

The Determinants of Emergency Nurses' Burnout: A Systematic Review

Nada Falah Alanazi¹, Tukimin Bin Sansuwito^{2*}

¹School of Health and Applied Science, Lincoln University College, Malaysia,
alanazinada.phdscholar@lincoln.edu.my

²School of Health and Applied Science, Lincoln University College, Malaysia,
Tukimin@lincoln.edu.my

*Corresponding Author's E-mail: Tukimin@lincoln.edu.my

Abstract: *This PRISMA-informed systematic review synthesizes eligible primary evidence on factors associated with burnout among emergency nurses published from 2015 through 2025. A targeted evidence-selection workflow used MEDLINE via PubMed, PubMed Central, OpenAlex for supplementary discovery, publisher and DOI records for verification, and backward and forward citation chasing. Forty-seven primary studies met the operational eligibility criteria and were mapped across thirteen determinant domains using structured narrative synthesis and evidence mapping. The evidence positions burnout as a multilevel occupational outcome shaped by interacting demands, resources, relational conditions, personal capacities, and recovery opportunities rather than an individual coping failure. Work Environment was the most frequently examined domain (29 of 47 studies), followed by Experience/Demographics (26), Trauma/Stress (12), Workload (12), Organizational Support (11), and Social Support (9). Staffing, Shift Work, Leadership, Work-Family/Recovery, and Resilience were less uniformly examined, while Moral Distress and Violence remained comparatively sparse. Across settings, greater burnout was recurrently associated with high or poorly controlled demands and weaker organizational resources, although heterogeneous measures and predominantly cross-sectional designs limit causal interpretation. Job Demands-Resources theory organizes the demand-resource pattern, while Conservation of Resources theory explains cumulative depletion and constrained recovery. The review contributes an updated thirteen-domain taxonomy, evidence-attention map, and theoretically integrated account that distinguishes research frequency from causal importance. Future studies should prioritize longitudinal, multilevel, intervention, and implementation designs that test organizational changes and clarify underexamined ethical, safety, and recovery mechanisms. Evidence was most recurrent for work environment and occupational context, whereas newer studies broadened attention toward psychological safety, ethical strain, and violence.*

Keywords: emergency nurses; burnout; job demands; work environment; staffing; organizational support; resilience; systematic review.

1. Introduction

Emergency nursing combines rapid clinical judgment, high patient turnover, unpredictable acuity, repeated exposure to suffering, competing priorities, and substantial interpersonal and organizational demands. These conditions create a distinctive risk environment for occupational burnout because emergency nurses must sustain attention and emotional regulation while managing time pressure, crowding, resource constraints, violence risk, and recurrent critical events. Earlier systematic

evidence established meaningful levels of emotional exhaustion, depersonalization, and reduced personal accomplishment and identified job demands, job control, social support, traumatic exposure, and organizational factors as important correlates (Adriaenssens et al., 2015b). A later meta-analysis similarly confirmed substantial burnout across the three Maslach dimensions in emergency-nursing samples (Li et al., 2018). The contemporary evidence base extends beyond prevalence by locating burnout within the organization of emergency care. A longitudinal study linked occupational stressors and work characteristics to later emotional exhaustion (Adriaenssens et al., 2015a). During the Middle East respiratory syndrome outbreak, job stress, inadequate hospital resources, and weak family or friend support explained variation in burnout (Kim & Choi, 2016). During COVID-19, workload changes and resource limitations were associated with higher burnout risk, whereas colleague, supervisor, and management support were protective (Butera et al., 2021). Recent studies linked effort-reward imbalance, workplace violence, organizational culture, and demographic or scheduling conditions to burnout (Braun et al., 2024; Lan et al., 2025; Mao et al., 2025; Moon & Park, 2025).

Job Demands-Resources theory provides a useful organizing framework because it distinguishes demands requiring sustained physical or psychological effort from resources that support goal attainment, learning, control, and recovery (Bakker & Demerouti, 2017). Conservation of Resources theory adds a temporal mechanism: repeated loss or threatened loss of time, energy, safety, status, social support, and control can generate loss spirals that make subsequent demands harder to absorb (Hobfoll et al., 2018). Together, these perspectives predict that workload, trauma, violence, shift burden, and ethical strain should be especially consequential when staffing, autonomy, leadership, equipment, social support, or recovery time are weak. They also caution against treating resilience as a substitute for safe systems because personal capacities are sustained more plausibly when organizational resources are credible and accessible. Recent determinant research therefore spans structural, relational, ethical, personal, and recovery conditions. Favorable emergency-department work environments have been associated with lower burnout, job dissatisfaction, and intention to leave (Muir et al., 2023). Authentic leadership, managerial support, staffing adequacy, and practice-environment characteristics have also been associated with lower burnout (Al Sabei et al., 2023). In a South African context, job demands, supervisor and co-worker relationships, equipment sufficiency, and work capabilities differentiated burnout profiles (Barnard et al., 2023). Newer studies further introduce moral distress, ethical climate, psychological safety, workplace violence, organizational culture, compensation, job insecurity, effort-reward imbalance, and work-family recovery, indicating movement toward more integrated and system-sensitive explanations rather than isolated individual-risk models.

Despite this expansion, the evidence remains fragmented by measurement instrument, setting, determinant terminology, and study design. Burnout is operationalized through the Maslach Burnout Inventory, Copenhagen Burnout Inventory, Professional Quality of Life scale, Burnout Assessment Tool, and single-item indicators, while exposures are labeled inconsistently as workload, job stress, practice environment, resources, organizational support, role stress, resilience, capability, or ethical climate. A review focused on emergency-department nursing burnout and resilience covered 2015–2019 evidence (Phillips et al., 2022), while a recent review combined emergency nurses and physicians and centered burnout, depression, and stress rather than a determinant taxonomy (Jachmann et al., 2025). Accordingly, this review updates primary evidence through 2025, organizes determinants into thirteen harmonized domains, maps research concentration and neglect, and interprets patterns more explicitly through JD-R and COR theory. It asks which determinants have been examined, how they cluster theoretically, where evidence converges or remains context-dependent, and which conceptual and methodological gaps should direct future research.

