

Burnout Syndrome in Oncology Nursing Professionals: Cross-Sectional Study

<https://doi.org/10.32635/2176-9745.RBC.2024v70n4.4983>

Síndrome de Burnout em Profissionais de Enfermagem Oncológica: Estudo Transversal
Síndrome de Burnout en Profesionales de Enfermería Oncológica: Estudio Cruzado

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ABSTRACT

Introduction: In 2022, the World Health Organization (WHO) included Burnout Syndrome (BS) as an occupational disease. BS is a response to chronic stress in the workplace, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. **Objective:** To estimate the prevalence of BS among oncology nursing professionals, identify factors associated with BS, and describe the epidemiological, work, and lifestyle profile of these professionals. **Method:** Descriptive cross-sectional study with a quantitative approach at the High Complexity Oncology Center of Bahia. The sample consisted of 110 nursing professionals. Data collection included a sociodemographic questionnaire and the Maslach Burnout Inventory (MBI), adapted to Portuguese. Data analysis was performed with SPSS, including descriptive statistics and bivariate analysis. **Results:** The prevalence of BS among participants was 21.8%, 45.5% presented moderate emotional exhaustion, 67.3%, high depersonalization and 51.8%, reduced personal accomplishment. Variables associated with BS included alcohol consumption, unhealthy diet, dissatisfaction with the job, poor working conditions and lack of physical activity. **Conclusion:** BS is moderate among oncology nursing professionals, with a high prevalence in the dimensions of depersonalization and low personal accomplishment. Associated factors include poor working conditions and inadequate lifestyle. Strategies to improve support for professionals and working conditions are necessary to mitigate this reality. **Key words:** Burnout, Psychological/epidemiology; Oncology Nursing; Occupational Health.

RESUMO

Introdução: Em 2022, a Organização Mundial da Saúde (OMS) incluiu a síndrome de *Burnout* (SB) como uma doença ocupacional. A SB é uma resposta ao estresse crônico no ambiente de trabalho, caracterizada por exaustão emocional, despersonalização e reduzida realização pessoal. **Objetivo:** Estimar a prevalência de SB entre profissionais de enfermagem oncológica, identificar fatores associados à SB e descrever o perfil epidemiológico, laboral e de estilo de vida desses profissionais. **Método:** Estudo transversal descritivo com abordagem quantitativa no Centro de Alta Complexidade em Oncologia da Bahia. A amostra foi composta por 110 profissionais de enfermagem. A coleta de dados incluiu um questionário sociodemográfico e o *Maslach Burnout Inventory* (MBI), adaptado para o português. A análise dos dados foi feita com o SPSS, incluindo estatísticas descritivas e análise bivariada. **Resultados:** A prevalência de SB entre os participantes foi de 21,8%, 45,5% apresentaram exaustão emocional moderada, 67,3% alta despersonalização e 51,8% reduzida realização pessoal. Variáveis associadas à SB incluíram consumo de bebida alcoólica, alimentação não saudável, insatisfação com a ocupação, condições de trabalho precárias e falta de atividade física. **Conclusão:** A SB é moderada entre os profissionais de enfermagem oncológica, com alta prevalência nas dimensões de despersonalização e baixa realização pessoal. Fatores associados incluem condições precárias de trabalho e estilo de vida inadequado. Estratégias para melhorar o suporte aos profissionais e as condições de trabalho são necessárias para mitigar essa realidade. **Palavras-chave:** Esgotamento Psicológico/epidemiologia; Enfermagem Oncológica; Saúde ocupacional.

