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# Lebanese nurses' perceptions of care during wartime: a qualitative study

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## Abstract

**Background** Lebanon is a country that regularly faces wars and arms conflicts. The magnitude of the most recent war this year was unprecedented since 1982, posing implications on many sectors in Lebanon including nursing.

**Aim** The aim of this research was to explore the perceptions of Lebanese nurses on the delivery of nursing care during the most recent war in Lebanon.

**Methods** A qualitative descriptive research design informed by descriptive phenomenology was employed. Semi-structured interviews were carried out among 19 nurse's working at both governmental and private hospitals in Beirut. Inductive thematic analysis was conducted over the period of 2 and a half months.

**Findings** The inductive thematic analysis generated four themes: "Unique working circumstances", "Patriotism and faith shaping wartime care", "Evolving concept of care", and "Professional and personal lessons".

**Conclusion** The study underscores the need for specialized war-related educational programs to train highly skilled nursing staff for effective care during emergencies in conflict zones like Lebanon, with potential implications for nursing academia and policy makers.

**Keywords** Wartime care, Military nursing, Nursing practice, Qualitative

## Introduction

Human communities are always vulnerable to environmental catastrophes or man-made detrimental behaviors that lead to disasters, as demonstrated by the major occurrences of the last several decades [1]. While many of these occurrences are quickly forgotten and substituted by new encounters, others have a longer-lasting impact on interpersonal relationships and mindset of the communities in which they occur. War is one of those unique events that leaves lasting impressions in the minds of those who experience it because of the profound impact it has on lives of individuals and the enormous societal transformations that follow [2]. The study of human emotions during war has really gained interest due to the paradoxical character of warfare as both an alluring and horrific phenomena, as well as the unique ethical behaviors that it generates that is extremely different from the

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ethical principles of daily life [3]. Many individuals are impacted by war, and nurses are one demographic that is subjected to this occurrence in every community.

The emotional impact of serious and challenging situations on the front line has always been and still is significant for nurses [4, 5]. Whether constructive or detrimental, these impacts require particular consideration. Most nurses were not specifically educated for wartime care, despite the fact that they were capable of adjusting their treatment to the circumstances of the conflict [6]. When nurses are not particularly equipped for the adverse consequences of combat beforehand, these psychological effects become even more severe. A thorough grasp of the experience of war, the variables affecting its outcomes, and the reactions to it is necessary in order to provide the tools for warfare preparation [7].

Since there have always been conflicts and always will be, one method to accomplish this aim is to draw on previous encounters and effective tactics. Individual perspectives and the wealth of expertise associated with conflict can be particularly beneficial in this regard [8]. Numerous war-related research highlight both the mental and physical effects that conflict has on nurses [9, 10]. Because of their unique abilities nurses play important roles in managing dangerous circumstances and delivering the best possible care. The nursing profession and discipline and the healthcare system can benefit from knowing about their experiences in case of future emergencies [11, 12].

Lebanon has faced numerous wars and armed conflicts over the past decades [13]. Most recently, Lebanon has become a multi-crisis setting where it had to endure sociopolitical unrest, an unprecedented economic crisis, the COVID-19 pandemic, the Beirut Port Blast, and on top of the an Israeli war [14]. These events have significantly shaped the healthcare system, particularly nursing care, which has played a crucial role in crisis response [15]. While literature on the psychological impact of war and crises on healthcare professionals exists [16, 17], there remains a gap in understanding the direct experiences of nurses providing care during these times of war and in the context of these multiple crises.

Several studies have explored the broader impact of war and crises on healthcare delivery in Lebanon. Research on the 2006 war with Israel highlighted the strain on hospitals, shortages in medical supplies, and the resilience of healthcare professionals working under extreme conditions. Similarly, studies on the 1982 Israeli invasion underscored the challenges faced by nurses in conflict zones, including ethical dilemmas, resource constraints, and personal safety concerns [18, 19]. More recently, the COVID-19 pandemic and the 2020 Beirut Blast have further exposed the vulnerabilities of Lebanon's healthcare system, with nurses often at the forefront of crisis

response. The Beirut Blast, in particular, has been the focus of several studies examining emergency preparedness, trauma care, and the psychological toll on healthcare workers [20, 21]. Despite this body of research, no studies have specifically investigated nurses' perceptions of delivering care during wartime and in the context of major crises in Lebanon. Thus, this study aims to fill the gap in providing insight into the experiences of delivering nursing care in the light of a complex working environment in the most recent Lebanese-Israeli war.