2. Methodology

This systematic literature review used structured narrative synthesis with determinant-domain evidence mapping to examine burnout determinants among emergency nurses. Reporting was guided by PRISMA 2020 principles; however, the review is described as PRISMA-informed rather than fully compliant because reproducible hit counts were unavailable for every search and no prospectively registered protocol existed. PRISMA principles informed identification, screening, eligibility assessment, and inclusion and supported consistency across the selection pathway (Page et al., 2021). Meta-analysis was not undertaken because heterogeneity in burnout measures, determinant definitions, populations, settings, and analytical approaches made pooled comparison inappropriate. The review covered publications from January 1, 2015 to December 31, 2025. MEDLINE via PubMed was the principal database, while PubMed Central and OpenAlex supported discovery. Publisher and DOI records verified metadata, and citation chasing extended retrieval. Search concepts combined emergency-nursing terminology, burnout-related terms, and determinant-focused language, including workload, staffing, leadership, support, work environment, violence, moral distress, and resilience. Searches and verification were completed on September 1, 2026, and eligibility was restricted to English-language, peer-reviewed primary studies.

Studies were included when they reported data from emergency nurses or a separable emergency-nurse subgroup, fell within the publication period, directly measured burnout or a burnout dimension, examined at least one personal, occupational, organizational, relational, ethical, or recovery-related determinant, and provided sufficient information for extraction. Quantitative, qualitative, observational, longitudinal, and intervention designs were eligible. Reviews, meta-analyses, editorials, commentaries, out-of-window publications, studies without direct burnout measurement, and studies lacking separable emergency-nurse findings were excluded. Screening was conducted by a single reviewer without duplicate screening or inter-rater reliability assessment; therefore, reviewer-dependent selection error remains possible despite verification against criteria and records. Data extraction recorded author and year, study design, population, burnout operationalization, and determinant terminology. Methodological characteristics were appraised narratively using design-appropriate domains from the Mixed Methods Appraisal Tool, without quality scoring; appraisal informed confidence rather than automatic exclusion (Hong et al., 2018). Concerns included cross-sectional temporality, self-report measurement, convenience sampling, single-center recruitment, incomplete confounder adjustment, and heterogeneous burnout instruments. Determinants were harmonized into thirteen domains: Workload, Staffing, Shift Work, Violence, Trauma/Stress, Moral Distress, Leadership, Organizational Support, Social Support, Work Environment, Resilience, Work-Family/Recovery, and Experience/Demographics.

Table 1 provides a binary evidence map showing whether each study measured, modeled, tested, or explored a determinant; check marks do not indicate significance, effect size, causal importance, or quality. Narrative synthesis compared convergence, divergence, context, design strength, and theoretical meaning across domains. Job Demands-Resources theory organized demand-resource patterns, while Conservation of Resources theory informed resource loss and recovery constraints. Causal language was reserved for designs supporting temporal or intervention inference. The candidate ledger contained 58 unique reports. Seven were removed before eligibility assessment: six reviews or commentaries and one publication outside the 2015–2025 window. Fifty-one reports underwent eligibility assessment, after which four were excluded because three did not directly measure burnout and one lacked separable emergency-nurse findings. The review therefore included 47 primary studies, as summarized in Figure 1. Narrative synthesis was retained because comparable effect estimates were unavailable across consistent exposures, burnout measures, populations, and models.

