in Emotional Exhaustion and Depersonalization and low scores in Incompetence or Lack of Professional Accomplishment indicate Burnout. The items are scored in a Likert scale ranging from zero (never) to four (every day), which are summed up for a global score. The subscales determine:

- Burnout or Emotional Exhaustion (EE): determines the worker's feelings in relation to the job - characterized as emotional burden. It is the initial sign of Burnout marked by psychological and physical manifestations with reduced work capacity;
- Depersonalization or Dehumanization (D): this is the specific characteristic of the syndrome, perceived as insensitivity and dehumanization of care, when individuals start to treat clients and colleagues with coldness and indifference;
- Incompetence or Lack of Professional Accomplishment (I): low efficiency and productivity at work.

The instruments were applied at four different points in time: in the second month (P1); in the 11th month (P2); in the 14th month (P3); and in the 23rd month of residence (P4), totaling two years of the Residency Program. Those who withdrew from the program were excluded from the study. The MBI cutoff point was computed with the average summed to the standard deviation for the subscales Emotional Exhaustion, Depersonalization and subtracting the average from the standard deviation for the subscale Incompetence/Lack Professional Accomplishment. Scores above the cutoff point indicate Emotional Exhaustion and Depersonalization and below the cutoff point indicate Professional Incompetence. An individual has to present altered scores in the three subscales to be characterized as having

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Burnout. The quantitative variables were described through average and standard deviation.

### Statistical Analysis

We evaluated the instrument's internal reliability using Cronbach's alpha. The MBI was accepted as reliable and as having good internal consistency when Cronbach's alpha was above 0.70. Hence, the reliability coefficient in Emotional Exhaustion was 0.9064, Depersonalization 0.7326 and 0.8504 in Incompetence/Professional Accomplishment; the total MBI was 0.7255.

The psychometric tests for the Brazilian versions revealed reliability of 0.86 for Emotional Exhaustion, 0.69 for Depersonalization and 0.76 for Incompetence/Professional Accomplishment. Such results ensure the use of the inventory for Brazilian populations<sup>(8)</sup>. Reliability obtained in the original version<sup>(9)</sup> for Emotional Exhaustion was 0.90, Depersonalization 0.79 and 0.71 for Incompetence/Professional Accomplishment.

Person's Chi-square test, Fisher's exact test, Cronbach's alpha and Person's linear correlation were applied in the study. The level of significance was fixed at 5%, hence,  $p$ -values  $< 0.05$  were considered significant.

## RESULTS

The sample was mainly composed of female individuals (81.3%), aged on average 25.8 years old, single (93.8%), Caucasians (81.3%), with no children (87.5%), originating from São Paulo (87.5%).

The MBI scores were tabulated by period of data collection (P1, P2, P3 and P4) and by subscales (Emotional Exhaustion, Depersonalization, and Incompetence/Lack Professional Accomplishment). Each period of data collection had its cutoff point changed depending on the group's behavior. It is worth mentioning that the residents maintained feelings of Emotional Exhaustion, Depersonalization, and Incompetence/Lack of Professional Accomplishment throughout the program.

An average of 17.2% of the residents displayed alterations in the subscales Emotional Exhaustion and Depersonalization and an average of 18.8% of the residents displayed alterations in the subscale Incompetence/Lack of Professional Accomplishment. We also inferred that the residents presenting altered scores over the four periods of data collection are not the same since one resident (6.3%) presented alterations in the three subscales in P4 and, consequently, Burnout syndrome (Table 1).

**Table 1** - Distribution of the results of the MBI subscales and of the nursing residents by altered subscales - São Paulo, SP, Brazil - 2007

Sub-scales	Data collection period	average (SD)	Mínimum	Maximum	Cutoff point*	n (%)
Emotional Exhaustion	P1	20.0 (4.2)	11	25	24.2	3 (18.8)
	P2	22.8 (5.6)	14	33	28.4	2 (12.5)
	P3	22.9 (4.7)	16	31	27.6	3 (18.8)
	P4	24.3 (6.4)	16	37	30.7	3 (18.8)
Depersonalization	P1	9.3 (2.2)	5	13	11.5	3 (18.8)
	P2	10.8 (4.2)	5	20	15.0	3 (18.8)
	P3	9.8 (3.3)	6	17	13.1	2 (12.5)
	P4	11.1 (3.8)	3	17	14.9	3 (18.8)
Professional Incompetence	P1	33.4 (5.0)	23	40	28.4	3 (18.8)
	P2	32.1 (4.6)	24	39	27.5	2 (12.5)
	P3	32.2 (5.3)	22	39	26.9	3 (18.8)
	P4	31.5 (4.9)	24	38	26.6	4 (25.0)
Burnout Syndrome	P4	-	-	-	-	1 (6.3)

When the residents' age (average 25.8 years old) was correlated to the MBI subscales, statistically significant

correlation was found in P1 (0.038) and P2 (0.026) (R1) referring to Professional Accomplishment as observed in Table 2.

