

RESUMO

ASSOCIAÇÃO ENTRE SÍNDROME DE *BURNOUT* E OBESIDADE: UM ESTUDO TRANSVERSAL

Introdução: A Síndrome de *Burnout* (SB) é caracterizada por um estado de esgotamento físico e mental decorrente da cronificação do estresse laboral. Estressores crônicos desempenham um papel importante para o desenvolvimento de doenças metabólicas. A literatura aborda a possível relação entre o *burnout* e alterações no eixo Hipotalâmico-Hipofisária-Adrenal (HHA). **Objetivo:** Estimar a associação entre o *Burnout* e a Obesidade em Enfermeiros da Atenção Primária à Saúde do estado da Bahia, Brasil.

Metodologia: Realizou-se um estudo populacional de corte transversal, analítico, confirmatório, integrado a uma pesquisa multicêntrica, intitulada “Síndrome de *Burnout* e Síndrome Metabólica em trabalhadores de Enfermagem da Atenção Básica à Saúde – (APS)”, tal pesquisa foi conduzida em 43 municípios, contemplando as 07 mesorregiões da Bahia, Brasil, com 455 enfermeiros. Utilizou o *Maslach Burnout Inventory* para identificar o *Burnout*. A obesidade foi considerada pelo Índice de Massa Corpórea (\geq a 30,0 Kg/m²). Realizou análise descritiva, bivariada e regressão logística. **Resultados:** A prevalência do *Burnout* foi de 17,7%, e da obesidade correspondeu de 12,7%. Os fatores associados ao *Burnout* foram: sexo, idade, hábito de fumar, padrão de sono, trabalho fora da APS, Tempo de APS. O *Burnout* esteve associado com a obesidade, mesmo após ajuste e com significância estatística (RP ajustada 1,85 - IC 95% = 1,11 – 3,06 – $p= 0,01$). **Conclusão:** Estratégias são

necessárias para identificar, tratar e prevenir o *Burnout*. Programas de saúde ocupacional se torna uma alternativa de controle do estresse, e conseqüentemente das suas complicações como o *Burnout* e seus agravos à saúde.

Palavras-chave: 1.Esgotamento Profissional; 2. Obesidade; 3.Atenção Primária à Saúde; 4.Trabalho; 5. Enfermagem.

ABSTRACT

ASSOCIATION BETWEEN BURNOUT SYNDROME AND OBESITY: A CROSS-SECTIONAL STUDY

Introduction: Burnout Syndrome (BS) is a state of physical and mental exhaustion resulting from chronicity of work-related stress. Chronic stressors play an important role in developing metabolic diseases. The specialized literature addresses the possible relationship between burnout syndrome and changes in the Hypothalamic-Pituitary-Adrenal (HPA) axis. **Objective:** estimating the association between burnout and obesity in primary health care nurses in the state of Bahia, Brazil. **Methodology:** a cross-sectional, analytical, confirmatory, population-based study was carried out and it is integrated with a multicenter research entitled "Burnout and Metabolic Syndromes in Primary Health Care (PHC) Nursing Workers". This research was conducted in 43 municipalities, covering 455 nurses in 7 mesoregions of Bahia, Brazil. The

Maslach Burnout Inventory was used to identify burnout. Obesity was considered by Body Mass Index ($\geq 30.0 \text{ Kg/m}^2$). A descriptive, bivariate analysis and logistic regression were performed. **Results:** The prevalence of burnout and obesity was 17.7% and 12.7%, respectively. The following factors were associated with burnout: sex, age, smoking, sleep pattern, work outside PHC, PHC time. Burnout was associated with obesity, even after adjustment and statistical significance (adjusted PR 1.85 - 95% CI = 1.11 – 3.06 – $p = 0.01$). **Conclusion:** Strategies are needed to identify, treat, and prevent burnout. Occupational health programs become an alternative to control stress and, thus, burnout and its health aggravations.

Keywords: 1. Occupational Burnout; 2. Obesity; 3. Primary Health Care; 4. Work; 5. Nursing.

TABELAS

Table 1. Sociodemographic, labor, lifestyle, and health characteristics among PHC nurses; Bahia, Brazil. 2018, (N=455).

