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Research Article

A Qualitative Study of Resource Constraints to Role Extension on Nurses' First Aid Experiences in Military Emergencies

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Abstract

Introduction: Military nurses operating in combat zones confront unparalleled challenges that demand extraordinary adaptability. Understanding how these nurses navigate resource scarcity and expand their professional roles in high-risk conflict environments remains restricted. This study investigates the experiences and coping strategies of Iranian military nurses providing first aid under such conditions.

Method: A qualitative descriptive study was conducted using conventional content analysis. Nineteen military nurses with 6-36 months of experience in combat zones (2015-2021) participated in face-to-face, semi-structured interviews conducted at operational sites. Data collection was accomplished from October 2023 to March 2024, continuing until thematic saturation was achieved.

Result: Data analysis produced 612 initial codes grouped into two central themes: (1) Challenges in Assisting Injured Individuals—including systemic barriers (resource scarcity, policy limitations) and psychosocial factors (emotional strain, post-traumatic growth); (2) Nurses Providing First Aid Beyond Their Professional Responsibilities, including extended responsibilities (role flexibility, patient advocacy) and personal sacrifices (impact on personal and family life, physical and mental health risks). The results showed that participants had excellent adaptability, often expanding their positions beyond standard job descriptions.

Conclusion : The results showed that nurses had good adaptability and resilience in the face of challenges. They expanded their roles to include further formal responsibilities to ensure quality care and patient safety. The findings emphasize the need for policy changes, including resourcing, logistics, legislation, education, and supportive measures to enable nurses to fulfill their critical roles effectively without compromising their well-being.

Keywords: Military Nursing, Qualitative Content Analysis, Role Adaptation, Resistance Axis Operations.

Introduction

Military nurses operating in conflict zones—particularly within the regional resistance axis—represent a distinct subset of healthcare professionals tasked with delivering life-saving care under extreme and volatile conditions. Unlike their civilian counterparts, they work amid active combat, severe resource constraints, and constantly shifting security threats. [1, 2]

Recent literature underscores the profound mental and physical burdens placed on these professionals. Systematic reviews indicate that repeated exposure to trauma and operational stress increases the risk of anxiety, burnout, and post-traumatic stress

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disorder (PTSD), with reported prevalence rates reaching 23% among military nursing staff. [3] Qualitative research conducted in Iran further reveals how nurses navigate decision-making amid chaos, confront moral dilemmas, extend professional boundaries, and adapt roles dynamically to meet unpredictable battlefield demands. [4–6]

Adaptability emerges as a defining competency in such environments, manifesting through rapid assessment capabilities, flexible problem-solving approaches, effective interprofessional communication, and resourceful utilization of limited supplies. [7, 8] in the Iranian context, coping mechanisms are frequently reinforced by religious values, spiritual resilience, and robust social support networks. [9, 10]

Despite these insights, a significant knowledge gap remains regarding the complex interplay of professional, personal, and cultural adaptations among Iranian military nurses operating within resistance-axis contexts. Existing studies predominantly center on Western military contexts or inadequately address how cultural-religious dynamics and operational realities shape adaptation strategies and professional role extension. [11]

Accordingly, this qualitative study seeks to explore the lived experiences of Iranian nurses providing first aid during resistance axis military operations, with particular focus on their operational adaptations, stress management approaches, and integration of cultural and religious values into professional practice.

Methods

Study Design and Objectives

This qualitative study employed a conventional content analysis approach (Graneheim & Lundman) to explore and interpret the comprehensive lived experiences of military nurses who provided healthcare and first aid during resistance operations against the Axis. The primary study objective was to illuminate how these nurses perceive, manage, and adapt to the extraordinary challenges of military emergencies. Four research questions guided the analysis:

What are the primary challenges faced by nurses when providing emergency care in military combat settings?

How do nurses adapt their professional roles and responsibilities in resource-constrained combat environments?

