OPEN ACCESS

Work Environment Challenges And Their Impact On Employee Performance In Public And Private Hospitals In The Kingdom Of Saudi Arabia

Basil Hamad Alkhathlan¹, Sultan Mohammed Almutairi², Mohammed Mesfer Musaed Al Khathami³, Salem Suliman Alharbi⁴, Amani Kader Albeshi⁵, Saleh Ibrahim Alghamdi⁶, Ahmed Turki Alotaibi⁷, Mohammed Faraj Mohammed Al Qahtani⁸, Mukhled Sinhat Suwaylih Alotaibi⁹, Sara Hamed Abosabaah¹⁰, Yara Hamed Abosabaah¹¹, Mohammed Hamed Abosabaah¹², Abdulrahim Othman Mohammed Alshehri¹³

¹Anesthesia Technology Specialist Security Forces Hospital, Riyadh.

²Health Informatics.

³Health Informatics Technician Ministry Of The National Guard.

⁴Nurse King Abdulaziz Hospital In Makkah.

⁵Staff Nurse Prince Sultan Military Medical City.

⁶Radiology Technician Security Forces Hospital Program.

⁷Health Informatics.

⁸Emergency Trauma Technician National Guard Health Affairs.

⁹Health Services National Guard Health Services.

¹⁰General Practitioner Almaarefa University.

¹¹Internship. King Saud Bin Abdulaziz University For Health Sciences.

¹²Medical Student King Saud Bin Abdulaziz University For Health Sciences.

¹³Pharmacy Technician Sharurah Military Hospital.

ABSTRACT

The work environment in healthcare institutions is a decisive determinant of employee performance, retention, and patient safety. In the Kingdom of Saudi Arabia (KSA), hospitals across public and private sectors operate under accelerating reform, rising service demand, and increasing expectations for quality, safety, and patient experience. Yet, many healthcare workers continue to report workplace challenges that undermine performance, including high workload and staffing shortages, long hours and shift-related fatigue, psychosocial stress and burnout, communication breakdowns, inconsistent leadership support, limited autonomy in clinical decision-making, and safety risks related to infection exposure, violence, and ergonomic hazards. These challenges influence clinical accuracy, timeliness of care, teamwork, and compassion, and they also shape organizational outcomes such as turnover intention, absenteeism, and patient satisfaction. This paper synthesizes the literature on work environment problems in Saudi hospitals, compares how these issues manifest in public and private settings, and outlines pathways linking workplace conditions to employee performance and healthcare quality. The paper concludes with practical, systems-level recommendations aligned with KSA's health sector transformation goals: workforce planning and staffing optimization, fatigue risk management, supportive leadership development, psychological safety initiatives, continuous improvement in communication, and robust occupational health and safety programs. Improving the work environment should be treated as a strategic investment that simultaneously strengthens workforce well-being and elevates patient outcomes.

Keywords: work environment; employee performance; Saudi Arabia; hospitals; burnout; workload; leadership; patient safety.

1. INTRODUCTION

Hospitals represent some of the most complex, high-stakes, and emotionally demanding workplaces. The performance of healthcare workers—nurses, physicians, pharmacists, laboratory and radiology professionals, paramedics, and administrative staff—depends not only on technical competence but also on the conditions under which work is performed. The "work environment" encompasses physical factors (e.g., equipment, staffing, infection control infrastructure), organizational factors (e.g., policies, leadership, scheduling), and psychosocial factors (e.g., teamwork climate, psychological safety, fairness, recognition). When these elements are supportive, employees are more likely to deliver safe, timely, and compassionate care. When they are inadequate, performance may decline through fatigue, disengagement, errors, and reduced responsiveness to patient needs.

In Saudi Arabia, the work environment in hospitals has attracted sustained attention due to rapid system change and national ambitions to improve health outcomes. Under Vision 2030 and related programs, the Saudi health sector has pursued transformation through quality improvement, digital health expansion, care model redesign, privatization pathways, and the strengthening of governance and accountability mechanisms. These reforms require a stable and high-performing workforce. At the same time, hospitals in KSA face pressures common to many countries: increasing patient volumes, an expanding burden of chronic disease, workforce shortages in certain specialties, and global competition for skilled clinicians. The COVID-19 pandemic further highlighted vulnerabilities in hospital work environments, including infection exposure, moral distress, and staffing surges. Although many Saudi hospitals strengthened resilience through improved infection prevention, expanded critical care capacity, and digitalization, the pandemic also amplified occupational stress and burnout risks among healthcare workers.