Variables	N (%)	Obesity (N = 455) P [#] = 58 (12.7%)			
		P (%) ^a	PR ^b	CI (95 %) ^c	p-value ^d
Sex (n = 455)					
Female	391 (85.9)	43 (11.0)			
Male	64 (14.1)	15 (23.4)	2.13	1.26 – 3.60	<0.01
Age (n = 455)					
Up to 35 years old	320 (70.3)	32 (10.0)			
≥ 36	135 (29.7)	26 (19.3)	1.92	1.19 – 3.10	<0.01
Race/ethnicity (n = 450)					
White/yellow	129 (28.7)	16 (12.4)			
Black	321 (71.3)	41 (12.8)	1.03	0.59 – 1.76	0.91
Marital Status (n = 455)					
Without partner	260 (57.1)	27 (10.4)			
With partner	195 (42.9)	31 (15.9)	1.53	0.94 – 2.47	0.08
Physical Activity (n = 455)					
Yes	303 (66.6)	35 (11.6)			
No	152 (33.4)	23 (15.1)	1.31	0.80 – 2.13	0.28
Smoking (n = 455)					
No	409 (89.9)	47 (11.5)			
Yes	46 (10.1)	11 (23.9)	2.08	1.16 – 3.72	0.01
Alcohol (n = 455)					
Not always drink	437 (96.0)	53 (12.1)			
Always drink	18 (4.0)	5 (27.8)	1.20	0.70 – 2.06	0.49
Food (n = 455)					
Healthy	233 (51.2)	27 (11.6)			
Unhealthy	222 (48.8)	31 (13.9)	1.20	0.74 – 1.95	0.44
Sleep pattern (n = 455)					
Satisfactory	218 (47.9)	20 (9.2)			
Unsatisfactory	237 (52.1)	38 (16.0)	1.74	1.05 – 2.90	0.02
Satisfaction with occupation (n = 455)					
Yes	402 (88.4)	55 (13.7)			
No	53 (11.6)	3 (5.7)	0.41	0.13 – 1.27	0.09
Works outside PHC (n = 455)					
No	311 (68.4)	32 (10.3)			
Yes	144 (31.6)	26 (18.1)	1.75	1.08 – 2.83	0.02
Night shift (n = 455)					
No	365 (80.2)	41 (11.2)			
Yes	90 (19.8)	17 (18.9)	1.68	1.00 – 2.81	0.05
Aggression at work (n = 455)					
No	310 (68.1)	36 (11.6)			
Yes	145 (31.9)	22 (15.2)	1.30	0.79 – 2.13	0.29
Working conditions (n = 455)					
Satisfactory	288 (63.3)	42 (14.6)			
Unsatisfactory	167 (36.7)	16 (9.6)	0.65	0.38 – 1.13	0.12
PHC time (n = 455)					
Up to 4 years	290 (63.7)	28 (9.7)			
≥ 5 years	165 (36.3)	30 (18.2)	1.88	1.16 – 3.03	< 0.01
Work binding (n = 455)					
Stable	319 (70.1)	46 (14.4)			

Precarious	136 (29.9)	12 (8.8)	0.61	0.33 – 1.11	0.10
Burnout (n = 451)					
No	371 (82.3)	40 (10.8)			
Yes	80 (17.7)	18 (22.5)	2.08	1.26 – 3.44	< 0.01
Emotional Exhaustion (n = 453)					
Low/Moderate	315 (69.5)	31 (9.8)			
High	138 (30.5)	27 (19.6)	1.98	1.23 – 3.19	< 0.01
Depersonalization (n = 454)					
Low/Moderate	264 (58.1)	23 (8.7)			
High	190 (41.9)	35 (18.4)	2.11	1.29 – 3.45	< 0.01
Reduced Professional Achievement (n = 451)					
Low/Moderate	169 (37.2)	14 (8.3)			
High	285 (62.8)	44 (15.4)	1.86	1.05 – 3.29	0.02

^aP = Prevalence of outcome between exposed and unexposed; ^b PR = Prevalence Ratio; ^c CI = 95% confidence interval; ^dP-value = Chi-square test; [#]P = Overall prevalence of the outcome.

