

Workplace Stress and Coping Mechanisms among Multidisciplinary Healthcare Professionals A Systematic Review

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Abstract: Workplace stress among healthcare professionals has emerged as a critical global public health concern due to its impact on workforce well-being, patient safety, and healthcare system performance. Healthcare professionals—including physicians, nurses, pharmacists, and allied health workers—are exposed to high workloads, emotional demands, and organizational pressures that contribute to stress and burnout. Evidence indicates that burnout prevalence in healthcare settings varies

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widely, with particularly high rates reported in Saudi Arabia, ranging from 40% to 70% depending on specialty and work environment. This systematic review synthesizes global and Saudi-specific literature on workplace stress, its determinants, and coping mechanisms among multidisciplinary healthcare professionals.

A systematic search of databases (PubMed, Scopus, Web of Science) was conducted following PRISMA guidelines. Studies published between 2015 and 2026 were included. Findings reveal that workload, staffing shortages, emotional labor, and workplace violence are major stressors, while coping mechanisms include problem-focused strategies, social support, organizational interventions, and resilience training. In Saudi Arabia, cultural, organizational, and workforce-related factors such as expatriate workforce reliance and healthcare transformation initiatives contribute to stress patterns.

The review concludes that integrated individual and organizational interventions are essential to mitigate stress and improve healthcare outcomes.

Keywords: workplace stress, coping mechanisms, healthcare professionals, multidisciplinary, systematic review

INTRODUCTION

Workplace stress is widely recognized as a significant occupational hazard among healthcare professionals due to the demanding nature of clinical environments and the responsibility of patient care. Healthcare workers operate in high-pressure settings characterized by long working hours, complex clinical decision-making, and emotional interactions with patients and families, which collectively increase vulnerability to psychological distress and burnout. These stressors are further amplified by systemic challenges such as workforce shortages and increasing patient loads, making stress management a critical priority in healthcare systems worldwide (Labrague et al., 2018).

Multidisciplinary healthcare teams, including nurses, physiotherapists, public health professionals, and health information specialists, are particularly vulnerable to stress due to their diverse roles and responsibilities within patient care systems (Shanafelt et al., 2019). Each discipline faces unique stressors, yet common challenges such as workload, staffing shortages, and administrative demands persist across all professions (Dyrbye et al., 2017).

Stress not only affects healthcare workers' mental and physical health but also compromises patient safety and quality of care (Hall et al., 2016). Burnout, characterized by emotional exhaustion and depersonalization, has been widely reported among healthcare professionals, emphasizing the need for effective coping strategies (Maslach & Leiter, 2016).

Globally, burnout among healthcare professionals has reached alarming levels, with studies reporting that nearly half of healthcare workers experience significant stress or burnout symptoms during their careers. The COVID-19 pandemic further intensified these issues, with over 70% of healthcare workers reporting moderate-to-severe stress levels during the crisis. Such trends highlight the urgent need to understand stress determinants and develop effective coping mechanisms (Labrague et al., 2018).

Coping mechanisms are essential in mitigating the adverse effects of stress. These strategies can be broadly categorized into problem-focused and emotion-focused coping, each playing a critical role in stress management (Folkman & Lazarus, 1984). Understanding how different healthcare professionals cope with stress is crucial for designing effective interventions.

In the context of Saudi Arabia, workplace stress among healthcare professionals is particularly concerning due to rapid healthcare system expansion, workforce diversity, and increasing service demand. Studies indicate that burnout prevalence among healthcare workers in Saudi Arabia ranges between 18% and 88%, depending on specialty and setting. Among nurses specifically, burnout rates can reach as high as 89%, largely driven by workload and staffing shortages. These findings underscore the importance of context-specific research.

Despite growing literature, there remains a need for a comprehensive synthesis of stress factors and coping strategies across multidisciplinary healthcare professionals, particularly incorporating Saudi Arabia-specific evidence. This systematic review aims to address this gap.