What coping mechanisms and support systems do military nurses utilize to manage the psychological and emotional demands of combat nursing?

How do cultural, spiritual, and personal factors influence nurses' experiences and decision-making in military emergencies?

Setting and Participants

Participants were selected through purposive sampling from various military healthcare settings—including field hospitals, frontline aid stations, and operational zones—engaged in resistance axis operations between 2015 and 2021. Nurses were recruited through professional networks, military medical units, and operational command structures to ensure diverse, information-rich cases.

Inclusion and Exclusion Criteria

Inclusion criteria comprised registered nurse licensure, at least six months of direct service in resistance axis operational areas, and willingness and capacity to participate in detailed interviews and share personal experiences.

Exclusion criteria included:

Receiving active psychological treatment for combat-related trauma

Declining informed consent or inability to complete the interview process

Nurses in purely administrative roles without direct combat-related trauma care responsibilities

Personnel without direct combat-related trauma experience in the past 5 years

Individuals unable to participate due to security clearance restrictions

Nurses who served exclusively in rear-echelon support roles without frontline exposure

A total of 19 nurses participated: 12 held a bachelor's degree (63.2%), five held a master's (26.3%), and 2 held a PhD (10.5%). Participants' ages ranged from 28 to 50 years (mean: 41.4 years); service duration ranged from 6 to 36 months.

Data Collection

Data collection occurred over 6 months from October 2023 to March 2024. This extended timeframe was necessary due to: Security constraints affecting access to operational areas

Participants' unpredictable deployment schedules

The need to achieve maximum variation in sampling across different operational contexts

Allowing sufficient time between interviews for preliminary analysis and refinement of questions

Semi-structured, in-depth face-to-face interviews were conducted at participants' operational posts, including field hospitals and aid stations, to ensure contextual relevance and authenticity. All interviews were conducted in person to capture non-verbal cues and environmental context. The face-to-face format also facilitated trust-building, which was essential given the sensitive nature of combat experiences. Interviews lasted 45–60 minutes and were conducted in private settings to ensure confidentiality and psychological safety.

The interview guide was developed through literature review, expert consultation, and pilot testing with two participants; further refinements were made based on feedback. The interview guide included open-ended questions addressing key areas such as:

"Can you describe your experience providing first aid and emergency care during resistance axis operations"?

"What were the most significant challenges you encountered"?

"How did you adapt your practice to the demands of the military environment"?

"What coping strategies or support systems helped you manage stress"?

Probing questions and contextual prompts explored interdisciplinary cooperation, environmental stressors, spiritual coping, and ethical dilemmas. All interviews were audio-recorded with explicit consent, except for one participant whose responses were documented through detailed field notes. Non-verbal cues and environmental context were also noted. Data collection continued until thematic saturation.

Participant Recruitment Process

Participant recruitment began through formal military medical command channels, with approval from relevant operational authorities. The recruitment strategy involved multiple stages:

Initial Contact: Unit commanders were briefed on the study and asked to identify eligible nurses who met the inclusion criteria.

Professional Networks: The research team utilized professional nursing associations within the military medical corps to disseminate study information.

Snowball Sampling: After initial interviews, participants were asked to recommend colleagues with relevant experiences, particularly those serving in different operational contexts.

Recruitment Materials: Information sheets were distributed through secure military communication channels, detailing study objectives, participation requirements, and ethical protections.

Screening Process: Potential participants underwent initial screening via secure telephone to confirm eligibility and willingness to participate.

Sampling Strategy: Purposive maximum variation sampling ensured representation across:

Different operational settings (field hospitals, aid stations, air transport)

Educational backgrounds (BSc to PhD)

Service duration (6-36 months)

Age ranges (28-50 years)

Recruitment continued until thematic saturation was achieved, as confirmed by three consecutive interviews yielding no new themes or insights.