RESUMEN

Introducción: En 2022, la Organización Mundial de la Salud (OMS) incluyó el síndrome de *Burnout* (SB) como enfermedad profesional. El SB es una respuesta al estrés crónico en el lugar de trabajo, caracterizado por agotamiento emocional, despersonalización y reducción de la realización personal. **Objetivo:** Estimar la prevalencia del SB entre profesionales de enfermería de oncología, identificar factores asociados al SB y describir el perfil epidemiológico, laboral y de estilo de vida de estos profesionales. **Método:** Estudio descriptivo transversal con enfoque cuantitativo en el Centro de Alta Complejidad en Oncología de Bahía. La muestra estuvo compuesta por 110 profesionales de enfermería. La recolección de datos incluyó un cuestionario sociodemográfico y el *Maslach Burnout Inventory* (MBI), adaptado al portugués. El análisis de los datos se realizó mediante SPSS, incluyendo estadística descriptiva y análisis bivariado. **Resultados:** La prevalencia del SB entre los participantes fue del 21,8%, el 45,5% presentó cansancio emocional moderado, el 67,3% despersonalización alta y el 51,8% realización personal reducida. Las variables asociadas con el SB incluyeron consumo de alcohol, dieta poco saludable, insatisfacción con la ocupación, malas condiciones laborales y falta de actividad física. **Conclusión:** El SB es moderado entre los profesionales de enfermería oncológica, con alta prevalencia en las dimensiones de despersonalización y baja realización personal. Los factores asociados incluyen malas condiciones laborales y un estilo de vida inadecuado. Para mitigar esta realidad son necesarias estrategias para mejorar el apoyo a los profesionales y las condiciones laborales. **Palabras clave:** Agotamiento Psicológico/epidemiología; Enfermería Oncológica; Salud Ocupacional.

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INTRODUCTION

In January 2022, the World Health Organization (WHO) published the eleventh revision of the International Classification of Diseases and Related Health Problems (ICD-11)¹, an important document to help identify world health trends and statistics. The current version has now considered Burnout syndrome (BS) as an exclusively occupational disease¹.

In the face of stress, the organism responds in a phased process: (1) alarm or alert phase, characterized by a nervous response by the escape system, (2) resistance phase, in which the organism tends to reorganize itself against the stressor agent adapting to establish homeostasis, (3) exhaustion phase when the stressor agent is ruptured, leading to physical and/or mental exhaustion. Thus, BS is considered to originate from a response to chronic work stress^{2,3}.

The most accepted version of BS describes it as a three-dimensional syndrome and was proposed by Maslach and Jackson⁴, who characterized it as emotional exhaustion (EE), depersonalization (DP), and reduced personal fulfillment (RPF). Thus, BS can be understood as a syndrome applied to the occupational context, characterized by chronic unspeakable stress associated with this environment, involving: (1) feelings of exhaustion or emotional exhaustion, which can be experienced by fatigue; (2) increased mental distance, feelings of negativity or cynicism concerning work, perceived as negative attitudes related to the other; and (3) the feeling of ineffectiveness and lack of accomplishment, both personal and professional⁴.

There is a high incidence of BS among health professionals and personal implications, at the institutional level, as well as in the provision of care to patients⁵. In Brazil, a study gathered publications between 2014 and 2019 and identified that there is a high prevalence of BS especially among medical and nursing professionals, as well as an elevated risk of developing other mental diseases⁵.

Because they are involved in the work context of keeping contact with many people, nursing workers are more susceptible to BS. Some of the associated factors raised may be: Close contact with patient and family, as well as teamwork and collaboration with other nurses and other professionals, high workload, low wages, precarious work environment, high patient demand, exposure to stressors, among others^{6,7}.

Given the context, there is a need to conduct research that focuses on the safety, health, and well-being of these professionals, which are the foundations of care in health organizations and services. Thus, the present

study aims to estimate the prevalence of BS in cancer nursing professionals, in addition to specific objectives: To evaluate the factors associated with BS in oncology nursing professionals and to describe the epidemiological, work and lifestyle profile of oncology nursing professionals.

METHOD

Cross-sectional descriptive and quantitative study, focusing on the factor and effect observed in a given temporal and spatial framework⁸.

