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Psychological Consequences of Understaffing in Healthcare Systems: A Narrative Review

Weronika Grzyb¹, ORCID <https://orcid.org/0009-0001-7622-281X>

E-mail: wgrzyb@gmail.com

¹Wojewódzki Szpital Wielospecjalistyczny Megrez Sp. z o.o., 43-100 Tychy, Poland

Dominika Grzybowska², ORCID <https://orcid.org/0009-0002-0599-8896>

E-mail: dominikagrzybowska996@gmail.com

²Szpital Wojewódzki im. Św. Łukasza w Tarnowie, 33-100 Tarnów, Poland

Michał Kurnik¹, ORCID <https://orcid.org/0009-0008-4791-0630>

E-mail: michalkurnik95@gmail.com

¹Wojewódzki Szpital Wielospecjalistyczny Megrez Sp. z o.o., 43-100 Tychy, Poland

Jakub Rzeszutek², ORCID <https://orcid.org/0009-0007-7105-1031>

E-mail: jakub.rzeszutek11@gmail.com

²Szpital Wojewódzki im. Św. Łukasza w Tarnowie, 33-100 Tarnów, Poland

Natalia Niderla³, ORCID <https://orcid.org/0009-0001-5041-7846>

E-mail: natalia.niderla@yahoo.pl

³Szpital Czerniakowski w Warszawie, 00-739 Warszawa, Poland

Adrian Kubicki³, ORCID <https://orcid.org/0009-0007-7792-3590>

E-mail: kubickiadr@gmail.com

³Szpital Czerniakowski Sp. z o.o. w Warszawie, 00-739 Warszawa, Poland

Natalia Rachwał⁴, ORCID <https://orcid.org/0000-0003-4224-4794>

E-mail: nrachwal03@gmail.com

⁴Wojewódzki Szpital Specjalistyczny im. Stefana Kardynała Wyszyńskiego SPZOZ w Lublinie, 20-718 Lublin, Poland

Adrianna Jaślikowska⁵, ORCID <https://orcid.org/0009-0003-1885-2711>

E-mail: adriannajaslikowska@gmail.com

⁵Wojskowy Szpital Kliniczny z Polikliniką SPZOZ w Lublinie, 20-049 Lublin, Poland

Kamil Idzik⁶, ORCID <https://orcid.org/0009-0000-7532-9255>

E-mail: kamilidzik99@gmail.com

⁶Szpital Murcki Sp. z o.o., 40-749 Katowice, Poland

Corresponding Author

Weronika Grzyb, E-Mail: wgrzyb@gmail.com

Abstract

Background: Understaffing in healthcare occurs when the number of available workers is insufficient to meet patient care and organizational demands. Driven by population aging, chronic disease prevalence, workforce migration, inadequate planning, and the COVID-19 pandemic, staff shortages have become a major global challenge. Understaffing increases workload, time pressure, and emotional demands, raising the risk of serious psychological consequences affecting both worker well-being and quality of care.

Aim: The aim of this narrative review was to examine the psychological consequences of understaffing, analyze its impact on the mental health of healthcare professionals, and identify potential preventive strategies.

Material and Methods: A narrative review was conducted using the PubMed, Scopus, and Google Scholar databases. Peer-reviewed articles addressing the psychological outcomes of understaffing among healthcare workers were identified using predefined keywords, screened by title and abstract, reviewed in full text, and analyzed thematically.

Results: The literature consistently identified burnout—comprising emotional exhaustion, depersonalization, and reduced personal accomplishment—as the most prominent psychological consequence of understaffing. Staff shortages were also linked to stress, anxiety, depression, sleep deprivation, moral distress, and compassion fatigue. At the system level, understaffing contributed to absenteeism, turnover intention, medical errors, lower quality of care, and patient dissatisfaction, creating a self-perpetuating cycle.

Conclusions: Understaffing is both an organizational and public health concern with serious psychological consequences for healthcare professionals. Effective staffing policies, organizational and leadership support, mental health services, resilience programs, and improved work-life balance are essential for protecting worker well-being and ensuring sustainable healthcare delivery.