Researcher's Role and Interview Conduct

All interviews were conducted by the principal researcher, who has both practical experience in military nursing and expertise in qualitative research methods. This background facilitated effective communication and trust-building with participants, enabling the collection of rich and authentic data. To ensure rigor and minimize bias, the researcher maintained reflective journals and engaged in regular team discussions to review the data collection and analysis process. The semi-structured, face-to-face interviews were conducted in accordance with ethical guidelines to protect participants' welfare and confidentiality.

Data Analysis

Analysis followed Graneheim & Lundman's five-phase conventional content analysis[12]:

Preparation & Immersion: Verbatim transcription of interviews within 24–48 hours; multiple readings for familiarity.

Open Coding: Line-by-line coding using MAXQDA 10 software, identifying meaningful units for a total of 612 initial codes.

Category Formation: Grouping similar codes into subcategories and broader categories; iterative refinement with the team.

Theme Development: Identifying overarching themes and patterns, validated through participant feedback and team discussion.

Interpretation & Validation: Exploration of latent meanings; consensus-building with research team and external supervisors.

MAXQDA 10 software facilitated data management, coding, and transparent audit trails.

Rigor and Trustworthiness

Following Lincoln and Guba's criteria:

Credibility: Prolonged engagement, member checking with six participants, and peer debriefing.

Dependability: Comprehensive documentation of methodological decisions, audit trail, and external reviews. Confirmability: Collaborative coding, preservation of participant quotations, and reflexive journaling.

Transferability: Thick descriptions of operational context, detailed demographic data, and transparent sampling strategy.

Reporting Standards

This study adhered to the COREQ guidelines for comprehensive and transparent reporting of qualitative research.

Ethical Considerations

The study was approved by the Ethics Committee of Baqiyatallah University of Medical Sciences (IR.BMSU.REC.1400.118) and conducted in accordance with the Declaration of Helsinki. All participants received detailed written and verbal explanations and provided written informed consent, including specific consent for audio recording. Confidentiality was ensured through anonymization, secure data storage, and limited access. Psychological support resources and autonomy in interview timing/location were also provided to safeguard participants' welfare.

Participant Characteristics

The demographic characteristics of study participants are presented in Table 1.

Table 1. Demographic and Professional Characteristics of Study Participants

No.	Age	Presence status in the region	Education	Month	ime
1	50	Aid stations, field hospital	MSc	6	55
2	39	In field hospital	BS	6	30
3	34	In operations - aid stations	BS	4	60
4	28	Aid stations	BS	4	45
5	47	aid stations, field hospital	MSc	36	56
6	38	Aid stations	MSc	6	42
7	39	In operations - aid stations	BS	6	50
8	50	Aid stations, field hospital	MSc	9	60
9	42	Air transport	PhD	2	55
10	39	Aid stations, field hospital	MSc	3	44
11	46	field hospital	PhD	2	40
12	43	Aid stations, field hospital	MSc	3	48
13	48	Aid stations, field hospital	BS	2	45
14	37	Aid stations, field hospital	BS	4	40
15	38	Aid stations	BS	4	35
16	42	Aid stations, field hospital	BS	2	47
17	38	Aid stations	BS	4	50
18	44	Aid stations, field hospital	BS	2	40
19	45	Aid stations, field hospital	BS	4	36

Results

The mean age of participants was 41.42 years (range: 28–50 years). Data analysis yielded 612 initial codes, systematically organized into two overarching themes that reflect the complex challenges nurses face when providing emergency care in military settings. These themes: (1) 'Challenges in Assisting Injured Individuals' and (2) 'Nurses Providing First Aid beyond Their Professional Responsibilities' were further categorized into four main categories and ten subcategories (Table 2).

