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Occupational Burnout: Health Risk Factors for Nursing Professionals

Lina Fernanda Vanegas-Novoa[1], Nidia Madeleine Medina-Montaña[2], Claudia Ximena Botero-Bonilla[3], Paula Andrea Vivas-Arias[4], Ruth Liliana Goyeneche-Ortegón[4]

ABSTRACT

Introduction: Occupational burnout is the result of demotivation and fatigue that affect the performance of work-related tasks. It is caused by the constant emotional involvement of the individual in response to the many demands of the job, which in turn leads to episodes of anxiety, depression, and physical discomfort.
Objective: To critically describe occupational burnout based on available literature and identify the associated risks for nursing professionals in the healthcare field.
Methods: A descriptive-narrative review, based on the typification and selection of articles related to burnout in nursing professionals, following the PRISMA diagram criteria for inclusion and exclusion of various studies.
Results: This narrative research outlines the most significant findings regarding occupational burnout symptoms, psychosocial factors, risk aspects, and its prevalence among nursing professionals.
Conclusions: The risk factors associated with stressors in nursing professionals confirm that burnout occurs more frequently in those who work under pressure and have long working hours.
Keywords: mental exhaustion; nursing; early warning; risk.

[1] Carbones Andinos SAS, Bogotá, Colombia

[2] IPS salud integral VIVE, Medellín. Colombia

[3] ESE Solución Salud del Meta, Villavicencio. Colombia

[4] Universidad de Boyacá (Tunja, Colombia).

Corresponding Author: Ruth Liliana Goyeneche Ortegón. Email Address: rlgoyeneche@uniboyaca.edu.co

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Síndrome de agotamiento profesional (burnout): aspectos de riesgo para la salud en los profesionales de enfermería

RESUMEN

Introducción: El agotamiento profesional (burnout) es el resultado de una desmotivación y fatiga que inciden en el desarrollo de las tareas laborales. Ello está provocado por la constante implicación emocional del sujeto ante las múltiples exigencias del trabajo que, a su vez, generan episodios de ansiedad, depresión y malestares físicos.

Objetivo: Describir de manera crítica, con base en la literatura disponible, el síndrome de burnout, y así identificar los riesgos asociados para los profesionales de enfermería en el área de la salud.

Métodos: Revisión descriptiva-narrativa, basada en la tipificación y selección de artículos correspondientes al burnout en profesionales de enfermería, bajo los criterios del diagrama PRISMA, que permitió la inclusión y exclusión de diferentes investigaciones.

Resultados: Esta investigación narrativa describe los hallazgos más importantes sobre la sintomatología síndrome de burnout, los factores psicosociales, los aspectos de riesgo y su prevalencia en los profesionales de enfermería.

Conclusiones: Los aspectos de riesgo relacionados con los factores estresantes en los profesionales de enfermería comprueban que el burnout aparece con mayor frecuencia en profesionales que trabajan bajo presión y jornadas de trabajo extensas.

Palabras clave: agotamiento psicológico; enfermería; alerta temprana; riesgo.

Síndrome de esgotamento profissional (burnout): aspectos de risco para a saúde nos profissionais de enfermagem

RESUMO

Introdução: O esgotamento profissional (burnout) é o resultado de uma desmotivação e fadiga que afetam o desempenho das tarefas laborais. Isso é provocado pela constante implicação emocional do indivíduo diante das múltiplas exigências do trabalho, que por sua vez geram episódios de ansiedade, depressão e desconfortos físicos.

Objetivo: Descrever de maneira crítica, com base na literatura, disponível, a síndrome de burnout e identificar os riscos associados para os profissionais de enfermagem na área da saúde.

Métodos: Revisão descritiva-narrativa, baseada na tipificação e seleção de artigos relacionados ao burnout em profissionais de enfermagem, de acordo com os critérios do diagrama PRISMA, o que permitiu a inclusão e exclusão de diferentes pesquisas.

Resultados: Esta pesquisa narrativa descreve os achados mais importantes sobre a sintomatologia da síndrome de burnout, os fatores psicossociais, os aspectos de risco y sua prevalência entre os profissionais de enfermagem.

Conclusões: Os aspectos de risco relacionados com os fatores estressantes nos profissionais de enfermagem provocam que o burnout aparece com maior frequência em profissionais que trabalham sob pressão e com jornadas de trabalho extensas.