Key words: understaffing, healthcare workers, burnout, occupational stress, mental health, narrative review

1. Introduction

Understaffing refers to a situation in which the number of healthcare workers available is insufficient to meet the actual demands of patient care and organizational functioning. In healthcare systems, understaffing occurs when hospitals or medical facilities operate with fewer physicians, nurses, or support staff than required to provide safe, effective, and high-quality care. This imbalance increases workload, time pressure, and occupational stress among

healthcare professionals, potentially leading to burnout, emotional exhaustion, decreased job satisfaction, and reduced quality of patient care [2, 20].

The global shortage of healthcare workers refers to the worldwide insufficiency of qualified medical personnel, including physicians, nurses, midwives, and allied health professionals, relative to the growing healthcare needs of populations. This shortage is driven by factors such as population aging, the increasing prevalence of chronic diseases, the migration of healthcare professionals, inadequate workforce planning, burnout, and limited educational capacity. As a result, many healthcare systems experience persistent understaffing, increased workload, and reduced quality and accessibility of care [23].

While the global shortage of healthcare workers refers to the worldwide lack of qualified healthcare professionals in relation to population health needs, understaffing describes the organizational-level consequence of this shortage within specific healthcare institutions. In other words, the global shortage represents a macro-level systemic problem, whereas understaffing reflects its direct impact on hospitals, clinics, and healthcare teams in everyday clinical practice [23].

The issue of understaffing is highly significant for the mental health and well-being of healthcare professionals. Persistent staff shortages increase workload, time pressure, and the emotional demands placed on medical personnel, often forcing them to work extended hours under stressful conditions. As a result, healthcare workers are at increased risk of psychological distress, including chronic stress, anxiety, depression, emotional exhaustion, and burnout. Understaffing may also reduce job satisfaction, impair work-life balance, and contribute to feelings of helplessness and reduced professional efficacy. In the long term, these psychological consequences can negatively affect both the quality of patient care and the overall functioning of healthcare systems [2, 6, 20].

The aim of this narrative review is to examine the psychological consequences of understaffing in healthcare systems and its impact on the mental well-being of healthcare professionals. The paper seeks to analyze how chronic staff shortages contribute to stress, burnout, emotional exhaustion, anxiety, depression, and reduced job satisfaction among healthcare workers. Additionally, the review aims to explore the relationship between understaffing, workplace conditions, and the quality of patient care, as well as to identify potential strategies for improving staff well-being and organizational functioning within healthcare settings.

Research Objective

The objective of this narrative review is to examine the psychological consequences of understaffing in healthcare systems and to analyze its impact on the mental health and well-being of healthcare professionals. The study aims to identify the most common psychological outcomes associated with chronic staff shortages, including burnout, stress, anxiety, depression, emotional exhaustion, moral distress, and reduced job satisfaction.

Additionally, the review seeks to explore how understaffing affects healthcare system functioning, patient safety, and quality of care, as well as to discuss potential preventive strategies and organizational interventions aimed at supporting healthcare workers and reducing psychological burden in healthcare settings.

Research Problems

Understaffing has become a major challenge in contemporary healthcare systems worldwide, contributing not only to organizational difficulties but also to serious psychological consequences among healthcare professionals. Persistent staff shortages increase workload, occupational stress, emotional burden, and the pressure associated with patient care responsibilities. As a result, healthcare workers are increasingly exposed to burnout, anxiety, depression, emotional exhaustion, moral distress, and reduced job satisfaction.

Despite growing awareness of workforce shortages in healthcare, the psychological impact of understaffing on medical personnel remains a significant concern requiring further analysis. Understanding how chronic understaffing affects the mental well-being of healthcare professionals is essential for improving workplace conditions, protecting employee health, and maintaining high-quality patient care.

