

THE IMPACT OF WORK-RELATED STRESS: SCIENTIFIC EVIDENCE AND APPLICATIONS IN HEALTHCARE

Maria Eduarda Iank¹

Wesley Soares da Cunha²

Clesio Aparecido Marinho³

Gabriel Villela da Costa⁴

Abstract: Occupational stress represents a growing challenge for workers and organizations, with significant effects on health, professional performance, and institutional costs. This article presents a literature review based on classical authors and recent national and international studies regarding the main causes, impacts, and strategies for preventing and coping with work-related stress. It adopts an applied approach with emphasis on the healthcare sector, due to the high exposure of professionals to intense demands, continuous contact with human suffering, and recurring structural limitations. As empirical support, a structured questionnaire was applied to nursing professionals working in hospital institutions, allowing a comparison between the findings from the literature and the local reality. The results indicated that 60% of the participants identified work overload as the main stressor, followed by lack of professional recognition (40%). Regarding the impacts, 80% reported symptoms of physical and emotional exhaustion, while 60% stated that stress negatively affects productivity. The most relevant strategies involved institutional psychological support (100%), redistribution of tasks and regular breaks (80%), and individual self-care practices (60%). It is concluded that the prevention of occupational stress requires integrated actions between individuals and organizations, with humanized management, structured psychological support, and professional recognition being strategic elements for promoting

1 Tecnólogo em Gestão Empresarial - FATEC

2 Tecnólogo em Gestão Empresarial - FATEC

3 Mestre em Engenharia de Produção

4 Tecnólogo em Gestão da Produção Industrial - FATEC



healthier, more productive, and sustainable work environments.

Keywords: occupational stress; worker's health; burnout; quality of work life; hospitals.

INTRODUCTION

Workplace stress is one of the main challenges faced by contemporary organizations, recognized by the World Health Organization (WHO, 2020) as one of the greatest threats to the physical and mental health of workers. It is a complex phenomenon characterized by physiological, cognitive, and emotional responses triggered when work demands exceed an individual's coping capacity, resulting in a prolonged state of tension capable of compromising professional performance and quality of life.

According to Lazarus and Folkman (1984), stress should not be understood as an automatic reaction to external pressures, but as a dynamic process of cognitive evaluation between the individual and the environment. In this sense, stress manifests itself when perceived demands exceed the resources available to cope with them, producing overload and emotional imbalance. Thus, occupational stress involves both objective working conditions and subjective interpretations, highlighting its multifactorial nature.

In the context of healthcare, work-related stress takes on even more critical dimensions. Professionals working in hospitals and care units face long hours, high technical and ethical responsibility, limited material and human resources, and continuous exposure to pain, suffering, and death. These conditions make the hospital environment particularly susceptible to the development of work-related disorders, including burnout syndrome, classified by the WHO (2019) as an occupational phenomenon resulting from chronic stress that is not adequately managed, originally described by Maslach and Jackson (1981).

Recent studies, such as those by Barello, Palamara, and Graffigna (2020) and Nowrouzi et al. (2017), indicate that emotional overload, the intensity of work demands, and insufficient organizational



support are among the main factors associated with illness among healthcare professionals. These findings reinforce the need to reassess management models and institutional policies aimed at promoting quality of life at work, especially in hospital settings characterized by high healthcare pressure.

Given this scenario, this article aims to analyze the causes, impacts, and coping strategies for occupational stress in the healthcare field, articulating evidence from the scientific literature with empirical data obtained through a questionnaire applied to nursing professionals working in hospital institutions. By integrating theoretical review and field investigation, it seeks to understand how the phenomenon manifests itself in the local context and to contribute to the formulation of preventive measures and institutional actions aimed at promoting well-being and the sustainability of hospital work.

LITERATURE REVIEW

Fundamental Concepts

Occupational stress is widely recognized as one of the main challenges to worker and organizational health. The World Health Organization (WHO, 2020) defines work-related stress as a physical and emotional response that occurs when professional demands do not correspond to the worker's capabilities, resources, or needs, characterizing an imbalance between demands and coping possibilities.

According to Lazarus and Folkman (1984), stress should be understood as a cognitive evaluation process in which the individual interprets the environment and judges whether they possess sufficient resources to cope with the demands imposed. When there is a perception of imbalance, the organism activates physiological and emotional defense mechanisms that, when maintained for long periods, can generate wear and tear and illness.