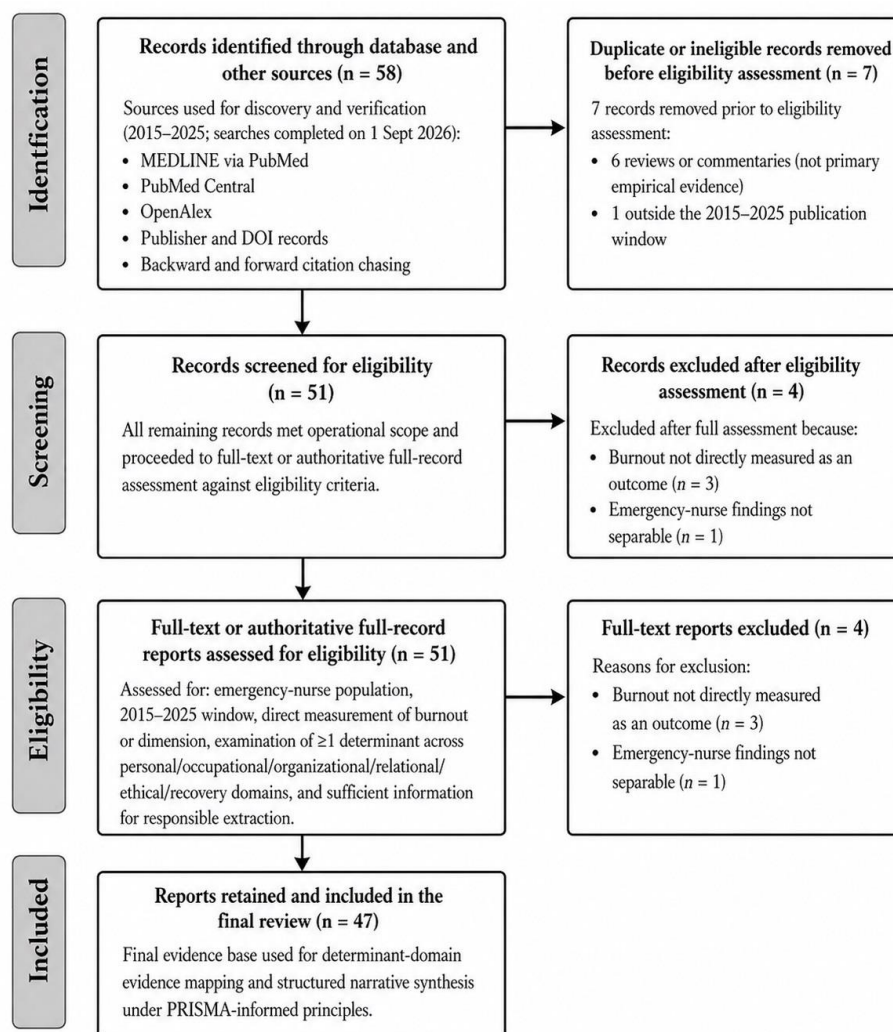


Figure 1: The Systematic Review Process

3. Integrated Determinant Framework for Emergency Nurses' Burnout

The 47 included studies conceptualize emergency-nurse burnout as a multilevel pattern shaped by demands, resources, conditions, and recovery opportunities. Work Environment was examined in 29 studies (61.7%), Experience/Demographics in 26 (55.3%), Trauma/Stress in 12 (25.5%), Workload in 12 (25.5%), Organizational Support in 11 (23.4%), and Social Support in 9 (19.1%). Under Job Demands-Resources theory, workload, trauma, violence, shift burden, and ethical strain operate as demands, whereas staffing, leadership, organizational and social support, favorable work environments, resilience, and recovery operate mainly as resources. These frequencies map research attention, not effect magnitude, study quality, or causal force. Work Environment was the most frequently examined domain, although its breadth creates overlap with staffing, leadership, autonomy, resources, and organizational relationships. Multicenter evidence associated favorable environments with lower burnout or better outcomes (Muir et al., 2023; Turnbach et al., 2024), while organizational culture and trust were protective in Korea (Moon & Park, 2025). Leadership and Organizational Support appeared in 7 and 11 studies, respectively. Authentic leadership and managerial resources were associated with lower burnout in Oman (Al Sabei et al., 2023). The evidence supports organizational resources, but construct overlap means domain frequency cannot be interpreted as comparative causal strength alone.

Demand-side evidence concentrated on Trauma/Stress (12 studies; 25.5%), Workload (12; 25.5%), Shift Work (7; 14.9%), Staffing (7; 14.9%), and Violence (3; 6.4%). Job stress correlated with burnout in Iranian nurses (Tavakoli et al., 2018), while Dutch data linked emotional exhaustion to work-time demands and aggression or conflict (de Wijn et al., 2022). During COVID-19, workload changes and resource shortages were associated with burnout risk, whereas collegial and managerial support were protective (Butera et al., 2021). Evidence linked workplace violence directly with burnout (Mao et al., 2025). Convergence exists, but pandemic contexts and cross-sectional designs constrain causal comparison. Shift and recovery evidence was more context-dependent. Work-Family/Recovery appeared in 6 studies (12.8%), while seven examined Shift Work. Shift patterns were associated with greater burnout in some samples, yet a 12-hour rotating-shift study reported work-family reconciliation without worsening burnout or sleep (Sánchez Onrubia et al., 2025). This divergence indicates that shift duration alone is incomplete. Rotation pattern, predictability, overtime, preference, consecutive shifts, family demands, and recovery opportunities may determine whether scheduling functions as a demand or resource. The evidence therefore favors contextual interpretation rather than a universal conclusion that longer shifts increase burnout.

Resilience (6 studies; 12.8%), Moral Distress (3; 6.4%), and Violence (3; 6.4%) remained sparse. Low frequency should not be mistaken for low practical importance. End-of-life conflict was related to burnout through self-compassion processes (Satake & Arao, 2020), while moral distress, ethical climate, and moral resilience were integrated in a later model (Wu et al., 2025). Organizational support and psychological capital showed protective relationships in a compassion-fatigue model including burnout (Xie et al., 2025). These findings broaden determinant research toward professional integrity, interpersonal safety, organizational trust, and resource preservation, but the limited evidence warrants cautious claims.

Table 1: Literature Review Matrix

No.	Author(s) and Year	Workload	Staffing	Shift	Violence	Stress	Moral Dist.	Leadership	Org Support	Social Support	Work Env.	Resilience	Recovery	Experience	Burnout
1	Adriaenssens et al. (2015a)	✓				✓				✓	✓			✓	✓
2	Hunsaker et al. (2015)	✓				✓				✓	✓			✓	✓
3	Kim & Choi (2016)			✓		✓			✓	✓				✓	✓
4	Jiang et al. (2017)		✓								✓			✓	✓
5	Rozo et al. (2017)					✓					✓				✓
6	Wei et al. (2017)							✓	✓		✓				✓
7	Tavakoli et al. (2018)					✓								✓	✓
8	Adams et al. (2019)							✓	✓		✓				✓
9	Alqahtani et al. (2019)			✓							✓			✓	✓
10	Borges et al. (2019)													✓	✓
11	Jose et al. (2020)											✓			✓
12	O'Callaghan et al. (2020)		✓			✓					✓			✓	✓
13	Portero de la Cruz et al. (2020)					✓								✓	✓
14	Satake & Arao (2020)						✓								✓
15	Butera et al. (2021)	✓							✓	✓	✓				✓
16	Lee et al. (2021)								✓		✓			✓	✓
17	Ruiz-Fernández et al. (2021)									✓	✓			✓	✓