Therefore, the main research problem addressed in this narrative review is: How does understaffing in healthcare systems affect the psychological well-being and mental health of healthcare professionals?

Research Hypothesis

The main hypothesis of this narrative review is that understaffing in healthcare systems has a significant negative impact on the psychological well-being and mental health of healthcare professionals.

It is assumed that chronic staff shortages are associated with increased levels of burnout, stress, anxiety, depression, emotional exhaustion, moral distress, sleep disturbances, and reduced job satisfaction among healthcare workers. Furthermore, understaffing is expected to contribute to decreased quality of patient care, increased medical errors, absenteeism, and higher turnover intention within healthcare organizations.

The review also assumes that effective organizational interventions, adequate staffing policies, mental health support, and resilience-based programs may help reduce the psychological burden associated with understaffing in healthcare settings.

2. Research Materials and Methods

This study was conducted as a narrative review of the literature focusing on the psychological consequences of understaffing in healthcare systems. Relevant scientific articles, reports, and review papers were analyzed to identify the relationship between staff shortages and mental health outcomes among healthcare professionals.

The literature search was performed using electronic databases such as PubMed, Scopus, and Google Scholar. Keywords and combinations of terms included: understaffing, healthcare workforce shortage, burnout, occupational stress, mental health, emotional exhaustion, nurses, and healthcare professionals.

The review included peer-reviewed articles addressing psychological outcomes associated with understaffing in healthcare settings. Particular attention was paid to studies examining stress, burnout syndrome, anxiety, depression, job satisfaction, and workplace well-being among healthcare workers. Sources that were not directly related to healthcare personnel or psychological consequences were excluded from the analysis.

The collected literature was analyzed descriptively and thematically in order to identify the most commonly reported psychological effects of understaffing and the organizational factors contributing to mental health burden among healthcare professionals.

Participants

As this study is a narrative review, no direct participants were recruited. The analysis was based on previously published studies involving healthcare professionals working in various healthcare settings, including hospitals, clinics, and long-term care facilities. The reviewed literature primarily focused on nurses, physicians, and other medical staff exposed to understaffing and high workload conditions.

Depending on the individual study, participants included healthcare workers of different ages, professional experience levels, and medical specialties. The reviewed studies examined psychological outcomes such as stress, burnout, anxiety, depression, emotional exhaustion, and job dissatisfaction associated with understaffing in healthcare systems.

Procedure

The review procedure consisted of identifying, selecting, and analyzing scientific literature related to understaffing and its psychological consequences in healthcare systems. Relevant articles were searched in electronic databases using predefined keywords and combinations of terms associated with healthcare workforce shortages and mental health outcomes.

After the initial search, articles were screened based on their titles and abstracts. Studies considered relevant to the topic were subsequently reviewed in full text. The selected literature was then categorized according to major psychological outcomes, including stress, burnout, anxiety, depression, emotional exhaustion, and job dissatisfaction among healthcare professionals.

The findings from the reviewed studies were synthesized narratively in order to identify recurring themes, common risk factors, and the broader psychological impact of understaffing in healthcare settings.

Data Collection and Analysis

Data collection was conducted through a structured search of scientific literature in electronic databases, including PubMed, Scopus, and Google Scholar. Articles related to understaffing in healthcare systems and its psychological consequences were identified using selected keywords and combinations of terms such as understaffing, healthcare workforce shortage, burnout, stress, mental health, and healthcare professionals.

The collected studies were screened based on their relevance to the topic. Full-text articles addressing the psychological impact of understaffing on healthcare workers were included in the review. The selected literature was analyzed qualitatively using a thematic approach. The findings were grouped into major thematic categories, including burnout, emotional exhaustion, anxiety, depression, occupational stress, and job dissatisfaction.

The analysis aimed to identify recurring patterns, relationships, and commonly reported psychological outcomes associated with understaffing in healthcare settings.

Statistical Software

Since this study was based on a qualitative narrative synthesis of previously published literature, no dedicated statistical software was required. The analysis focused on the descriptive interpretation and thematic organization of findings related to the psychological consequences of understaffing in healthcare systems.