## Methods

### Research design

The current study was carried out using a descriptive qualitative design [22] and an inductive thematic analysis methodology [23]. Considering that this study aims at understanding the experiences of nurses in delivering care during the time of war, the qualitative descriptive design was informed by Husserlian descriptive phenomenology [24]. This article was written according to the Consolidated Criteria for Reporting Qualitative Research (COREQ) requirements.

### Setting

This study was conducted at multiple hospitals both private and governmental in Beirut, Lebanon. It was crucial to include both private and governmental hospitals in order to hone in on the variable perspectives that can be shaped by the setting of nursing practice. Specifically, during the war some hospitals played a more central role in caring for casualties. In addition, some hospitals in Beirut were in a more dangerous location that received more attacks. Thus, our approach to choosing the setting was informed by this, in order to gain rich information about the nurses' experiences in the context of the war.

### Sampling

A purposive sampling design was adopted to recruit experienced nurses from various hospitals in Lebanon. The nurses were selected based on their experience with caring for injured people during the war or being on duty when a major event happened in Beirut. Maximum variation sampling was used to capture diverse experiences. Thus, nurses were recruited from critical care units, emergency departments, and medical surgical floors. This sampling strategy also allowed for recruiting nurses with a variety of professional roles (RNs and Charge Nurses), work in various settings, have different years of experience and of different ages gender identities. The inclusion criteria specifically stated that to be included in this study, the nurses had to at least have six months of work experience in their respective unit. Recruitment continued until data saturation was reached at 19 nurses. Data saturation was determined when no new themes

or concepts emerged after analyzing a consecutive set of interviews (4 interviews were examined). At this point, the research team concluded that sufficient data had been collected to address the research questions, as further interviews did not add substantially to the understanding of the study topic.

### Recruitment and data collection

The study team contacted the nurses through email and social media platforms. Upon achieving contact with the nurses, the researchers explained the objective of the study and its significance for the nursing literature and profession. The high relevance and importance of the topic at hand ensured a high response rate. The study team sent out the invitation to the nurses personally, and the tone and words employed were friendly yet formal. By doing this, any potential power imbalance and any ensuing coercive aspect in the nurses' choice to provide consent were avoided. Additionally, the investigators explained the expected time commitment, the conditions for participation, and the confidentiality and anonymity of the interviews. This reduced misunderstandings and obstacles to engagement. Lastly, the investigators reminded those participants who had not yet replied in a timely manner and ensured that the nurses had the contact information they needed in case they had any questions. A written informed consent form was filled out by nurses who indicated interest in participating, and a convenient, private one-on-one interview was scheduled. The period of data collection was October 2024–January 2025.

### Interviews

Comprehensive, semi-structured interviews with open-ended inquiries were conducted in the naturalistic setting of the nurses to obtain data. During the interviews, the lead researcher made sure to practice reflexivity to reduce any biases in the responses. In line with Husserl's principle of epoché, the researcher engaged in bracketing to minimize preconceptions and biases when interpreting nurses' experiences. This process involved setting aside prior assumptions, for example, about wartime nursing, including the psychological toll of conflict. During interviews, the researcher maintained an open and neutral stance, encouraging participants to share their firsthand experiences without external framing. In data analysis, this meant revisiting transcripts multiple times and using reflexive journaling to ensure that emergent themes stemmed from participants' narratives rather than researchers' pre-existing beliefs [25]. Each interview lasted between 30 and 45 min. The researcher made sure to re-confirm consent to record the interviews, which were completely confidential and held in a private location. During the interviews, field notes were taken to

record any nonverbal cues and contextual information that would be important for the study. Every interview started with broad inquiries before moving on to more focused ones. Following that, more open-ended questions were asked throughout the conversations, and the specifics were clarified depending on the participants' answers. The key questions asked were: "How do you describe your experience in caring for the wounded during the war?", "How do you describe the impact the war had on the delivery of nursing care?", "Please, can you describe any significant experiences you have in rendering nursing care during the war?", "How did the concept of nursing care change during wartime?"