Table 2. Themes, Categories, Subcategories, and Supporting Evidence

Theme	Category	Subcategory	Example Quote	Participants (n)
Challenges in Assisting Injured Individuals	Systemic Barriers	Resource Scarcity	"I saw that the commander had been shot in the chest… However, I did not have a stretcher." (P7)	17
		Policy Restrictions	"Command ordered evacuation, but my patient wasn't stable. I stayed behind - against orders…" (P15)	14
	Psychosocial Factors	Emotional Strain	"Witnessing young soldiers die… it stays with you forever" (P3)	19
		Post-Traumatic Growth	"This experience made me a stronger nurse and person" (P9)	12
Nurses Providing First Aid Beyond Their Professional Responsibilities	Extended Responsibilities	Role Flexibility	"When no surgeon was available, I had to perform procedures beyond my training" (P11)	16
		Patient Advocacy	"I argued with command to get my patient evacuated" (P4)	15
	Personal Sacrifices	Impact on Personal and Family Life	"I missed my daughter's graduation… but saving lives was my priority" (P18)	18
		Physical and Mental Health Risks	"We worked 48 hours straight under fire… exhaustion was constant" (P2)	19

Theme 1: Challenges in Assisting Injured Individuals

This theme encompasses the multifaceted obstacles nurses encountered while delivering emergency care to wounded military personnel. The challenges revealed both systemic and individual-level barriers that significantly impacted care delivery. Two primary categories emerged: systemic barriers and psychosocial factors.

1.1. Systemic Barriers

Participants consistently identified resource limitations and procedural constraints as fundamental barriers to effective care delivery. These systemic challenges required nurses to operate as first responders under direct combat conditions, demanding diverse competencies, including trauma management, military tactics, and rapid decision-making.

Resource Scarcity

Nurses frequently encountered situations where essential medical equipment and supplies were unavailable, compelling them to improvise and adapt their clinical techniques.

"I saw that the commander had been shot in the chest. He was breathing heavily and bleeding profusely from the right side. However, I did not have a stretcher. I

requested an ambulance, but none was available. We frequently faced shortages of medical supplies and equipment. Aware that any delay could result in the commander's death, I decided to transport him to the aid station in a military vehicle." (P7)
"We had three critical patients but only one ventilator. I had to decide who gets priority while manually ventilating the others." (P12)

Policy Restrictions

Formal protocols sometimes conflicted with urgent patient needs, creating ethical dilemmas between adherence to established procedures and immediate care requirements.
"One of the warriors was shot but fell on the opposite side of the embankment, toward the enemy. The opposing forces were unleashing heavy fire on the embankment, creating a critical situation. Accessing the injured was challenging. According to rescue protocols, it was deemed impossible to save the injured, but the dedication of the medical team made it possible to reach them." (P3)
"Command ordered evacuation, but my patient was not stable. I stayed behind - against orders but right for the patient." (P15)
"The helicopter was not allowed to land due to enemy fire. I watched as my patient deteriorated, knowing evacuation could save him. The policy said wait for clearance, but waiting meant death. These restrictions cost lives." (P8)

1.2. Psychosocial Factors

The psychological and emotional dimensions of providing care under combat conditions emerged as equally significant challenges, affecting both immediate performance and long-term well-being.

Emotional Strain

Participants described intense emotional burdens arising from witnessing severe injuries, making life-or-death decisions, and experiencing the loss of patients despite their best efforts.
"I witnessed injuries that haunt my dreams. Young soldiers calling for their mothers while dying in my arms. The emotional weight of being unable to save everyone despite having the skills—if only we had the resources—creates a unique type of grief." (P14)
"Making triage decisions when all patients are critical breaks something inside you. Choosing who lives and who dies based on available resources rather than medical need violates everything we believe as nurses." (P6)

Post-Traumatic Growth

Despite the challenges, many participants reported experiencing positive psychological changes and finding meaning in their service.
"This experience transformed me. Yes, there was trauma, but also growth. I discovered strengths I never knew existed. My faith deepened, my clinical skills expanded exponentially, and I found purpose in serving those who sacrifice for our nation." (P9)
"The hardships made me a better nurse and person. I learned that humans can endure and adapt far beyond what we imagine. This knowledge now guides my practice and life." (P11)

Theme 2: Nurses Providing First Aid Beyond Their Professional Responsibilities

This theme captures how nurses consistently exceeded their formal job descriptions, driven by patient needs and operational demands. Participants described assuming roles typically assigned to other professionals and making personal sacrifices to ensure continuity of care.