Palavras-chave: esgotamento psicológico; enfermagem; alerta precoce; risco

INTRODUCTION

In the past five years, occupational safety and health have evolved and expanded across various work sectors to prevent competitive, demanding, and exhausting environments from affecting the well-being and quality of life of workers. This is particularly important as some individuals experience a reduction in their physical and psychological capacities, manifesting as emotional exhaustion, depersonalization, anxiety episodes, physical discomfort, and depression. These factors contribute to decreased concentration, resulting in errors that harm organizational productivity, increased absenteeism, a higher likelihood of accidents, and a rise in occupational illnesses (1,2).

According to Molina Cepeda and López López (3), in a study on the potential dangers posed by occupational burnout in nursing professionals working at Homero Castanier Crespo Hospital, it was concluded that this staff is exposed to job stress due to long workdays, shifts, rotations, and the diversity of tasks. Likewise, a 2018 systematic review with meta-analysis found that occupational burnout is more prevalent in surgical residencies compared to medical residencies (4).

The World Health Organization (WHO) has classified this syndrome as an occupational risk due to its potential to negatively impact quality of life, mental health, and even endanger the lives of professionals (5). This explains the high incidence of occupational burnout syndrome among healthcare workers in several countries, which ranges between 2.2% and 69.2%, depending on the questionnaire used and the personal, occupational, social, economic, legal, cultural, and political context of the personnel evaluated (6).

After examining the risk factors for burnout in the nursing field, international epidemiological indices revealed high levels of emotional exhaustion, at 17.4%, with 4.9% of nurses reporting low personal accomplishment (7,8). Studies conducted in Spain and Latin America reported the following burnout prevalence rates among nursing staff: in Spain, 14.9%; in Argentina, 14.4%; in Uruguay, 7.9%; in Mexico, 4.2%; in Ecuador, 4%; in Peru, 4.3%; in Colombia, 5.9%; in Guatemala, 4.5%; and in El Salvador, 2.5% (9).

Consequently, occupational burnout, according to Mckinley and colleagues (10), is a phenomenon that began to be investigated in the 1970s. It results from prolonged exposure to stressful factors in the work environment, leading to significant job dissatisfaction, demotivation, and negative attitudes toward work.

In Colombia, the prevalence of occupation

burnout was 65% in a sample of 117 nursing professionals, with scores of 12.7% for emotional exhaustion, 7.4% for depersonalization, and 64.2% for personal accomplishment (11). In this regard, Castillo-Ávila and colleagues (12), through their study, described several factors related to work stress and associated with risk aspects in nursing professionals at two hospitals in Cartagena (Colombia). These factors included being in a relationship, having multiple children, an average age under 30 years, working in outpatient services, having a fixed-term contract, employment duration of more than two years, and having more than five years of experience in the position. These findings highlight personal and work-related aspects, such as the services provided and the type of contract, as determinants of stress in professionals.

Moreover, the research by Álvarez Verdugo and Prieto Bocanegra (13) assessed the degree of burnout in nursing staff at a tertiary hospital in Tunja (Boyacá, Colombia). They found that sociodemographic variables such as length of employment at the organization, night shifts, rest periods during the month, and type of contract were associated with greater emotional exhaustion in the first ten years of employment. As the length of employment increased, the risk of burnout decreased. Additionally, night shifts were identified as a variable that significantly contributed to burnout, being one of the risk factors for workers.

In summary, research involving nursing personnel in hospital settings, who are exposed daily to occupational risks, environmental adaptation, patient demands, clinical and surgical actions, and interpersonal relationships, indicates that these factors can trigger elements that negatively impact mental health and human well-being. This includes an increased occurrence of workplace accidents or occupational diseases. Additionally, somatization, self-medication, and the use of psychoactive substances and alcohol may occur, leading to long-term complications for the organization in terms of occupational health and safety management (14,15).

Therefore, this narrative-descriptive review aimed to critically evaluate the available literature on occupational burnout to identify the health risk factors associated with nursing professionals in the healthcare sector.

MATERIALS AND METHODS

The article search was conducted between March and April 2023 using the PubMed, Lilacs, Science Direct, OVID, Psicodoc, BVSalud, and SciELO databases. The objective was to identify scientific articles that addressed risk alerts for detecting occupational burnout in nursing professionals. The

keywords used were the DeCS and MeSH terms: *mental exhaustion*, *nursing*, *early warning*, and *risk*. The eligibility criteria included studies such as randomized clinical trials, descriptive studies, cross-sectional epidemiological studies, or observational studies. These had to be written in English, Portuguese, or Spanish, published within the five-year timeframe from 2018 to 2023, and focused on nurses working in healthcare institutions.