No.	Author(s) and Year	Workload	Staffing	Shift	Violence	Stress	Moral Dist.	Leadership	Org Support	Social Support	Work Env.	Resilience	Recovery	Experience	Burnout
18	Yu et al. (2021)									✓	✓			✓	✓
19	de Wijn et al. (2022)	✓			✓					✓	✓		✓		✓
20	Lopez et al. (2022)					✓					✓			✓	✓
21	Siam & Alrasheedi (2022)			✓										✓	✓
22	Yang et al. (2022)					✓					✓				✓
23	Yu & Gui (2022)									✓	✓			✓	✓
24	Al Sabei et al. (2023)	✓	✓					✓	✓		✓				✓
25	Barnard et al. (2023)	✓						✓		✓	✓	✓			✓
26	Muir et al. (2023)		✓								✓				✓
27	Norful et al. (2023)										✓			✓	✓
28	Subih et al. (2023)					✓								✓	✓
29	Almeziyeny et al. (2024)													✓	✓
30	Braun et al. (2024)										✓				✓
31	Hetherington et al. (2024)	✓	✓			✓					✓		✓		✓
32	Huang et al. (2024)	✓				✓					✓			✓	✓
33	Tang et al. (2024)			✓					✓			✓	✓	✓	✓
34	Turnbach et al. (2024)		✓					✓	✓		✓				✓
35	Alshammari et al. (2025)						✓							✓	✓
36	Barnard (2025)	✓									✓	✓			✓
37	Brassington et al. (2025)	✓	✓								✓				✓
38	Fernandes et al. (2025)			✓									✓	✓	✓
39	Lan et al. (2025)	✓		✓										✓	✓
40	Li et al. (2025)												✓	✓	✓
41	Mao et al. (2025)				✓										✓
42	Mataei et al. (2025)													✓	✓
43	Moon & Park (2025)							✓	✓		✓				✓
44	Munn et al. (2025)	✓			✓			✓	✓		✓			✓	✓
45	Sánchez Onrubia et al. (2025)			✓									✓		✓
46	Wu et al. (2025)						✓				✓	✓			✓
47	Xie et al. (2025)								✓			✓			✓

Table 1 presents the evidence map. A check mark indicates substantive examination of a determinant through measurement, modeling, or central exploration; blank cells indicate no verified substantive focus. Every study measured burnout or a burnout dimension, so the Burnout column is checked throughout. Across 47 studies, the matrix identifies research imbalance: organizational and work-environment factors receive attention, whereas violence and moral distress remain comparatively sparse. The matrix supports an updated determinant taxonomy and evidence-attention map integrated through JD-R and COR theory, while preserving the distinction between how frequently a determinant is studied and how strongly it is supported.

4. Discussion

The 47-study synthesis supports a systems-oriented explanation of emergency-nurse burnout. Across settings, the recurring pattern is an imbalance between demands and the resources available to meet them. Emergency departments combine crowding, acuity, interruptions, uncertainty, emotional labor, time pressure, and critical events; these demands appear more consequential when staffing, equipment, decision latitude, leadership, support, or recovery are insufficient. This pattern fits Job Demands-Resources theory, while Conservation of Resources theory explains why repeated depletion of energy, safety, time, control, and social resources may amplify subsequent stressors. Because the evidence is predominantly observational, the synthesis supports a coherent association pattern rather than a universal causal chain. Its contribution is an integrated account of how structural, relational, ethical, personal, and recovery conditions cluster around burnout rather than an attribution of burnout to vulnerability. Workload, staffing, and practice environment form the structural cluster, although evidence varies in design strength. A study found that high perceived workload and an unsupportive practice environment increased burnout odds, with practice environment mediating part of the workload-burnout relationship (Brassington et al., 2025). Multicenter studies similarly associated better emergency-department environments with lower burnout and related job outcomes (Muir et al., 2023; Turnbach et al., 2024). Iranian data linked burnout with job stress and dissatisfaction (Tavakoli et al., 2018), while effort-reward imbalance correlated with burnout risk in a German pilot (Braun et al., 2024). This convergence favors structural explanations, but cross-sectional temporality, heterogeneous instruments, and broad constructs mean that staffing, workload, recognition, autonomy, and practice climate cannot be treated as interchangeable causal exposures.

Leadership, organizational support, and collegial resources appear to buffer demands, but their boundaries require discipline. During COVID-19, colleague, supervisor, and management support were associated with lower burnout risk while workload changes and inadequate protective resources increased risk (Butera et al., 2021). Perceived social support was similarly related to professional-quality-of-life dimensions in Spanish emergency nurses (Ruiz-Fernández et al., 2021). Evidence associated positive organizational culture and trust-based relationships with lower burnout (Moon & Park, 2025), while organizational support related to compassion-fatigue patterns including burnout through psychological capital (Xie et al., 2025). These findings suggest emotional and instrumental pathways, but support may represent interpersonal help, managerial responsiveness, organizational recognition, or environmental resources. The synthesis therefore supports resource availability broadly without assuming that each support construct has an equivalent effect. Traumatic exposure and acute stress remain central, yet evidence is context-sensitive. During MERS, job stress was the strongest burnout predictor, while hospital resources and family or friend support were protective (Kim & Choi, 2016). During COVID-19, burnout mediated relationships between stress and posttraumatic symptoms, while California nurses reported moderate burnout alongside secondary traumatic stress (Yang et al., 2022; Lopez et al., 2022). Spanish and Iranian studies also linked perceived or occupational stress with burnout (Portero de la Cruz et al., 2020; Tavakoli et al., 2018). These recurrent findings span outbreak and non-outbreak settings, but pandemic-specific shortages and threat exposure may amplify ordinary emergency-work demands. Trauma-informed workforce strategies are plausible, while the contributions of acute exposure and chronic organizational strain still require prospective comparison.

