
	<div data-bbox="568 243 1045 291" data-label="Section-Header"><h2>Mosul Journal of Nursing</h2></div> <div data-bbox="509 336 1104 405" data-label="Text"><p>Online ISSN: 2663-0311 - Print ISSN: 2311-8784 Website: https://mjn.uomosul.edu.iq</p></div>	
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Investigating the Prevalent Challenges and Workplace Issues Faced by Critical Care Nurses in Duhok City, Kurdistan Region - Iraq

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ARTICLE INFO

Keywords:

Critical Care Nurses
Workplace Issues
Challenges
Intensive Care Units
Stress
Iraq



Abstract

Background: Critical care nurses encounter numerous challenges that impact their work-life balance and overall professional satisfaction. Understanding these challenges is essential to addressing staff retention and improving healthcare outcomes. This study investigates the difficulties and workplace issues critical care nurses face in Duhok City, Iraq.

Methods: A descriptive, cross-sectional study design was employed. A non-probability convenience sampling method was used to select 60 critical care nurses working in public hospitals in Duhok City. Data was collected from August 1 to September 1, 2024, through direct interviews using the "Challenges and Crisis Assessment Tool."

Results: The study found that 95% of participants reported increased workload, 86.7% faced challenges with severe health conditions, and 71.7% reported unavailability of examination rooms and beds. A significant percentage also expressed fear of infection and a high sense of responsibility for medical supplies and equipment.

Conclusions: The primary challenges identified were increased workload, fear of infection, inadequate resources, and the psychological stress of managing severe conditions. Addressing these challenges can help improve nurse retention and patient care.

What is already known about the topic?

- Globally, **critical care nursing is associated with high levels of occupational stress, burnout, emotional exhaustion, and moral distress, especially due to long shifts, high patient acuity, and inadequate staffing.**

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[10.33899/mjn.2025.153953.1127](https://doi.org/10.33899/mjn.2025.153953.1127) , Authors, 2025, College of Nursing, University of Mosul.

Received 06 September 2024; Received in revised form 24 December 2024; Accepted 28 December 2024,
Available online 01 January 2025



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Introduction

Critical care nursing is one of the most demanding and essential fields in healthcare, providing care for patients who are critically ill or injured. Nurses in this specialty care for individuals suffering from life-threatening conditions that require constant attention, specialized skills, mental resilience, and physical endurance. These professionals play a pivotal role in the healthcare system, managing complex and often unstable patients in environments such as intensive care units (ICUs), emergency departments, and high-dependency units (HDU). The importance of their role cannot be overstated, as they often provide the necessary interventions to save lives.

However, the profession is not without its challenges. Over the years, critical care nurses have faced mounting pressures, including increasing patient numbers, insufficient resources, and longer working hours. The increase in the global healthcare burden, combined with staffing shortages and budget cuts, has exacerbated these issues. Despite the mounting pressures, critical care nurses continue to provide essential care, often at the expense of their own physical and mental health. Studies have shown that critical care nurses experience high levels of burnout, emotional exhaustion, and stress due to the combination of excessive workloads, exposure to traumatic events, inadequate staffing, and workplace violence. These stressors are further compounded by the lack of professional support, recognition, and inadequate compensation for the demands of their work (Mahran et al., 2017; Saleh, 2021). As a result, these challenges not only affect the well-being of nurses but also significantly impact patient care quality and safety.

Critical care nursing, by its very nature, involves high-stress situations that require nurses to make life-and-death decisions with limited time and resources. Nurses frequently deal with patients in critical conditions, face ethical dilemmas, and have to manage complex family dynamics. Workplace violence, often perpetrated by patients or their families, adds to the emotional and psychological strain. Additionally, the unpredictable work hours and extended shifts can lead to work-life imbalances, affecting nurses' mental health and job satisfaction. According to a study by Awan et al. (2023), high workloads and extended working hours are significant contributors to stress and burnout among critical care nurses, leading to decreased job satisfaction and increased turnover rates. Furthermore, inadequate staffing levels and lack of professional support exacerbate these challenges,

leading to a vicious cycle of stress, dissatisfaction, and compromised patient care (Khalaf & Bakey, 2022; Moradi et al., 2021).

In this context, understanding the specific challenges faced by critical care nurses in Duhok City, Iraq, is crucial to improving healthcare systems and supporting the nursing profession. By identifying the factors contributing to stress, workload, and other difficulties, targeted interventions can be implemented to alleviate the pressures on nurses, improve their work environment, and ultimately enhance patient care. This study aims to provide a comprehensive understanding of the challenges faced by these nurses, contributing valuable insights into the structural and operational improvements needed to support critical care nursing in Duhok City and beyond.