This descriptive research, as the term suggests, seeks to describe characteristics intrinsic to a population or phenomenon and variables associated with them⁹. The quantitative approach routinely used in epidemiological studies intends to explain phenomena from the objective interpretation of numerical data, with the aid of statistical instruments¹⁰.

The research was conducted at the High-Complexity Oncology Center (Cacon) of Bahia, located in the city of Salvador-BA, Brazil, between September and October 2024. The participants of the research were nurses and nursing technicians of the hospital who developed assistance activities or administrative regime (administrative nurses) in the second half of 2023.

The sample was delimited from sample calculation for the finite population considering the average quantity of 557 active nursing professionals in the said hospital¹¹, until December 2022, data available online by the National Registry of Health Establishments (CNES) of the Department of Informatics of the National Health System (DATASUS).

For the calculation, the Brazilian study by Oliveira *et al.* was used as a basis, which found a BS prevalence of three or two dimensions of 6.9%, and 41.4% in at least one dimension¹², an absolute error of 5% and a confidence level of 95% was also considered. The value obtained by the sample calculation was 94, with 10% added to suppress potential filling errors and losses, besides increasing the power of the study, reaching the value of 104 individuals. The calculation was performed using the Epi Info 7.0¹³ (Centers for Disease Control and Prevention) software.

The inclusion criteria were being 18 years or over; be a nurse or nursing technician; to accept participation in the research by signing the Informed Consent Form (ICF).

Data was collected through a questionnaire that includes variables related to sociodemographic, occupational and lifestyle data. The data collection instrument used was the Maslach Burnout Inventory (MBI) — Human Services Survey, adapted and validated for Brazilian Portuguese¹⁴. The instrument consists of 22 questions exploring the

three dimensions as follows: EE (1, 2, 3, 6, 8, 13, 14, 16, 20), DP (5, 10, 11, 15, 22) and RPF (4, 7, 9, 12, 17, 18, 19, 21). The results are scored with a five-point Likert scale: “1”, never; “2”, rarely; “3”, sometimes; “4”, often; and “5”, always¹⁵. The instruments were applied by four researchers (one resident and three fellows).

Regarding the interpretation of MBI, BS is evidenced by high scores in EE and DP and low scores in the RPF subscales. The individual needs to present a high level in EE or DP, or low level in RPF independently¹⁶.

The score is based on issues related to each BS dimension and the following cut-off points: EE: High (≥ 27 points), moderate (19 to 26 points) and low (< 19 points); DP: High (≥ 10 points), moderate (6 to 9 points) and low (< 6 points) and RPF: High (≤ 33 points), moderate (34 to 39 points) and low (≥ 40 points)¹⁵.

The dependent variable studied was BS and the independent variables were organized into three sections: Sociodemographic aspects, lifestyle, and work, distributed in the questionnaire. Data typing and processing were performed using the Statistical Package for the Social Sciences (SPSS)¹⁷, version 22.0 for Windows.

Data analysis was initiated by descriptive statistics to characterize the sample and estimate the prevalence of the outcome, expressed in absolute and relative frequencies. Then, a bivariate analysis was performed to evaluate the crude association between independent and dependent variables, based on the calculation of prevalence ratios (PR), their respective 95% confidence intervals (CI), and Pearson's¹⁸ or Fisher's exact chi-square test. *P* values lower than 0.05 were considered statistically significant.

The present study respected the bioethical principles and norms and guidelines established in Resolution No. 466¹⁹ of December 12, 2012, which regulates research involving human beings. This research has been approved by the Research Ethics Committee of *Universidade do Estado da Bahia*, report number 6.315.719 (CAAE (submission for ethical review): 69701023.5.0000.0057).

RESULTS

A total of 110 nursing professionals participated in the research, distributed in the sectors of intensive care units (ICU), hospitalization units (clinical and surgical), onco-hematological hospitalization unit, chemotherapy outpatient clinics, radiotherapy, hemodialysis, and emergency care (Table 1).