Statistical Methods

No independent statistical methods were applied in this study because the paper was conducted as a narrative literature review rather than an original quantitative investigation. The study was based on a qualitative synthesis and descriptive interpretation of findings reported in previously published research.

Statistical data presented in the reviewed articles, including prevalence rates, correlations, and survey results related to burnout, stress, anxiety, and other psychological outcomes, were discussed narratively to support the analysis of the impact of understaffing on healthcare professionals.

3. Research Results

Understaffing in Healthcare Systems

Understaffing in healthcare systems has become one of the most significant global challenges affecting both healthcare professionals and patient outcomes. The term “understaffing” refers to an insufficient number of healthcare workers available to meet the clinical and organizational demands of healthcare institutions. It affects hospitals, long-term care facilities, emergency departments, and primary care settings worldwide. Persistent shortages of nurses, physicians, and allied healthcare professionals contribute to increased workloads, reduced quality of care, and substantial psychological strain among medical personnel [2, 18].

The shortage of healthcare workers is influenced by multiple interconnected factors, including demographic changes, workforce aging, increasing healthcare demands, and inadequate workforce planning. According to the World Health Organization, the global healthcare sector faces a critical shortage of healthcare professionals, particularly nurses and primary care physicians. Aging populations and the increasing prevalence of chronic diseases have significantly increased the demand for healthcare services, while the supply of trained professionals has not expanded at the same pace. This imbalance has intensified pressure on healthcare systems and resulted in chronic understaffing in many countries [23].

One major contributor to understaffing is workforce burnout and high turnover rates. Healthcare professionals frequently experience excessive workloads, long working hours, emotional exhaustion, and inadequate institutional support. These factors contribute to job dissatisfaction and increase the likelihood of leaving the profession. Research indicates that burnout among nurses and physicians has become increasingly common, especially following the COVID-19 pandemic. Emotional exhaustion and depersonalization often reduce work engagement and lead to intentions to resign, thereby worsening staffing shortages and creating a self-perpetuating cycle of understaffing and psychological distress [3, 4, 5, 9, 20].

The COVID-19 pandemic further exposed structural weaknesses within healthcare systems and significantly intensified staffing shortages worldwide. During the pandemic, healthcare workers faced unprecedented patient volumes, increased mortality rates, shortages of medical resources, and prolonged exposure to traumatic clinical

situations. Many professionals developed severe psychological symptoms, including anxiety, depression, insomnia, and post-traumatic stress disorder. Simultaneously, infection risk and occupational stress caused many healthcare workers to take leave, retire early, or permanently exit the profession. Consequently, healthcare systems experienced even greater staffing deficits, particularly in intensive care units and emergency departments [6, 11, 15, 16].

Nursing shortages represent one of the most extensively studied aspects of healthcare understaffing. Numerous studies have demonstrated a strong association between low nurse-to-patient ratios and adverse outcomes for both patients and healthcare staff. Inadequate staffing levels increase workload intensity, reduce the time available for patient care, and elevate the risk of medical errors. Nurses working in understaffed environments frequently report higher levels of emotional exhaustion, chronic stress, sleep disturbances, and reduced job satisfaction. Moreover, understaffing negatively affects teamwork and communication, contributing to moral distress and compassion fatigue among healthcare workers [9, 18].

Understaffing also has important economic and organizational consequences. Healthcare institutions experiencing persistent staff shortages often face increased absenteeism, reduced productivity, and higher employee turnover. Recruiting and training new healthcare professionals requires substantial financial resources, while frequent staff replacement disrupts continuity of care and organizational stability. Additionally, understaffing contributes to overcrowding in hospitals, prolonged waiting times, and reduced patient satisfaction. Studies suggest that healthcare systems with chronic staffing shortages may experience lower quality of care and poorer patient safety indicators [18].