Initially, each researcher selected the studies and removed duplicate articles. They then reviewed the titles, abstracts, and full texts. Once the studies were selected, the researchers reached various agreements regarding their inclusion.

For data extraction, an MS Excel® matrix was used, with the following parameters: identification (databases, search terms, search date, number of articles, articles excluded by title, articles excluded by abstract, and number of articles selected), as well as information related to the most common occupational burnout symptoms, psychosocial factors, risk aspects, and prevalence among nursing professionals.

After determining article eligibility, the PRISMA 2020 tool was used to guide and structure the

Figure 1. PRISMA

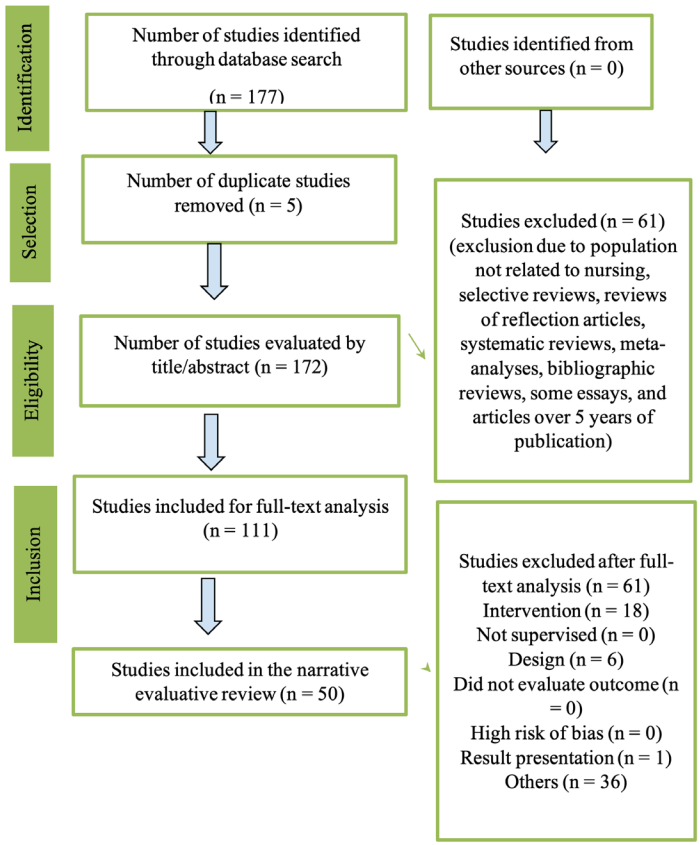
Finally, to ensure the quality of the collected information, various checklists were employed to assess methodological quality and bias. The "Checklist for Reporting Descriptive Studies: MINCIR Initiative" (16), which consists of 19 items, was initially used. Of the 50 articles reviewed in this research, 28% utilized descriptive methodology and met 15 of the checklist items.

On the other hand, the "CONSORT 2010 Statement: Checklist for Randomized Clinical Trials" (17), consisting of 25 items, was implemented, and 2% of the articles met 23 of the items. Similarly, the "Tool for Critical Reading and Evaluation of Cross-Sectional Epidemiological Studies" (18), which consists of 27 items, revealed that 42% of the 50 articles met between 22 and 24 points of the 27 items.

Likewise, for observational studies, as mentioned by Veiga de Cabo and colleagues (19), it was evident that the articles under review met 5% of the criteria regarding the description of the phenomenon (occupational burnout) within the study population (nursing professionals). These studies aim to describe the research and provide the investigators' viewpoints. Thus, the checklist was used to analyze the opinions of various authors on occupational burnout in nursing professionals.

Once the studies were identified, they were subjected to a methodological evaluation using checklists. According to the study designs included, the five researchers individually reviewed

review process, ensuring the inclusion of all recommended information, as shown in Figure 1.



and evaluated each study. After completing this step, the results were compared, and in cases of disagreement, a consensus was reached among the evaluators. At the end of the review, it was deemed relevant to apply the criteria outlined in the article by Moreno and colleagues (20) to corroborate the structure of the present review, applied in consensus by the researchers.

DEVELOPMENT AND DISCUSSION

The article addresses research on occupational burnout in the field of nursing. The following sections describe the key findings: occupational burnout symptoms, psychosocial factors, risk aspects, and the prevalence of the syndrome

among nursing professionals.

