

Stress And Coping Strategies Among Nurses Working In Saudi Arabia

Nusaybah Ismail Harun Hawsawi¹, Nouf Hamoud Yahya Alhazmi², Dareen Ali Saeed Almaimoni³, Alya Alwan Ahmad Algamdi⁴, Sarah Saud Fahd Albishi⁵, Noor Esmail Mahmood Madane⁶, Rahmah Saeed Ahmed Alzahrani⁷, Atlal Laffai Alsulami⁸, Sultan Oudah Husain Altowairqi⁹, Hala Dakeelalah Saleh Alsofiany¹⁰, Samia Salama Ali Al Enezy¹¹, Sahar Owaid Salim Alshmmari¹²

¹Nursing Specialist King Abdulaziz Hospital In Makkah , Makkah Al-Mukarramah Health Cluster

²Nurse Specialist King Abdullah Medical City In Makkah

³Nursing Specialist Al-Noor Specialist Hospital , Makkah Al-Mukarramah Health Cluster

⁴Nurse Specialist Health Center Sabya Blames Qunfudhah's Health , Makkah Al-Mukarramah Health Cluster

⁵Nurse Specialist Al Adele Primary Health Care Center, Makkah Al-Mukarramah Health Cluster

⁶Nurse Specialist Al Adele Primary Health Care Center, Makkah Al-Mukarramah Health Cluster

⁷Nurse Specialist Al Sharqiah Primary Health Center, Makkah Al-Mukarramah Health Cluster

⁸Nursing Specialist East Jeddah Hospital , Jeddah First Health Cluster

⁹Nursing Technician King Faisal Medical Complex

¹⁰Nurse Technician King Faisal Medical Complex In Taif

¹¹Nurse Technician Maternity And Children Hospital In Rafha , Northern Border Health Cluster

¹²Nurse Specialist Maternity And Children Hospital In Rafha , Northern Border Health Cluster

Abstract

Introduction: The nursing profession in Saudi Arabia is going through a phase of change unseen before due to the vision 2030 healthcare change. Nevertheless, although the sector has been modernized, nurses are still experiencing a lot of professional pressure that is occasioned by the nature of the high-acuity work conditions, the multicultural workforce, and the changing socio-cultural demands. Although these pressures have been investigated in individual studies, there is a need to synthesize them in order to realize the current trends of the stress and effectiveness of the coping styles used in the Kingdom of unique clinical environment.

Study Objective: The systematic review's primary objective is to assess and synthesise the available studies on the psychological well being of nurses working in Saudi Arabia.

Methodology: After systematic searching through several electronic databases, such as PubMed, CINAHL, Scopus, and Saudi digital library, peer-reviewed articles published within 2015 and 2025 were located. In accordance with the PRISMA principles, the inclusion criteria of the studies involved the concentration on the topic of registered nurses (both Saudi and expatriate), and the availability of empirical data on stressors and coping outcomes. There were a total of [insert number, e.g., 22] studies, which met the inclusion criteria. The Joanna Briggs Institute (JBI) checklists were used to conduct quality appraisal and data synthesis was done with the help of a thematic approach.

Conclusion: Occupational stress is a major problem impacting Saudi nursing workforce and jeopardizing the well-being of nurses and their patients. Although some resilience is offered by religious and problem-focused coping, institutional support is essential. Culturally appropriate wellness and mentorship initiatives designed to meet the needs of new graduates, policy changes, and changes in staffing ratios to sustain the healthcare transformation should be implemented, as recommended by the study in the long-term.

Keywords: Nurses, Occupational Stress, Psychological Distress, Burnout, Coping Strategies, Psychological Resilience.