Shift work and work-family recovery show divergence rather than a uniform risk pattern. Midshift or night-shift conditions were associated with greater burnout in some studies, and latent-profile evidence linked night shifts and longer weekly hours with burnout subtypes (Lan et al., 2025). In contrast, a 2025 observational study found that 12-hour rotating shifts improved work-family reconciliation without significantly worsening burnout or sleep (Sánchez Onrubia et al., 2025). This inconsistency is informative: shift duration is not equivalent to recovery opportunity. Predictability,

rotation direction, consecutive shifts, overtime, commute burden, family responsibilities, nurse preference, break quality, and schedule control may determine whether scheduling becomes a demand or resource. Evidence supports context-dependent interpretation and treating scheduling as a multidimensional exposure rather than a shift-length effect. Resilience and personal capacities appear protective but are best interpreted within the work system. South African evidence linked stronger work capabilities and better supervisor, co-worker, autonomy, and equipment resources with lower exhaustion and mental distance (Barnard et al., 2023); later work found capabilities and job-insecurity appraisal differentiated burnout profiles (Barnard, 2025). Organizational support and resilience were negatively related to burnout-related outcomes (Tang et al., 2024). Self-compassion partly mediated the association between end-of-life-care conflict and burnout in Japan (Satake & Arao, 2020), while grit predicted lower burnout alongside organizational culture in Korea (Moon & Park, 2025). These findings broaden the resource concept but do not justify transferring prevention responsibility to nurses; personal resources remain more usable when organizational conditions protect recovery, autonomy, and professional efficacy.

Ethical and interpersonal-safety evidence adds mechanisms conventional workload models can miss. Moral distress involves professional constraint and threatened integrity, while workplace violence adds threats to safety. Moral distress was associated with burnout through ethical-climate and moral-resilience pathways (Wu et al., 2025), and end-of-life-care conflict was linked with exhaustion and depersonalization through self-compassion (Satake & Arao, 2020). Systems-focused research connected violence and psychological safety with burnout (Munn et al., 2025), while a Chinese study found workplace violence significantly predicted burnout within a mediation model (Mao et al., 2025). Although these domains remain sparse relative to work environment or demographics, they are distinct from high effort alone. The findings warrant violence prevention, psychologically safe leadership, ethical support, reporting systems, and organizational accountability while highlighting longitudinal needs. Methodological confidence is constrained rather than high. Cross-sectional self-report studies dominate, and heterogeneous burnout measures complicate comparisons of prevalence, thresholds, and determinant effects. Multicenter studies improve external validity, while a few longitudinal, intervention, qualitative, or mixed-design reports add temporal or contextual depth, but causal inference remains limited. Geographic coverage spans Asia, Europe, the Middle East, North America, South Africa, and Australia, although many contexts remain represented by one study or hospital network. The strongest conclusions concern recurring demand-resource patterns rather than precise causal effect sizes. The review advances knowledge through integrating 47 studies into a thirteen-domain taxonomy and distinguishing evidence that is recurrent, emerging, context-dependent, or sparse. Prospective, multilevel, and organizational-intervention designs are needed before specific determinants can be ranked by causal importance.

5. Research Gaps and Future Research Directions

The principal conceptual gap is the absence of a shared taxonomy and construct boundaries. Studies use overlapping labels such as job stress, workload, demands, work environment, organizational support, psychological safety, capability, and resilience, while burnout is operationalized with different instruments and thresholds. The 47-study map shows sustained attention to Work Environment and Experience/Demographics but comparatively sparse examination of Violence and Moral Distress. Future studies should predefine constructs, distinguish exposure from mediator, moderator, and outcome, and report burnout subscale and total-score logic transparently. Theory should also be used prospectively: JD-R and COR models can test which resources buffer particular demands, under what conditions, and through which recovery or resource-loss pathways rather than serving only as post-hoc interpretations.

The dominant design gap remains cross-sectional research. Prospective cohorts are needed to establish whether workload, violence exposure, moral distress, organizational deterioration, or resource loss precede changes in burnout and whether resource improvements predict recovery. Cluster-randomized trials and natural experiments should evaluate staffing changes, schedule redesign, workload interventions, leadership development, violence-prevention programs, protected recovery, ethical-climate interventions, and organizational-support strategies. Emergency-department operational data should be linked with psychological measures so that patient volume, acuity, boarding, staffing ratios, overtime, breaks, shift patterns, and workload can be analyzed alongside burnout. Multilevel models are especially important because nurses are nested within teams, shifts, departments, hospitals, and health systems, while confounder control is required before associated factors are interpreted as determinants.

Geographic, measurement, and implementation gaps are important. Although the evidence now spans multiple regions, many health systems remain represented by single-center or cross-sectional samples, limiting transferability across staffing models, labor markets, cultures, and emergency-care structures. Comparative studies should test whether demand-resource pathways operate similarly in high-resource and resource-constrained settings and across rural, urban, trauma, pediatric, and high-volume departments. Intervention research should report feasibility, participation, fidelity, equity, cost, sustainability, and unintended effects. Individual wellness programs should be compared with structural interventions rather than evaluated in isolation. The highest-priority agenda is to determine which combinations of staffing, workload control, leadership, safety, ethical climate, organizational and social support, and recovery produce reductions in burnout without shifting responsibility from institutions to nurses.

6. Conclusion

This review integrated 47 eligible primary studies published from 2015 through 2025 and organized evidence on emergency-nurse burnout into thirteen determinant domains. Research is concentrated around work environment, occupational and demographic context, stress, workload, and organizational or social resources, while violence and moral distress remain comparatively underexamined. Across settings, greater burnout recurrently accompanies high or poorly controlled demands and weaker resources, although heterogeneous measures and predominantly cross-sectional designs limit causal ranking. The review's contribution is not first identification of burnout determinants, but an updated evidence-attention map and theoretically integrated taxonomy showing how structural, relational, ethical, personal, and recovery conditions form a demand-resource pattern. JD-R explains demand-resource balance, while COR clarifies how cumulative loss and constrained recovery may intensify that imbalance. For practice and policy, the evidence supports multilevel prevention rather than individual coping alone. Emergency departments should consider manageable workload, staffing and resources, psychologically safe leadership, violence prevention, ethical support, organizational and peer support, and scheduling that protects recovery. Resilience, self-compassion, coaching, or wellness strategies are useful adjuncts, but they should not substitute for reform of harmful conditions. Confidence is greatest in recurring associations and lower for sparse domains or causal interpretations from cross-sectional self-report evidence. Research should test system-level interventions through longitudinal, experimental, natural-experiment, and multilevel designs while clarifying how ethical, safety, cultural, and recovery mechanisms interact with established workload and work-environment pathways. Stronger evidence is required before specific determinants can be ranked by causal importance or translated into intervention priorities.