Aim:

The primary aim of this study is to investigate the prevalent challenges and workplace issues faced by critical care nurses in Duhok City, Iraq. Specifically, the study seeks to identify the factors contributing to stress, workload, and other difficulties encountered by nurses working in intensive care units (ICUs), high-dependency units (HDUs), and emergency settings. This study will also explore how these challenges affect the nurses' well-being, job satisfaction, and overall performance, as well as their impact on the quality of patient care delivered in these critical settings.

Materials and Methods

Study Design

This study employed a descriptive cross-sectional design to systematically investigate prevalent challenges and workplace issues faced by critical care nurses in Duhok City, Kurdistan Region, Iraq.

Study Setting and Duration

The study was conducted at two major public hospitals in Duhok City: Azadi Teaching Hospital and Hevi Teaching Hospital. Data collection took place over a period of one month, from August 1 to September 1, 2024.

Ethical Considerations

Ethical approval was obtained from the General Directorate of Health in the Duhok Governorate (reference number: 31072024-6-22). Participation was voluntary, and informed verbal consent was obtained from each nurse before initiating the survey.

Study Population and Sampling Method

A non-probability convenience sampling approach was utilized to recruit participants. The sample comprised 60 critical care nurses employed in intensive care settings at two public hospitals in Duhok City: Azadi Teaching Hospital and Hevi Teaching Hospital. Nurses working in various critical units—including High Dependency Units (HDU), Surgical Intensive Care Units (SICU), Coronary Care Units (CCU), Neonatal Intensive Care Units (NICU), Intensive Care Units (ICU), Pediatric Intensive Care Units (PICU), and Emergency Departments—were included. Nurses who were unwilling to participate were excluded from the study.

Data Collection Tool

Data were collected using a structured questionnaire administered through face-to-face interviews, lasting approximately 8-10 minutes each. The questionnaire comprised two sections:

- **Section One** included demographic data such as age, gender, marital status, educational qualifications, years of experience, and job role.
- **The Challenges and Crisis Assessment Tool** comprised the second section, which contained 32 items grouped into six domains: Patient-Family Challenges (6 items), Role Conflict (4 items), Sense of Accountability (5 items), Supportive Resources (5 items), Psychological Load/Stress (7 items), and Workload (5 items). Each item was scored dichotomously (1 = Yes, 0 = No).

Statistical Analysis

Data analysis was conducted using the Statistical Package for Social Sciences (SPSS), version 25.0. Descriptive statistics were employed to summarize the data; frequencies and percentages were used for categorical variables, while mean and standard deviation (SD) were used for continuous variables. Pearson correlation tests were applied to examine relationships among the studied domains. Statistical significance was determined at $p < 0.05$ (two-tailed), and a p-value of ≤ 0.01 was considered highly significant.

Results

The demographic characteristics of the 60 critical care nurses participating in this study are summarized in Table 1. Participants had a mean age of 27.42 years (SD = 4.29), with ages ranging from 22 to 42 years. The majority (56.7%) fell within the 22-26 age group. Slightly more than half of the participants were female (51.7%), and most were single

(65%). Regarding education levels, half had diploma degrees in nursing (50%), while 46.7% held a bachelor's degree. The vast majority of nurses worked as bedside nurses (91.7%), and 55% had between one and five years of clinical experience.

Table 1. Sociodemographic Characteristics of the Study Sample (N=60)

Variables	Frequency (F)	Percentage (%)	Mean \pm SD
Age group (years)			27.42 \pm 4.29
22-26	34	56.7	
27-31	16	26.7	
32-36	8	13.3	
36 and over	2	3.3	
Gender			
Male	29	48.3	
Female	31	51.7	
Marital status			
Single	39	65.0	
Married	21	35.0	
Educational level			
Diploma in Nursing	30	50.0	
Bachelor's Degree in Nursing	28	46.7	
Master's/PhD Degree in Nursing	2	3.3	
Job			
Bedside Nurse	55	91.7	
Head Nurse	5	8.3	
Years of Experience			2.25 \pm 0.77
≤ 1 year	8	13.3	
1-5 years	33	55.0	
5-10 years	15	25.0	
≥ 10 years	4	6.7	

As illustrated in Table 2, the majority of nurses (95%) reported an increased workload in critical care units, and 65% noted the challenge of managing a large number of patients. Furthermore, 61.7% reported an increase in night shifts, and over half (53.3%) expressed inadequate time to complete assigned tasks.