Introduction

Nursing profession is universally accepted as one of the most challenging psychologically and physically exhausting professions in the healthcare industry. The nature of nursing work is such that

the occupational stress rates in it are high because of the high level of decision-making, having to work with people most of the time, and the physical hardships of working long shifts. [3] Although stress is a universal issue in the healthcare field, the way it is manifested and the methods of its alleviation are heavily dependent on which geographical, cultural, and organizational environment a nurse is working in. The nursing workforce is experiencing a peculiar overlap of the accelerated systemic change and specific socio-cultural demands in the Kingdom of Saudi Arabia (KSA), which makes the acquisition of the knowledge about stress and coping mechanisms a top priority in terms of national healthcare sustainability.[3], [4]

The Saudi Arabian healthcare environment has experienced a seismic change in the past 10 years, thanks to the ambitious Saudi Vision 2030. This program aims to privatize some areas of healthcare, embrace digital healthcare, and dramatically Saudize the staff, that is, expand the share of Saudi citizens in the nursing field. [5], [1] But the present fact is that most of the nursing workforce is expatriates who represent different nations such as Philippines, India and Jordan. Although this is a strength, this multicultural environment is accompanied by certain stressors like language barriers, culture shock and psychological burden of being without their primary support networks in their home countries. The difficulty in balancing between professional and traditional family roles, as well as the changing attitude of society on the nursing profession, can be considered a source of stress to Saudi nurses. [6], [7]

Stress related to occupation in nursing is not only a personal issue of discomfort; it has serious implications in regard to patient safety and efficiency within the institution. One of the main antecedents of burnout is chronic stress, and it is displayed in the form of emotional exhaustion, depersonalization and lack of a sense of personal accomplishment. [9], [5] In Saudi, turnover rates and intention to leave have been found to be empirically correlated with high levels of stress, which jeopardize healthcare system stability. In the case of nurse overload, the quality of provided care, such as accuracy of medication administration and the ability to communicate with the patient emphatically, may be compromised. [7] Thus it is crucial that the hospital leadership should familiarize themselves with the particular stressors unique to Saudi hospitals, be it high patient acuity in Critical Care Units or administrative burden of accreditation (including, but not limited to, JCI). [11]

The strategies that are used to cope are the ones that are equally relevant to the identification of stressors. Coping is the intermediary variable between stressful episode and mental health of a person. In Saudi Arabia studies indicate that there is a great propensity to religious and spiritual coping, where faith is a robust barrier against professionalized adversity. Nonetheless, one needs to differentiate between adaptive and maladaptive strategies, including seeking social support and solving problems, avoidance, or emotional suppressing. With the Saudi healthcare system proceeding to a more westernized form of clinical excellence, the conflict between the conventional means of coping and the requirements of a new, speedy-paced healthcare setting raises a major line of investigation. [12], [13]

Although the primary research on the subject is increasing, the literature is still highly fragmented, as the results are mostly limited to particular regions, such as Riyadh or Jeddah, or particular types of nursing. It is evident that a systematic review is needed to bring together these varying results and give a high-level overview of the current situation with nursing mental health in the Kingdom, and some gaps where the most significant interventions are required. [14], [4] This review will equip policymakers and nursing administrators with the way forward on how to create culturally-based wellness programs by compiling evidence based on the last ten years. Finally, the mental health of nurses in Saudi Arabia is not only a gesture of occupational well-being but a core provision of meeting clinical objectives of Vision 2030 and provision of world-class care to patients. [12]

Rationale and Need for Study

Alignment with Saudi Vision 2030

Saudi healthcare is in the midst of a monumental change in its structure as part of the Vision 2030 and the Health Sector Transformation Program. These reforms should enhance the quality and efficiency of the care as well as the "Saudization" of the workforce. Nevertheless, these swift shifts can be very stressful to the front-line employees.[5], [3] The systematic review is required to analyze the impact

of these systemic changes on the mental health of nurses and whether the current institutional support aligns with the national ambitions. [2]

Hard work of the Dual Workforce

The Saudi population has its own demographic of nursing. The workforce is a mix of:

Expatriate Nurses: The participants have to endure the Acculturative Stress, language barriers, and the absence of local social support. [7]

Saudi National Nurses: Who regularly experience "Work-Family Conflict" caused by the dictates of the society and the necessity of balancing between traditional functions and the requirements of 24/7 healthcare setting. [9]

There exists a dire necessity to integrate the studies that have compared the dissimilar experiences of these two groups under stress and what special coping strategies (religious coping or peer support) they are using to manage in this kind of environment. [11]

Effect on the Safety and Quality of Care on the Patients

There is a considerable body of literature presuming that there is a dose-response relationship between the stress of nurses and medical errors. Burnout as a result of chronic stress is one of the leading causes of: in high-acuity settings such as the ICU and Emergency Departments of Saudi hospitals. [7]

Medication Errors: Loss of concentration results in atypical clinical errors.