Most Common Symptoms of Occupational Burnout

Burnout is often associated with unrewarding and unfavorable working conditions. In their research, Castro Romero and Romero Urrea (21), as well as Luceño-Moreno and colleagues (22), report that burnout results from demotivation and fatigue, which affect the performance of work tasks. It is caused by the constant emotional involvement of the individual in response to the numerous demands of the job, particularly in areas where workers are exposed to high levels of stress, such as healthcare and education (23).

Therefore, the World Health Organization (WHO) declared burnout an occupational disease rather than a mental health condition (24), as confirmed by Baldonedo-Mosteiro and colleagues (25) and Gutiérrez and colleagues (26). This pathology stems from stress, specifically emotional exhaustion caused by work, which leads to depersonalization and feelings of personal inadequacy. In this way, Rivas and Barraza-Macías (27) developed a three-dimensional model composed of three parameters based on work stress, which helps to confirm the general perspective of the syndrome (Table 1).

Table 1. Three-Dimensional Model of Occupational Burnout

Parameter	Definition
Emotional exhaustion	Lack of energy (both physical and emotional), accompanied by a sense of "emptiness" and the depletion of emotional resources, leading to apathy and disinterest in work. This is a core component of burnout.
Depersonalization	The development of negative feelings and attitudes, such as cynicism and insensitivity, toward the recipients of one's work.
Low personal accomplishment	A tendency to negatively evaluate one's own work and relationships with those under their care, leading to feelings of professional inadequacy and low self-esteem.

Source: Author's own research based on (27).

According to Pérez-Fuentes and colleagues (28), Aragao and colleagues (29), Dincer and Inangil (30), Serra and colleagues (31), Kist and colleagues (32), and De las Salas and colleagues (33), the most common manifestations of occupational burnout include anxiety, depersonalization, low professional accomplishment, poor sleep quality, depression, mood swings, isolation, irritability, difficulty concentrating, memory loss, and headaches (29). This is corroborated by Vincenzo and colleagues (34) and García and colleagues (8), whose studies found that the predominant factor in the nursing population is low personal accomplishment, affecting 31%. This symptom is

one of the most influential in burnout, alongside external factors such as long working hours, rotating shifts, and family responsibilities (35). This symptomatology is gradually acquired due to work overload, seniority, and prolonged exposure to stressful factors, as described by Durán and colleagues (36).

It was also observed that some manifestations of burnout among nursing professionals include reduced work quality, poor organization, and an increased number of errors in daily activities (37). Finally, research conducted by Caille and colleagues (38) showed that the psychological impact of COVID-19 on healthcare workers led to a rise in the number of healthcare workers experiencing psychological disorders, such as anxiety, depression, post-traumatic stress disorder, insomnia, psychological distress, and burnout.

Psychosocial Factors of the Syndrome

Psychosocial factors are closely related to mental health. In this context, an interaction was observed between the worker, the environment, the job, and the conditions present in the organization or institution, as well as the worker's individual needs, culture, and personal situation. These factors influence health, performance, and job satisfaction. Gutiérrez and Arias-Herrera (39) identified individual factors related to sociodemographic circumstances, such as age, gender, and education level, that are directly associated with occupational burnout in each worker. These factors can increase stressors, including workload, problems with supervisors, uncertainty, insufficient training, conflicts among coworkers, and temporary reassignment to other services due to staff shortages.

Similarly, there are organizational and workplace factors that increase the likelihood of developing burnout, such as psychological pressure, lack of autonomy, work overload, interpersonal issues with the work team, insufficient resources, working more than 48 hours per week, dissatisfaction with the work performed, or personal exhaustion (40,41). However, other authors suggest that not all individuals exposed to the same working conditions develop this syndrome, which highlights the importance of individual and organizational factors in determining its onset (42).

Finally, the emotional factor is crucial, as explained by Rivas and Barraza-Macías (27), who refer not only to the absence of psychic energy but also physical energy, leading to a sensation of emptiness. The authors compare it to being "alive but dead", which results in low productivity at work due to a lack of interest in professional duties.

Furthermore, it was found that women exhibit higher levels of emotional exhaustion than men, likely due to greater combined responsibilities

at work (organizational factors) and at home. This finding was also reflected in marital status: married individuals tend to have more stable emotional resources than single individuals, due to the support networks and communication they receive (43,44).