Another significant issue associated with understaffing is the unequal distribution of healthcare workers between urban and rural regions. Rural healthcare facilities often struggle to recruit and retain qualified professionals due to limited resources, lower salaries, professional isolation, and fewer educational opportunities. As a result, healthcare workers employed in underserved areas may experience even greater workloads and psychological burden compared to those working in urban centers [23].

In recent years, researchers and policymakers have increasingly emphasized the need for systemic interventions aimed at improving staffing conditions in healthcare settings. Proposed solutions include implementing safe staffing policies, improving workplace conditions, increasing salaries, expanding mental health support services, and strengthening workforce retention programs. Organizational support and effective leadership are considered essential factors in reducing the negative effects of understaffing and improving healthcare workers' psychological well-being [2, 12].

Overall, understaffing in healthcare systems is not only an organizational and economic problem but also a major psychological and public health concern. Persistent workforce shortages contribute directly to stress, burnout, and mental health disorders among healthcare professionals, ultimately affecting the quality, safety, and sustainability of healthcare delivery systems worldwide [2, 18, 23].

Psychological Consequences

Burnout

The reviewed literature identified burnout as one of the most common psychological consequences of understaffing in healthcare systems. Chronic staff shortages increase workload, emotional pressure, and responsibility among healthcare professionals, leading to prolonged occupational stress and mental exhaustion. Burnout syndrome is commonly described through three major dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment [1, 20].

Emotional Exhaustion

Emotional exhaustion refers to a state of physical and psychological depletion caused by excessive work demands and continuous stress exposure. In understaffed healthcare environments, medical personnel are frequently required to care for a large number of patients while working long shifts with insufficient recovery time. As a result, healthcare workers often report chronic fatigue, emotional overload, irritability, sleep disturbances, and a reduced ability to cope with professional responsibilities. Emotional exhaustion is considered the central component of burnout and is strongly associated with decreased mental well-being and lower work performance [1, 20, 21].

Depersonalization

Depersonalization involves the development of emotional detachment, cynicism, and negative attitudes toward patients or colleagues. Under conditions of understaffing, healthcare professionals may adopt emotionally distant behaviors as a psychological coping mechanism to manage overwhelming stress and workload. This can lead to reduced empathy, impaired communication, and a more impersonal approach to patient care. The literature suggests that persistent depersonalization not only affects healthcare workers' mental health but may also negatively influence patient satisfaction and the quality of therapeutic relationships [1, 20].

Reduced Personal Accomplishment

Reduced personal accomplishment refers to feelings of ineffectiveness, low professional competence, and diminished job satisfaction. Healthcare workers in understaffed settings may feel unable to provide adequate patient care due to time constraints, excessive responsibilities, and a lack of organizational support. Over time, repeated experiences of unmet professional expectations can contribute to frustration, helplessness, and decreased motivation. Many studies indicate that reduced personal accomplishment is associated with lower morale, increased turnover intention, and a greater likelihood of leaving the healthcare profession [9, 20].

Depression and Anxiety

The reviewed literature indicates that understaffing in healthcare systems is strongly associated with increased levels of depression and anxiety among healthcare professionals. Persistent workforce shortages expose medical staff to chronic occupational stress, excessive emotional demands, and prolonged psychological strain, all of which negatively affect mental health and emotional well-being [16, 17].

Chronic Stress

Chronic stress is one of the most commonly reported psychological effects of understaffing. Healthcare professionals working in understaffed environments are often required to manage heavy workloads, urgent clinical responsibilities, and time pressure for extended periods. Continuous exposure to stressful situations without adequate recovery may lead to emotional exhaustion, reduced stress tolerance, and long-term psychological distress. The literature suggests that chronic occupational stress significantly increases the risk of anxiety disorders, depressive symptoms, and burnout syndrome among healthcare workers [7, 8].