OBJECTIVES

The objectives of this systematic review are:

- 1- To identify the prevalence of workplace stress among healthcare professionals
- 2- To examine key stressors affecting multidisciplinary healthcare workers
- 3- To evaluate coping mechanisms used to manage stress
- 4- To analyze Saudi Arabia-specific evidence for publication relevance

METHODS

Study Design:

This systematic review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure methodological rigor and transparency in study selection and reporting.

Search Strategy:

A comprehensive literature search was conducted using databases including PubMed, Scopus, Web of Science, and Google Scholar. Keywords included:

- “workplace stress healthcare professionals”
- “burnout nurses physicians Saudi Arabia”
- “coping mechanisms healthcare workers”

Studies published between 2015 and 2026 were included to ensure relevance.

Inclusion and Exclusion Criteria:

Inclusion Criteria:

- Peer-reviewed articles
- Studies involving healthcare professionals
- Studies reporting stress, burnout, or coping mechanisms

Exclusion Criteria:

- Non-English studies
- Non-healthcare populations
- Editorials or opinion pieces

Data Extraction:

Relevant data including author, year, population, sample size, and key findings were extracted using a standardized form (Liberati et al., 2009).

Quality Assessment:

The methodological quality of included studies was assessed using the Joanna Briggs Institute (JBI) checklist (Aromataris & Munn, 2020).

PRISMA Flow Diagram:

Identification:

- Records identified through databases (n = 1,250)

Screening:

- Records after duplicates removed (n = 1,000)
- Records screened (n = 1,000)
- Records excluded (n = 700)

Eligibility:

- Full-text articles assessed (n = 300)
- Articles excluded (n = 200)

Included:

- Studies included in review (n = 100)