Risk Factors

Regarding the worker, it was found that work schedules and rotating shifts negatively affect quality of life, leading to emotional exhaustion and a reduced sense of personal accomplishment at work. In comparison to nurses who work during the day, the overload of professional duties results in a higher level of responsibility. This is consistent with the findings of Vásquez-Yáñez and Guzmán-Muñoz (45) and Serra and colleagues (31). Likewise, Bezerra and colleagues (46) and Molero and colleagues (47) report that, in combination with poor working conditions, excessive working hours, exposure to risks, or the inherent dangers of the profession, factors such as vulnerability, workers' health conditions, salary, workload, and ineffective communication styles become risk factors for professional exhaustion.

At an individual level, Borges and colleagues (48) and Roig-Grau and colleagues (49) observed a higher incidence of occupational burnout among nursing professionals who were widowed. Additionally, Paiva and colleagues (50) identified behavioral traits such as impatience with colleagues, melancholy, and being single as factors most closely related to burnout. Therefore, it is evident that marital status, workload, emotional state, and stress exacerbate the occurrence of this syndrome (51).

In a more immediate context, the experiences during the COVID-19 pandemic were analyzed, which heightened the emotional stress of frontline nursing staff in intensive care units of public hospitals worldwide (45). Vidotti and colleagues (52) explained this viewpoint by discussing the demands of the position, personnel shortages, and the pressure from superiors. Furthermore, De La Fuente-Solana and colleagues (53) noted that this not only negatively impacted the nurses themselves but also led to mistreatment of patients, as the care provided was inadequate, resulting in a decrease in the quality of care.

Additionally, the constant and direct interaction that nursing professionals have with others exposes them to greater risks. According to Muñoz and colleagues (54), daily stressors are exacerbated by factors such as insufficient recognition of their role within the healthcare system, confusion over their occupational profile, limited job flexibility, the provision of services to third parties, inadequate remuneration, work overload, frequent changes in worksite rotations, and exposure to various risks (ergonomic, biological, physical, and psychological), all of which contri-

bute to the deterioration of both work and personal conditions.

Prevalence of Occupational Burnout in Nursing Professionals

Nursing is a fundamental part of the multidisciplinary healthcare team, known for its strong performance in comprehensive primary care. It focuses on academic training centered on human and social needs. However, the high demand, workload, and lack of human resources exemplify the challenges faced by this profession in the work process (25). Additionally, this profession is particularly vulnerable to workplace interventions, such as occupational exhaustion, shift work, and daily exposure to death and human suffering (55).

According to Luceño-Moreno and colleagues (22) and Vincenzo and colleagues (34), nursing professionals are the most prone to developing occupational burnout. This has a greater impact on their physical and mental health compared to professionals in other medical fields, due to the demands of their position, shift rotations (especially day shifts), low wages, lack of communication, and poor personal and social relationships (49,56). It was also noted that the role of nurses involves more complex care and team management tasks compared to nursing assistants, who are responsible for less complex activities (25).

Research by Kist and colleagues (31) and Ribeiro and colleagues (57) found that the highest percentage of nurses experiencing burnout is between the ages of 25 and 34. At this age, they may lack the maturity needed to handle the stressors present in their work environments.

The prevalence of burnout among nursing workers shows that they are the most affected population, due to emotional exhaustion, a high degree of depersonalization, and low personal accomplishment (56). A large percentage of female nursing professionals experience burnout, which is significantly associated with the quality of the work environment and the location where they perform their duties (58). Additionally, female nurses who provide care and attend to patients dealing with suffering and the possibility of death are more likely to experience greater exhaustion compared to their male counterparts in relation to burnout syndrome (48–61). Therefore, implementing organizational strategies to improve work environments may reduce burnout and improve the quality of care, as suggested by Simonetti and colleagues (62).

CONCLUSIONS

As evidenced throughout this article, the origins of occupational burnout are multifactorial and generally linked to work-related stress due to workplace

demands that impact both the individual's overall well-being and the organization's productivity. By identifying risk factors associated with stressors in nursing professionals, it was confirmed that burnout occurs more frequently in those who work under pressure and have long working hours.

The World Health Organization (WHO) has classified occupational burnout as an important occupational disease that needs to be addressed through occupational safety and health measures. However, comprehensive occupational health plans are required, focusing on the prevention of psychosocial risks and work-related accidents, and based on psychoeducation (self-care, identification of risk factors and symptoms) for professionals, as well as changes in organizational strategies.

Future research should expand the evaluation to include more healthcare personnel, such as physicians, bacteriologists, and physical therapists, among others, to observe how occupational burnout manifests in these professionals.

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CONFLICT OF INTERESTS

The authors declare no conflicts of interest.

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