2.1. Extended Responsibilities

The operational environment necessitated role flexibility that went far beyond the traditional nursing scope of practice.

Role Flexibility

Nurses adapted to fill critical gaps in the healthcare team, often performing procedures and making decisions typically reserved for other specialists.
"When no surgeon was available and the patient had a tension pneumothorax, I performed the needle decompression myself. It was not in my scope of practice, but the alternative was watching him die. After that, I trained others—we couldn't wait for doctors who might never arrive." (P11)
"I became logistics coordinator, ensuring supplies reached forward positions. I negotiated with local suppliers, managed inventory, and even drove supply trucks under fire. These were not nursing duties, but they were necessary for patient care." (P5)
"During mass casualty events, I functioned as incident commander, triage officer, and primary care provider simultaneously. Traditional role boundaries disappeared when lives hung in the balance." (P17)

Patient Advocacy

Participants frequently advocated for their patients' needs, even when this meant challenging military hierarchy or operational decisions.
"I argued with the command to get my patient evacuated. They said the tactical situation did not permit it, but I knew he would die without immediate surgery. I went over heads, made calls, and finally got that helicopter. Being an advocate sometimes means being insubordinate." (P4)
"When supplies were diverted to another unit, I fought to get what my patients needed. I learned to navigate military bureaucracy, build alliances, and sometimes bend rules. Patient advocacy in combat requires

diplomatic and political skills never taught in nursing school." (P16)

2.2. Personal Sacrifices

The extended roles and challenging environment exacted significant personal costs from participants.

Impact on Personal and Family Life

Extended deployments and the emotional burden of combat nursing profoundly affected participants' personal relationships and family dynamics.

"I missed my daughter's graduation because we were dealing with a mass casualty event. My family understood it was a duty, but understanding does not eliminate the pain. My children grew up with an absent parent who chose strangers' lives over family moments." (P18)

"My marriage could not survive what I became. The person who returned from deployment was fundamentally different. My spouse said I gave everything to my patients and had nothing left for family. They were right." (P10)

Physical and Mental Health Risks

Participants regularly endangered their own well-being to provide care, accepting physical danger and psychological strain as part of their extended role.

"We worked 48 hours straight under fire during the offensive: no sleep, minimal food, constant adrenaline. My body broke down—chronic pain is now my permanent reminder of those days. However, stopping meant letting soldiers die." (P2)

"I developed PTSD, anxiety, and depression. The mental health costs of constantly operating beyond your training while making life-and-death decisions are severe. We knew the risks but accepted them as part of serving." (P13)

"Working at aid stations under direct fire meant accepting you might die any moment. Several times, mortar rounds landed close enough to shower us with debris while we operated. Physical safety became secondary to patient needs." (P19)

The analysis revealed that military nurses in resistance operations face unprecedented challenges that require extraordinary adaptability and resilience. They consistently extend their professional roles beyond traditional boundaries, motivated by a strong ethical commitment to patient care and humanitarian service. Despite significant systemic barriers and personal risks, participants demonstrated remarkable capacity for growth and professional development within these demanding contexts. The findings highlight the critical need for enhanced support systems, resource allocation, and policy frameworks to support military nurses better while maintaining their effectiveness and well-being.

Discussion

The present study aims to elucidate the experiences of military nurses providing first aid in emergencies, particularly in contexts where limited resources constrain their roles. Numerous experiences have been documented, revealing both negative and positive impacts on their personal and professional lives. Participants have rendered emergency care to save the lives of injured individuals in the most difficult, life-threatening circumstances. They have provided high-quality care services grounded in their experience, expertise, dedication, and motivation to serve in these environments.