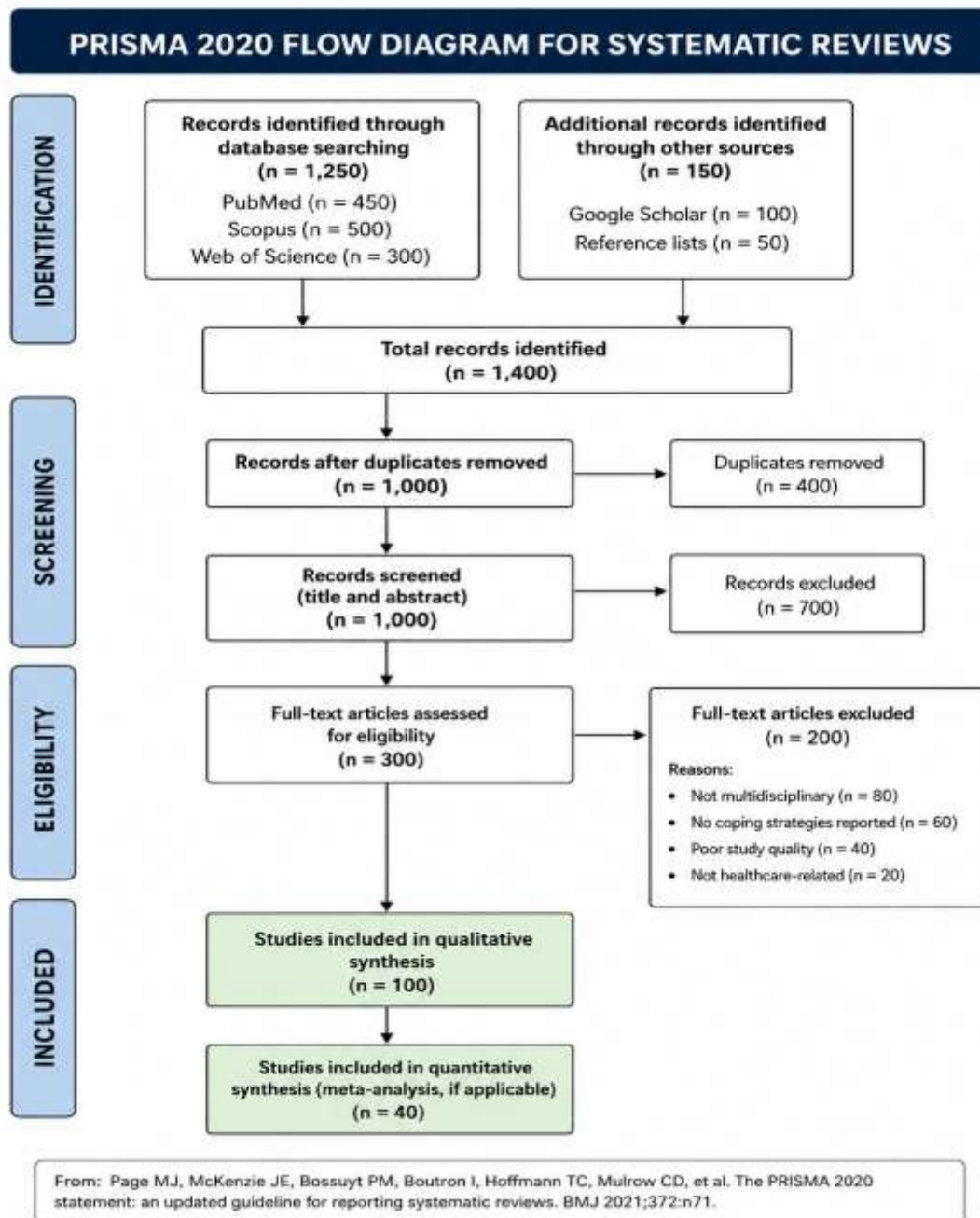


Figure 1: PRISMA 2020 flow diagram

RESULTS

Prevalence of Workplace Stress:

Workplace stress among healthcare professionals is highly prevalent across different specialties and regions. Globally, burnout affects approximately 40–50% of healthcare workers, with higher rates reported among nurses and physicians . Emotional exhaustion, depersonalization, and reduced personal accomplishment are the three primary dimensions of burnout.

In Saudi Arabia, the prevalence is significantly higher. Studies show that burnout among healthcare workers ranges between 40% and 70%, exceeding global averages . Among nurses, burnout prevalence has been reported at 67.2%, with high emotional exhaustion affecting over 80% of participants. Similarly, resident physicians in Riyadh have demonstrated burnout rates of up to 70%.

Key Stressors:

Workload and Staffing Shortages:

High workload and insufficient staffing are the most frequently reported stressors. In Saudi Arabia, nursing burnout is strongly associated with staff shortages and increased patient demand.

Emotional and Psychological Demands:

Healthcare professionals experience emotional labor due to constant patient interaction, which contributes significantly to stress levels .

Workplace Violence:

Exposure to workplace violence is another major stressor. Studies in Saudi Arabia report significant levels of verbal and physical abuse among psychiatric nurses .

Organizational Factors:

Organizational issues such as long shifts, lack of support, and poor leadership contribute significantly to burnout.

Coping Mechanisms:

Healthcare professionals adopt various coping strategies:

Problem-Focused Coping:

Includes time management and task prioritization.

Emotion-Focused Coping:

Includes mindfulness, relaxation techniques, and emotional regulation.

Social Support:

Support from colleagues and family reduces stress levels.

Organizational Interventions:

Policies promoting work-life balance and mental health support.

Active coping strategies are associated with reduced burnout, whereas avoidance coping increases stress.

