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Assessment of Burnout and Job Satisfaction Among Nurses in Tertiary Care Hospitals

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Abstract

Nurse burnout and job dissatisfaction in tertiary care hospitals represent a systemic crisis, exacerbated by high demands such as workload, emotional labor, and work-life interference, leading to exhaustion, depersonalization, reduced personal accomplishment, and turnover rates up to 30–50%. Drawing on the Job Demands-Resources (JD-R) model and Conservation of Resources (COR) theory, this review examines how job demands initiate health impairment processes, while resources like supervisor support and autonomy foster motivation and resilience. Global prevalence data indicate burnout affects 20–80% of nurses, with tertiary settings showing higher rates due to patient acuity and shift work. Assessment tools, including the Maslach Burnout Inventory (MBI) and Minnesota Satisfaction Questionnaire (MSQ), reveal correlations between burnout and dissatisfaction, impacting patient safety and healthcare costs (estimated at $4.6 billion annually in the US). Interventions such as mindfulness-based stress reduction (MBSR), social-emotional learning (SEL) programs, and organizational reforms (e.g., flexible scheduling) demonstrate 15–40% reductions in burnout symptoms. In resource-constrained regions, targeted strategies are essential to enhance retention and well-being amid ongoing shortages.

Keywords: Nurse Burnout, Job Satisfaction, Tertiary Care Hospitals, Job Demands-Resources Model, Conservation Of Resources Theory, Maslach Burnout Inventory, Emotional Exhaustion, Turnover Intention, Mindfulness-Based Interventions, Healthcare Workforce Sustainability