References

- Adams, A., Hollingsworth, A., & Osman, A. (2019). The implementation of a cultural change toolkit to reduce nursing burnout and mitigate nurse turnover in the emergency department. *Journal of Emergency Nursing*, 45(4), 452–456. <https://doi.org/10.1016/j.jen.2019.03.004>
- Adriaenssens, J., De Gucht, V., & Maes, S. (2015a). Causes and consequences of occupational stress in emergency nurses, a longitudinal study. *Journal of Nursing Management*, 23(3), 346–358. <https://doi.org/10.1111/jonm.12138>
- Adriaenssens, J., De Gucht, V., & Maes, S. (2015b). Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research. *International Journal of Nursing Studies*, 52(2), 649–661. <https://doi.org/10.1016/j.ijnurstu.2014.11.004>
- Almeziyeny, T., Alashaikh, A., Alnasser, R., Dammas, S., Alsubaie, N., Alhusaini, Y., & Alotaibi, T. (2024). Prevalence and impact of burnout in emergency department nurses; a multicenter study in Riyadh, Saudi Arabia. *Medical Science*, 28, e14ms3304. <https://doi.org/10.54905/disssi.v28i145.e14ms3304>
- Alqahtani, A. M., Awadalla, N. J., Alsaleem, S. A., Alsamghan, A. S., & Alsaleem, M. A. (2019). Burnout syndrome among emergency physicians and nurses in Abha and Khamis Mushait Cities, Aseer Region, Southwestern Saudi Arabia. *The Scientific World Journal*, 2019, 4515972. <https://doi.org/10.1155/2019/4515972>
- Al Sabei, S., AbuAlRub, R., Al Yahyaei, A., Al-Rawajfah, O. M., Labrague, L. J., Burney, I. A., & Al-Maqbali, M. (2023). The influence of nurse managers' authentic leadership style and work environment characteristics on job burnout among emergency nurses. *International Emergency Nursing*, 70, 101321. <https://doi.org/10.1016/j.ienj.2023.101321>
- Alshammari, S. A., Sankarapandian, C., Pasay-an, E., Alshammari, A. A., Gonzales, A., Gutierrez, J., Alreshidi, M. S., Alrashidi, N. A., Pangket, P., Cabansag, D., Alkubati, S., Mostoles, R., Jr., Lagura, G. A., Albarak, S. H., & Saguban, R. (2025). A predictive study of factors associated with burnout, compassion fatigue, and moral distress among emergency nurses. *Scientific Reports*, 15, 30596. <https://doi.org/10.1038/s41598-025-14792-5>
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Barnard, N. B. (2025). Burnout and engagement profiles of emergency nurses: The role of job insecurity appraisal and capabilities. *Frontiers in Psychology*, 16, 1504483. <https://doi.org/10.3389/fpsyg.2025.1504483>
- Barnard, N. B., Rothmann, S., De Beer, L. T., & Lubbe, W. (2023). Burnout of emergency nurses in a South African context: The role of job demands and resources, and capabilities. *Frontiers in Psychology*, 14, 1119063. <https://doi.org/10.3389/fpsyg.2023.1119063>
- Borges, E. M. N., Fonseca, C. I. N. S., Baptista, P. C. P., Queirós, C. M. L., Baldonado-Mosteiro, M., & Mosteiro-Díaz, M. P. (2019). Compassion fatigue among nurses working on an adult emergency and urgent care unit. *Revista Latino-Americana de Enfermagem*, 27, e3175. <https://doi.org/10.1590/1518-8345.2973.3175>
- Brassington, S., Thomas-Hawkins, C., Johansen, M. L., de Cordova, P. B., Cimiotti, J. P., & Zha, P. (2025). Impact of registered nurse staffing, workload, and the practice environment on burnout in emergency nurses. *Journal of Emergency Nursing*, 51(4), 684–691. <https://doi.org/10.1016/j.jen.2025.01.007>
- Braun, J. W., Darius, S., & Böckelmann, I. (2024). The correlation between effort-reward imbalance at work and the risk of burnout among nursing staff working in an emergency