In the hospital setting, stress is intensified by the nature of the activities performed.



Healthcare professionals constantly deal with emergency situations, human suffering, and a high level of responsibility for the lives of others, which favors the development of physical and emotional exhaustion. Burnout syndrome, described by Maslach and Jackson (1981), is one of the main manifestations of chronic stress, characterized by emotional exhaustion, depersonalization, and reduced professional accomplishment.

Complementing this approach, McEwen (1998) introduced the concept of allostatic load, which represents the accumulated physiological wear and tear resulting from continuous exposure to stress. According to the author, prolonged adaptive responses can generate a significant biological cost, contributing to the development of cardiovascular diseases, metabolic disorders, and immunological dysfunctions.

Figure 1 - Conceptual diagram of the occupational stress process



Source: Adapted from WHO (2020), Lazarus and Folkman (1984), Maslach and Jackson (1981) and



McEwen (1998).

Main Causes of Occupational Stress

Workplace stress results from multiple factors, which vary according to organizational culture and the characteristics of the professional activity. In hospital settings, these causes become even more relevant due to the complexity of the environment and the high operational demands.

According to Nowrouzi et al. (2017), work overload is one of the most recurring causes, intensified by prolonged working hours, a shortage of human resources, and the need to work under constant pressure. Bhui et al. (2016) also highlight ambiguity and role conflict, characterized by a lack of clarity in responsibilities or by contradictory demands.

Lack of autonomy and participation in decision-making is also cited as a relevant factor. The European Agency for Safety and Health at Work (EU-OSHA, 2014) emphasizes that workers with less control over their activities tend to exhibit higher levels of emotional stress. Furthermore, communication failures, lack of recognition, and deficiencies in leadership contribute to increased psychological burnout (BORGES et al., 2023).

The physical environment also exerts a significant influence. The National Institute for Occupational Safety and Health (NIOSH, 1999) highlights that factors such as noise, inadequate lighting, extreme temperatures, and lack of breaks contribute to increased stress and reduced performance. Table 1 presents the main causes of occupational stress identified in the literature.

Table 1 – Main causes of occupational stress

Cause	Authors	Observed impacts
Work overload	Nowrouzi et al. (2017)	Fatigue, exhaustion, and irritability
Role ambiguity	Bhui et al. (2016)	Conflicts and job insecurity
Lack of autonomy	EU-OSHA (2014)	Reduced motivation and engagement
Poor communication	Borges et al. (2023)	Disorganization and tension between teams
Inadequate physical environment	NIOSH (1999)	Discomfort and decreased productivity



Source: own elaboration based on the authors cited.