It was identified that 21.8% of the professionals who responded to MBI presented BS (Table 2). In addition, when assessing the dimensions of BS separately, it was observed that 45.5% presented EE moderately, 67.3% of the sample presented a high level of DP, and 51.8% a high level of RPF. An analysis of the mean score was made in each dimension, obtaining a moderate level of EE ($24.1\% \pm 7.55$), high DP ($11\% \pm 2.66$), and RPF ($32.47\% \pm 5.18$) (Table 3).

In this study, the bivariate analysis of sociodemographic, lifestyle and work variables were arranged in a table for better data visualization (Table 4).

In the bivariate analysis, the sociodemographic variables female (PR= 0.86; 95% CI=0.24-3.02), age over 36 years (PR=0.54; 95% CI=0.26-1.10), black race/color (PR=0.80; 95% CI=0.39-1.63), residence in the periphery (PR=0.86; 95% CI=0.41-1.80) did not show an association with low BS and all variables of the outcome among the participants.

Among the variables related to lifestyle, the lack of routine physical activity (PR=1.92; 95% CI=0.92-4.02) and smoking habit (PR=1.55; 95% CI=0.30-8) did not show any association with BS. The variables alcohol consumption (PR=2.33; 95% CI=1.15-4.68) and lack of healthy eating (PR=2.76; 95% CI=1.36-5.61) were associated with the syndrome. There were higher prevalences of BS in professionals who do not have a routine physical activity, who are smokers, have a habit of alcohol consumption and who do not eat healthy.

Table 1. Distribution of nursing professionals participating in the research in the Bahia Cacon sectors, 2023

Sectors	Frequency	Percentage
Intensive care unit	32	29.1
Unit of hospitalization	23	20.9
Onco-hematological hospitalization unit	7	6.4
Chemotherapy	25	22.7
Radiotherapy	7	6.4
Hemodialysis	4	3.6
Emergency care	12	10.9
Total	110	100.0



Table 2. Presence of Burnout syndrome in nursing professionals in a Bahia Cacon, 2023

BS presence	Frequency	Percentage
No	86	78.2
Yes	24	21.8
Total	110	100.0

Captions: BS = Burnout syndrome.

In the work section, dissatisfaction with current occupation (PR=3.73; 95% CI=2.0-6.9), unstable working conditions (PR=3.33; 95% CI=1.72-6.42), precarious technical resources and equipment (PR=2.56; 95% CI=1.30-5.02) and precarious collective protective equipment (PR=2.28; 95% CI=1.09-4.76) were associated with BS.

Table 3. Distribution of frequencies of the dimensions emotional exhaustion, depersonalization and reduced professional fulfillment among nursing professionals of Cacon, Bahia, Brazil, 2023

Dimensions	n (%)			Points mean	Standard deviation
	Low	Moderate	High		
EE	23 (20.9)	50 (45.5)	37 (33.6)	24.1	7.55
DP	2 (1.8)	34 (30.9)	74 (67.3)	11.0	2.66
RPF	7 (6.6)	46 (41.8)	57 (51.8)	32.47	5.18

Captions: EE = emotional exhaustion; DP = depersonalization; RPF = reduced personal fulfillment.

Table 4. Crude prevalence ratio of Burnout syndrome and its 95% confidence intervals, according to sociodemographic, lifestyle and work variables in nursing professionals of a Cacon in Bahia, Brazil, 2023