- department—A pilot study. *Healthcare*, 12(22), 2249. <https://doi.org/10.3390/healthcare12222249>
- Butera, S., Brasseur, N., Filion, N., Bruyneel, A., & Smith, P. (2021). Prevalence and associated factors of burnout risk among intensive care and emergency nurses before and during the coronavirus disease 2019 pandemic: A cross-sectional study in Belgium. *Journal of Emergency Nursing*, 47(6), 879–891. <https://doi.org/10.1016/j.jen.2021.08.007>
- de Wijn, A. N., Fokkema, M., & van der Doef, M. P. (2022). The prevalence of stress-related outcomes and occupational well-being among emergency nurses in the Netherlands and the role of job factors: A regression tree analysis. *Journal of Nursing Management*, 30(1), 187–197. <https://doi.org/10.1111/jonm.13457>
- Fernandes, J. B., Antunes, R., Ivanel, M., Lucas, M., Oliveira, R., Bico, W., Simões, A., Vareta, D., Bernardes, C., Vaz, C., Hall, S., Fernandes, S., & Castro, C. (2025). Assessing the magnitude of burnout among emergency nurses in Portugal. *Frontiers in Public Health*, 13, 1699355. <https://doi.org/10.3389/fpubh.2025.1699355>
- Hetherington, D., Wilson, N. J., Dixon, K., & Murphy, G. (2024). Emergency department nurses' narratives of burnout: Changing roles and boundaries. *International Emergency Nursing*, 74, 101439. <https://doi.org/10.1016/j.ienj.2024.101439>
- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103–128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- Hong, Q. N., Pluye, P., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.-C., & Vedel, I. (2018). Mixed Methods Appraisal Tool (MMAT), version 2018: User guide. McGill University.
- Huang, C.-P., Zou, J.-M., Ma, H., & Zhong, Y. (2024). Role stress, occupational burnout and depression among emergency nurses: A cross-sectional study. *International Emergency Nursing*, 72, 101387. <https://doi.org/10.1016/j.ienj.2023.101387>
- Hunsaker, S., Chen, H.-C., Maughan, D., & Heaston, S. (2015). Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *Journal of Nursing Scholarship*, 47(2), 186–194. <https://doi.org/10.1111/jnu.12122>
- Jachmann, A., Loser, A., Mettler, A., Exadaktylos, A., Müller, M., & Klingberg, K. (2025). Burnout, depression, and stress in emergency department nurses and physicians and the impact on private and work life: A systematic review. *Journal of the American College of Emergency Physicians Open*, 6(2), 100046. <https://doi.org/10.1016/j.acepjo.2025.100046>
- Jiang, H., Ma, L., Gao, C., Li, T., Huang, L., & Huang, W. (2017). Satisfaction, burnout and intention to stay of emergency nurses in Shanghai. *Emergency Medicine Journal*, 34(7), 448–453. <https://doi.org/10.1136/emmermed-2016-205886>
- Jose, S., Dhandapani, M., & Cyriac, M. C. (2020). Burnout and resilience among frontline nurses during COVID-19 pandemic: A cross-sectional study in the emergency department of a tertiary care center, North India. *Indian Journal of Critical Care Medicine*, 24(11), 1081–1088. <https://doi.org/10.5005/jp-journals-10071-23667>
- Kim, J. S., & Choi, J. S. (2016). Factors influencing emergency nurses' burnout during an outbreak of Middle East respiratory syndrome coronavirus in Korea. *Asian Nursing Research*, 10(4), 295–299. <https://doi.org/10.1016/j.anr.2016.10.002>

- Lan, L., Chen, X., Zhang, H., Zhong, L., & Ye, L. (2025). Characterizing potential subtypes and influencing factors of burnout in emergency department nurses by latent profile analysis. *Frontiers in Public Health*, 13, 1654398. <https://doi.org/10.3389/fpubh.2025.1654398>
- Lee, M. M. D., Gensimore, M. M., Maduro, R. S., Morgan, M. K., & Zimbardo, K. S. (2021). The impact of burnout on emergency nurses' intent to leave: A cross-sectional survey. *Journal of Emergency Nursing*, 47(6), 892–901. <https://doi.org/10.1016/j.jen.2021.07.004>
- Li, H., Cheng, B., & Zhu, X. P. (2018). Quantification of burnout in emergency nurses: A systematic review and meta-analysis. *International Emergency Nursing*, 39, 46–54. <https://doi.org/10.1016/j.ienj.2017.12.005>
- Li, N., Xie, N., Chen, X., Zhang, H., Zhong, L., Diao, D., Zhu, L., & Zhou, Y. (2025). Somatization symptoms and burnout: A correlational study among emergency nurses. *Frontiers in Public Health*, 13, 1647123. <https://doi.org/10.3389/fpubh.2025.1647123>
- Lopez, J., Bindler, R. J., & Lee, J. (2022). Cross-sectional analysis of burnout, secondary traumatic stress, and compassion satisfaction among emergency nurses in Southern California working through the COVID-19 pandemic. *Journal of Emergency Nursing*, 48(4), 366–375.e2. <https://doi.org/10.1016/j.jen.2022.03.008>
- Mao, J., Gu, Z., Zhong, L., Zhang, H., Chen, X., & Zou, L. (2025). The mediating effect of job burnout between workplace violence and sleep disorders among emergency department nurses. *Frontiers in Public Health*, 13, 1640865. <https://doi.org/10.3389/fpubh.2025.1640865>
- Mataei, K., Vatandost, S., Dousti, N., & Salehi, K. (2025). Triage decision-making and its relationship with burnout among nurses in Iranian emergency departments. *International Emergency Nursing*, 81, 101643. <https://doi.org/10.1016/j.ienj.2025.101643>
- Moon, S.-Y., & Park, H.-R. (2025). The effects of grit, emergency nursing competency, and positive nursing organisational culture on burnout among nurses in the emergency department. *Behavioral Sciences*, 15(4), 486. <https://doi.org/10.3390/bs15040486>
- Muir, K. J., Sloane, D. M., Aiken, L. H., Hovsepian, V., & McHugh, M. D. (2023). The association of the emergency department work environment on patient care and nurse job outcomes. *Journal of the American College of Emergency Physicians Open*, 4(5), e13040. <https://doi.org/10.1002/emp2.13040>
- Munn, L. T., O'Connell, N., Huffman, C., McDonald, S., Gibbs, M., Miller, C., Danhauer, S. C., Reed, M., Mason, L., Foley, K. L., Stopyra, J., & Gesell, S. B. (2025). Job-related factors associated with burnout and work engagement in emergency nurses: Evidence to inform systems-focused interventions. *Journal of Emergency Nursing*, 51(2), 249–260. <https://doi.org/10.1016/j.jen.2024.10.007>
- Norful, A. A., Cato, K., Chang, B. P., Amberson, T., & Castner, J. (2023). Emergency nursing workforce, burnout, and job turnover in the United States: A national sample survey analysis. *Journal of Emergency Nursing*, 49(4), 574–585. <https://doi.org/10.1016/j.jen.2022.12.014>
- O'Callaghan, E. L., Lam, L., Cant, R., & Moss, C. (2020). Compassion satisfaction and compassion fatigue in Australian emergency nurses: A descriptive cross-sectional study. *International Emergency Nursing*, 48, 100785. <https://doi.org/10.1016/j.ienj.2019.06.008>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S.,

- ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Phillips, K., Knowlton, M., & Riseden, J. (2022). Emergency department nursing burnout and resilience. *Advanced Emergency Nursing Journal*, 44(1), 54–62. <https://doi.org/10.1097/TME.0000000000000391>
- Portero de la Cruz, S., Cebrino, J., Herruzo, J., & Vaquero-Abellán, M. (2020). A multicenter study into burnout, perceived stress, job satisfaction, coping strategies, and general health among emergency department nursing staff. *Journal of Clinical Medicine*, 9(4), 1007. <https://doi.org/10.3390/jcm9041007>
- Rozo, J. A., Olson, D. M., Thu, H. S., & Stutzman, S. E. (2017). Situational factors associated with burnout among emergency department nurses. *Workplace Health & Safety*, 65(6), 262–265. <https://doi.org/10.1177/2165079917705669>
- Ruiz-Fernández, M. D., Ramos-Pichardo, J. D., Ibañez-Masero, O., Sánchez-Ruiz, M. J., Fernández-Leyva, A., & Ortega-Galán, Á. M. (2021). Perceived health, perceived social support and professional quality of life in hospital emergency nurses. *International Emergency Nursing*, 59, 101079. <https://doi.org/10.1016/j.ienj.2021.101079>
- Satake, Y., & Arao, H. (2020). Self-compassion mediates the association between conflict about ability to practice end-of-life care and burnout in emergency nurses. *International Emergency Nursing*, 53, 100917. <https://doi.org/10.1016/j.ienj.2020.100917>
- Siam, B. G. A. H., & Alrasheedi, L. N. (2022). Burnout among emergency nurses during COVID-19 pandemic at Hail governmental hospitals in the Kingdom of Saudi Arabia. *Ethiopian Journal of Health Sciences*, 32(6), 1245–1253. <https://doi.org/10.4314/ejhs.v32i6.23>
- Sánchez Onrubia, I. M., Resta Sánchez, E. J., Cabañero Contreras, T., Perona Moratalla, A. B., & Molina Alarcón, M. (2025). Emergency nursing staff's well-being, burnout, and sleep on 12-hour shifts. *Enfermería Clínica (English Edition)*, 35(1), 102141. <https://doi.org/10.1016/j.enfcle.2025.102141>
- Subih, M., Salem, H., & Al Omari, D. (2023). Evaluation of compassion fatigue and compassion satisfaction among emergency nurses in Jordan: A cross-sectional study. *International Emergency Nursing*, 66, 101232. <https://doi.org/10.1016/j.ienj.2022.101232>
- Tang, L., Wang, F., & Tang, T. (2024). Exploring the relationship between family care, organizational support, and resilience on the professional quality of life among emergency nurses: A cross-sectional study. *International Emergency Nursing*, 72, 101399. <https://doi.org/10.1016/j.ienj.2023.101399>
- Tavakoli, N., Shaker, S. H., Soltani, S., Abbasi, M., Amini, M., Tahmasebi, A., & Hosseini Kasnavieh, S. M. (2018). Job burnout, stress, and satisfaction among emergency nursing staff after health system transformation plan in Iran. *Emergency*, 6(1), e41.
- Turnbach, E., Coates, L., Vanek, F. D., Cotter, E., Pogue, C. A., Clark, R. R. S., & Aiken, L. H. (2024). Emergency nurses' well-being in Magnet hospitals and recommendations for improvements in work environments: A multicenter cross-sectional observational study. *Journal of Emergency Nursing*, 50(1), 153–160. <https://doi.org/10.1016/j.jen.2023.06.012>
- Wei, R., Ji, H., Li, J., & Zhang, L. (2017). Active intervention can decrease burnout in ED nurses. *Journal of Emergency Nursing*, 43(2), 145–149. <https://doi.org/10.1016/j.jen.2016.07.011>
- Wu, S., Sun, Y., Zhong, Z., Li, H., Ding, B., & Deng, Q. (2025). The effect of moral distress on emergency nurses' job burnout: The mediating roles of hospital ethical climate and moral resilience. *Frontiers in Public Health*, 13, 1562209. <https://doi.org/10.3389/fpubh.2025.1562209>

- Xie, D., Zhu, X., Zhang, X., Jiang, Z., & Liu, T. (2025). The impact of support from emergency nurse organizations on compassion fatigue: The mediating role of psychological capital. *Frontiers in Public Health*, 13, 1551381. <https://doi.org/10.3389/fpubh.2025.1551381>
- Yang, B.-J., Yen, C.-W., Lin, S.-J., Huang, C.-H., Wu, J.-L., Cheng, Y.-R., Hsieh, C.-C., & Hsiao, F.-H. (2022). Emergency nurses' burnout levels as the mediator of the relationship between stress and posttraumatic stress disorder symptoms during COVID-19 pandemic. *Journal of Advanced Nursing*, 78(9), 2861–2871. <https://doi.org/10.1111/jan.15214>
- Yu, H., & Gui, L. (2022). Compassion fatigue, burnout and compassion satisfaction among emergency nurses: A path analysis. *Journal of Advanced Nursing*, 78(5), 1294–1304. <https://doi.org/10.1111/jan.15034>
- Yu, H., Qiao, A., & Gui, L. (2021). Predictors of compassion fatigue, burnout, and compassion satisfaction among emergency nurses: A cross-sectional survey. *International Emergency Nursing*, 55, 100961. <https://doi.org/10.1016/j.ienj.2020.100961>