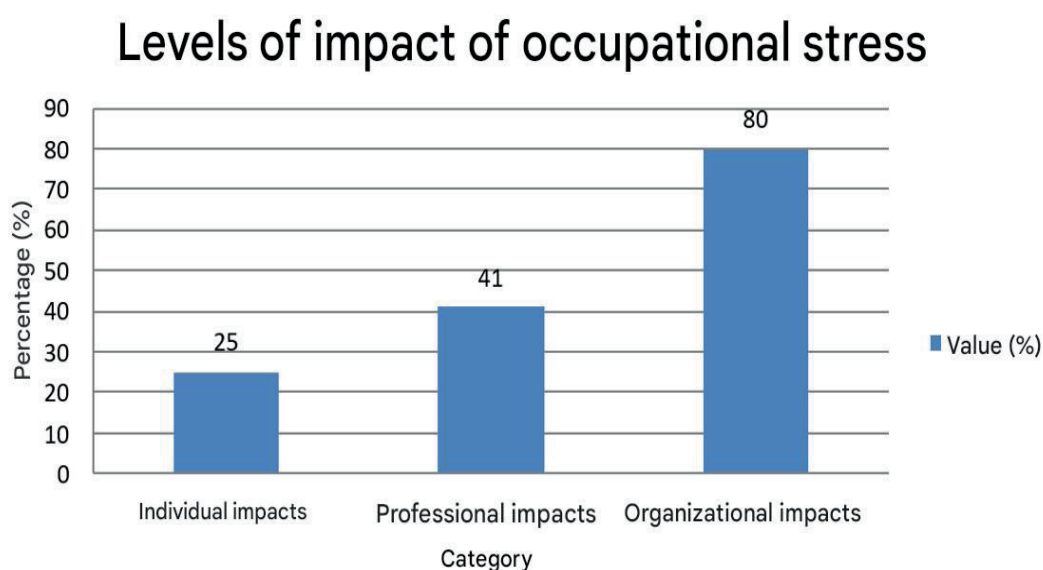
Impacts of Occupational Stress

The effects of prolonged stress manifest themselves comprehensively, affecting the individual, the team, and the organization. At an individual level, stress compromises emotional and physiological balance, and can lead to anxiety disorders, depression, insomnia, muscle pain, and cardiovascular diseases (McEwen, 1998; WHO, 2020).

In healthcare professionals, these impacts become even more pronounced. Barello et al. (2020) demonstrated that emotional exhaustion is among the main causes of absenteeism, directly affecting the quality of patient care. Furthermore, stress compromises concentration and decision-making abilities, critical aspects in the hospital environment.

In an organizational context, stress results in absenteeism, increased turnover, and reduced productivity, raising operational costs and the risk of errors (EU-OSHA, 2014; NIOSH, 1999). Furthermore, it compromises the organizational climate and work relationships.

Figure 2 – Levels of impact of occupational stress



Source: Adapted from McEwen (1998), EU-OSHA (2014) and Barelo et al. (2020).

Prevention and Coping Strategies

The literature shows that managing occupational stress requires integrated actions at different levels. Bhui et al. (2016) and Nowrouzi et al. (2017) highlight that individual and organizational interventions should work in a complementary way.

At the individual level, practices such as mindfulness, relaxation techniques, physical activities, and emotional education contribute to strengthening psychological resilience. At the organizational level, actions such as task redistribution, clear definition of roles, effective communication, professional recognition, and institutional psychological support stand out (NIOSH, 1999; WHO, 2020).

In the hospital setting, Barelo et al. (2020) suggest the implementation of support groups, listening spaces, and programs focused on quality of life at work. Table 2 presents the main strategies for preventing and coping with occupational stress.

Table 2 – Main causes of occupational stress

Level of intervention	Examples of actions	Authors
Individual	Mindfulness, relaxation, psychological support;	Bhui et al. (2016)
Organizational	Task redistribution, internal communication;	NIOSH (1999)
Institutional (hospital)	Support groups, wellness programs;	Barelo et al. (2020)

Source: adapted from Bhui et al. (2016), NIOSH (1999) and Barelo et al. (2020).

RESEARCH METHODOLOGY

The methodology of this study describes the path taken to understand the impact of stress in the work environment, with an emphasis on healthcare professionals, who are considered more susceptible to physical and emotional burnout resulting from work demands. The research was



conducted in two main stages: a literature review, of a theoretical nature, and field research, of an empirical nature, allowing for the articulation between the findings of the scientific literature and the reality observed in the hospital context.

According to Gil (2019), the methodology guides the researcher in obtaining and analyzing data, ensuring consistency and reliability of the results. In this sense, this study is characterized as applied research, with a mixed approach (qualitative and quantitative), since it integrates theoretical analysis, statistical data, and subjective perceptions of the participants.

Materials and methods

The field research was conducted through the application of a structured questionnaire to healthcare professionals working in hospital institutions in the region. The instrument, composed of 29 questions, was organized into four sections: sociodemographic and professional profile; causes of occupational stress; perceived impacts on health and performance; and coping strategies and suggestions for improvement.

The closed-ended questions were developed using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), while the open-ended questions allowed for the collection of participants' subjective perceptions. The questionnaire was administered in person and anonymously, respecting the ethical principles of research.

The data were analyzed using a mixed-methods approach. Quantitative analysis was performed based on descriptive statistics, considering frequencies and percentages of agreement (responses 4 and 5 on the Likert scale), according to IBGE guidelines (1993). Qualitative analysis was conducted using the content analysis technique, according to Bardin (2011), allowing the identification of thematic categories related to the causes, impacts, and coping strategies of occupational stress.



RESULTS AND DISCUSSION

This section presents and analyzes the results obtained through the application of the questionnaire to five nursing professionals. The analysis was structured around three main axes: causes of occupational stress, impacts on health and professional performance, and coping strategies, allowing for a comparison between empirical data and findings from the literature. The results were interpreted based on the percentage frequency of agreement (responses 4 and 5 on the Likert scale), allowing for the identification of predominant patterns in the participants' perceptions.

