



ORIGINAL RESEARCH PAPER

Psychiatry

PREVALENCE OF BURNOUT SYNDROME IN PEDIATRICIANS OF NEONATAL CARE IN ONE CITY OF BRAZIL

KEY WORDS: occupational health of these professionals.

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ABSTRACT

Introduction: The stress due to the work in the health professionals is becoming an important problem. The medicine promotes high levels of stress, which can result in negative consequences to the professionals. **Objective:** To evaluate the prevalence of Burnout Syndrome (BS) and associated factors in pediatricians of neonatal care in Mossoró/RN. **Methods:** It was performed a cross-sectional epidemiological study after approval in Research Ethics Committees and filling the informed consent form. It was applied a questionnaire to the pediatricians, which included biodemographic data and the Maslach Burnout Inventory, that evaluates the presence of BS. **Results:** The prevalence of BS was 45.0%. There was statistical significance for younger physicians, with less time of general and specialist work, higher night workload and the emotional exhaustion item. **Conclusion:** Know these factors is important to guide prevention and promotional care strategies in the occupational health of these professionals.

INTRODUCTION

The term Burnout Syndrome (BS), derived from the English "to burn out", was first described in 1974 by the psychoanalyst Herbert Freudenberger, whom already associated the decrease of the work satisfaction and the feeling of exhaustion to the lack of motivation caused by the absence of emotional energy¹. Later at 1980-decade Christina Maslach and Susan Jackson characterized the syndrome as a kind of permanent and deep stress provoked by the work².

Pediatrician is a specialized area dedicated to the children and evolves the assistance to the sick one and its family³. The practice of pediatrician is marked by a hard relation with the external surrounding motivated by the access limitations and the deficit of attention to the children in the health services and by the structure of the work's place⁴.

That being said and considering the importance of the work developed by the pediatricians, as well as the susceptibility of develop the syndrome, the aim of this study is to identify the prevalence of BS in a sample of pediatricians in a specialized hospital of Mossoró, Brazil, as well as associated factors.

METHODOLOGY

It was performed a cross-sectional epidemiological study with application of questionnaires to pediatricians in the period from November 2018 to June 2019 at Mossoró/RN. This research was approved at Research Ethics Committee of Rio Grande do Norte State University.

The population was composed by 30 professionals that worked at delivery room and obstetric center of the only maternity hospital of the city of Mossoró, Brazil. It was invited to participate the research all the pediatricians that worked in the studied hospital, registered at Regional Board of Medicine of Rio Grande do Norte State and in active operation for at least six consecutive months. The exclusion criteria

considered were: pediatricians away from work because of vacations, license, hospitalized or with less than six months working.

The individuals were approached in their place of work and invited to voluntarily participate of the research through a questionnaire for characterized the BS, the Maslach Burnout Inventory (MBI)⁵. The results obtained through the MBI were analyzed by the Grunfeld et al. criteria (2000)⁶, which define BS by the presence of high level in at least one of the dimensions.

The questionnaires were codified and typed through Microsoft Office Excel ® Software and after analyzed at Statistical Package for the Social Science (SPSS) 20.0 for Windows. The association between the cases of BS found and the socio-occupational information's found was verified through tests of statistic inference with the proportions been compared by the prevalence ratio and Person's Qui-Squared Test. It was adopted a significance level of 5% for rejection of nullity's hypotheses.

RESULTS

The sample consisted of 20 pediatricians (66.7% of the population) of both sexes. Demographic data are in table 1 and occupational data in table 2.

Table - 1: Distribution according to gender, age, marital status of the pediatricians of neonatal care at Mossoró, Brazil (n = 20).

Characteristic	N (%)
Gender	
Male	8 (40.0)
Female	12 (60.0)
Age (years)	
Average (sd)	39.2 (11.3)

Minimum	29
Maximum	69
Marital status	
Married/common-law marriage	14 (70.0)
Single	4 (20.0)
Divorced	2 (10.0)

sd: standard deviation.

Analyzing the prevalence of the amount of interviewed professionals, the emotional exhaustion dimension showed prevalence at high level of 20.0%. At depersonalization dimension there was a high level of 5.0% of the amount. Lastly, at professional accomplishment dimension, it was revealed a prevalence of low-level equivalent to 45.0% of this item (table 3). Based on the criteria of Grunfeld et al. (2000), the prevalence in this article was 45.0%.

Table - 2: Distribution according to aspects related to work: shifts, kind and weekly workload of the physicians at neonatal care at Mossoró, Brazil (n = 20).