Table 2. Association between burnout and obesity per strata of sociodemographic, labor, lifestyle and health characteristics of primary health care nurses, Bahia, Brazil. 2018, (n=455).

Variables	PR ^a	95% CI ^b	p-value ^c
Sex			
Male	2.03	1.10 – 3.73	
Female	1.7	0.71 – 4.1	0.75
PR _{adjusted}	1.92	1.16 – 3.16	
Age			
Up to 35 years old	1.65	0.76 – 3.59	
≥ 36	2.16	1.1 – 4.23	0.61
PR _{adjusted}	1.91	1.15 – 3.18	
Race/ethnicity			
White/yellow	1.46	0.51 – 4.13	
Black	2.26	1.25 – 4.7	0.47
PR _{adjusted}	2.01	1.20 – 3.34	
Marital Status			
With partner	2.49	1.19 – 5.16	
Without partner	1.74	0.87 – 3.45	0.48
PR _{adjusted}	2.05	1.24 – 3.38	
Physical activity			
Yes	2.67	1.41 – 5.05	
No	1.39	0.62 – 3.13	0.22
PR _{adjusted}	2.01	1.22 – 3.29	
Smoking			
No	1.96	1.10 – 3.52	
Yes	1.90	0.69 – 5.21	0.96
PR _{adjusted}	1.95	1.18 – 3.23	
Alcohol			
No	2.42	1.45 – 2.03	
Yes	-	-	-
PR _{adjusted}	2.05	1.24 – 3.38	
Food			

Healthy	1.63	0.74 – 3.59	
Unhealthy	2.54	1.33 – 4.86	0.39
PR _{adjusted}	2.09	1.26 – 3.44	
Sleep pattern			
Satisfactory	1.85	0.72 – 4.74	
Unsatisfactory	2.08	1.15 – 3.75	0.83
PR _{adjusted}	2.01	1.22 – 3.31	
Satisfaction with occupation			
Yes	2.57	1.56 – 4.24	
No	0.76	0.07 – 7.88	0.31
PR _{adjusted}	2.35	1.44 – 2.82	
Works outside PHC			
No	1.28	0.53 – 3.12	
Yes	2.49	1.26 – 4.90	0.24
PR _{adjusted}	1.92	1.12 – 3.37	
Night shift			
No	1.53	0.77 – 3.03	
Yes	0.09	1.35 – 7.09	0.19
PR _{adjusted}	2.00	1.19 – 3.37	
Aggression at work			
No	1.40	0.65 – 3.00	
Yes	3.14	1.49 – 6.61	0.13
PR _{adjusted}	2.07	1.23 – 3.49	
Work conditions			
Satisfactory	1.48	0.78 – 2.80	
Unsatisfactory	4.50	1.83 – 11.03	0.05
PR _{adjusted}	2.10	1.27 – 3.48	
PHC time			
Up to 4 years old	1.99	0.91 – 4.38	
≥ 5 years	1.87	0.98 – 3.58	0.90
PR _{adjusted}	1.92	1.16 – 3.17	
Work binding			
Stable	2.63	1.55 – 4.45	
Precarious	0.46	0.06 – 3.37	0.08
PR _{adjusted}	2.07	1.25 – 3.43	

^aPR = Prevalence Ratio; ^bCI = 95% Confidence Interval; ^cP-value = Braslow Day's homogeneity test.

Table 3. Final model of association between burnout and obesity obtained by multivariate logistic regression.

Final Model	PR _{gross}	CI (95%)	PR _{adjusted}	CI (95%)	p-value
<i>Burnout</i> ^a	2.09	1.28 – 3.44	1.85	1.11 – 3.06	0.01
ROC curve area	0.72				
Fit-of-goodness test ^b	0.61				

^aAdjusted by sex, age, physical activity, healthy eating, satisfaction with occupation, another job, night shift, PHC time, and working conditions. ^bHosmer-Lemeshow. PR = Prevalence Ratio; CI = 95% Confidence Interval.