Causes of occupational stress

The data show that work overload is the main stress factor in the hospital environment investigated. In the sample analyzed, 60% of participants reported frequently experiencing excessive tasks, corroborating the findings of Nowrouzi et al. (2017), who point to the intensity of work demands as a central element in the emotional burnout of healthcare professionals.

Lack of professional recognition was indicated by 40% of respondents, reinforcing the relevance of institutional appreciation for psychological well-being, as highlighted by Bhui et al. (2016). Poor communication and an inadequate physical environment were mentioned by 20% of participants, suggesting a lower prevalence of these factors in the analyzed context.

On the other hand, lack of autonomy was not identified as a relevant factor (0%), indicating that, in this specific scenario, professionals do not perceive decision-making restrictions as determinants of stress. This result shows that the phenomenon can vary according to organizational and cultural characteristics. The consolidated results are presented in Table 3.



Table 3 – Main causes of occupational stress identified by participants

Cause	Percentage of responses	Evidence in the literature
Work overload	60%	Nowrouzi et al. (2017)
Lack of autonomy	0%	EU-OSHA (2014)
Poor communication	20%	Borges et al. (2023)
Lack of recognition	40%	Bhui et al. (2016)
Inadequate physical environment	20%	NIOSH (1999)

Source: own elaboration (2026).

Impacts of stress on health and professional performance

The results indicate that occupational stress has significant impacts on the physical and mental health of professionals. In the sample analyzed, 80% of participants reported symptoms of physical and emotional exhaustion, demonstrating a strong impact at the individual level, consistent with McEwen (1998) and Barello et al. (2020).

Furthermore, 60% stated that stress negatively interferes with productivity, while 40% indicated that they had already considered changing sectors or institutions, suggesting possible organizational consequences such as increased turnover and loss of human capital.

The overall average agreement was approximately 56%, indicating a predominance of moderate to high perceived stress. This result reinforces the consistency of the data, even considering the small sample size.

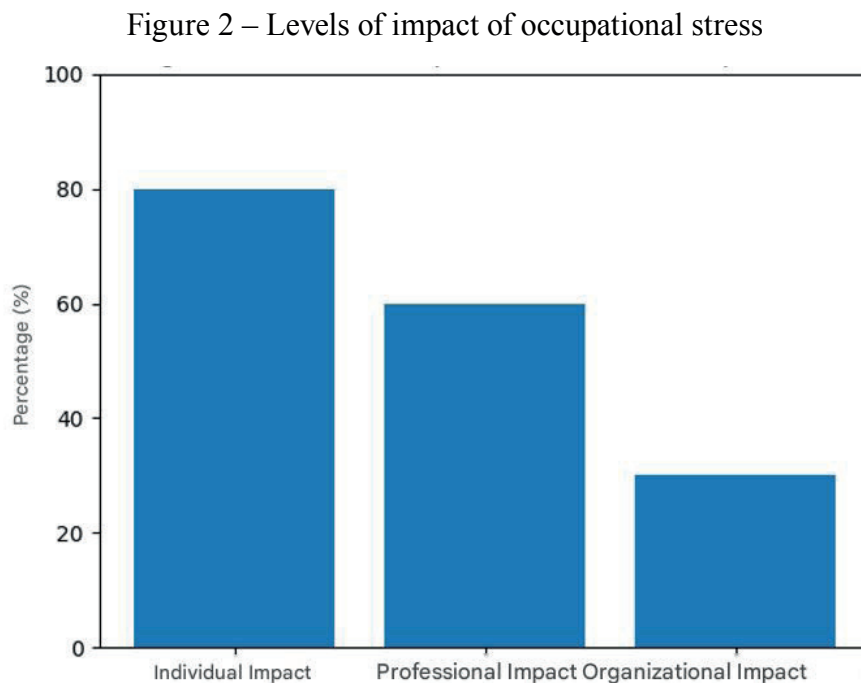
Table 4 – Impacts of occupational stress on health and performance (n = 5)

Impact assessed	Percentage of responses	Evidence in the literature
Physical and emotional symptoms	80%	Individual
Interference with productivity	60%	Professional
Consideration of changing sectors	40%	Organizational
Interference in labor relations	60%	Professional/Social
Stress-related absences	20%	Organizational

Source: own elaboration (2026).