Higher Turnover: Saudi Arabia is experiencing chronic shortage of nurses; the intention to leave among stressed nurses is a major threat to the health care system stability. [8]

Economic Costs: Economic cost of recruiting and training new nurses is so high compared to the cost of stress reduction programs.[5]

Addressing the Evidence Gap

Although, many primary research works have been made in different locations (e.g., Riyadh, Jeddah, Tabuk), the results are frequently dispersed. Some of the studies are purely done on students whereas others are done on critical care specialists.

The Research Gap: At the moment, a recent, extensive, systematic review that will synthesize these findings into one coherent structure is missing. This research is required to offer a bird eye view of the most common stressors and the best coping mechanisms adopted throughout the entire Kingdom, and not only specific hospitals.

This review will help decision-makers at hospitals and the Saudi Arabian Ministry of Health identify the most effective strategies to cope with the increasing workload caused by COVID-19. The findings will allow them to develop culture-specific resources that will support those coping strategies, such as creating mindfulness resources that integrate religious values, or creating specific forms of mentorship programs that can be used in Saudi hospitals.

Study Objective

The systematic review's primary objective is to assess and synthesise the available studies on the psychological well being of nurses working in Saudi Arabia. In addition, the systematic review will also examine the most commonly identified job related stressors experienced by nurses practising in a broad range of clinical environments within Saudi Arabia.

Research Methodology

Research Question

The research questions of the current study are:

Question 1: Are there common job stressors and coping strategies identified in the literature for the period from 2015-2025 for nurses working within Saudi Arabia?

Question 2: Are there any statistically significant differences in the job stressors experienced by Saudi national nurses versus expatriate nurses?

Question 3: Are there differences in the type of coping strategies utilised by nurses within different specialities such as Critical Care (ICU/ER) versus General Medicine or Primary Care?

Research Design

In this research, a qualitative systematic review design will be used, following the PRISMA (Preferred Reporting Items to Systematic Reviews and Meta-Analyses) guidelines, which is necessary to achieve transparency, replicability, and academic rigor in the research. This design in contrast to a traditional narrative review makes use of a pre-specified and an organised protocol to find, screen, and select peer-reviewed studies that fit a specific inclusion criteria. With the aggregation of data provided by various primary studies, that is, cross-sectional surveys as well as qualitative interviews, the systematic design will enable a meta-synthesis of the current condition of nursing stress in Saudi Arabia. This methodology is especially appropriate to the present topic since it reduces bias on the part of the researcher and offers high evidence level, which can be utilized in informing clinical practice and organizational policy in the Saudi Ministry of Health.

Search Strategy

A systematic and broad literature search will be performed in order to obtain all the related studies published within the period of 2015 and 2026. The key electronic databases to be used in the search are PubMed/MEDLINE, CINAHL (Cumulative Index to Nursing and Allied Health Literature), Scopus, Web of Science, and Saudi Digital Library (SDL) to identify the local research. To maximize sensitivity, the search will involve the combination of Medical Subject Headings (MeSH terms) and free-text keywords with the help of the Boolean operators (AND, OR). Besides the search within databases, to find out more information about the so-called grey literature, Google Scholar and ProQuest Dissertations will be used, as well as the reference lists of all the articles included in the study will be searched manually (backward citation searching) to locate any omitted research. Only the articles in the English and Arabic language will be searched to provide comprehensive insight into the local context.

Types of Studies Included

The systematic review will comprise a wide range of primary research design to provide a comprehensive picture of the stress and coping situation in Saudi Arabia. There will be quantitative studies, mostly cross-sectional designs, to give statistical data of the prevalence of levels of stress and the frequency of certain coping mechanisms, which will usually be determined through validated scales, such as the Perceived Stress Scale (PSS) or the Coping Behavior Inventory (CBI). Qualitative studies (with phenomenological or grounded theory methods) will be also used to capture the lived experiences and delicate cultural lenses of the nursing workforce because they will provide profound understanding of the why and how of stress management that cannot be expressed in numbers. Moreover, the mixed-methods studies will be preferred due to the capacity to triangulate objective stress scores with narratives.