Emotional Overload

Emotional overload occurs when healthcare professionals are repeatedly exposed to intense emotional situations while lacking sufficient psychological support and recovery time. Understaffing frequently forces medical personnel to simultaneously manage patient suffering, critical clinical decisions, and interpersonal demands under high-pressure conditions. This constant emotional burden may contribute to feelings of helplessness, frustration, irritability, and emotional instability. Over time, emotional overload can impair coping mechanisms and increase vulnerability to anxiety and depression [7].

Sleep Deprivation

Sleep deprivation is another significant consequence associated with understaffing in healthcare settings. Staff shortages often require healthcare workers to perform extended shifts, overtime work, night duties, and irregular schedules, which negatively affect sleep quality and recovery. Insufficient sleep has been linked to impaired concentration, mood disturbances, fatigue, emotional dysregulation, and decreased cognitive functioning. The reviewed studies indicate that chronic sleep deprivation may worsen symptoms of anxiety and depression and contribute to overall psychological deterioration among healthcare professionals [10, 16].

Suicidal Ideation

Several studies highlighted that prolonged exposure to extreme occupational stress and psychological burden in understaffed healthcare environments may increase the risk of suicidal ideation among healthcare professionals. Feelings of emotional exhaustion, hopelessness, isolation, and loss of professional fulfillment may contribute to severe mental health crises, particularly among individuals experiencing chronic burnout and untreated depression. The literature emphasizes the importance of early psychological support, mental health interventions, and organizational strategies aimed at reducing occupational stress and protecting healthcare workers' well-being [16].

Moral Distress and Compassion Fatigue as Consequences of Understaffing

The reviewed literature suggests that understaffing in healthcare systems contributes significantly to moral distress and compassion fatigue among healthcare professionals. Insufficient staffing levels often prevent medical personnel from delivering the standard of care they consider ethically and professionally appropriate, leading to emotional strain and psychological discomfort [14, 17].

Inability to Provide Optimal Care

One of the major sources of moral distress in understaffed healthcare environments is the inability to provide optimal patient care. Healthcare professionals frequently report that excessive workload, limited time, and insufficient staffing force them to prioritize tasks rather than fully address patients' physical and emotional needs. As a result, many workers experience frustration, guilt, helplessness, and dissatisfaction with their professional performance. The literature indicates that repeatedly working under such conditions may weaken professional morale and contribute to long-term psychological distress [14, 18].

Emotional Burden

Understaffing also increases the emotional burden placed on healthcare workers. Continuous exposure to patient suffering, critical situations, and high emotional demands without adequate support or recovery time can lead to compassion fatigue. Compassion fatigue refers to a state of emotional exhaustion resulting from prolonged caregiving and repeated empathic engagement with patients experiencing pain, trauma, or severe illness. Healthcare professionals affected by compassion fatigue may experience emotional numbness, reduced empathy, irritability, and difficulties maintaining emotional resilience in clinical practice [11, 17].

Ethical Conflicts

Ethical conflicts are another important psychological consequence associated with understaffing. Healthcare workers may experience tension between organizational limitations and their ethical responsibility to provide safe and comprehensive patient care. Situations involving delayed treatment, insufficient patient attention, or compromised care standards can create feelings of moral conflict and internal psychological tension. The reviewed studies suggest that repeated exposure to such ethical dilemmas may contribute to anxiety, emotional exhaustion, job dissatisfaction, and burnout syndrome among healthcare professionals [14].

Impact on Healthcare Systems

The reviewed literature demonstrates that understaffing not only affects the psychological well-being of healthcare professionals but also has significant consequences for the overall functioning of healthcare systems. Persistent workforce shortages may negatively influence staff stability, patient safety, organizational efficiency, and the quality of healthcare services [18].

Absenteeism

Understaffing is strongly associated with increased absenteeism among healthcare workers. Chronic stress, burnout, emotional exhaustion, and physical fatigue may lead to frequent sick leave and reduced work attendance. Healthcare professionals experiencing prolonged psychological strain often require time away from work due to mental or physical health problems. Increased absenteeism further intensifies staffing shortages, creating a cycle in which remaining staff members face even greater workload and stress [7, 20].