What This Study Adds to Existing Knowledge

While previous studies have documented the challenges faced by military nurses, our research provides several unique contributions to the literature:

1. Dual Theme Framework:

In contrast to prior research that has predominantly emphasized the challenges faced by military nurses, our study introduces a comprehensive dual thematic framework. This approach encompasses both the "challenges encountered in providing care to injured individuals" and the phenomenon of "nurses delivering first aid beyond conventional professional boundaries." By integrating these two dimensions, our findings offer a more holistic and nuanced understanding of the military nursing experience.

2. Post-traumatic Growth Perspective:

While previous military nursing studies have predominantly focused on the traumatic aspects of wartime nursing, our research uniquely identifies post-traumatic growth as a distinct subcategory within this context. Notably, we found that religious beliefs and spiritual motivations act as significant protective factors, enabling nurses to transform traumatic experiences into opportunities for personal and professional growth. This finding is consistent with recent research on post-traumatic growth among military healthcare providers[13].

3. Resource Scarcity and Innovation:

Our study goes beyond simply documenting resource limitations. We demonstrate how nurses develop innovative solutions and adaptive strategies when faced with equipment shortages, such as using military vehicles for patient transport when ambulances are unavailable. This creative problem-solving aspect adds a new dimension to understanding nursing resilience, as supported by Rahmani et al.'s study on adaptive strategies[5].

4. Role Expansion Beyond Clinical Care:

Our study categorizes explicitly the types of role expansion, including:

- Logistical coordination and facility management

- Performing advanced medical procedures typically reserved for physicians
- Making strategic decisions about aid station placement under enemy fire
- This systematic categorization aligns with Gianni Trapani KF's work on role expansion in military nursing[14].

5. Simultaneous Personal Sacrifice and Professional Growth:

Our findings reveal a paradox not fully explored in previous research: nurses simultaneously experience personal sacrifice (risking their lives, family separation) while achieving professional growth and satisfaction. This duality is supported by Karimi et al.'s work on professional identity formation among military nurses[15].

6. Cultural and Spiritual Context:

Unlike Western-focused studies, our research highlights the unique roles of religious faith and cultural values in resistance. Participants described their work as "jihad for the sake of God," providing insights into how cultural-spiritual frameworks influence coping mechanisms and professional identity in non-Western military contexts[8, 9].

Comparison with Previous Research

Recent evidence suggests that military nurses increasingly function as autonomous practitioners in austere environments[16, 17]. Our findings add to this growing body of literature by documenting specific examples of role expansion, such as performing advanced procedures typically undertaken by physicians and coordinating complex logistics operations. In particular, military nurses in our study played a critical role in pre-hospital care, significantly influencing the survival and mortality rates of injured soldiers[11].

The emotional strain reported by participants in our study is consistent with contemporary research on combat-related psychological impacts, which has shown high rates of psychological distress among military healthcare providers[3]. Nevertheless, a key contribution of our study is the identification of spiritual beliefs and cultural values as important protective factors that help mitigate these psychological burdens among Iranian military nurses[11].

The physical and mental health risks identified in our study are consistent with previous research [18, 19]. However, our findings uniquely highlight that nurses perceive these risks as acceptable sacrifices when motivated by spiritual beliefs and a sense of national duty. This perspective is further supported by Elliott B et al.'s work on cultural competence in military nursing[20].

Implications for Theory and Practice

This study contributes to nursing theory by proposing that military nursing in conflict zones represents a distinct specialty requiring recognition of:

- The dual nature of challenges and growth
- The importance of cultural-spiritual frameworks in coping
- The need for flexible role boundaries in extreme conditions
- The value of experiential learning in developing expertise

These findings suggest that military nursing education should incorporate not just clinical skills but also training in logistics, leadership, spiritual care, and psychological resilience[21]. Policy makers should recognize that practical military nursing requires flexibility in protocols and support for the expanded roles nurses must assume in combat situations[24].