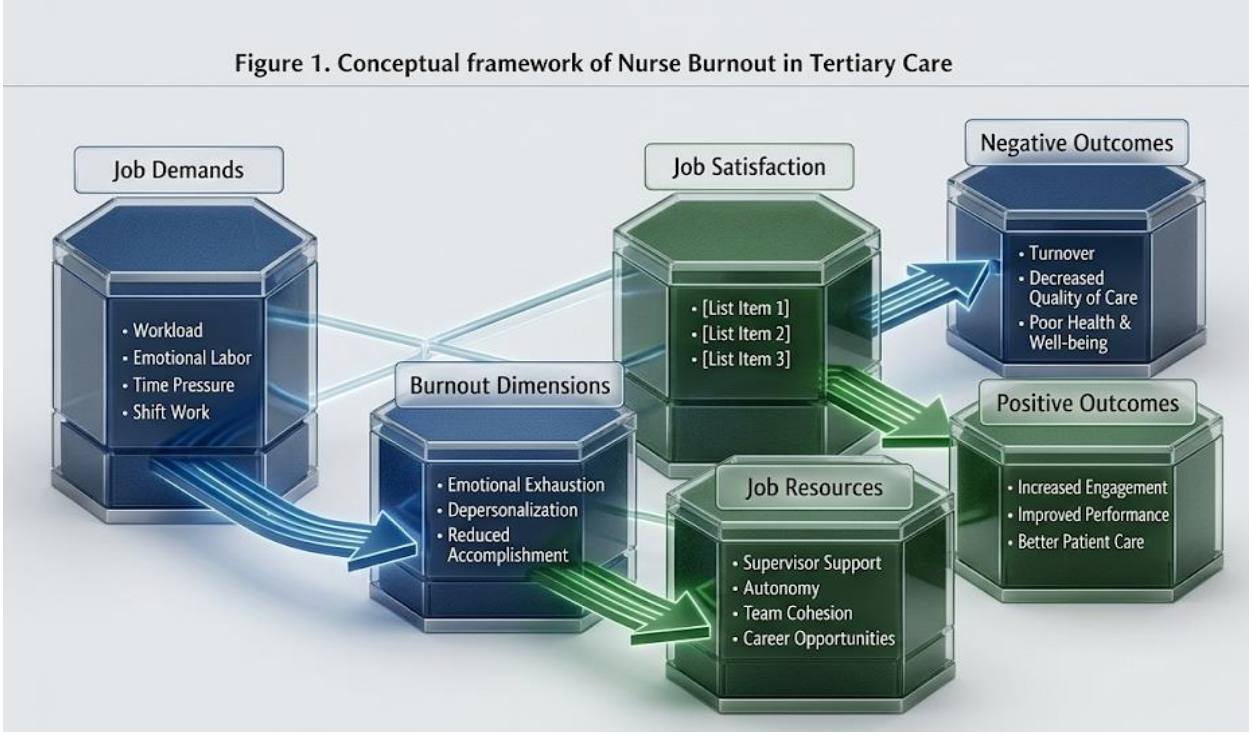
1. Introduction

The global healthcare infrastructure is currently facing an unprecedented sustainability crisis, primarily centered on the well-being and retention of its nursing workforce (Glarcher et al., 2025). Within the complex ecosystem of tertiary care hospitals institutions characterized by high patient acuity, advanced technological integration, and high-pressure clinical environments the dual phenomena of occupational burnout and job dissatisfaction have emerged as the most significant threats to patient safety and institutional stability (Jun et al., 2021). As the World Health Organization (2023) has identified, nurse burnout is no longer merely an individual psychological concern but a systemic hazard that jeopardizes the future of healthcare delivery, particularly in regions already grappling with critical nursing shortages (World Health Organization, 2023).

2. Theoretical Architecture of Nurse Well-being

Understanding the root causes of burnout and the drivers of job satisfaction requires a robust theoretical framework that accounts for the multifaceted nature of the nursing profession. The

contemporary academic literature predominantly utilizes the Job Demands-Resources (JD-R) model as the foundational lens for this assessment (Almgadawi et al., 2025). This model posits that the working conditions of any occupation can be categorized into two broad domains: job demands and job resources, which initiate two distinct psychological processes (Demerouti et al., 2001). Figure 1. Conceptual framework illustrating the interaction between job demands and job resources influencing burnout and job satisfaction among nurses in tertiary care hospitals based on the Job Demands–Resources (JD-R) model.



2.1 The Health Impairment Process

The first pathway, known as the health impairment process, describes how chronic job demands lead to the depletion of an individual's physical and mental energy. In tertiary care settings, these demands include work overload, time pressure, high emotional labor, and exposure to traumatic events (Li et al., 2025). Job demands are defined as the physical, social, or organizational aspects of the job that require sustained effort and are thus associated with physiological and psychological costs, such as exhaustion (Lesener et al., 2019).

2.2 The Motivational Process

Conversely, the second pathway is the motivational process, driven by job resources. Resources are those aspects of the job that are functional in achieving work goals, reducing the costs associated with demands, or stimulating personal growth and development (Findsrud et al., 2001). In nursing, key resources include supervisor support, autonomy, team cohesion, and opportunities for professional advancement (Majeed et al., 2025). The JD-R model suggests that these resources not only directly foster work engagement and job satisfaction but also act as crucial buffers against the deleterious effects of high demands (Bakker & Demerouti, 2007).

2.3 Resource Caravans and Loss Spirals

The Conservation of Resources (COR) theory further elucidates these dynamics by suggesting that

individuals strive to acquire and protect resources. Burnout occurs when there is a perceived threat of resource loss or an actual loss of resources (Bakker et al., 2021). In the high-stress environment of tertiary care, nurses often find themselves in a "loss spiral," where the exhaustion caused by high demands prevents them from effectively utilizing available resources, leading to further depletion and an increased intention to leave the profession (Hämmig, 2018). Conversely, a "resource caravan" occurs when organizational supports such as leadership emotional support enhance personal resources like adaptability and professional identity, creating a synergistic effect that mitigates burnout (Srinivasan, 2025).

Table 1. JD-R Model Elements and Impact on Nursing Outcomes

JD-R Model Category	Element Description	Impact on Nursing Outcomes
Quantitative Demands	Workload volume, patient-to-nurse ratios, shift length.	High levels correlate with severe emotional exhaustion.
Emotional Demands	Dealing with death, dying, and patient/family suffering.	Primary driver of depersonalization and compassion fatigue.
Work-Life Interference	Conflict between professional duties and family responsibilities.	Increases turnover intention and general job dissatisfaction.
Supervisor Support	Instrumental and emotional support from nurse managers.	Strongest predictor of job satisfaction; reduces burnout.
Autonomy	Control over practice, involvement in clinical decision-making.	Stimulates personal growth and organizational commitment.
Formal Rewards	Salary, benefits, professional status, and promotion pathways.	Mismatch leads to effort-reward imbalance and dissatisfaction.

3. Characterizing the Triad of Occupational Burnout

Burnout in the nursing profession is measured as a multidimensional syndrome comprising three distinct components: emotional exhaustion (EE), depersonalization (DP), and a reduced sense of personal accomplishment (PA). Each dimension reflects a different aspect of the psychological erosion experienced by nurses in tertiary care (Lee et al., 2025).