Characteristics	N (%)
Work shifts	
Daytime	1 (5.0)
Day and night	19 (95.0)
Kind of work	
Only private	5 (25.0)
Private and public	15 (75.0)
Weekly daily workload (h)	
Average (sd)	35.9 (9.8)
Minimum	15
Maximum	50
Weekly night workload (h)	
Average (sd)	21.3 (10.4)
Minimum	1
Maximum	36

sd: standard deviation.

Table - 3: Dimensions of BS according to MBI of the pediatricians interviewed at neonatal care at Mossoró, Brazil (n= 20).

Item	Level	N (%)
Emotional exhaustion	Low	10 (50.0)
	Moderate	6 (30.0)
	High	4 (20.0)
Depersonalization	Low	14 (70.0)
	Moderate	5 (25.0)
	High	1 (5.0)
Professional accomplishment	Low	9 (45.0)
	Moderate	4 (20.0)
	High	7 (35.0)

For the one hand, it was observed the negative correlation and the statistical significance for age, time of professional and specialist practice time and the EE dimension. This shows that younger physicians, with less time of work and with less time of medical specialization showed bigger emotional exhaustion. On the other hand, it was observed a positive correlation for weekly night workload, showing that night workloads associate to a significant tiredness for this BS dimension (table 4). For the depersonalization and the professional accomplishment dimensions it wasn't found significant values.

Table - 4: Association between the dependent and the independent variables of MBI of physicians at neonatal care at Mossoró, Brazil (n= 20).

Variable	Indicators	MBI score		
		EE	DP	PA
Age	r-value	-0.477	-0.260	-0.174
	p-value	0.034*	0.268	0.463

Time of professional practice	r-value	-0.514	-0.264	0.002
	p-value	0.020*	0.261	0.992
Time of medical specialist practice	r-value	-0.527	-0.298	0.023
	p-value	0.017*	0.202	0.925
Weekly night workload	r-value	0.475	0.275	-0.015
	p-value	0.034*	0.241	0.950

* p significant

DISCUSSION

The prevalence of BS found in the sample was 45.0%. In researches made by Baer et al. 2017⁷ with pediatricians' residents at United States several results were found indicating a prevalence of 39.0 to 49.3% of BS in this population. In a recent research made at 2017 with United States physicians it was observed high levels of BS in pediatricians with 60.0% of prevalence⁸.

When analyzing the dimensions to measure the presence of BS, it was observed that the studied population showed similar findings as the ones found by Marques et al. 2018⁹ and Tironi et al. 2016¹⁰ for the depersonalization and professional accomplishment dimensions, but opposite for the emotional exhaustion dimension, which presented a mostly high value, unlike the observed at this sample. Lots of authors have detected a meaningful reduction at EE and DP scores¹¹.

Generally, the main dimension affected in the participant physicians is the emotional exhaustion, considered the precursor of the syndrome and the most prevalent at studies about this subject. The exhaustion promotes physical and emotional tiredness, complicating the deal with difficult situations at work and decrease of energy to achieve the work^{9,11,12}.

Considering the criteria of Grunfeld et al.⁶ it was found a significant statistical association with negative correlation for bigger levels of the syndrome for ages, time of medical practice and time of specialist medical practice and significant statistical association with positive correlation for weekly night workload, similar findings as the literature^{10,12,13}.

The relation between gender with BS is still controversial. This high prevalence of BS in females could be explained by the double workload (professional and housewifely)^{12,14}, while the significant decrease can be explained by the familiar support received by the spouse or the friends⁹. The agreement in the studies are that female professionals have better evaluation of life quality, which can drive the evaluative scores in this group⁹.

There was a statistic significance to the EE dimension for hours of night workload, showing that exist a bigger propension of tiredness in the pediatricians that worked at night. This result differed than the researches previously made with physicians, in which was observed that who worked during the day had a bigger propension for BS when compared to the ones that worked at night shifts¹⁵.

Some factors in this research should be highlighted. Because this is a cross-sectional study, it is possible to analyze the prevalence of BS only in the moment of the data collect. It is also important to emphasize that some professionals showed resistance to answer the questionnaire for the data collection, which was justified specially for the lack of time due to the workload, justly one of the predispose factors to BS.

CONCLUSIONS

Know the variables that can contribute to the sickness and the prevalence of BS in the studied population allows the comprehension of weaknesses and try to improve them, contributing to better work conditions and personal satisfaction. It is necessary that occurs the awareness about the value of the mental health care for the health

professionals, as well as the construction of care plans and the disclosure about the theme in the physician's environment.

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