Based on our findings, several recommendations emerge for supporting military nurses in emergency settings:

1. **Enhanced Training Programs**: Development of comprehensive pre-deployment training that includes advanced trauma procedures, psychological resilience building, and cultural competency[22].
2. **Resource Allocation**: Systematic assessment and improvement of medical supply chains to minimize resource scarcity in operational areas[23, 24].
3. **Mental Health Support**: Implementation of regular psychological screening and culturally sensitive mental health services for military nurses before, during, and after deployment[25, 22].
4. **Policy Flexibility**: Creation of adaptive protocols that allow nurses to expand their scope of practice when necessary while maintaining patient safety standards[26].
5. **Recognition Systems**: Formal acknowledgment of the extended roles and personal sacrifices made by military nurses through appropriate compensation and career advancement opportunities[27].

Limitations and Future Research

While this study provides valuable insights, it is limited to nurses from the resistance axis context. The sample was limited to Iranian military nurses, which may limit transferability to other cultural contexts. Additionally, the retrospective nature of the interviews may have introduced recall bias, and security constraints prevented observation of actual practice in operational areas.

Future research should explore whether similar patterns of post-traumatic growth and role expansion occur in other military and cultural contexts. Longitudinal studies could examine how these experiences impact nurses' long-term career trajectories and well-being[20]. Intervention studies testing support programs and training initiatives would provide valuable evidence for policy development[28], [29]. Comparative studies across different military healthcare systems could identify best practices for supporting nurses in emergency military settings[24].

Conclusion

This study reveals the remarkable resilience, adaptability, and commitment of nurses serving in military emergencies. Despite facing severe resource constraints, policy limitations, and personal risks, these healthcare professionals consistently extend their roles beyond formal boundaries to ensure patient survival and quality care. Their experiences demonstrate that military nursing in conflict zones requires not only clinical expertise but also extraordinary flexibility, innovation, and personal sacrifice.

The dual nature of their experience—simultaneously facing immense challenges while achieving post-traumatic growth—highlight the complex reality of military nursing. While spiritual and cultural factors provide important coping mechanisms, the personal costs in terms of family relationships and mental health cannot be overlooked. These findings underscore the urgent need for systematic support structures, adequate resource allocation, and policies that recognize and accommodate the expanded roles nurses must assume in combat settings.

Military and healthcare leaders must acknowledge that role extension in resource-constrained environments is not an anomaly but an operational necessity. Pre-deployment training should prepare nurses for these expanded responsibilities, while post-deployment support must address the lasting impacts of such service. Recognition of these sacrifices through appropriate compensation, career advancement, and comprehensive mental health support is not merely deserved but essential for sustaining an effective military healthcare workforce.

Ultimately, this study honors the extraordinary service of military nurses who place patient needs above personal safety and professional boundaries. Their willingness to adapt, innovate, and sacrifice in the most challenging circumstances exemplifies the highest ideals of nursing. As conflicts continue globally, understanding and supporting these healthcare heroes becomes increasingly vital for maintaining effective emergency care in military settings. Their experiences provide valuable lessons for developing resilient healthcare systems capable of functioning under extreme stress, while reminding us of the human cost of such resilience.

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Conflict of Interest Disclosures

The authors declare no conflict of interest.

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Authors' Contributions

HG: Conceptualization, data collection, data analysis, writing - original draft
STM: Conceptualization, methodology, supervision, writing - review & editing
EH: Data collection, data analysis, validation
HJ: Formal analysis, investigation, writing - review & editing
AR: Data collection, investigation, resources
All authors read and approved the final manuscript.

Ethical Statement

The study was approved by the Ethics Committee of Baqiyatallah University of Medical Sciences (IR.BMSU.REC.1400.118) and conducted in accordance with the Declaration of Helsinki.

Declaration of Generative AI and AI-assisted technologies

No generative AI or AI-assisted technologies were used in the preparation of this manuscript.

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