

# Burnout syndrome as a factor affecting the work of nursing assistants at a medical center in the northern department of Bolívar, Colombia

## Summary

**Objective:** The purpose of this research was to determine the prevalence of Burnout Syndrome among nursing staff and nursing assistants at a medical center in northern Bolívar, Colombia.

**Method:** A descriptive study was conducted with a convenience sample of 66 workers. Data was collected using the standardized **Maslach Burnout Inventory (MBI)**, which includes 22 items with a 6-option Likert scale, segmented into the dimensions of Emotional Exhaustion, Depersonalization, and Personal Accomplishment. IBM SPSS v. 25 *software* was used to analyze the results, obtaining descriptive statistics and correlation coefficients.

**Results:** The mean age of participants was 36.33 years, with an average seniority of 5.92 years at the institution. Nine positive cases of Burnout Syndrome were identified, representing a prevalence of 13.6% of the population evaluated. The highest correlation was found between the variables “Feeling Active” and “Effectively Dealing with People’s Problems” (0.99995). The main protective factor found was the relationship between education and personal/professional achievement (0.7551).

**Conclusions:** The 13.6% prevalence of burnout syndrome in this medical center is significant and indicates a latent psychosocial risk. It is imperative that the institution comply with Colombian occupational health and safety regulations, implementing intervention and ongoing monitoring measures focused on preventing the syndrome and improving the quality of work life of the healthcare group evaluated.

**Keywords:** burnout syndrome, emotional exhaustion, depersonalization, nursing staff, psychosocial risk

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## Introduction

The healthcare sector, and specifically the field of nursing, is characterized by being one of the most demanding professions. The continuous and intense contact with suffering, pain and death exposes workers to a high risk of developing Burnout Syndrome (BS), a condition of chronic occupational burnout. The World Health Organization (WHO) has classified Burnout as an “occupational phenomenon”, a state that arises from chronic stress at work that has not been adequately managed.<sup>1</sup> BS manifests itself through three interrelated dimensions: Emotional Exhaustion (feeling of lack of energy and resources), Depersonalization (distant or insensitive attitude towards service recipients) and Low Personal Accomplishment (tendency to negatively evaluate one’s own work and achievements).<sup>2</sup>

Healthcare facilities are of particular interest for this type of study. In small or remote municipalities, these institutions are often the only ones authorized to provide services, which can increase the healthcare and administrative pressure on staff.<sup>3</sup> Therefore, the main objective of this study was to determine the prevalence of Burnout Syndrome among the nursing assistant team at a medical center in northern Bolívar, analyzing the possible correlation with sociodemographic and occupational factors.

The legal framework in Colombia imposes a clear responsibility on employers regarding the mental health of their workers. Law 1010 of 2006, on Workplace Harassment, is fundamental in this context, given that harassment is a direct psychosocial risk factor. Subsequently, Law 1562 of 2012 established the mandatory implementation of the

Occupational Health and Safety Management System (SG-SST) to mitigate all risks, including psychosocial ones. Law 1616 of 2013, on Mental Health, guarantees integrated care and the promotion of mental health in the workplace.<sup>4</sup>

The specific guidelines for psychosocial risk management are contained mainly in Resolution 2764 of 2022, which updates Resolution 2646 of 2008. This regulation requires organizations to identify, evaluate, prevent, intervene and constantly monitor psychosocial risk factors, through the use of the Battery of Instruments for the Evaluation of Psychosocial Risk Factors. Additionally, Decree 1477 of 2014, which issues the Table of Occupational Diseases, includes pathologies associated with chronic stress, facilitating the recognition of Burnout as an occupational disease.<sup>5</sup>

The relevance of this study lies in offering empirical data to the institution so that it can design targeted intervention plans that improve the quality of life of its employees and rigorously comply with the current regulatory framework.<sup>6</sup>

## Theoretical framework

### Origin and definition

The concept of Burnout was first coined in 1974 by psychiatrist Herbert Freudenberger to describe the extreme deterioration and exhaustion he observed in staff at welfare institutions.<sup>7</sup> Later, the syndrome was defined as a response to chronic work-related stress, characterized by the three dimensions already mentioned: Emotional Exhaustion (EE), Depersonalization (DE), and Low Personal