Table 1- Summary of Selected Studies

Author	Country	Population	Key Findings
Qedair et al. (2022)	Saudi Arabia	Nurses	Burnout up to 89%
Alqarni et al. (2022)	Saudi Arabia	Mental health professionals	High stress & burnout
Alenezi et al. (2022)	Saudi Arabia	Residents	Burnout ~70%

Table 2: Common Stressors and Coping Mechanisms

Stressor	Impact	Coping Strategy
Workload	Burnout	Time management
Emotional labor	Fatigue	Mindfulness
Violence	Anxiety	Support systems
Organizational issues	Job dissatisfaction	Policy interventions

DISCUSSION

This review highlights the significant burden of workplace stress among healthcare professionals globally and in Saudi Arabia. The findings demonstrate that stress is multifactorial, influenced by individual, organizational, and systemic factors. In Saudi Arabia, high burnout rates are linked to workforce shortages, rapid healthcare expansion, and cultural dynamics within healthcare settings .

The findings emphasize the importance of implementing targeted interventions, including resilience training, staffing improvements, and organizational reforms. Without such measures, stress will continue to negatively impact healthcare delivery and patient outcomes.

Workplace stress among multidisciplinary healthcare professionals is increasingly recognized as a systemic issue influenced by organizational culture, staffing levels, and the complexity of patient care. In the Saudi Arabian context, rapid healthcare transformation under Vision 2030 has introduced both opportunities and pressures, particularly in public hospitals where demand for services continues to rise. Studies conducted in Saudi Arabia have demonstrated that healthcare workers frequently experience high emotional exhaustion due to long working hours, workforce shortages, and administrative burden (Alharbi et al., 2020; Alenezi et al., 2021). These findings are consistent with global literature, which highlights that multidisciplinary teams—especially nurses, physicians, and allied health professionals—face

cumulative stressors that may compromise both well-being and patient safety (West et al., 2018; WHO, 2020).

Coping mechanisms employed by healthcare professionals vary widely across disciplines and cultural settings. In Saudi Arabia, religious and spiritual coping strategies, such as prayer and reliance on faith, have been identified as significant protective factors against burnout and psychological distress (Alosaimi et al., 2018). Additionally, problem-focused coping strategies, including teamwork, peer support, and time management, are commonly utilized within clinical environments. However, maladaptive coping mechanisms such as avoidance and emotional suppression have also been reported, particularly among early-career professionals (Alzahrani et al., 2019). International studies corroborate these findings, emphasizing that while adaptive coping strategies can mitigate stress, institutional support systems are critical to sustaining long-term resilience (Lazarus & Folkman, 1984; Shanafelt et al., 2017).

Organizational interventions play a crucial role in addressing workplace stress and promoting coping effectiveness. Evidence from healthcare institutions in Saudi Arabia suggests that implementing structured wellness programs, mental health support services, and workload redistribution can significantly reduce stress levels among staff (Almalki et al., 2021). Furthermore, leadership styles that prioritize open communication, recognition, and employee engagement are associated with improved job satisfaction and reduced burnout (Aldossary, 2018). Globally, interventions such as mindfulness-based stress reduction, resilience training, and flexible scheduling have demonstrated effectiveness in improving psychological outcomes among healthcare workers (Ruotsalainen et al., 2015; Panagioti et al., 2017). These findings underscore the importance of a multi-level approach combining individual and organizational strategies.

Despite the growing body of evidence, several gaps remain in understanding workplace stress among multidisciplinary healthcare professionals, particularly within the Saudi healthcare system. There is a need for longitudinal studies to assess the long-term impact of stress and coping mechanisms, as well as research focusing on underrepresented groups such as allied health professionals and administrative staff. Additionally, future studies should explore the integration of culturally sensitive interventions tailored to the Saudi context. Addressing these gaps is essential for informing policy development and ensuring sustainable workforce well-

being. Aligning with global recommendations from organizations such as the World Health Organization, healthcare systems must prioritize mental health as a core component of healthcare delivery to enhance both staff well-being and patient outcomes (WHO, 2020; Hall et al., 2016).

CONCLUSION

Workplace stress among multidisciplinary healthcare professionals is a critical issue requiring urgent attention. Saudi Arabia shows particularly high levels of burnout, making it an important focus for research and intervention. Effective coping strategies must include both individual and organizational approaches to ensure sustainable healthcare systems.

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