Table 2: Workload Challenges Faced by Participants (N=60)

Workload Challenges	Yes, n (%)	No, n (%)
Increased workload	57 (95.0)	3 (5.0)
Inadequate time to complete assigned tasks	32 (53.3)	28 (46.7)
Need to work long hours (night shifts)	25 (41.7)	35 (58.3)
Large number of patients in critical areas	39 (65.0)	21 (35.0)
Increase in number of night shifts	37 (61.7)	23 (38.3)

Psychological stress was notably high among nurses, with 86.7% dealing with severe medical conditions with limited recovery prospects, 73.3% reporting fear of infection, and 68.3% experiencing difficulties with non-compliant patients. However, conflicts among nurses or with doctors were less frequently reported, indicating generally good collaboration.

Table 3: Psychological Load (Stress) Challenges (N=60)

Psychological Challenges	Yes, n (%)	No, n (%)
Dealing with severe medical conditions with little hope of recovery	52 (86.7)	8 (13.3)
Fear of infection from patients	44 (73.3)	16 (26.7)
Dealing with patients of different beliefs and values	37 (61.7)	23 (38.3)
Patients not adhering to instructions	41 (68.3)	19 (31.7)
Lack of appreciation for efforts	30 (50.0)	30 (50.0)
Conflict between nurses	12 (20.0)	48 (80.0)
Conflict between nurses and doctors	26 (43.3)	34 (56.7)

Regarding technical and supportive material challenges, most nurses (71.7%) reported shortages of beds, examination rooms, and medical supplies. More than half (55%) lacked appropriate office spaces. However, the majority did not report challenges with handling high-tech equipment or lack of opportunities to enhance their skills.

Table 4: Technical and Supportive Material Challenges (N=60)

Supportive Material Challenges	Yes, n (%)	No, n (%)
Lack of beds, examination rooms, and supplies	43 (71.7)	17 (28.3)
Lack of appropriate offices for nurses	33 (55.0)	27 (45.0)
High-tech devices exceeding cognitive skills without training	18 (30.0)	42 (70.0)
Unavailability of opportunities to showcase skills	28 (46.7)	32 (53.3)
Stressful and tense working atmosphere	30 (50.0)	30 (50.0)

A substantial majority reported a significant sense of responsibility for critical cases (88.3%) and medical supplies and equipment (83.3%). However, fewer participants reported challenges related to managerial competence or unclear nursing responsibilities.

Table 4: Sense of Responsibility Challenges (N=60)

Responsibility Challenges	Yes, n (%)	No, n (%)
Responsibility for critical cases	53 (88.3)	7 (11.7)
Responsibility for equipment, supplies, medicines	50 (83.3)	10 (16.7)
Unclear nursing duties and responsibilities	25 (41.7)	35 (58.3)
Lack of managerial and leadership competence of supervisors	18 (30.0)	42 (70.0)
Lack of support from superiors	30 (50.0)	30 (50.0)

Correlation analysis indicated significant relationships between workload and psychological stress ($p=0.006$), supportive material and sense of responsibility ($p=0.025$), and sense of responsibility and patient-family care challenges ($p=0.047$), suggesting interconnectedness among these stressors.

Discussion

Critical care nursing remains one of the most demanding professions within healthcare, characterized by high levels of stress, burnout, and turnover. The primary objective of this study was to identify and examine the prevalent workplace issues and challenges faced by critical care nurses in public hospitals in Duhok City. The participants consisted of 60 nurses with diverse demographic and professional backgrounds, predominantly young, single, female nurses with approximately two to five years of experience.

This study identified several significant challenges impacting critical care nurses, primarily related to workload. Most nurses (95%) reported a considerable increase in workload, emphasizing insufficient time to complete assigned tasks due to the high patient numbers and frequent night shifts. These findings align with previous studies such as those by Mahran et al. (2017) and Khalaf & Bakey (2022), which similarly reported excessive workloads, prolonged working hours, and increased night shifts among ICU nurses as major stressors. Additionally, these findings correlate with the results from Alwin (2013), who highlighted that extended work hours combined with high responsibilities lead to substantial mental and physical stress among nurses.