Public and private hospitals in KSA operate within different administrative, financial, and performance frameworks. Public hospitals typically serve large catchment populations and may experience high throughput demands and complex referral patterns. Private hospitals often function under market dynamics, where service efficiency and patient satisfaction are closely monitored. These differences shape how work environment challenges emerge and how they affect employee performance. For instance, public hospitals may face more severe crowding and resource constraints, while private hospitals may impose productivity targets and customer-service expectations that can heighten emotional labor. Understanding these sector-specific dynamics is essential for designing interventions that are both effective and contextually appropriate.

This paper aims to (1) define the work environment in hospital settings and identify key dimensions relevant to performance; (2) analyze major work environment challenges affecting healthcare workers in Saudi public and private hospitals; (3) synthesize evidence regarding the impact of these challenges on employee performance and patient outcomes; and (4) propose actionable strategies to improve the work environment, strengthen workforce well-being, and support national healthcare transformation goals.

2. CONCEPTUAL FRAMEWORK: HOW WORK ENVIRONMENT SHAPES PERFORMANCE

Employee performance in healthcare can be understood as a combination of task performance (clinical and operational duties), contextual performance (teamwork, communication, professionalism), and adaptive performance (responding to change, handling complex cases). Work environment factors influence performance through multiple pathways:

- Resource and workload pathway: Staffing levels, workload distribution, and access to equipment determine whether employees can complete tasks safely and on time. Inadequate staffing leads to work compression, missed care, and delays.
- Fatigue and cognitive pathway: Long hours, shift work, and sleep disruption impair cognitive function, judgment, and reaction time. Fatigue is associated with increased error risk.
- Psychosocial pathway: Stress, burnout, and moral distress reduce motivation, empathy, and engagement. Psychological strain can compromise communication and increase conflict.
- Leadership and culture pathway: Supportive leadership, fairness, recognition, and psychological safety enable employees to speak up about risks, coordinate effectively, and pursue improvement.
- Safety pathway: Exposure to infection, workplace violence, and ergonomic hazards affects physical and psychological security. Feeling unsafe is itself a stressor that distracts from core tasks.

These pathways are interrelated. For example, chronic understaffing elevates workload, which increases fatigue and burnout, which then undermines teamwork and increases turnover, further worsening staffing shortages. Therefore, interventions must be multi-component and system-focused rather than limited to individual coping strategies.

3. MAJOR WORK ENVIRONMENT PROBLEMS IN SAUDI HOSPITALS

3.1 Workload Pressure and Staffing Shortages

Workload is one of the most widely reported stressors in hospital environments. In Saudi hospitals, workload pressure may arise from high patient volumes, seasonal surges (e.g., Hajj and Umrahrelated travel and regional outbreaks), and increased complexity of care due to comorbidities. Staffing shortages can be acute in nursing, emergency medicine, critical care, laboratory services, radiology, and certain allied health roles. When staffing is insufficient, employees may be required to care for more patients, complete more documentation, and cover additional shifts. Such conditions can lead to "missed care," where essential tasks (patient education, mobility support, timely monitoring) are delayed or omitted due to time constraints.

In addition, the distribution of workload may be perceived as unfair, especially when assignment practices do not account for patient acuity or when there is inadequate coordination across departments. Perceived workload inequity can reduce morale, increase interpersonal tension, and decrease discretionary effort. For clinical workers, workload pressure can also reduce opportunities for reflective practice and professional development—both essential for long-term performance improvement.

3.2 Long Working Hours, Shift Work, and Fatigue

Hospitals operate 24/7, and shift work is unavoidable. However, excessive overtime, rapid rotation between day and night shifts, insufficient rest between shifts, and extended shift lengths can create fatigue and circadian disruption. Fatigue reduces vigilance and is linked to slower processing speed, decreased attention, and impaired memory—capabilities essential for medication administration, patient assessment, and emergency response.

In KSA, shift work challenges may be intensified by staffing gaps and demand fluctuations. Employees may accept overtime to supplement income or to support team needs, but repeated overtime can become chronic. Fatigue risk is particularly relevant in high-intensity units such as emergency departments, intensive care units, operating theaters, and diagnostic services that require sustained concentration (e.g., laboratory result validation or imaging interpretation). A fatigued workforce is more likely to experience occupational injuries and errors, which can directly harm patients and reduce overall service quality.