The distribution of these impacts can be seen in Figure 2, which summarizes the individual, professional, and organizational dimensions of occupational stress.



Source: own elaboration (2026).

Coping and prevention strategies

The results demonstrate consensus regarding the need for structured interventions in the organizational environment. All participants (100%) highlighted the importance of institutional psychological support, demonstrating the demand for formal support policies.

Furthermore, 80% highlighted the importance of redistributing tasks and adopting regular breaks, indicating that organizational changes can significantly reduce workload. Meanwhile, 60% recognized the importance of individual practices such as self-care, relaxation, and mindfulness.

These findings are consistent with Bhui et al. (2016) and Barello et al. (2020), who advocate



for the integration of individual and organizational strategies in coping with occupational stress.

Table 5 – Coping strategies identified in the research and literature

Level	Suggested action	Percentage (questionnaire)	Theoretical reference
Individual	Mindfulness, relaxation, self-care	60%	Bhui et al. (2016)
Organizational	Task redistribution, breaks, psychological support.	80%	NIOSH (1999)
Institutional	Listening spaces and wellness programs	100%	Barello et al. (2020)

Source: own elaboration (2026).

Discussion of results

The integrated data analysis confirms that workload overload is the main stress factor in the hospital setting, consistent with the literature. This result highlights that the intensity of demands remains a critical variable in healthcare work management.

It is observed that individual impacts (80%) are more significant than professional (60%) and organizational (40%) impacts, indicating that stress initially manifests in the psychophysiological dimension of the worker. This pattern can be interpreted in light of the concept of allostatic load (McEwen, 1998), according to which continuous exposure to stress generates cumulative effects on health.

The unanimous agreement regarding the need for institutional psychological support reinforces the importance of structured organizational interventions. The results indicate that coping with occupational stress requires integrated actions, involving professional recognition, work reorganization, and ongoing psychological support.

Despite the sample size limitation, the data are consistent with the scientific literature, demonstrating that occupational stress remains a significant challenge in the hospital environment. In this sense, the adoption of integrated strategies is essential to promote healthier, more productive, and



sustainable work environments.

FINAL CONSIDERATIONS

This article aimed to analyze the causes, impacts, and coping strategies for occupational stress in the hospital setting, combining a literature review and empirical research. The combination of these approaches made it possible to understand the phenomenon in an integrated way, relating theoretical foundations to the reality observed among nursing professionals in the Sertãozinho region (SP).

The results showed that work overload is the main stressor (60%), followed by lack of professional recognition (40%), while factors such as poor communication and inadequate physical conditions were less relevant (20%). These findings confirm the literature, especially the studies by Nowrouzi et al. (2017) and Bhui et al. (2016), which highlight the intensity of work demands and professional recognition as central determinants of occupational stress in the health field.

Regarding the impacts, manifestations on an individual level predominated, with 80% of participants reporting symptoms of physical and emotional exhaustion and 60% indicating impaired productivity. These results suggest that stress initially manifests at the psychophysiological level and can evolve into organizational consequences, such as turnover and reduced performance. This interpretation aligns with the concept of allostatic load (McEwen, 1998), which highlights the cumulative effects of prolonged stress on health.

Regarding coping strategies, the need for structured actions within the institutional environment was highlighted, with unanimous agreement on the importance of psychological support (100%). Organizational measures, such as task redistribution and regular breaks (80%), and individual strategies, such as self-care practices (60%), were identified as complementary, demonstrating that coping with stress requires an integrated approach between the individual and the organization.

One limitation is the difficulty in obtaining respondents and their geographical scope, which



restricts the generalizability of the results. However, the data obtained are consistent with the scientific literature, indicating relevant trends for the analyzed context. It is recommended that future research expand the number of participants and include different professional categories in order to deepen the understanding of the organizational variables that influence occupational stress.

It is concluded that managing occupational stress constitutes a strategic challenge for healthcare institutions, making the implementation of policies focused on humanized management, continuous psychological support, and professional development fundamental. Investing in the mental health of workers not only prevents illness but also contributes to improving the quality of services provided, promoting healthier, more productive, and sustainable work environments.

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