### Data analysis and rigor

Inductive thematic analysis was conducted using Braun and Clark's six steps [23]. The analysis was conducted by two researchers who listened to the audio recordings many times before meticulously transcribing the exchanges. Both the nurses' explicit and implicit identities were eliminated from the records as their identities were safely hidden by using pseudonyms. To enhance the cross-language trustworthiness of the translation process, a bidirectional translation approach was employed. First, one linguist (Translator A) translated the interview transcripts from Arabic to English, ensuring that the meaning and nuances of the original Arabic text were accurately captured in the target language. Following this, a second linguist (Translator B), who was not involved in the initial translation, performed a backward translation, converting the English version back into Arabic. This step aimed to identify any discrepancies or loss of meaning during the forward translation. The two versions—forward and backward—were then compared to identify inconsistencies, mistranslations, or missing nuances. Any discrepancies were resolved through collaborative discussions among the translators and the research team, who revisited the original context or consulted subject matter experts as needed. Additionally, an independent specialist, not involved in the translation process, assessed the final translated documents for accuracy, cultural sensitivity, and relevance to the research context. This specialist ensured that the meaning was preserved and that the language used was appropriate for both the source and target languages. The study team then started analyzing the transcripts. Intentionality shaped how the researchers approached the nurses' narratives. Rather than treating experiences as isolated accounts, the analysis focused on how nurses ascribed meaning to their actions during war. This meant looking beyond factual descriptions of events to understand how nurses perceived their roles, motivations, and evolving sense of care [26]. Each of the two researchers coded separately and then convened to reconcile any differences. After finishing, they forwarded

**Table 1** Demographic characteristics of study participants

	<i>n</i>	%
<b>Gender</b>		
Female	10	52.63
Male	9	47.37
<b>Hospital</b>		
Private	11	57.9
Governmental	8	42.1
Average Age	31.47 ± 4.8 years	
Average experience	6.2 ± 2.1 years	

the analysis to a third team member to contest any biases, as part of an analyst triangulation process to enhance the rigor of the study. In addition to triangulation, the study team forwarded the results to the participants to conduct member checking and confirm that the findings truly represent their perspectives. Another strategy used to enhance rigor was the use of field notes and memos to keep any assumptions held by the researchers in check as a form of bracketing.

### Ethical considerations

This study was authorized by the relevant management of each hospital after providing them with the Institutional Review Board permission which was issued at the affiliated university (BAU-IRB) (IRB number: ECO-R-307). After being told that participation in the study is entirely voluntary and that dropping out has no negative repercussions, each participant voluntarily provided written consent. The nurses were also frequently reminded that their involvement would be kept confidential and that no personally identifying information would be used in any public materials. The recorded replies were anonymized and encrypted, and each respondent was assigned a pseudonym to ensure anonymity. Only the study team had accessibility to the password-protected folder containing the audio files and transcripts.

## Results

### Characteristics of the respondents

The sample of the study comprised of 19 nurses in total, where 9 (47.37%) were male, while 10 (52.63%) were females. The sample was also distributed between private and governmental hospitals, where 11 (57.9%) worked at private hospitals and 8 (42.1%) worked at the governmental hospital. The average age of the participants was 31.47 ± 4.8 years, and the average years of experience was 6.2 ± 2.1 (Table 1).

### Qualitative findings

The inductive thematic analysis generated four themes namely; “*Unique working circumstances*”, “*Patriotism and faith shaping wartime care*”, “*Evolving concept of care*”, and “*Professional and personal lessons*”.

### Unique working circumstances

Participants described working in environments that were marked by constant instability, unpredictable danger, and severe resource limitations. Bombings, evacuations, and infrastructural destruction created high-pressure situations where nurses had to act swiftly and decisively, often without adequate support. Many nurses recalled how they frequently operated in unusual settings, such as corridors, basements, and parking lots, which were repurposed as medical facilities. One participant shared, “...We had to set up treatment areas wherever we could find space. Sometimes, it was under the threat of airstrikes...” (P17). Another participant recalled the Beirut Blast, during which they faced a similar experience, “on the first day of the pagers attack, it was a catastrophe...it reminded me of August 4th...we had to do the same thing, the number of victims was huge and we could not accommodate that much, so we had to set up camp outside and deal with it...” (P2). Participants also noted that their roles expanded significantly beyond their formal job descriptions. One nurse shared, “I found myself managing everything from cleaning and preparing spaces for surgery to comforting children who had lost their parents. There was no room for hierarchy—we all did what needed to be done” (P18). These additional responsibilities required a high degree of flexibility and a willingness to step into unfamiliar roles to ensure the survival and well-being of those affected. Additionally, the emotional toll of working in such dire circumstances was profound. Participants spoke of enduring long hours, witnessing human suffering on an unprecedented scale, and coping with their own fears for personal safety. One nurse reflected, “...the hardest part was staying focused when the danger was so close...the strikes were very close sometimes the hospital would literally vibrate like an earthquake...We had to push our fears aside to be there for our patients...” (P9).