**Table 2** - Relationship between the 16 nursing residents' age and the MBI subscales - São Paulo, SP, Brazil - 2007

Data Collection Period	Sub-scales	Age (average = 25.8 years old)	
		Pearson's coefficient correlation (r)	P
P1	Emotional Exhaustion	-0.458	0.074
	Depersonalization	-0.078	0.774
	Professional Accomplishment	0.522	<b>0.038</b>
P2	Emotional Exhaustion	-0.413	0.112
	Depersonalization	0.276	0.300
	Professional Accomplishment	0.553	<b>0.026</b>
P3	Emotional Exhaustion	-0.360	0.171
	Depersonalization	0.322	0.223
	Professional Accomplishment	0.467	0.068
P4	Emotional Exhaustion	-0.284	0.286
	Depersonalization	0.335	0.204
	Professional Accomplishment	0.451	0.079

The variable specialty B (Emergency, Adult and Pediatric Intensive Therapy Units) was statistically significant ( $p = 0.027$ ) correlated with the scores of the subscale Professional Accomplishment, as presented in Table 3. Of the in-

dividuals who presented feelings of Incompetence/Lack of Professional Accomplishment, 75% of them belonged to specialty B.

**Table 3** - Relationship between the socio-demographic and occupational variables and the subscale Incompetence/ Professional Accomplishment of the MBI - São Paulo, SP, Brazil 2007.

Socio-demographic variables/Occupational	Incompetence/Professional Accomplishment		P
	Yes n (%)	No n (%)	
<b>Gender</b>			
Male	0 (0.0)	1 (8.3)	1.000**
Female	4 (100.0)	11 (91.7)	
<b>Marital Status</b>			
Married (o)	0 (0.0)	1 (8.3)	1.000**
Single (o)	4 (100.0)	11 (91.7)	
<b>Ethnicity</b>			
Caucasians	3 (75.0)	10 (83.3)	1.000**
Non-Caucasians	1 (25.0)	2 (16.7)	
<b>Children</b>			
Yes	0 (0.0)	2 (16.7)	1.000**
No	4 (100.0)	10 (83.3)	
<b>Origin</b>			
São Paulo – capital	1 (25.0)	5 (41.7)	0.459*
São Paulo – interior	3 (75.0)	5 (41.7)	
Other states	0 (0.0)	2 (16.7)	
<b>Specialty</b>			
A	1 (25.0)	11 (91.7)	<b>0.027**</b>
B	3 (75.0)	1 (8.3)	
<b>Unit</b>			
Open	0 (0.0)	6 (50.0)	0.234**
Closed	4 (100.0)	6 (50.0)	
<b>Living arrangements</b>			
Family	0 (0.0)	3 (25.0)	0.537*
Housing provided by the institution	3 (75.0)	7 (58.3)	
Share rent	1 (25.0)	2 (16.7)	
<b>Time spent to get to the hospital (in minutes)</b>			
≤ 30	4 (100.0)	11 (91.7)	1.000**
31 – 60	0 (0.0)	1 (8.3)	

\* Pearson's Chi-square test

\*\* Fisher's exact test

## DISCUSSION

The presented results indicate that the studied group displays susceptibility to Burnout in some variables. They are young, female, single individuals, without children, at the beginning of their professional career<sup>(5,7)</sup>. The correlation between the socio-demographic/occupational variables with the MBI subscales indicated statistically ( $p < 0.05$ ) significant correlation in P1 (0.038) and P2 (0.026) (first year - R1) regarding Incompetence/Lack of Professional Accomplishment. Although a reduced number of residents presented low Professional Accomplishment/Incompetence over time, the analysis of this subscale indicated positive changes over R2, that is, this feeling became less intense.

Although a statistically positive correlation was found between age and low Professional Accomplishment in a specific group of residents, one cannot ignore that other individuals presented Emotional Exhaustion and Depersonalization. We highlight that a higher incidence of Burnout was identified among those younger than 30 years of age (period of transition between the individuals' idealist expectations and daily practice) and the highest scores were obtained in the subscale Depersonalization, while older individuals displayed higher scores in the subscale Incompetence/Lack of Professional Accomplishment<sup>(5,7)</sup>.