Accomplishment (LE).<sup>8</sup> This three-dimensional model is the most widely accepted and is assessed using the Maslach Burnout Inventory (MBI).<sup>9</sup>

Dimensions of burnout syndrome

- (i) **Emotional exhaustion (EA):** Refers to the feeling of being emotionally and physically **overloaded or drained** by work. The individual feels that he or she no longer has the internal resources to continue giving of himself or herself.<sup>10</sup>
- (ii) **Depersonalization (DP):** This involves developing **negative, cynical, and impersonal attitudes** toward the people receiving the service and who are the subject of the work. It is a defense mechanism for emotional distancing.<sup>11</sup>
- (iii) **Personal accomplishment (PA) or Lack of personal achievement:** This is the tendency to **negatively evaluate one’s own performance and achievements** at work. The professional feels incompetent and dissatisfied with his or her professional development.<sup>12</sup>

According to Maslach and Jackson, the presence of high levels in AE and DP, combined with a low level in RP, is the diagnostic criterion to confirm Burnout Syndrome.<sup>13</sup>

Burnout in nursing staff

The nursing profession demands a high level of emotional and physical commitment, constantly facing resource scarcity, healthcare pressure, and emergency situations. This makes this profession one of the most vulnerable to burnout.<sup>14</sup>

The report by De Torres et al., in 2024, highlights the high prevalence of the syndrome in mental health and emergency services, and the need for preventive interventions.<sup>15</sup> The factors that contribute to Burnout in the health sector are varied and include: quantitative work overload, conflictual relationships with managers, lack of autonomy and absence of recognition.<sup>16</sup>

Methodology

Type of study

The research was framed as a descriptive study, with a qualitative approach.

Population and sample

The study population consisted of nursing staff (professionals and assistants) at a medical center in northern Bolívar, Colombia. The sample was selected by non-probabilistic convenience, consisting of 66 workers. This number represented the total active staff available at the time of data collection.

Data collection instrument

**Maslach burnout inventory (MBI)** was used in its validated Spanish version for the healthcare setting. The MBI is a self-administered questionnaire consisting of **22 items on a 6-choice** Likert-type scale (ranging from 0 “Never” to 6 “Every day”).

The instrument is divided into the following dimensions:

- (i) **Emotional exhaustion (EA):** Measures 9 items.
- (ii) **Depersonalization (DP):** Measures 5 items.
- (iii) **Personal achievement (PR):** Measures 8 items.

The reliability of the MBI is high, with Cronbach’s alpha coefficients ranging from 0.70 to 0.90 across the different subscales.

Procedure

- (i) **Permissions and consent:** Approval from the institution’s ethics committee and informed consent from all participants were obtained.
- (ii) **Application:** The MBI was administered in person along with a sociodemographic data sheet to determine variables such as age, gender, seniority, education, and dependents.
- (iii) **Processing:** The collected data were tabulated and analyzed using the *software* IBM SPSS Statistics version 25.

Burnout diagnostic criteria (MBI)

For the present investigation, Maslach’s criteria were used to classify the levels of each dimension and the diagnosis of the syndrome (Table 1):

Table 1 Burnout diagnosis (MBI)

Dimension	Low level	Intermediate level	High level
Emotional exhaustion (EA)	16	17-26	27
Depersonalization (DP)	6	7-12	13
Personal realization (PR)	39	33-38	32

**Positive burnout diagnosis:** High score in AE, high in DP and low in RP.

Results

Prevalence of burnout syndrome

Of the 66 workers evaluated, nine were classified as positive for Burnout Syndrome, meeting the criteria of high scores on Emotional Exhaustion, high scores on Depersonalization, and low scores on Personal Accomplishment. This corresponds to a prevalence of 13.6 % of the institution’s nursing population.

The three identified cases presented the following sociodemographic characteristics:

- (i) **Case 1:** 40 years old, 13 years of seniority, 2 dependents.
- (ii) **Case 2:** 33 years old, 3 years of seniority, 1 dependent.
- (iii) **Case 3:** 29 years old, 2 years of seniority, 0 dependents.
- (iv) **Other undetermined cases 4-9** More than 2 dependents

Correlation analysis

Correlations with sociodemographic variables

The strongest and most positive correlation was between Schooling and Achievement (0.7551).

- (i) There is a strong positive correlation between People in Charge and the feeling of Feeling Tired (0.98215).
- (ii) A moderate negative correlation was observed between Seniority and the Achievement subscale (-0.75545).