3.1 Emotional Exhaustion: The Depletion of Vitality

Emotional exhaustion is frequently the first and most dominant manifestation of burnout. It is characterized by feeling overextended and depleted of emotional and physical resources in response to chronic job stressors (Alotaibi, 2025). In many tertiary care studies, the prevalence of high EE is staggering. Research in Saudi Arabia and the UAE indicated that 82.8% of nurses reported high levels of EE, with mean scores as high as 36.79 +/- 10.34 on the Maslach Burnout Inventory (Jun et al., 2021). This exhaustion is deeply rooted in the "cost of caring," where the continuous exposure to high-acuity patients and ethical dilemmas leaves the nurse unable to offer the emotional empathy required for the role (Musto et al., 2023).

3.2 Depersonalization: The Defensive Detachment

Depersonalization involves the development of cynical, callous, or indifferent attitudes toward the recipients of care. It often serves as a maladaptive coping mechanism designed to create a psychological distance between the nurse and the stressors of the job (Maslach & Jackson, 1981). Evidence shows that in high-stress units, such as Intensive Care Units (ICUs) or COVID-19 wards, over 50% of nurses experience high levels of depersonalization. This detachment is particularly dangerous in tertiary care, where subtle changes in a patient's condition require vigilant,

compassionate monitoring that DP actively undermines (Clifton et al., 2025).

3.3 Reduced Personal Accomplishment: The Crisis of Competence

The third dimension, reduced personal accomplishment, refers to a decline in feelings of competence and successful achievement in one's work. Unlike EE and DP, which are primarily driven by job demands, PA is more closely linked to a lack of job resources, such as inadequate training, lack of recognition, or limited professional growth (Fodor et al., 2020). Approximately 44.6% to 55.8% of nurses in various tertiary care settings report low levels of personal accomplishment, leading to a negative self-image and a profound sense of hopelessness regarding their ability to make a difference in patient outcomes (Alharbi, 2024).

4. Determinants of Job Satisfaction in Tertiary Settings

Job satisfaction is a critical determinant of workforce stability and care quality, representing the degree to which an individual likes their job. In tertiary care hospitals, satisfaction is influenced by a complex interplay of organizational, professional, and personal factors (Shi et al., 2023).

4.1 The Primacy of Leadership and Teamwork

Leadership support consistently emerges as the strongest predictor of job satisfaction among hospital nurses. In Omani tertiary hospitals, regression analysis revealed that leadership support was the most influential factor, with a correlation of $r = 0.58$ with overall satisfaction (Al-Abdali et al., 2025). When leaders are perceived as fair, authentic, and transformational, nurses report higher engagement and lower burnout (Wei et al., 2020). Teamwork and communication are also vital; in many surveys, strong team cohesion is cited by nearly 32% of nurses as the most influential factor in their daily satisfaction (Loveday et al., 2021).

4.2 Staffing Adequacy and Workload Management

The relationship between staffing levels and satisfaction is direct and quantifiable. Chronic understaffing in tertiary care leads to an overwhelming workload, which forces nurses to prioritize urgent tasks while neglecting essential elements of care, such as patient education or emotional support (Alrehaili et al., 2024). Studies have shown that 68% of nurses believe inadequate staffing negatively impacts their mental health, and roughly 36% of hospital nurses report that excessive workloads cause them to miss important changes in patient conditions (Varghese et al., 2021).

4.3 Compensation and Career Growth

Extrinsic rewards, including salary and benefits, remain a significant source of dissatisfaction globally. In some Asian tertiary hospitals, dissatisfaction with salary reached levels as high as 75.5%, making it the primary driver of turnover intention (Tung et al., 2020). Furthermore, while nurses may be satisfied with professional development (training), they are often dissatisfied with actual promotion pathways (Al-Sabhan et al., 2022). Only 57.7% of nurses in some tertiary settings expressed satisfaction with their career progression, highlighting a gap between skill acquisition and organizational advancement (Arian al., 2018).

4.4 Work-Life Balance and Flexibility

The intensive nature of tertiary care nursing, involving rotating shifts and long hours (often exceeding 50 hours per week), significantly interferes with personal life. In Jordan, 52.8% of nurses reported having to change family plans due to work-related duties (Aiken et al., 2012). Work-family conflict is not only a source of dissatisfaction but a significant trigger for the development of burnout and the decision to leave the profession (Mansour et al., 2018).