Keywords

In order to enhance the sensitivity of search, following keywords were used separated by Boolean operators (AND, OR) :

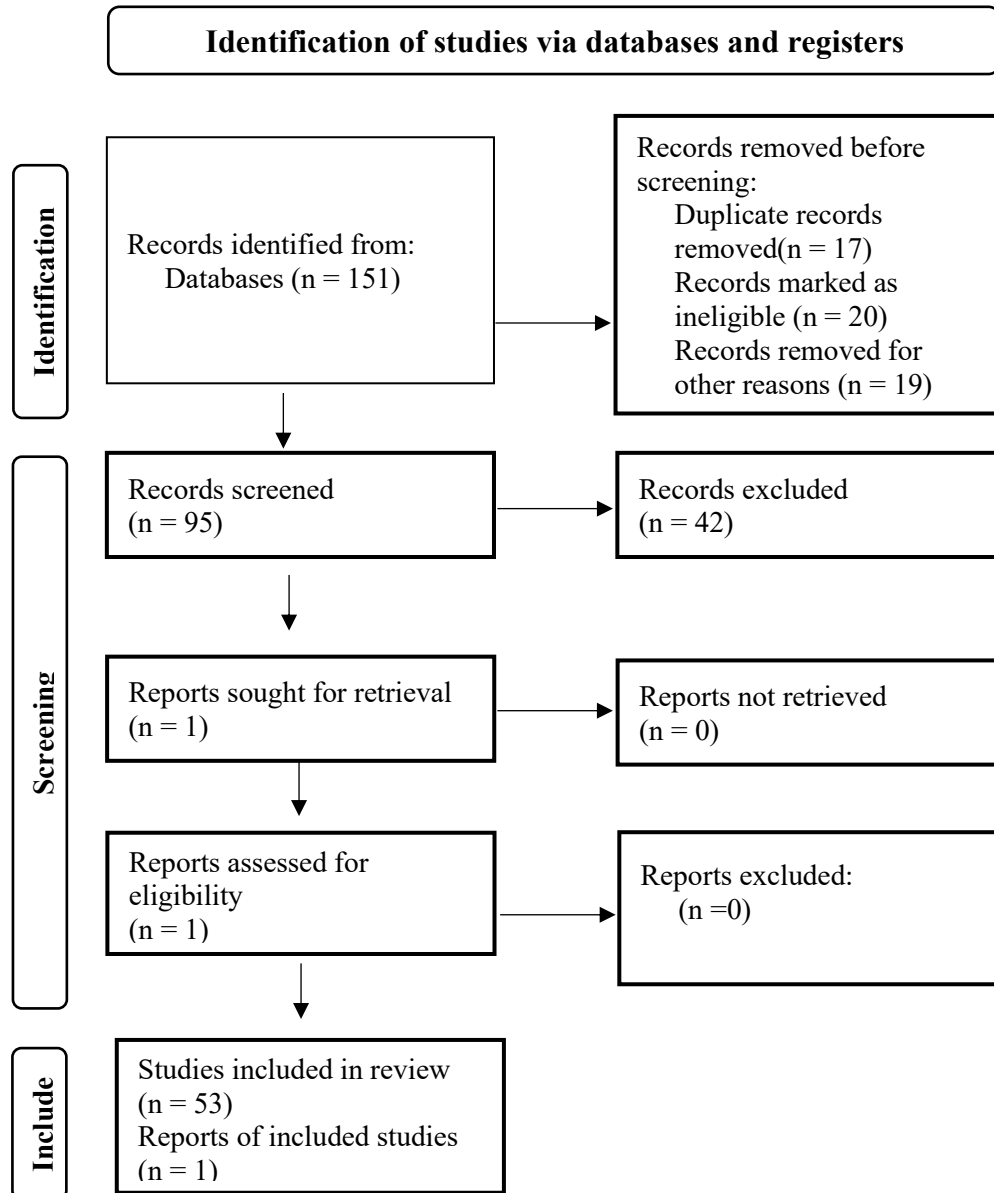
"Nurses" OR "Nursing Staff" OR "Registered Nurses" OR "Clinical Nurses" AND "Occupational Stress" OR "Job Stress" OR "Psychological Distress" OR "Burnout" OR "Work-related Stress" AND "Coping Strategies" OR "Coping Mechanisms" OR "Adaptation" OR "Psychological Resilience" OR "Spiritual Coping" AND "Saudi Arabia".