Variables	n (%)	RPF ^a (95% CI) ^d	P
Socio-demographic			
Sex (n=110)			
Male	8 (7.3)	1.00	
Female	102 (92.7)	0.86 (0.24-3.02)	0.79 ^d
Age (n=110)			
Up to 35 years-old	43 (39.1)	1.00	
36 years-old and over	67 (60.9)	0.54 (0.26-1.10)	0.08 ^c
Race/Color (n=110) ^a			
Non-black	40 (36.4)	1.00	
Black	70 (63.6)	0.80 (0.39-1.63)	0.54 ^c
Place of residence (n=110)			
Center	65 (59.1)	1.00	
Periphery	45 (40.9)	0.86 (0.41-1.80)	0.07 ^c
Lifestyle			
Physical activity routine (n=110)			
Yes	59 (53.6)	1.00	
No	51 (46.4)	1.92 (0.92-4.02)	0.073 ^c
Alcohol consumption (n=110)			
No	73 (66.4)	1.00	
Yes	37 (33.6)	2.33 (1.15-4.68)	0.01 ^c
Smoking (n=110)			
No	107 (97.3)	1.00	
Yes	3 (2.7)	1.55 (0.30-8)	0.64 ^d
Healthy diet (n=110)			
Yes	73 (66.4)	1.00	
No	37 (33.6)	2.76 (1.36-5.61)	0.003 ^{c*}

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Table 4. Continuation

Variables	n (%)	RPF ^a (95% CI) ^d	P
Work			
Professional Category (n=110)			
Nurse	41 (37.3)	1.00	
Nursing technician	69 (62.7)	0.59 (0.29-1.19)	0.14 ^c
Satisfaction with the current occupation (n=110)			
Yes	97 (88.2)	1.00	
No	13 (11.8)	3.73 (2.0-6.9)	0.001 ^{d*}
Working time in oncology (n=110)			
Up to 4 years	30 (27.3)	1.00	
5 years and over	80 (72.7)	0.62 (0.30-1.27)	0.20 ^c
Other employment (n=110)			
No	93 (84.5)	1.00	
Yes	17 (15.5)	1.44 (0.62-3.33)	0.42 ^d
Working condition stability (n=110)			
Stable	100 (90.9)	1.00	
Unstable	10 (9.1)	3.33 (1.72-6.42)	0.007 ^{d*}
Rest break (n=110)			
Yes	84 (76.4)	1.00	
No	26 (23.6)	0.85 (0.35-2.05)	0.71 ^c
Aggression at work (n=110)			
No	80 (72.7)	1.00	
Yes	30 (27.3)	1.90 (0.95-3.81)	0.07 ^c
Night shift (n=110)			
No	45 (40.9)	1.00	
Yes	65 (59.1)	0.96 (0.47-1.98)	0.93 ^c
Ventilation condition (n=110)			
Satisfactory	66 (60.0)	1.00	
Precarious	44 (40.0)	1.07 (0.52-2.19)	0.85 ^c
Temperature condition (n=110)			
Satisfactory	64 (58.2)	1.00	
Precarious	46 (41.8)	1.39 (0.68-2.81)	0.35 ^c
Lighting condition (n=110)			
Satisfactory	92 (83.6)	1.00	
Precarious	18 (16.4)	1.70 (0.78-3.69)	0.22 ^d
Technical resources and equipment (n=110)			
Satisfactory	86 (78.2)	1.00	
Precarious	24 (21.8)	2.56 (1.30-5.02)	0.008 ^{c*}
Personal Protective Equipment (n=110)			
Satisfactory	104 (94.5)	1.00	
Precarious	6 (5.5)	1.57 (0.47-5.18)	0.50 ^d
Collective Protective Equipment (n=110)			
Satisfactory	96 (87.3)	1.00	
Precarious	14 (12.7)	2.28 (1.09-4.76)	0.063 ^d

Captions: ^a PR = crude prevalence ratio; ^b95% CI = 95% confidence intervals; ^c Pearson's chi-square test; ^d MID-P test; *statistical significance (<0.01).



Higher prevalence of the outcome was observed among professionals dissatisfied with the occupation, who had another employment and were in unstable working conditions, who had already suffered aggression at work and considered precarious conditions of ventilation, temperature, lighting, resources, and technical equipment, as well as protective equipment, both individual and collective.