Table 2. Satisfaction Subscales and Key Findings

Satisfaction Subscale (MMSS-based)	Prevalence of Satisfaction/Findings	Source Context
Work Conditions/Supervisor Support	13.34% variance explained; high reliability (alpha = 0.85).	
Teamwork/Social Interaction	31.9% of nurses cite as most influential factor.	
Salary and Benefits	53.3% to 75.5% dissatisfaction reported.	
Professional Opportunities	94.6% satisfied with training, 57.7% with promotion.	
Scheduling Flexibility	48.6% report difficulty managing shift duties.	
Work-Life Balance	40.7% report job negatively impacts family life.	

5. Psychometric Assessment Methodologies

Accurate measurement of burnout and job satisfaction is essential for designing effective interventions. Two primary instruments dominate the literature: the Maslach Burnout Inventory (MBI) and the McCloskey/Mueller Satisfaction Scale (MMSS) (Soares et al., 2023).

5.1 The Maslach Burnout Inventory (MBI): The Gold Standard

The MBI is a 22-item proprietary instrument designed to measure the triad of burnout. It is considered the gold standard for clinical research, with high internal consistency reliability coefficients (alpha = 0.84 for EE, 0.80 for DP, and 0.76 for PA) (Knox et al., 2018). Despite its utility, the MBI has been critiqued for its length and proprietary costs (Edú-Valsania et al., 2022). Alternative versions, such as the Abbreviated MBI (aMBI) or single-item burnout measures, have been developed to reduce survey fatigue (Dyrbye et al., 2017).

5.2 The McCloskey/Mueller Satisfaction Scale (MMSS): Evolution and Validity

The MMSS was originally developed in 1990 as a 31-item tool to measure factors that encourage nurse retention. Over the decades, it has undergone significant psychometric refinement. While the original instrument measured eight factors, subsequent factor analyses have identified seven-factor or five-factor models that provide better fit in modern acute care contexts (Lee et al., 2016).

- **Original 8 Factors:** Extrinsic rewards, scheduling, family/work balance, coworkers, interaction, professional opportunities, praise/recognition, and control/responsibility (Mueller & McCloskey, 1990).
- **Revised 5 Factor Model:** Refined to 25 items with Cronbach's alphas ranging from 0.71 to 0.87, providing stronger internal consistency than the original structure (Lin et al., 2019).

5.3 Correlational Interplay Between Measures

Research consistently shows a significant negative correlation between MBI scores and job satisfaction measures. Nurses with high burnout are 0.56 to 0.87 times as likely to report high job satisfaction compared to those with low burnout (Gunawati et al., 2022). Specifically, job satisfaction correlates most strongly with reduced personal accomplishment (r = -0.59) and emotional exhaustion (r = -0.39), suggesting that when a nurse feels their work is meaningless or their energy is depleted, their overall appraisal of the job collapses (Whittington et al., 2021).

6. The Impact of Regional and Demographic Factors

The prevalence and predictors of burnout and satisfaction vary significantly across global healthcare systems and nursing demographics (Woo et al., 2020).

6.1 Global Variations and the "Nursing Shortage"

The World Health Organization estimates a global deficit of 5.9 million nurses, a gap that is projected to grow to 30 million by 2030. This shortage creates a vicious cycle: understaffing leads to higher burnout, which drives more nurses to leave, further deepening the shortage (Bailey, 2024).

- **Middle East:** In regions like Jordan, Saudi Arabia, and the UAE, burnout rates are exceptionally high (67% to 73%), driven by high patient volume and cultural factors affecting work-life balance (Jun et al., 2021).
- **Asia:** Studies in China and Pakistan highlight salary and work environment as primary stressors, with nearly 45% of nurses reporting job dissatisfaction (Alsaqri, 2024).
- **Europe/North America:** While burnout rates are also high (approximately one-third of nurses), the focus is often on professional autonomy and administrative support as key drivers (Aiken et al., 2012).

6.2 The Role of Age, Education, and Experience

Demographic characteristics serve as critical moderators in the development of burnout.

- **Age:** Younger nurses (under 40 years) are generally more susceptible to burnout, particularly emotional exhaustion (Majeed et al., 2025).
- **Education:** Higher educational attainment (Master's or PhD) is associated with better work-life balance (aOR = 3.081) and higher job satisfaction (Pattanayak, 2024).
- **Experience:** Greater work experience is associated with lower burnout levels (beta = -0.278), suggesting that veteran nurses may develop more resilient coping mechanisms over time (Shalom et al., 2025).