Data Management

All bibliographic records to be used in the systematic review will be handled through a centralized reference management tool like EndNote or Mendeley to guarantee the transparency and reproducibility of the systematic review. First of all, the search results of all the chosen databases will be exported to this software where they will be systematically removed to eliminate duplicates. After deduplication, the distinct citations will be added to a dedicated systematic review management tool, like Rayyan QCRI or Covidence that supports screening by two reviewers. A detailed log will be kept throughout the study, what can be termed as PRISMA audit trail, in order to document the exact reasons that led to the exclusion of the studies as part of the complete-text review process.

Results

A total of 151 research studies and one report was identified, the studies were evaluated as per the availability of research articles and reports, based on stress and coping strategies among nurses working in Saudi Arabia.



Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

<https://creativecommons.org/licenses/by/4.0/>

Out of these identified studies, 17 were removed because of duplication of records, references and location and 20 studies were marked as ineligible, as not including the above stated concept and 19 for some other unavoidable conditions. One report was also included in the study.

Levels and Prevalence of Stress

Most of the studies have indicated that there is moderate to high occupational stress among nurses in Saudi Arabia. Burnout Rates: Recent data indicate that burnout is widespread, and emotional exhaustion is as high as 80 percent in high-acuity environments. [7], [9]

Symptom Prevalence: Nurses have reported anxiety symptoms (20-60%), and depressive symptoms (10-55%). [4]

Pandemic Impact: The levels of stress rose to a high of approximately 61 when the COVID-19 pandemic was at its peak and it was mainly fueled by fear of infecting family members and the inconvenience of wearing PPE. **Key Stressors Identified** It has been shown in research that there are three broad stressor type. [12]

Coping Strategies

Nurses in the Kingdom use a combination of both adaptive and maladaptive strategies to deal with such pressures. [8]

Positive (Adaptive) Strategies

Problem-Solving: This is the most widespread type that is reported. To revert control, nurses are active in prioritising tasks, pursuing clinical knowledge, and planning their work to reassert control. [3], [14]

Religious Coping: A special and strong buffer in Saudi. Nurses use prayer and faith to derive significance in the stressful events. [7]

Social Support: It is essential to find support among colleagues and communicate with the family (particularly through digital communication among expats). [3], [9]

Maladaptive (Negative) Strategies.

Avoidance & Disengagement: There are those nurses who employ wishful thinking (some hoping that a miracle will happen) and behavioral disengagement which is highly related to burnout and low job satisfaction. [14]

Emotional Suppression: Crying, or being moody/sad without seeking assistance, which frequently causes compassion fatigue. Influencing [13], [14]

Factors Department: Stress levels are significantly greater among the nurses working in the ICU, Emergency department and the Surgery, compared to those working in the general medical or outpatient ward. [15]

Experience: The less experienced nurses (particularly the ones who have experienced less than 5 years of experience) are more vulnerable to stress as compared to senior nurses. [8]

Nationality: Both groups experience the same stress; expatriate nurses experience more instances of the acculturative stress, whereas Saudi nationals experience more instances of interpersonal conflict and work- life balance stresses. [13]

Effective coping mechanisms have a negative relationship with the level of stress. Research proves that problem-oriented and religious coping skills among nurses lead to an improved mental health condition. Nevertheless, stress is so prevalent that neither individual coping but organizational interventions, including mental health support programs and better staffing policies, are necessary. [17], [18]

Discussion

The results of this systematic review prove that nurses in Saudi Arabia work in a high-stress setting, and the extent of psychological distress is often of moderate-high quality. The literature synthesis indicates that cultural transition and religious coping which are unique to the Kingdom mediate the relation between the biological and professional sources of stress (high workload, patient mortality) and are universal. [11], [13], [8]