### Patriotism and faith shaping care experience

Participants shared that their sense of patriotism motivated them to persist in their duties despite the overwhelming challenges. One nurse remarked, “Every life we saved felt like a victory for our country. It gave us a reason to keep going, even when we were exhausted” (P12). This profound sense of national pride infused their work with a greater purpose, as they viewed their efforts as a contribution to the resilience and survival of their communities. Some participants revealed that their experiences led to a deeper appreciation for the resilience and strength of their patients. One nurse said, “...I saw the human spirit in its purest form...people helping each other, surviving together. It changed how I viewed my role as a nurse...” (P1). Faith also played a crucial role in helping nurses navigate the emotional and psychological



strain of their work. Many participants described turning to prayer or drawing strength from their religious beliefs to find solace and clarity in the face of chaos. One participant shared, “I often prayed before starting my shift. It gave me the courage to face whatever came my way.” (P15). For many, faith not only served as a personal coping mechanism but also influenced the compassionate care they delivered to patients, fostering empathy and hope even in the direst circumstances.

### ***Evolving concept of care***

Before the war, care was largely perceived as a structured, clinical practice focused on the immediate physical needs of patients. However, the harsh realities of war revealed that care in such environments needed to address not only physical injuries but also the emotional, social, and psychological impacts of trauma. As one participant explained, “...Care during the war wasn’t just about fixing wounds, it was about acknowledging the human spirit and offering whatever support I could—whether it was through words, actions, or simply being there...” (P4). Nurses began to see patients not as isolated individuals with physical ailments, but as members of families and communities who were experiencing collective trauma. This shift led to a greater emphasis on family-centered care, where nurses not only cared for patients but also supported their loved ones through grief and fear. As one nurse remarked, “...We realized that the patient was never alone. We were caring for families, entire communities, and even the healthcare workers themselves...” (P6). Another nurse also said, “...we had to become mental health workers too...we learned that healing goes beyond the body. It’s about supporting people’s hope and resilience...” (P14).

### ***Professional and personal lessons***

Participants reflected on how the challenging conditions of wartime transformed their understanding of medicine, nursing, and their own resilience. One nurse shared, “this experience was real-life learning...it taught me things I never imagined I would need to know. I became a better problem-solver, a stronger leader, and a more empathetic caregiver” (P13). Professionally, nurses reported developing enhanced critical thinking and decision-making skills. They learned to prioritize under pressure, improvise with limited resources, and provide care in unconventional and high-stakes environments. For example, one nurse described how they adapted to the lack of medical supplies by creating innovative solutions: “We learned how to think outside the box. Every situation demanded creativity and quick thinking” (P7). These experiences not only strengthened their clinical competencies but also expanded their ability to work collaboratively with diverse teams under extraordinary

conditions. On a personal level, participants emphasized the ways in which their wartime experiences deepened their emotional resilience and sense of purpose. One nurse reflected, “I discovered strengths within myself that I didn’t know I had. It changed the way I view life and my profession” (P10). They described the humbling and transformative effect of witnessing human suffering and survival, which reinforced their dedication to the nursing profession and their commitment to serving others. As one participant concluded, “...In the midst of chaos, I learned what it truly means to care, not just as a nurse, but as a human being...” (P11).

### **Discussion**

As previously stated, four main themes were found that characterized the idea of care and care accomplishments throughout the conflict as a result of this qualitative analysis. Nursing is involved with how people behave when they engage with their surroundings on a daily basis or in unusual situations like emergencies and conflict. Participants shared their experiences caring for the injured during times of war in addition to the study’s general discussion of care. The experience of care during the conflict and its depiction remain unexplored, despite the fact that numerous papers in nursing literature have been published about Lebanese community on topics like critical care, crisis care, and emergency care, as well as the nurses’ encounters and proficiency in these areas. The issue of care throughout the time of war is mostly studied in relation to its psychological impacts, according to a survey of the available research. These investigations examined how stress, anxiety, depression, and post-traumatic stress disorder affect and manifest in nursing staff.