7. Systemic Consequences: Patient Safety and Economic Stakes

The repercussions of nurse burnout and dissatisfaction extend far beyond the individual, impacting the clinical and financial health of the entire healthcare system (Stemmer et al., 2022).

7.1 Patient Morbidity and Mortality

A massive meta-analysis of 288,581 nurses confirmed that burnout is significantly associated with lower patient safety grades and a higher prevalence of adverse events (Stemmer et al., 2022).

- **Nosocomial Infections:** Burnout is a predictor of increased rates of hospital-acquired infections (SMD = -0.20) (Daly et al., 2024).
- **Medication Errors:** Higher burnout levels correlate directly with more frequent clinical errors (Menon et al., 2020).

7.2 The Economic Burden of Attrition

The financial cost of failing to address nurse well-being is staggering. Healthcare institutions lose between $20,000 and $31,000 per day due to nurse turnover, recruitment, and lost productivity (Doherty, 2025). For a tertiary care hospital, reducing nurse turnover by even 7% can result in $1.5 million in annual savings (Botiba et al., 2024).

Table 3. Impact of Nurse Burnout on Clinical and System Outcomes

Clinical/System Outcome	Correlation with Nurse Burnout	Statistical Indicator (SMD/Ratio)
Safety Climate/Culture	Strong Negative Correlation	SMD = -0.68
Patient Satisfaction	Significant Decrease	SMD = -0.51
Medication Errors	Significant Increase	$p < 0.001$
Patient Mortality	Increased Risk	High Odds Ratio
Daily Financial Loss	Organizational Attrition	Up to $31,000 per hospital

8. Evidence-Based Interventions and Strategic Management

To combat the burnout crisis in tertiary care, healthcare leaders must implement multifaceted strategies that address both systemic and individual needs (Alqahtani et al., 2023).

8.1 Organizational Transformation: Magnet and HWE Standards

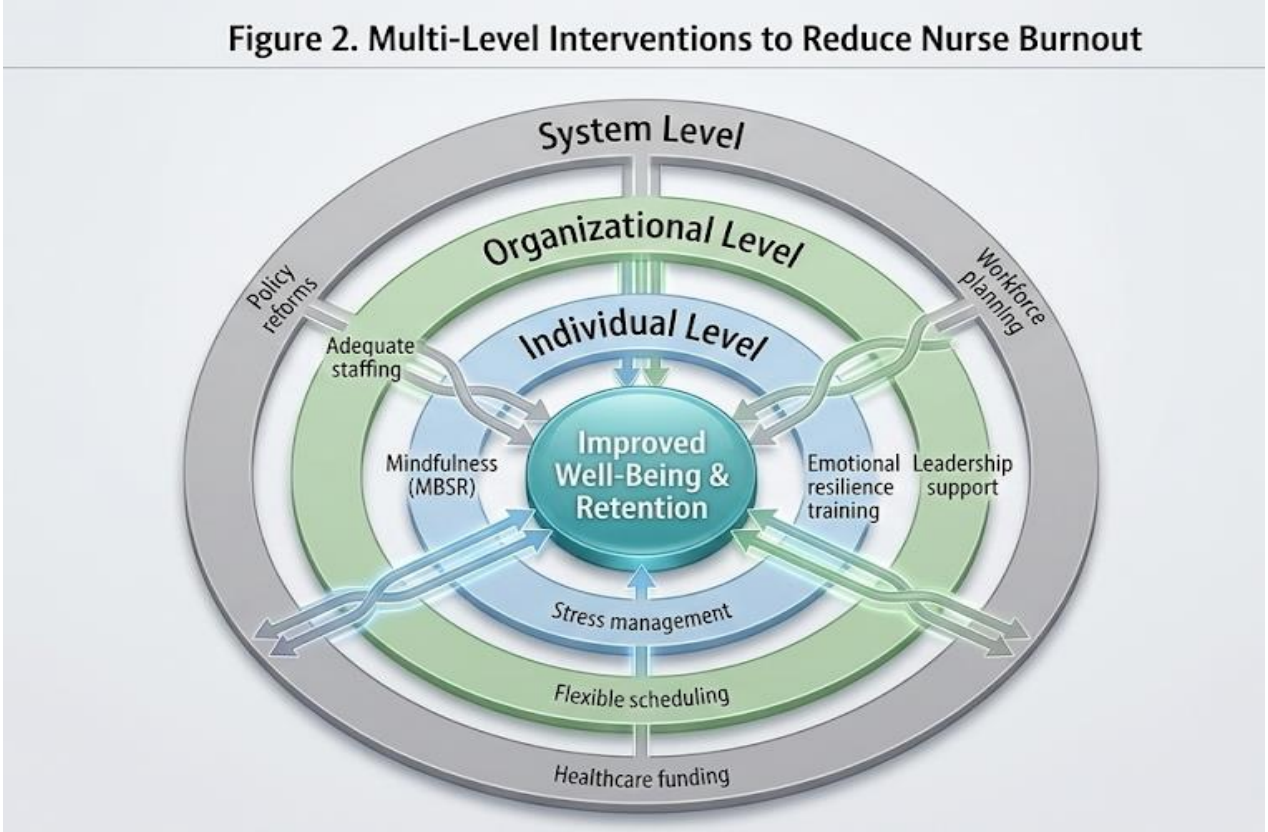
The most effective way to reduce burnout is to transform the work environment itself (Leiter & Maslach, 2018). As showed in figure 2 multi-level intervention strategies to reduce nurse burnout and improve job satisfaction in tertiary care hospitals.