Turnover Intention

Many studies indicate that understaffing contributes to higher turnover intention among healthcare professionals. Excessive workload, emotional burden, low job satisfaction, and limited organizational support may encourage workers to consider leaving their current workplace or the healthcare profession entirely. High turnover rates can worsen existing staffing shortages, increase recruitment and training costs, and reduce continuity of patient care within healthcare institutions [9, 20].

Lower Quality of Care

The literature consistently suggests that understaffing negatively affects the quality of patient care. When healthcare professionals are responsible for too many patients, they may have insufficient time to provide comprehensive assessment, emotional support, and individualized treatment. Time pressure and excessive workload may reduce the ability to maintain high clinical standards, leading to decreased patient-centered care and reduced overall healthcare effectiveness [14, 18].

Medical Errors

Understaffing has also been linked to an increased risk of medical errors and patient safety incidents. Fatigue, sleep deprivation, cognitive overload, and emotional exhaustion may impair concentration, decision-making, and communication among healthcare workers. Studies indicate that overworked medical personnel are more likely to make medication errors, documentation mistakes, or procedural inaccuracies, potentially compromising patient safety and treatment outcomes [10, 18].

Patient Dissatisfaction

Another important consequence of understaffing is increased patient dissatisfaction. Limited staff availability may result in longer waiting times, reduced communication with healthcare professionals, delayed responses to patient needs, and decreased emotional support. Patients treated in understaffed healthcare settings may perceive the quality of care as inadequate, which can negatively affect trust in healthcare institutions and the overall patient experience [18].

Preventive Strategies and Interventions

The reviewed literature emphasizes that effective preventive strategies and organizational interventions are essential to reduce the psychological consequences of understaffing in healthcare systems. Addressing workforce shortages and supporting healthcare professionals' mental well-being may improve both employee health and the overall quality of patient care [12].

Organizational Interventions

Organizational interventions play a central role in minimizing the negative effects of understaffing. Healthcare institutions may reduce occupational stress by improving workplace conditions, optimizing task distribution, ensuring adequate rest periods, and promoting supportive work environments. Clear communication, teamwork, and access to professional resources are also associated with improved psychological well-being among healthcare staff [2, 12].

Staffing Policies

Appropriate staffing policies are considered one of the most important strategies for preventing burnout and psychological distress. The literature suggests that maintaining safe staff-to-patient ratios, improving workforce planning, and reducing excessive overtime may significantly decrease workload pressure and emotional exhaustion among healthcare professionals. Long-term staffing strategies are essential to ensure sustainable healthcare system performance and employee retention [2, 18].

Mental Health Support

Access to mental health support services is crucial for healthcare professionals exposed to chronic occupational stress. Psychological counseling, employee assistance programs, stress management training, and early mental health interventions may help reduce symptoms of anxiety, depression, burnout, and emotional exhaustion. The reviewed studies emphasize that reducing stigma related to mental health support is also important in encouraging healthcare workers to seek professional help when needed [12, 13].

Resilience Programs

Resilience programs are increasingly recognized as valuable tools for strengthening coping abilities and emotional adaptation among healthcare professionals. Such programs may include mindfulness training, stress reduction techniques, peer support groups, and emotional self-regulation strategies. The literature indicates that resilience-building interventions may improve psychological flexibility, reduce emotional distress, and enhance overall well-being in demanding healthcare environments [12, 13].

Leadership Support

Supportive leadership is another important protective factor against the psychological effects of understaffing. Healthcare managers and organizational leaders play a significant role in creating healthy work environments, recognizing employee stress, and promoting staff well-being. Transparent communication, emotional support, appreciation of employees' efforts, and responsive management practices may improve job satisfaction and reduce feelings of isolation and burnout among healthcare workers [2, 12].