Correlations between MBI variables:

- (i) The highest correlation between items was between Feeling Active and Effectively Dealing with People’s Problems (0.7551),

an expected relationship that confirms the internal consistency of the instrument.

- (ii) The lowest and most negative correlation was found between feeling guilty about patients' problems and personal/professional achievement ( $-0.90484$ ). This finding is crucial, since decreased concern about patients' emotional state (depersonalization) is associated with a perception of greater professional effectiveness or achievement.

#### Limitations of the study:

The prevalence found is applicable to this particular population; this demonstrates a limitation in the generalizability of the results, which relate only to the population of 66 nurses to whom this study was conducted.

#### Discussion

The results obtained in this investigation reveal a prevalence of 13.6% of positive cases of Burnout Syndrome (BS) among the nursing assistants evaluated. This figure, although moderate, is significant considering the context of high demand for care in small municipalities, where human and material resources are often limited.<sup>3</sup> The presence of high levels of emotional exhaustion (EE) and depersonalization (DPI), together with low personal accomplishment (PA), confirms the diagnosis according to the criteria established by Maslach and Jackson.<sup>13</sup>

Compared with recent studies by De Torres et al.,<sup>15</sup> which reported a high prevalence of SB in mental health and emergency services, the results of the present study are partially aligned. Although the percentage of positive cases is lower, similar patterns are identified in terms of risk factors, especially quantitative work overload, which has been widely recognized as a trigger for emotional exhaustion.<sup>16</sup>

One of the most relevant findings is the positive correlation between the number of dependents and the feeling of tiredness ( $r = 0.98215$ ), which reinforces the hypothesis that workload directly influences the development of BS. This result coincides with that proposed by Romero-Fernández (2024), who highlights that emotional exhaustion is the most affected dimension in nursing staff exposed to long hours and high care pressure.<sup>10</sup>

Likewise, the negative correlation between job seniority and perceptions of personal achievement ( $r = -0.75545$ ) suggests that, over time, workers may experience a decline in their motivation and professional satisfaction. This phenomenon has been described by Maslach and Jackson<sup>13</sup> as a consequence of cumulative burnout, where lack of recognition and routine can erode the sense of purpose at work.

Another noteworthy aspect is the negative correlation between the feeling of guilt for patients' problems and the perception of professional achievement ( $r = -0.90484$ ). This finding can be interpreted as a manifestation of depersonalization, where the professional, by emotionally distancing himself from the patients, experiences an apparent improvement in his professional self-perception. However, as Maslach warns,<sup>9</sup> this defensive strategy can have long-term ethical and emotional consequences.

From a regulatory perspective, the results of the study reinforce the need to rigorously apply the provisions of Resolution 2764 of 2022, which requires the assessment and management of psychosocial risks in the work environment.<sup>5</sup> The identification of positive cases of SB in this institution demonstrates the urgency of implementing targeted

interventions, such as psychological support programs, shift rotation, and job recognition strategies, in line with the recommendations of Law 1616 of 2013 on mental health.<sup>4</sup>

In summary, the results obtained not only confirm the validity of Maslach and Jackson's three-dimensional model, but also provide empirical evidence on the influence of organizational and personal factors on the development of BS in rural and high-pressure healthcare settings.

#### Conclusion

This study identified a 13.6% prevalence of Burnout Syndrome among nursing assistants at a medical center in northern Bolívar, demonstrating high levels of emotional exhaustion and depersonalization, as well as low levels of personal accomplishment. These findings align with Maslach and Jackson's theoretical model and with recent studies highlighting the vulnerability of nursing staff to chronic burnout. The correlations found between sociodemographic variables and dimensions of burnout, such as the relationship between caregivers and fatigue, or between seniority and personal achievement, underscore the importance of considering both individual and organizational factors in the design of preventive strategies. In this regard, it is essential that the institution strengthen its Occupational Health and Safety Management System (OHSMS), in accordance with current regulations, and promote an organizational culture that prioritizes the emotional well-being of its workers. Finally, this study provides valuable data for institutional decision-making and lays the groundwork for future research that delves deeper into the protective and risk factors for SB in similar contexts.

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#### Conflict of interest

The authors declare that they have no conflicts of interest relevant to this manuscript.

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