- **Magnet Status:** Hospitals that achieve Magnet designation exhibit significantly lower levels of burnout and mortality (Aiken et al., 2011).
- **AACN Healthy Work Environment (HWE) Standards:** The AACN identifies six essential standards: skilled communication, true collaboration, effective decision-making, appropriate staffing, meaningful recognition, and authentic leadership. Units implementing these standards see a 50% reduction in intent to leave (AACN, 2024).

8.2 Systemic and Leadership Interventions

- **Acuity-Based Staffing:** Moving beyond simple patient-to-nurse ratios toward staffing models that reflect patient complexity can prevent work overload (World Health Organization, 2023).
- **Leadership Training:** Equipping nurse managers with transformational leadership skills has been shown to improve staff well-being (Mansour et al., 2018).
- **Workforce Analytics:** Utilizing AI-driven scheduling and real-time burnout tracking allows Chief Nursing Officers to intervene before a staffing crisis occurs (Tung et al., 2020).

Figure 2. Multi-Level Interventions to Reduce Nurse Burnout



9. Future Outlook: Nursing in the Era of 2026

As the healthcare sector transitions into 2026, technological innovation and role reconfiguration will fundamentally reshape the experience of tertiary nursing (Sindhushree et al., 2025).

9.1 Technological Disruption: AI and Remote Monitoring

Artificial Intelligence is set to become the "intelligence layer" for nursing operations (Arian al., 2018).

- **Automated Documentation:** AI-driven tools will automate routine charting and administrative tasks, potentially reclaiming hours of direct patient care time each shift (Soares et al., 2023).
- **Remote Patient Monitoring (RPM):** Hybrid care models will allow for virtual nursing oversight, reducing physical strain on bedside nurses (ShiftMed, 2026).

9.2 Workforce Evolution and New Care Models

The market for 2026 will demand "Healthcare Workforce OS Stacks" unified platforms that integrate staffing, scheduling, and engagement. These platforms will utilize predictive analytics to forecast patient demand and balance workloads. Furthermore, new professional roles such as RPM coordinators and care navigators will emerge, providing career diversification for nurses (Healthstream, 2026).

9.3 Legislative Solutions

In early 2026, Representative Don Beyer introduced the National Urgent Recruitment for Skilled Employees (NURSE) Visa Act to address the nationwide nursing shortage by making 20,000 visas available for foreign nurses in shortage areas. This legislative action aims to ease the burnout fueled by chronic staffing deficits (Beyer, 2025).

10. Conclusion

Burnout and job dissatisfaction among nurses in tertiary care hospitals are intertwined epidemics driven by chronic demands and inadequate resources, posing risks to individual health, patient outcomes, and systemic stability. The JD-R and COR frameworks underscore the need for balanced demands and amplified resources to interrupt loss spirals and cultivate motivational pathways. Evidence-based assessments via MBI and MSQ, coupled with interventions like MBSR and supportive leadership, offer proven avenues for mitigation, potentially curbing turnover and enhancing satisfaction. As global nursing shortages intensify, healthcare institutions must prioritize proactive, multifaceted reforms including policy-driven workload reductions and professional development to foster resilient workforces, ensuring high-quality care in high-stakes environments.

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