DISCUSSION

According to the data presented in this study, 21.8% of the participating professionals presented BS, and, considering the isolated dimensions, 45.5% presented moderate EE, 67.3% high DP level, and 51.8% high RPF level. We observed a moderate level of EE (24.1%; ± 7.55), high DP (11%; ± 2.66), and RPF (32.47%; ± 5.18). Therefore, oncology services stand out because nursing professionals demand assistance to patients with death-prone pathologies, in addition to making these professionals deal with the very meaning of death, as well as intense emotional processes, such as the mourning and suffering of patients and their families, and ethically complex decisions⁷.

As a reflection of this complexity, a meta-analysis that included 9,959 oncology nurses revealed prevalence values of 30% for EE, 15% for DP, and 35% for RPF⁷.

Corroborating this study, Oliveira et al. found three or two dimensions suggestive of Burnout syndrome in 6.9% each, and 41.4% in at least one dimension. In addition, the prevalence of Mental Disorders was statistically correlated, in addition to stress and self-esteem as associated factors¹².

In this sense, nursing professionals are often exposed to stressful factors that contribute to the risk of developing BS²⁰. These professionals have a demand to provide emotional support to patients and family members and deal with the different stages of oncological disease, from diagnosis to rehabilitation or unfavorable prognosis, or even with death and post-death, making these latter stages factors of important influence for the emergence of BS^{15,21}.

Moreover, the influence of these factors is directly related to the type of health care service in which the nursing professional is acting, since there may be intrinsic differences in the dynamics of work²².

Among the variables presented in this study regarding lifestyle, the consumption of alcoholic beverages (PR=2.33; 95% CI= 1.15-4.68) and lack of healthy eating (PR=2.76; 95% CI= 1.36-5.61) were associated with BS, also showing higher prevalence of BS in professionals without a routine physical activity, smokers, with a habit of alcohol consumption and who do not eat healthily.

Harmful living habits are known to be related to low quality of life²³, with occupational stress being an enhancer factor, bringing repercussions on self-care, level of physical activity, diet, alcohol abuse, and smoking, contributing to the development of comorbidities^{24,25}. Thus, BS impacts cardiometabolic diseases, alcohol abuse, and psychotropic diseases, as well as productivity and risk of accidents^{26,27}.

In the workplace, dissatisfaction with the current position (PR=3.73; 95% CI=2.0-6.9), instability in working conditions (PR=3.33; 95% CI=1.72-6.42), deficiency in resources and technical equipment (PR=2.56; 95% CI=1.30-5.02), and inadequate conditions of collective protective equipment (PR=2.28; 95% CI=1.09-4.76) were all associated with the development of BS.

Nursing professionals working in oncology service live with particularities of care for complex or terminal patients, who require specific knowledge, care, and managerial skills that allow work in medium and high complexity environments⁵. Working in deficient oncological health services that lack adequate conditions is a frequent reality for nursing professionals. This long-term exposure affects physical and mental health, making these professionals more likely to develop BS^{5,7}.

The highest prevalence of BS was observed among professionals who were dissatisfied with their occupation, had multiple jobs, faced unstable conditions, had suffered aggression in the work environment, and reported precarious conditions regarding ventilation, temperature, lighting, resources, and technical equipment, as well as protective equipment, both individual and collective.

When investigating the occurrence of BS in nurses of the onco-hematology unit in the reference service of an emergency hospital in Brazil, it was evidenced that 43.75% were in the initial phase of BS, and 37.5% were likely to develop it. The very high workload, which can reach up to 76 hours/week, having more than one job, and the shift system contribute to occupational exhaustion and illness³.

In this sense, the findings suggest that, in addition to emotional and psychological factors, adverse working conditions and work overload play an important role in the development of BS, as reflected in the results of this research. Moreover, the lack of basic resources, occupational risk, conviviality with suffering, low pay, physical fatigue, and impairment of care provided are some of the common stress factors in the reality of nursing^{2,28}.

Violence at work is another issue present in the nursing routine. Harassment, abuse, and gender discrimination, among other forms of manifestation, directly impact the health of the individual^{15,29}. At least a quarter of the attacks

occur in the health area, and nursing professionals are the top targets^{29,30}.