The author of one study<sup>(10)</sup> did not find significant difference in the factor age, except in the subscale Incompetence/Lack of Professional Accomplishment. She also stresses that lower scores are usually observed in younger individuals in the subscale Professional Accomplishment because these feel less realized than the older ones, which corroborates our findings.

For another author<sup>(11)</sup>, age regulates the stressing factors and implies experience and familiarity with diverse situations and also that, over time, older and more mature people are more reasonable and react better to daily events, although no consensus has been achieved among researchers in relation to this variable. Other studies<sup>(8,12)</sup> did not find significant correlation between age and the MBI subscales. The younger members<sup>(13)</sup> of the nursing team are more affected by Depersonalization and Emotional Exhaustion.

Newly graduated nurses, young and inexperienced in professional terms, seek to put theory into practice during their residency program. Therefore, these individuals may initially display feelings of incompetence and self-devaluation but these feelings gradually give place to personal and professional self-assurance and competence<sup>(14)</sup>.

Another variable that obtained statistically significant correlation was specialty. This variable was correlated (0.027) with the subscale Incompetence/Lack of Professional Accomplishment but not with the subscales Emotional Exhaustion and Depersonalization. Of the four residents who presented feelings of Incompetence/Lack of Professional Accomplish-

ment, one (25%) of them belonged to one of the A specialties and three of them (75%) to specialty B.

We grouped the specialties into two groups: A (Cardiology, Nephrology, Orthopedic, Infectology, Neurosurgery, Oncology and General Pediatric) and B (Emergency, Adult and Pediatric Intensive Therapy Units). The residents of both the adult and pediatric specialties go through specific units (open and closed). This practice of rotation is required and also well accepted in the residency program because it enables students to broaden their theoretical-practical knowledge in different contexts and to acquire a generalist view within the specialty they choose<sup>(1)</sup>.

The influence of the specialty/unit of work for the development of Burnout has been described in many studies. The results presented here contradict those found in the literature in which nurses present more Emotional Exhaustion and Depersonalization when working in specialized units.

The author of another study<sup>(8)</sup> revealed that units such as Hospitalization, Intensive Care Therapy, Outpatient, Hemodialysis, Dialysis, Surgical Center, Recovery, Sterile Supply Department, Obstetric Center, Emergency Department, Pediatrics and Neonatology, showed statistically significant variation in the sub-scales of Emotional Exhaustion and Depersonalization. No significant correlation was found in the sub-scale Incompetence/Lack of Professional Accomplishment.

The care demanded by patients in the Emergency, Adult and Pediatric Intensive Therapy units (here called B specialties) is so intense both in technological and emotional terms, and also so complex and time pressured, that nurses in these units display high scores of Emotional Exhaustion and Depersonalization when compared to other hospital units<sup>(8)</sup>.

Professional inexperience and work overload are the main sources of Burnout<sup>(15)</sup>. From this perspective, we emphasize that the studied individuals did not have any other occupational activity related to nursing and were newly graduated, which explains their professional inexperience.

In relation to work overload, it is a fact that residents assume the responsibility for providing direct care to more than one patient per shift, as opposed to the units' nurses (non-resident nurses usually play management roles and do not fully dedicate their time to direct patient care). The fact is that residents are not totally familiar with or prepared to assume a large number of patients and, therefore, feel overwhelmed.

Many times, in order to avoid situations of conflict, they end up assuming the responsibility for providing care to the patients with more severe conditions and also managing the unit. Despite this added responsibility, as they progress in the program, and given their routine and daily experiences in each unit/specialty in which they work, these

feelings are minimized and replaced by increased self-assurance and technical ability.

The residence program is an exhausting professional experience and this fact is well documented in the literature<sup>(16)</sup>. In relation to the Nursing Residence program, the authors<sup>(17)</sup> cover some manifestations of residents related to the working conditions experienced by nurses during the professional training period. Some of the reported aspects refer to dissatisfaction concerning the replacement of employees during days off, vacation, medical leave, bypass function, low income, physical and mental/emotional exhaustion<sup>(18)</sup>, no time for leisure, and especially a conflicting relation concerning a lack of professional identity<sup>(1,4)</sup>.

In the sample of the studied residents, no statistically significant correlation ( $p > 0.05$ ) was found among the scores of the subscales Emotional Exhaustion, Depersonalization and Professional Incompetence and the socio-demographic/occupational variables. This result is similar to those found by another study's authors<sup>(5)</sup> and contrary to those that have shown that gender, marital status, and children, among others, are variables associated with Burnout<sup>(7)</sup>.