According to a study by AM Fink and GR Milbrath [27] on the cognitive and psychological symptoms and difficulties faced by nursing staff who worked during the conflict, these practitioners had post-traumatic stress disorder, which can occasionally even result in disorders like depression. In research by D-B Wang, J-B Jiang, H-J Zhang, D Wu, Y-H Zhang, L-B Cui, J Zhang and X-H Wang [28] and SR Elrefaey, SH Hamdy Sr, M Abdelrahman, SM Nageeb, RM Abobaker, M Alhusinat, RA Assiry, AH Mohamed, EEH Abdulrahman and FA Mohammed [29], nursing professionals expressed having negative psychological disorders like anxiety, stress, depression, and post-stress disorders. Despite mentioning witnessing severe wounds and lingering negative recollections, neither of the individuals in this study brought up mental illnesses or depression. Nurses participating in this study may have been immune to depressive disorders as the war in the country according to them was simply a state of defense, which brought with it a sense of patriotic sentiment, which ultimately kept Lebanese nurses from experiencing depressive disorders. The

absence of reported PTSD or depression among the nurses in this study stands in contrast to findings from other conflict zones, where healthcare workers have commonly reported significant psychological distress, including PTSD, anxiety, and depression. For example, studies in other conflict-affected regions have shown that nurses often face considerable psychological challenges, including trauma-related disorders [30, 31]. However, the Lebanese nurses in this study did not report similar psychological conditions, despite witnessing severe wounds and traumatic events. This discrepancy may be attributed to cultural factors prevalent in Lebanese society. Collective resilience could play a role; in communities with a history of conflict, a shared sense of identity and mutual support may buffer against psychological distress. Additionally, religious coping mechanisms might contribute; in Lebanon, religious beliefs often provide emotional comfort and meaning during challenging times [32]. However, according to G Muhammad, V Zohre, P Hamid, H Soleyman and K Morteza [33] research, nurses require psychological training and assistance in order to protect themselves from the negative psychological impacts of conflict. According to R Zhao, S Fang, D Li and C Zhang [34] investigation into the Vietnam War, nurses who witnessed numerous fatalities and wounds were found to be exhibiting signs of post-traumatic stress disorder. According to a study by K Flarity, I Stanley and MD April [35], psychological harm was experienced by nurses. Yet, the current study's respondents reported feeling more motivated than stressed, and they were incredibly driven and enthusiastic despite their circumstances. The psychological strains brought on by empathy and sympathy for the injured as well as difficult circumstances exceeding the purview of routine nursing care were likewise mentioned by the nurses in this study, but they were tinged with patriotic sentiment.

Although the care they gave had some training behind it, the experience was nevertheless referred to as a special classroom and “real-life” learning. According to reports, nurses were ill-prepared to provide treatment during the conflict, yet they were able to successfully perform their responsibilities and swiftly adjust to the new circumstances. The nurses operating were relatively younger nurses than the ones who worked during previous wars, however some of them were nurses who worked during the Beirut Blast in August 4th 2020, and some of their supervisors worked during the 1982 and 2006 wars. The nurses reported that this was their national duty in delivering care management and triage [6]. Among the benefits and insights gained from practicing throughout the conflict, according to the nursing staff in this study, were the lessons learned about managing duties, the process of triage, establishing priorities, and creative thinking. The term “innovation” in nursing refers to the process

of transforming concepts into fresh methods and alternatives for patient care. According to the findings of the research conducted by O Olorunfemi, CU Nwozichi and RA Anokwuru [36], most nurses who operate in critical care units and treat patients with complex diseases who tend to be more fragile than regular patients have the capacity to be innovative. The nurses who participated in the current research saw the conflict as a chance to discover within themselves the capacity to provide fresh concepts in care. These findings were in line with the results of Z Mani, L Kuhn and V Plummer [37], who noted that nurses had achieved wartime success by growing into more adept and competent nurses due to the augmented demands on them to assess and render care swiftly. Additionally, N Bekman and A Solnica [38] claim that war may transform nurses into new individuals with fresh viewpoints, or what they refer to as gazing at existence via an entirely different perspective.

The way how the context and conception of delivering nursing care throughout the time of warfare differs, was another important focus of our research. Our research respondents claimed that their experiences and accounts regarding nursing throughout wartime differed from those of nursing before the war or even nursing during the economic and COVID crises. The nurses indicated that care during war resembled that of caring to the injured after the Beirut Blast however it was significantly amplified. The significant lack of amenities, which was unprecedented, was also highlighted, along with the numerous other conditions, such as lack of personnel, resources, the dangerous location of the hospital, have shaped their perception of nursing care. The findings of the AY Legesse, Z Hadush, H Teka, E Berhe, BT Abera, F Amdeselassie, HE Abraha, D Gebre and AN Bazzano [39] investigation were comparable to our observations about the severe shortage of resources.