Regarding psychological stressors, the current study indicated that nurses frequently faced emotionally draining situations such as managing critically ill patients with low

chances of recovery, fear of infection, and dealing with non-compliant patients or those holding different beliefs and values. Interestingly, the nurses expressed divided views concerning recognition and appreciation for their efforts, with exactly half indicating inadequate acknowledgment from management and peers. These psychological challenges align with findings from previous research (Khalaf & Bakey, 2022; Mahran et al., 2017; Moradi et al., 2021), which identified similar stressors rooted in high patient-to-nurse ratios and limited professional recognition.

Regarding supportive material and resources, a significant proportion of nurses (71.7%) reported shortages of essential resources, including medical supplies, examination rooms, and beds. Furthermore, more than half of participants experienced inadequate office spaces, contributing to increased stress levels and complicating their work environment. Although the participants indicated competence in managing high-tech equipment, they expressed significant dissatisfaction due to limited professional advancement opportunities. This finding is consistent with previous studies (Ford, 2012; Gondwe et al., 2011), emphasizing that inadequate resources and limited formal training exacerbate stress and workplace dissatisfaction.

Role conflict and family-life balance emerged as critical challenges among nurses, with a majority (61.7%) indicating that their nursing career negatively impacted their family life due to long hours and frequent night shifts. Sabuh et al. (2008) similarly found that prolonged shifts negatively affected family responsibilities, suggesting that societal perceptions and structural workplace conditions significantly impact nurses' family stability.

Regarding patient-family care, the current study's participants reported fewer challenges, primarily due to clear guidelines on visitation regulations, adequate preparation for educating family members, and sufficient time to manage family needs. However, satisfaction with waiting spaces for families was divided. These findings contrast with those of Mahran et al. (2017), who reported inadequate family support systems in similar healthcare settings.

The study also identified a statistically significant correlation between increased workload and psychological stress ($p = 0.006$). Additionally, significant relationships emerged between supportive resources and nurses' sense of responsibility, and between nurses' sense of responsibility and patient-family care, underscoring the interconnectedness of

these domains ($p=0.025$ and $p=0.047$, respectively). This relationship highlights the necessity of integrated interventions addressing these multifaceted challenges comprehensively.

Limitations

A primary limitation of this study is the relatively small sample size, influenced by the limited number of nurses working in critical care units within the public hospitals of Duhok City. Future research could benefit from larger sample sizes and more diverse hospital settings.

Conclusions and Recommendations

The study concludes that critical care nurses in Duhok City face significant challenges, including increased workload, limited resources, psychological stress, role conflicts, and negative impacts on family life. To address these challenges effectively, it is recommended that:

1. Healthcare authorities and media initiatives should actively promote the nursing profession to improve societal recognition and appreciation.
2. Hospital management should enhance professional training and implement continuous education programs focusing on stress management and crisis intervention.
3. Implementing reward systems and recognition programs could significantly improve nurses' motivation and satisfaction.
4. Psychological support services, including regular debriefing sessions following stressful incidents, should be routinely integrated into critical care practice.
5. Policies should be developed to alleviate shift-related stress, such as reducing night shift lengths, ensuring adequate rest periods between shifts, and fairly distributing weekend and holiday duties.

Funding: This study is author-based funded.

Author's Contributions: The author developed the research design, data collection, and data management and also wrote the manuscript report.

Disclosure Statement: The authors declare no conflict of interest.

Data Privacy: Participant confidentiality and data privacy were maintained throughout the study. Identifiable information was anonymized and securely stored, accessible only to the research team for analysis.

Data Availability Statement: Available from the corresponding author upon reasonable request.

ACKNOWLEDGEMENTS: The authors would like to express their sincere gratitude to all the critical care nurses in Duhok City who participated in this study—special thanks to the hospital administrators for their support and cooperation. Your valuable insights made this research possible.