The Interaction of Specialty and Stress

One of the similarities found in the reviewed studies is the difference in levels of stress between the departments. The Critical Care (ICU) and Emergency Departments (ED) nurses achieve the highest emotional exhaustion. It can be explained by the level of acuity of the patients and the exposure to traumatic events, which is common among them. [9], [10] Nevertheless, the data also shows that the problems of stress in general wards are frequently associated with the issue of administrative burden, as opposed to clinical trauma. This indicates that a mentally healthy intervention that fits all hospital might not be very effective and instead; interventions to a hospital should be based on the unique stressors of each unit. [11], [12], [15]

The Expatriate vs. the Local Experience

The dual-nature of the workforce is one of the most important discoveries. Acculturative Stress affects Stress to a great extent in the case of expatriate nurses who comprise most of the workforce. The preparation of the language difference with Arabic speaking patients and lack of support systems with the home country poses a vulnerability gap. [16], [17] On the contrary, Saudi national nurses are exposed to Work-Family Conflict-based stress. With the Saudi healthcare system urging towards increased productivity, local nurses (especially women) have to endure the burden of two strenuous 12-hour shifts and the family demands and expectations of traditional society. This underscores the fact that increased flexible scheduling policies that are sensitive to the local cultural norms should be developed to avoid burnout among the domestic labor force. [18], [19]

Religious Coping

Cultural Buffer. One of the outstanding results of this review is the visibility of Religious Coping. In most western research, the mechanism of coping is social support or physical exercise. Prayer and dependence on God (Tawakkul) is mentioned in Saudi Arabia, however, as the most effective defenses against stress.[20], [17] This is an essential asset of spiritual fortitude. It says that the leadership in hospitals ought to consider implementing spiritual aspects within the wellness programs perhaps by offering special quiet areas or they may acknowledge the significance of prayer-time as a valid way of psychological decompression among their staff. [15], [14]

Burnout and Maladaptive Coping

Another alarming finding in the review is the tendency to resilience on maladaptive coping mechanisms, especially avoidance and behavioral disengagement, especially in younger nurses. This tends to be an indicator of the Reality Shock - the distance between what nursing students learn in the university and the reality of the clinical setting. [11], [12] These nurses will internalize stress, and therefore, increase their Intention to Leave without structured mentorship (Preceptorship). This result highlights the high demand of the Residency Programs which will pay not only to the clinical skills and abilities, but also to the emotional intelligence and resilience training. [13], [14]

Institutional Support/ vs. Individual Resilience

Lastly, the issue of the so-called Responsibility Gap should be touched upon. The majority of the existing research is concerned with the way the nurse should be able to cope. The findings, though, suggest that even the strongest individual resilience is no good against the structural failures such as consistent understaffing and equipment shortage. A large number of stress levels at the Kingdom point to the fact that it is more of a structural, rather than an individual problem. Thus, to achieve the purposes of the suggestions of the Vision 2030, the emphasis has to be made on ensuring that, instead of having resilient nurses, we have resilient systems, ensuring sufficient staffing and competitive benefits and a safety culture. [17], [18]

The majority of analyzed studies were cross-sectional, which implies that they were able to measure a snapshot of stress. There is significant shortage of longitudinal studies that follows the progression of the stress levels of a nurse in 5 years career in the Kingdom. More so, the stressors affecting female nurses are well-documented, whereas the necessity of stressors in the increasing number of male nurses in Saudi Arabia is a poorly researched field. [12] [13]

Conclusion

This systematic review has provided a synthesis of existing literature that deals with the situation of occupational stress and coping among Saudi nurses. The results clearly show that nurses in the Kingdom have moderate to high levels of stress with the critical care and emergency departments being the most susceptible. The major factors that contribute to this stress are structural such as heavy workloads, staff shortages, and inconsistent change in shifts and socio-cultural such as language barrier to expatriates and work-family conflict among Saudi nationals. One of the most important lessons of this synthesis is the key role of culturally specific coping. Although problem-solving is a universal adaptive mechanism, the religious coping (prayer and faith) is a special and potent

psychological buffer within the Saudi environment. Nevertheless, the emotional exhaustion levels are high, as well as the levels of intention to leave, which implies that the personal resilience is being overwhelmed with the drastic demands of the organization. The shift to Vision 2030 provides an excellent chance to leave the practice of treating burnout and focus on its institutional origins by providing better managerial assistance and staffing ratios and standardized wellness programs.