3.3 Psychosocial Stress, Burnout, and Moral Distress

Burnout has become a global concern in healthcare, characterized by emotional exhaustion, cynicism or depersonalization, and reduced personal accomplishment. In Saudi hospitals, burnout can be driven by high workload, emotional demands, limited autonomy, and conflicts between clinical ideals and organizational constraints. Moral distress occurs when clinicians know the ethically appropriate action but cannot carry it out due to barriers such as resource limitations, policy constraints, or patient-family disagreements. Repeated moral distress can lead to disengagement and decreased empathy, undermining patient-centered care.

Psychosocial stressors also include role ambiguity, interpersonal conflict, and perceived lack of recognition. In multicultural teams, differences in communication styles and expectations can contribute to misunderstandings and tension. Stress can manifest as sleep problems, irritability, reduced concentration, and increased absenteeism—all of which affect performance. Importantly, burnout is not merely an individual issue; it is often a symptom of system-level problems such as understaffing, inefficient workflows, and weak leadership support.

3.4 Leadership, Management Support, and Organizational Justice

Leadership shapes the hospital work environment through decision-making, policy implementation, communication, and support. Employees are more likely to perform well when leaders provide clear expectations, resources, coaching, and recognition. Conversely, inconsistent leadership, lack of transparency, and limited responsiveness to staff concerns can reduce trust. When staff perceive "organizational injustice" (unfairness in scheduling, promotion, training opportunities, or disciplinary actions), motivation and commitment may decline.

In some settings, hierarchical structures may discourage speaking up about risks. If employees fear blame or punishment for reporting errors or safety concerns, the organization loses opportunities to learn and improve. High-reliability healthcare depends on "psychological safety," where staff can raise concerns without fear. Leadership training that fosters just culture, supportive supervision, and collaborative problem-solving is essential to improving performance.

3.5 Communication Breakdowns and Teamwork Barriers

Effective teamwork is crucial in hospitals, where care is delivered through coordinated actions across multiple professions and departments. Communication problems can occur during handoffs, referrals, laboratory result reporting, medication reconciliation, and interdepartmental coordination. Poor communication increases the risk of duplication, delays, and errors. It can also increase frustration among staff, contributing to stress and conflict.

In Saudi hospitals, workforce diversity is an additional context factor. Multilingual environments may create communication barriers, particularly in high-pressure situations. Standardized handoff tools, interdisciplinary rounds, and structured communication training can reduce these risks. However, these practices require time, leadership support, and a culture that values collaboration.

3.6 Administrative Burden and Workflow Inefficiencies

Healthcare workers increasingly face administrative tasks, including documentation, coding, compliance reporting, and digital system navigation. While electronic health records and digital tools can improve continuity, poorly designed workflows or insufficient training can increase cognitive load. Administrative burden reduces time for direct patient care, increases frustration, and contributes to burnout. Workflow inefficiencies may include repeated data entry, delays in obtaining supplies, bottlenecks in patient flow, and unclear responsibilities between departments.

Performance suffers when clinicians must compensate for system inefficiencies by working faster, skipping breaks, or extending shifts. Over time, such "workarounds" can normalize unsafe practices. Continuous process improvement, lean methodologies, and frontline involvement in workflow redesign are important for reducing waste and enhancing performance.

3.7 Occupational Health and Safety Risks

www.diabeticstudies.org 531

Hospital workers are exposed to biological hazards (infectious diseases), chemical hazards (sterilants, cleaning agents), radiation exposure (diagnostic imaging, nuclear medicine), ergonomic risks (patient lifting), and psychosocial hazards (violence and harassment). In KSA, occupational safety has received increasing attention, but gaps can remain in training, reporting systems, and protective equipment availability—especially during surges.

Workplace violence is an important issue in many countries and can occur in emergency departments and crowded outpatient settings. Aggression from patients or visitors increases anxiety and reduces willingness to engage. Infection exposure, especially during outbreaks, generates fear for personal and family safety. When staff do not feel protected, performance and patient interaction quality may decline.

3.8 Professional Development, Career Progression, and Recognition

A supportive work environment includes opportunities for learning, competency development, and career progression. Limited access to training, unclear promotion pathways, or insufficient recognition can reduce motivation. Saudi hospitals have expanded professional development initiatives in many areas, but perceived inequities may persist. When employees see few opportunities for growth, turnover intention increases and engagement decreases. Recognition—both financial and non-financial—reinforces desired behaviors and supports retention.