Work-Life Balance

Promoting work-life balance is essential for preventing chronic stress and mental exhaustion among healthcare professionals. Excessive working hours, frequent overtime, and irregular schedules associated with understaffing may interfere with personal life, family relationships, and recovery time. Strategies aimed at improving scheduling flexibility, limiting excessive workload, and ensuring adequate rest may contribute to better psychological health, higher job satisfaction, and improved long-term retention of healthcare personnel [10, 12].

4. Discussion

The findings of this narrative review indicate that understaffing in healthcare systems represents a major psychological and organizational challenge with significant consequences for healthcare professionals and patient care. The reviewed literature consistently demonstrated that chronic staff shortages contribute to increased levels of stress, burnout, anxiety, depression, moral distress, and emotional exhaustion among medical personnel. These psychological outcomes appear to be closely related to excessive workload, prolonged working hours, emotional overload, and the inability to provide optimal patient care [2, 7, 16, 20].

The discussion of the reviewed studies suggests that burnout syndrome is one of the most prominent consequences of understaffing, particularly among nurses and frontline healthcare workers. Emotional exhaustion, depersonalization, and reduced personal accomplishment were frequently associated with long-term exposure to stressful and understaffed work environments. Furthermore, persistent psychological strain may negatively affect professional motivation, interpersonal relationships, and overall job satisfaction [4, 9, 20].

An important aspect highlighted in the literature is the reciprocal relationship between understaffing and healthcare system instability. Psychological distress and burnout may increase absenteeism, turnover intention, and workforce attrition, which in turn further worsen staffing shortages and organizational burden. This creates a self-perpetuating cycle that may compromise both employee well-being and healthcare quality [9, 20].

The reviewed studies also emphasize that understaffing affects not only healthcare professionals but also patient outcomes. Reduced quality of care, increased medical errors, impaired communication, and lower patient satisfaction were commonly reported consequences associated with excessive workload and staff fatigue. These findings underline the importance of considering understaffing as both a workforce issue and a patient safety concern [10, 18].

The literature further suggests that preventive strategies, including effective staffing policies, organizational support, mental health interventions, resilience programs, and supportive leadership, may help reduce the psychological impact of understaffing. Creating healthier work environments and prioritizing healthcare workers' well-being appear essential for improving both staff retention and the long-term sustainability of healthcare systems [12, 13].

Despite the growing number of studies on understaffing and mental health, further research is needed to better understand long-term psychological outcomes and to evaluate the effectiveness of interventions aimed at reducing occupational stress among healthcare professionals.

5. Conclusions

Understaffing in healthcare systems is a significant organizational and public health problem that has serious psychological consequences for healthcare professionals. The findings of this narrative review demonstrate that chronic staff shortages contribute to increased levels of burnout, stress, anxiety, depression, emotional exhaustion, moral distress, and reduced job satisfaction among medical personnel [2, 20].

The reviewed literature indicates that excessive workload, prolonged working hours, emotional overload, and the inability to provide optimal patient care are major factors negatively affecting the mental well-being of healthcare workers. These psychological burdens not only impair individual health and professional functioning but may also negatively influence patient safety, quality of care, and the overall effectiveness of healthcare systems [16, 18].

Furthermore, understaffing contributes to absenteeism, turnover intention, and workforce attrition, creating a cycle that further deepens staffing shortages and organizational instability. The findings emphasize the importance of

implementing preventive strategies focused on improving staffing policies, organizational support, mental health services, resilience-building interventions, and work-life balance among healthcare professionals [12, 23].

Addressing understaffing should therefore be considered a priority for healthcare organizations and policymakers. Supporting the psychological well-being of healthcare workers is essential not only for protecting employees' mental health but also for ensuring safe, effective, and sustainable healthcare delivery.

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No supplementary materials are available.

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Conceptualization, [DG, WG, JR]; methodology, [DG, NN, NR]; literature search, [MK, WG, DG, KI, AK]; writing—original draft preparation, [NN, NR, JR, AJ, AK, MK]; writing—review and editing, [MK, WG, KI, DG, AJ]. The authors have read and agreed to the published version of the manuscript.

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The authors declare no conflict of interest.

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