The factors related to Burnout in nurses seem to be numerous. However, it is believed that professionals with more than 10 years of experience in the field are less vulnerable to Burnout. This information is corroborated by one author<sup>(8)</sup>, who states that having little experience in nursing practice is one of the variables associated with Burnout since inexperience may trigger feelings of insecurity and

anxiety. It is worth mentioning that there is individual variability and susceptibility to certain situations that often influence and determine changes of behavior and attitudes in addition to socio-demographic, occupational and behavioral characteristics.

## CONCLUSION

This investigation characterized and analyzed the presence of Burnout throughout the training of nursing residents. The studied subject is broad in terms of knowledge concerning this pathology but restricted in terms of the studied population.

Some limitations have to be taken into account such as the fact this study was carried out in a single facility, and the reduced sample given sample loss; ten (38.5%) residents withdraw the program. It was not possible to establish a reliable comparison of results with those of other studies because in most of them different criteria and cutoff points were used, although there is a certain homogeneity in relation to the incidence and prevalence of Burnout in nurses. Although, the study's longitudinal-prospective character and originality of the subject (first Brazilian study) are considered a strength of this study.

Therefore, this subject has not been completely treated. The developments of this evidence will be discussed in the future and related with other variables since this is a partial approach of a larger study.

## REFERENCES:

1. Franco GP. Qualidade de vida e sintomas depressivos em residentes de enfermagem da UNIFESP/EPM [dissertação]. São Paulo: Universidade Federal de São Paulo; 2002.
2. Schwartzmann L. Strés laboral, síndrome de desgaste (quemado), depresión ? Estamos hablando de lo mismo? *Cienc Trab.* 2004;6(14):174-84.
3. Gil-Monte PR. El síndrome de quemarse por el trabajo (síndrome de Burnout) en profesionales de enfermería. *Rev Electrónica InterAção Psy* [Internet]. 2003 [citado 2010 fev. 11];1(1):19-33. Disponible en: <http://www.bvsde.paho.org/bvsacd/cd49/artigo3.pdf>
4. Flórez Lozano JA. Síndrome de "Estar Quemado". Barcelona: Edika-Méd; 1994.
5. Bernardi M, Catania G, Marceca F. The world of nursing burnout: a literature review. *Prof Inferm.* 2005;58(2):75-9.
6. Maslach C, Jackson SE. The measurement of experienced burnout. *J Occup Behav.* 1981;2(1):99-113.
7. López Franco M, Rodríguez Núñez A, Fernández Sanmartín M, Marcos Alonso S, Martínón Torres F, Martínón Sánchez JM. Síndrome de desgaste profesional en el personal asistencial pediátrico. *An Pediatr (Barc).* 2005;62(3):248-51.
8. Lautert L. O desgaste profissional do enfermeiro [tese]. Salamanca: Escola Salamanca; Universidad Pontificia de Salamanca; 1995.
9. Maslach C, Jackson SE, Leiter MP. *Maslach burnout inventory*. 3rd ed. Palo Alto, CA: Consulting Psychologists Press; 1996.
10. Benevides-Pereira AMT. Burnout: quando o trabalho ameaça o bem-estar do trabalhador. São Paulo: Casa do Psicólogo; 2002.
11. Ferreira FG Desvendando o estresse da equipe de enfermagem em terapia intensiva. [dissertação]. São Paulo: Universidade Federal de São Paulo; 1998.

12. Rodrigues AB. Burnout e estilos de coping em enfermeiros que assistem pacientes oncológicos [tese]. São Paulo: Escola de Enfermagem, Universidade de São Paulo; 2006.
13. Maslach C, Jackson SE. Maslach burnout inventory. 2nd ed. Palo Alto, CA: Consulting Psychologists Press; 1986.
14. Matheus MCC. A obstinação como mediadora entre a idealização e a concretude do cuidado instituído: a experiência da enfermeira recém-formada [tese]. São Paulo: Escola de Enfermagem, Universidade de São Paulo; 2002.
15. Escribà Agüir V, Más Pons R, Cárdenas Echegaray M. Estresores laborales y bienestar psicológico: impacto en la enfermería hospitalaria. *Rev ROL Enferm*. 2000;23(7/8):506-11.
16. Berg JK, Garrard J. Psychosocial support in Residency Training Programs. *J Med Educ*. 1980;55(10):851-7.
17. Lopes GT, organizadora. Residência de enfermagem: espaço de lutas e contradições. Rio de Janeiro: EPUB; 2002.
18. De Martino MMF, Misko MD. Estados emocionais de enfermeiros no desempenho profissional em unidades críticas. *Rev Esc Enferm USP* [Internet]. 2004 [citado 2010 fev. 11];38(2):161-7. Disponível em: <http://www.scielo.br/pdf/reeusp/v38n2/06.pdf> DOI: 10.1590/S0080 6234200400020 0006