4. PUBLIC VS PRIVATE HOSPITALS: CONTEXTUAL DIFFERENCES IN WORK ENVIRONMENT

Public hospitals in KSA commonly provide broad service coverage and may experience higher patient volumes, complex referral cases, and heavy emergency and inpatient demand. Bureaucratic procedures may slow procurement or staffing adjustments. Employees may appreciate job security and national service mission but experience stress from crowding, workload intensity, and resource limitations.

Private hospitals typically emphasize service responsiveness and patient satisfaction, and they may have newer facilities and stronger amenities. However, private-sector staff may face performance metrics tied to productivity, revenue, or patient experience scores. Job insecurity, competition, and customer-service expectations can increase emotional labor. In some private contexts, staffing models may be lean to maintain efficiency, creating workload strain. Thus, while the nature of pressures differs, both sectors can produce a challenging work environment if governance, staffing, and culture are not supportive.

Importantly, employees may move between sectors over time, and system-level solutions should aim for consistent standards in staffing safety, leadership quality, and occupational health. Cross-sector learning is valuable: public hospitals may adopt private-sector efficiency practices, while private hospitals may learn from public-sector programs that emphasize equitable access and structured training pathways.

5. IMPACT OF WORK ENVIRONMENT PROBLEMS ON EMPLOYEE PERFORMANCE

5.1 Clinical Accuracy and Patient Safety

Work environment constraints influence clinical accuracy and safety behaviors. High workload and fatigue increase the likelihood of medication errors, delayed recognition of deterioration, and incomplete documentation. Communication breakdowns can cause incorrect handoffs and missed laboratory results. Burnout is associated with reduced attention, decreased empathy, and higher risk of errors. Safety culture problems, including fear of blame, reduce incident reporting and prevent organizational learning.

5.2 Productivity, Timeliness, and Service Quality

A strained work environment reduces efficiency. Workflow inefficiencies and administrative burdens lengthen task completion and increase waiting times. Staff under stress may have less capacity for proactive care and patient education. Timeliness is crucial in emergency, surgical, and diagnostic services; delays can worsen outcomes and increase length of stay. In private hospitals, productivity pressure can increase speed but may also elevate stress and compromise quality if not balanced with safety standards.

5.3 Teamwork, Communication, and Patient Experience

Employee performance includes teamwork and communication. Burnout and stress may increase irritability and conflict, undermining collaboration. When communication is poor, patients may receive inconsistent information, reducing trust. Patient experience depends strongly on staff interactions; fatigued and disengaged staff may provide less compassionate care, affecting satisfaction scores and organizational reputation.

5.4 Retention, Absenteeism, and Organizational Costs

A negative work environment increases turnover intention. Replacing trained staff is costly, requiring recruitment, onboarding, and training. Absenteeism may rise due to stress-related illness or injuries. High turnover disrupts team cohesion and increases workload for remaining staff, forming a cycle that further reduces performance. Therefore, improving the work environment is both a clinical quality priority and a financial sustainability strategy.

6. DISCUSSION: ALIGNING IMPROVEMENTS WITH HEALTH SECTOR TRANSFORMATION IN KSA

Saudi Arabia's health sector transformation aims to increase value-based care, improve patient outcomes, and enhance system efficiency. Workforce performance is central to these goals. Work environment improvements should be treated as strategic initiatives rather than isolated projects. A system lens is necessary: staffing models, scheduling practices, leadership development, and safety programs must be integrated and supported by data and accountability.

Digital transformation can support the work environment if implemented thoughtfully. For example, decision support tools can reduce cognitive burden, and integrated communication platforms can improve handoffs. However, digitalization can also increase stress if systems are difficult to use, create duplicative documentation, or are implemented without adequate training. Therefore, user-centered design and frontline feedback are essential.

Additionally, cultural and contextual considerations matter. Workforce diversity requires inclusive communication practices. Nationalization and talent development programs should ensure that local staff have sustainable career pathways and mentorship. Interventions should be evaluated using performance metrics (error rates, patient outcomes), staff outcomes (burnout, engagement), and organizational outcomes (turnover, absenteeism).