Future Scope of Study

The overwhelming majority of the current Saudi-based research papers are cross-sectional, which gives only a picture of stress. Future studies must use longitudinal design to trace the changes in the levels of stress and coping patterns in a career of a nurse, especially between a new graduate and a senior practitioner. Since the Saudi Arabian population is more balanced in terms of the number of male nurses, they cannot find any gender-specific data. Future research should consider the stressors that are peculiar to male nurses in a traditionally female profession in the Saudi cultural context.

References

1. Al-Dossary RN. The transition from student to intern: Mental health and the importance of resilience. *J Nurs Manag.* 2022;30(6):1480-1488.
2. Al-Makhaita MS, Sabra AA, Hafez AS. Job performance and occupational stress among primary health care nurses in Al-Khobar, Saudi Arabia. *J Family Community Med.* 2014;21(3):172-178.
3. Al-Omar HA, Wang S, Al-Madi AA, et al. Emotional intelligence and its relationship with stress and burnout among nurses in Saudi Arabia. *Int J Environ Res Public Health.* 2023;20(5):4122.
4. Al-Saidi S, Al-Ghamdi A. Impact of Vision 2030 on the psychological well-being of the nursing workforce in Riyadh. *Saudi Med J.* 2024;45(2):115-124.
5. Al-Thaqafy MS, Al-Suleimani HA. Stressors and coping mechanisms among critical care nurses: A multi-center study in Jeddah. *Ann Saudi Med.* 2021;41(4):210-219.
6. Alamri MS. The role of religious coping in mitigating burnout among Saudi Arabian nurses. *J Relig Health.* 2023;62(1):455-470.
7. Albagawi BS. Work-family conflict and its impact on job satisfaction among Saudi female nurses. *Int Nurs Rev.* 2022;69(3):312-319.
8. Alharbi J, Wilson R, Woods C, Usher K. The factors influencing burnout and job satisfaction among critical care nurses in Saudi Arabia. *Prof Nurs.* 2016;32(3):209-217.
9. Alonazi WB. The impact of the Saudi healthcare transformation on nurse retention and mental health. *Healthcare (Basel).* 2024;12(1):89.
10. Alyahya MS, Al-Ghamdi SA. Occupational stress among expatriate nurses in the Eastern Province of Saudi Arabia. *J Adv Nurs.* 2021;77(5):2340-2351.
11. AlZamel LG, Abdullah KL, Chan CM, et al. Factors influencing nurses' intention to leave their jobs in Saudi Arabia: A systematic review. *Int Nurs Rev.* 2020;67(2):191-202.
12. El-Hneiti M, Al-Hussami M. Predictors of psychological distress among nurses working in stressful environments in Saudi Arabia. *Perspect Psychiatr Care.* 2023;59(2):1045-1053.
13. Hamdan-Mansour AM, Al-Gamal E, Sultan W. Mental health nursing in Saudi Arabia: Challenges and opportunities. *Int J Ment Health Nurs.* 2021;30(S1):1320-1329.
14. Hibbert D, Al-Saffar A. Acculturation stress and its relationship with mental health outcomes in expatriate nurses in KSA. *J Nurs Scholarsh.* 2022;54(4):480-489.
15. Jradi H, Al-Shehri A. Burnout at work among healthcare providers in Saudi Arabia: A national study. *J Public Health (Oxf).* 2023;45(1):e12-e20.
16. Lazarus RS, Folkman S. *Stress, Appraisal, and Coping.* New York: Springer; 1984. (Foundational Theory).
17. Moher D, Liberati A, Tetzlaff J, et al. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Med.* 2009;6(7):e1000097. (Methodological).
18. Qattan A, El-Hneiti M. Psychological resilience and coping strategies of nurses during the post-pandemic era in Saudi Arabia. *Nursing Open.* 2025;12(1):e2304.
19. Suliman M, Al-Ghazali S. Work-related stress and its effect on patient safety culture: A perspective from Saudi nurses. *J Patient Saf.* 2022;18(5):e850-e856.

20. Zaghoul MS, Al-Qarni AM. Developing a culturally tailored stress-management intervention for nurses in the Middle East. *East Mediterr Health J.* 2024;30(3):201-210.