In addition, BS also influences the quality of care provided by the nursing team, decreases satisfaction, and affects patients' health outcomes. The main causes of BS are related to environmental aspects that prevent adequate work, and interventions remain focused on individual coping, disregarding causal origin³¹.

Thus, the work of nursing professionals in oncology implies frequent stressful situations compared to other health units, due to the assistance provided to patients with chronic degenerative diseases, such as cancer. Studies on the subject also point to the predisposition of this class to BS. Therefore, it is important to think about strategies that restructure everyday processes of nursing work in oncology.

In this sense, humanized care is one of SUS's guidelines and a philosophy in nursing practice that allows professionals to be closer to their patients. However, studies indicate that there is a unidirectional professional-patient flow and what is evident is that there is no care offered to professionals. In addition, another factor pointed out is that work effort is associated with the benefit of the patient often neglecting self-care and work-related limits, leading to psychic suffering¹⁵.

Thus, it is necessary to develop strategies for emotional resilience, social support, and emotional support, regardless of source. Family or partnership are protective factors that even prevent exhaustion¹⁵. Being older and more experienced can favor strategies aimed at better coping with stress at work. This is explained by the maturity and experience of situations that generate greater mastery in the work area and safety to provide adequate assistance in stressful situations, thus minimizing exposure and perception of stress³². Professionals also report using spirituality as a protection strategy/mechanism. For this group, it can informally offer comfort to the daily anxieties³³.

From this perspective, these findings reveal managerial alienation and the lack of systematic psychological support, which reverberates in the concealment of psychic suffering in this group of professionals. The absence of this support strengthens indicators of psychological illness, such as conflicts in work relations, tension, and a decrease in quality of life. On the other hand, it becomes obvious that early detection of exhaustion is essential to reverse this reality or the possibility of achieving it. It is necessary to take care of those who care for others³³.

Another important issue is the challenges posed by the COVID-19 pandemic, which intensified the exposure of nurses to work stress, contributing to exhaustion today. A British study draws attention to the fact that BS in

cancer nurses will be another problem aggravated by the COVID-19 pandemic in cancer health services in the coming years³¹.

A review conducted in North America and Europe between August 2014 and January 2020 covered 31 studies and showed that the prevalence of BS is culturally and institutionally specific, but that, at the same time, it is a real problem in the whole nursing sector³¹.

In this sense, the health organization/institution can influence the work environment by providing infrastructure and resources to develop strategies that bring these professionals closer to self-care. Work-break interventions can influence mental and physical well-being, as well as promote performance and safety improvements in care³⁴.

Some limitations of this research should be pointed out. A cross-sectional study cannot establish a causal relationship since exposure and outcome are measured simultaneously. The susceptibility to the occurrence of memory bias due to self-reported variables is also noteworthy.

CONCLUSION

The prevalence of BS among cancer nursing professionals in this study is moderate and the dimensions DP and RPF were high. The sociodemographic variables were not associated with BS, the variables associated with the syndrome were alcohol consumption, lack of healthy eating, dissatisfaction with current occupation, unstable working conditions, poor technical resources, and equipment, as well as poor personal and collective protective equipment.

These factors highlight the importance of interventions aimed not only at the mental health of professionals but also at improving working conditions and promoting a safe and healthy work environment. Thus, the best scenario is the prevention of Burnout syndrome, which requires a comprehensive approach that includes stress management, psychological support, and improved working conditions.

CONTRIBUTIONS

Aline de Jesus Garcia and Magno Mercedes Weyll Pimentel contributed to the study design, planning, data acquisition, analysis and interpretation, wording, and critical review. André da Silva dos Santos, Claudeone Vieira Santos, and Matheus dos Santos Ferreira contributed to the study design and planning, data acquisition, analysis, and interpretation. All the authors approved the final version for publication.



DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interest to declare.

FUNDING SOURCES

None.

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Recebido em 11/10/2024

Aprovado em 13/12/2024