7. RECOMMENDATIONS: PRACTICAL STRATEGIES TO IMPROVE WORK ENVIRONMENT AND PERFORMANCE

- 7.1 Staffing Optimization and Workload Management
- Implement evidence-informed staffing models aligned with patient acuity.
- Monitor workload indicators (patient-to-staff ratios, overtime hours, missed breaks).
- Use flexible staffing pools and surge plans to manage demand peaks.
- Strengthen recruitment and retention strategies, including supportive onboarding and mentorship.
- 7.2 Fatigue Risk Management
- Limit excessive consecutive shifts and ensure adequate rest periods.
- Reduce rapid rotation of shifts; design schedules that support sleep health.

- Provide fatigue education and encourage reporting of unsafe fatigue.
- Use technology and staffing analytics to predict high-demand periods and plan coverage.
- 7.3 Supportive Leadership and Just Culture
- Train managers in supportive supervision, coaching, and conflict resolution.
- Promote psychological safety so staff can speak up about risks and improvement ideas.
- Implement just culture approaches that distinguish human error from reckless behavior.
- Recognize high performance and teamwork through transparent and equitable mechanisms.
- 7.4 Strengthening Communication and Interdisciplinary Teamwork
- Standardize handoffs using structured tools (e.g., SBAR).
- Conduct interdisciplinary rounds and huddles for complex cases.
- Provide communication training for multicultural teams.
- Improve coordination between diagnostic services and clinical units to reduce delays.
- 7.5 Reducing Administrative Burden and Improving Workflow
- Conduct workflow mapping to identify bottlenecks and waste.
- Simplify documentation and reduce duplication in electronic systems.
- Involve frontline staff in redesigning processes and digital tools.
- Ensure adequate training and technical support for new systems.
- 7.6 Occupational Health, Safety, and Well-Being Programs
- Strengthen infection prevention programs and ensure consistent PPE access.
- Improve incident reporting systems and feedback loops.
- Implement violence prevention measures, including security protocols and de-escalation training.
- Provide mental health resources, peer support, and confidential counseling.
- Promote ergonomic training and safe patient handling equipment.
- 7.7 Career Development and Recognition
- Expand continuing professional development opportunities with protected time for learning.
- Create transparent pathways for promotion and specialty development.
- Use recognition programs that value quality, safety, and teamwork—not only volume.

8. CONCLUSION

Work environment problems in Saudi public and private hospitals—workload pressure, staffing shortages, fatigue, burnout, communication barriers, leadership gaps, workflow inefficiencies, and safety risks—have significant implications for employee performance and healthcare quality. These challenges affect clinical accuracy, productivity, teamwork, and patient experience, and they contribute to turnover and organizational costs. Addressing them requires integrated, system-level interventions aligned with national healthcare transformation goals. By investing in staffing optimization, fatigue management, supportive leadership, communication improvement, workflow redesign, and robust occupational health programs, Saudi hospitals can enhance employee performance and ensure sustainable, high-quality care.

REFERENCES

1. Aiken, L. H., Sloane, D. M., Ball, J., Bruyneel, L., Rafferty, A. M., & Griffiths, P. (2021). Patient satisfaction with hospital care and nurses in England: An observational study. BMJ Open, 11(1), e043537.

- 2. Dall'Ora, C., Griffiths, P., Ball, J., Simon, M., & Aiken, L. H. (2015). Association of 12 h shifts and nurses' job satisfaction, burnout and intention to leave: Findings from a cross-sectional study of 12 European countries. BMJ Open, 5(9), e008331.
- 3. Hayes, B., Douglas, C., & Bonner, A. (2015). Work environment, job satisfaction, stress and burnout among haemodialysis nurses. Journal of Nursing Management, 23(5), 588–598.
- 4. Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. World Psychiatry, 15(2), 103–111.
- 5. Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & Andrade, S. M. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. PLoS ONE, 12(10), e0185781.
- 6. Sexton, J. B., Helmreich, R. L., Neilands, T. B., Rowan, K., Vella, K., Boyden, J., Roberts, P. R., & Thomas, E. J. (2006). The Safety Attitudes Questionnaire: Psychometric properties, benchmarking data, and emerging research. BMC Health Services Research, 6, 44.
- 7. World Health Organization. (2020). Health workforce policy and management in the Eastern Mediterranean Region. WHO.
- 8. World Health Organization. (2022). Mental health and psychosocial well-being of health workers: Considerations for action. WHO.