References

- Akinwolere, O. A. O. (2016). Psychological stress in critical care nurses (Doctoral dissertation, Walden University). Retrieved from <https://scholarworks.waldenu.edu/dissertations/155>
- Alwin, S. (2013, October 15). Top 7 professional challenges faced by nurses in the 21st century. Retrieved from <https://newnursehelp.com/top-7-professional-challenges-faced-by-nurses-in-the-21st-century/>
- Awan, H., Urooj, S., Rafiq, N., Ali, A., Rani, N., & Akhtar, Z. (2023). Level of stress and associated factors among nurses working in critical care unit in public sector hospital Lahore Pakistan. *Journal of Positive School Psychology*, 7(7), 131-138.
- Bolado, G. N., Ataro, B. A., Gadabo, C. K., Ayana, A. S., Kebamo, T. E., & Minuta, W. M. (2024). Stress level and associated factors among nurses working in the critical care unit and emergency rooms at comprehensive specialized hospitals in Southern Ethiopia, 2023: Explanatory sequential mixed-method study. *BMC Nursing*, 23(1), 341. <https://doi.org/10.1186/s12912-024-02004-w>
- Cortese, C. G. (2012). Predictors of critical care nurses' intention to leave the unit, the hospital, and the nursing profession. *Open Journal of Nursing*, 2(3A), 311-326. <https://doi.org/10.4236/ojn.2012.223046>
- Ford, S. (2012). Meeting patient expectations is the biggest problem facing nursing. *Nursing Times*. Retrieved from <http://www.nursingtimes.net/nursingpractice/specialisms/management/meeting-patient-expectations-is-biggestproblem-facing-nursing/5041565.article>

- Gondwe, W., Bultemeier, K., Bhengu, B., & Midwifery. (2011). Challenges encountered by intensive care nurses in meeting patients' families' needs in Malawi. *African Journal of Nursing*, 13(2), 92-102. Retrieved from <https://hdl.handle.net/10520/EJC19374>
- Health Workforce Australia. (2014). Australia's future health workforce—Nurses detailed report. Retrieved from <https://www.health.gov.au/internet/main/publishing.nsf/Content/34AA7E6FD B8C16AACA257D9500112F25/%24File/AFHW%20-%20Nurses%20detailed%20report.pdf>
- Johan, S., Sarwar, H., & Majeed, I. (2017). Causes of stress among nurses working in intensive care unit of Ittefaq Hospital Lahore. *International Journal of Social Sciences Management*, 4(2), 96-109. <https://doi.org/10.3126/ijssm.v4i2.17159>
- Khalaf, J. Y., & Bakey, S. J. (2022). Challenges facing nurses toward providing care for patients at intensive care units during the pandemic of coronavirus disease. *Pakistan Journal of Medical & Health Sciences*, 16(03), 893-897. <https://doi.org/10.53350/pjmhs22163893>
- Khanade, K., & Sasangohar, F. (2017). Stress, fatigue, and workload in intensive care nursing: A scoping literature review. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 61(1), 686-690. <https://doi.org/10.1177/1541931213601640>
- Lamadah, S. M., & Sayed, H. Y. (2014). Challenges facing nursing profession in Saudi Arabia. *Journal of Biology, Agriculture and Healthcare*, 4(7), 20-25.
- Mahmood, A., Ali, M. M., Punjwani, F. S. A., Bardai, S. S., Sultan, S., & Shamim, O. (2020). Comparison of level of stress among bedside nurses working in different specialties at private sector tertiary care hospital in Karachi, Pakistan. *Journal of Research Development in Nursing and Midwifery*, 17(2), 4-6. Retrieved from <http://nmj.goums.ac.ir/article-1-1154-en.html>
- Mahran, G. S., Taher, A. A., & Saleh, N. M. (2017). Challenges and work crisis facing critical care nurses. *Egyptian Nursing Journal*, 14(3), 235-240. https://doi.org/10.4103/ENJ.ENJ_15_17
- Moradi, Y., Baghaei, R., Hosseingholipour, K., & Mollazadeh, F. (2021). Challenges experienced by ICU nurses throughout the provision of care for COVID-19

- patients: A qualitative study. *Journal of Nursing Management*, 29(5), 1159-1168.
<https://doi.org/10.1111/jonm.13254>
- Munyanziza, T., Bhengu, B., Cishahayo, E. U., & Uwase, A. (2021). Workplace stressors and coping strategies of intensive care unit nurses at university teaching hospitals in Rwanda. *Rwanda Journal of Medicine and Health Sciences*, 4(1), 53-71.
<https://doi.org/10.4314/rjmhs.v4i1.5>
- Pietersen, C. (2005). Job satisfaction of hospital nursing staff. *SA Journal of Human Resource Management*, 3(2), 19-25. Retrieved from
<https://hdl.handle.net/10520/EJC95811>
- Sabuh, S. R., Soad, A. G., Hala, R. Y., & Samah, M. A. (2008). Effect of locus of control on job stress and intent to leave for nurses at Assiut University Hospital (Master's thesis, Assiut University, Egypt).
- Saleh, A. A. (2021). An overview on critical care nurses: Challenges & workload. *Journal of Perioperative and Critical Intensive Care Nursing*, 7, 168.
<https://doi.org/10.35248/2471-9870.21.7.168>