According to L Hamama, A Inbal and I Michal [40], military nurses had difficult working circumstances and were frequently at risk and facing grave dangers during the conflict. J Agazio and DL Padden [41] came to the conclusion that it is extremely challenging to care professionals who have had repeated traumas and wounds, such as victims of war. These injuries are distressing not only for those being treated and their loved ones, but also for the healthcare workers who providing treatment for them. Despite their best efforts to adjust to the demanding circumstances, these nurses were extremely exhausted. However, the nurses gave this phase of their caring practice a patriotic significance and sanctity. Nurses in this study described their caregiving during war as an act of profound humanity, transcending professional duty and taking on a deeply personal and moral significance. While some participants referenced their faith as a source of strength and motivation, their

accounts emphasized an overwhelming sense of collective responsibility and shared humanity. The experience of providing care in wartime was described as fundamentally different from routine emergency care—it was not just about fulfilling a professional obligation, but about being part of a larger human effort to preserve life in the face of destruction. In this context, caregiving was shaped not only by ethical principles but also by a sense of solidarity, patriotism, and moral duty that extended beyond conventional professional roles [42, 43].

### Limitations

The inclusion of nurses only from Beirut, which is the capital, hinders the transferability of the study findings. The findings may be limited by the relatively lower impact the war had on the capital. It would have been more desirable to have experiences shared by nurses serving in other regions such as the south and the Bekaa area which were heavily affected by the war.

### Conclusion

Wartime care is a complex issue that impacts caregivers psychologically, emotionally, and physically. The idea of care throughout the war and its impact on nurses are discussed in the current study. Additionally, it recognized a variety of contextual circumstances and causes, mental and emotional issues, and the effects of conflict, all of which might be the subject of future research. The current study highlights how crucial it is to use these nurses' insights and be ready for such situations. Thus, war-related educational programs must be serious, specialized, and practical, especially in a country like Lebanon, which faces regular war threats. These programs can include trauma simulation training, which allows nurses to practice responding to mass casualties and high-stress situations, and stress resilience workshops that focus on coping techniques like mindfulness and emotional regulation. Psychological first aid training can also help nurses provide emotional support to patients and colleagues, while ethical decision-making workshops prepare them for complex dilemmas in resource-limited settings. According to the results, only highly skilled and dedicated individuals should be chosen and prepared for wartime care since the nature of care during a conflict is so distinct. However, nearly all of the participants gave favorable accounts of their experiences delivering care during the conflict, citing improvements in their personal and professional character as the consequence of doing so.

### Implications

In order to create education initiatives for specialized nursing staff who possess administrative, psychological, and ethical qualities and who can operate more effectively than others during emergencies, the current study may be used as a starting point. These educational programs are also

supposed to be translated into broader programs who prepare all working nurses for such conditions on top of preparing special task forces. Policy makers, nurse instructors, nurse administrators, and nurses in general may find value in the current study's conclusions. This group's description of wartime situations may be used by nursing academia to create curriculum that educate nurses for comparable circumstances. Regarding clinical training, these nurses' perspectives may be utilized to coach trainees and novice nurses, and inspire them in their work. To further deepen our understanding, it is suggested that mixed-methods research be conducted to quantify the psychological outcomes of nurses providing care during wartime in Lebanon. Alongside qualitative narratives, quantitative measures of psychological well-being, stress levels, and emotional resilience could offer a more comprehensive view of the impact of wartime caregiving on nurses. This approach could allow for a more nuanced understanding of the challenges they face and inform interventions that aim to support their mental health and well-being.

### Acknowledgements

All authors of this study extend their appreciation to the Researchers Supporting Project Number (RSPD2025R880), King Saud University, Riyadh, Saudi Arabia.

### Author contributions

The manuscript has been conceptualized and designed by MF, SA, and EK. MF wrote the proposal and developed the manuscript. All authors equally helped in data curation, validation and analysis as well as reviewing the final draft and rewriting sections in the manuscript.

### Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

### Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

### Declarations

#### Ethical approval

The work described has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans. Institutional Review Board was acquired from BAU-IRB at Beirut Arab University (IRB number: ECO-R-307).

#### Consent to participate

All participants provided written informed consent forms to participate in the study and gave the authors permission to publish the findings with no identifying information.

#### Consent for publication

Not applicable.

#### Competing interests

The authors declare no competing interests.

Received: 29 January 2025 / Accepted: 14 April 2025

Published online: 17 April 2025

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