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Title: Moral Distress among Emergency Nurses in a Conflict-Affected Setting: A Cross-Sectional Study in Afghanistan

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Abstract

Background: Moral distress threatens the operational resilience and care continuity of emergency nurses, particularly in fragile health systems facing recurrent disasters and acute resource scarcity. Despite its direct relevance to workforce stability and surge capacity during crises, empirical evidence from conflict-affected, low-resource contexts such as Afghanistan is entirely lacking. This study aimed to assess the level of moral distress and its associated factors among emergency nurses working in hospitals in Afghanistan.

Materials and Methods: This descriptive-analytical cross-sectional study was conducted among 313 nurses working in the EDs of four hospitals in Herat in 2024. Participants were selected using a quota sampling method. Data were collected using the Corley Moral Distress Questionnaire, which measures moral distress based on frequency and intensity of distressing situations across 21 items. Descriptive statistics and inferential tests (Mann-Whitney and Spearman correlation) were used to analyze the data.

Results: The mean scores of moral distress in terms of frequency, intensity, and total score were 30.10 ± 14.47 , 38.34 ± 15.93 , and 64.03 ± 49.79 , respectively. There was no statistically significant relationship between total moral distress score and demographic variables such as gender, marital status, age, work experience, or number of shifts per month ($p > 0.05$).

Conclusion: Although the overall level of moral distress among emergency nurses in Herat hospitals was below average, this should not be interpreted as an absence of ethical conflict. Rather, it may reflect a process of desensitization—termed "normalization of moral poverty"—resulting from chronic exposure to systemic constraints in a resource-limited, crisis-affected setting. The lack of association with demographic variables suggests that moral distress is primarily a systemic issue, requiring organizational-level interventions rather than individual-focused approaches. To safeguard workforce well-being and maintain functional surge capacity during disasters, health systems in similar fragile contexts should prioritize structural reforms, ongoing monitoring, and context-specific support mechanisms. Future longitudinal and qualitative research is needed to deepen understanding of this phenomenon and inform evidence-based policy development.

Keywords: Moral distress, Nurses, Emergency departments, Herat, Afghanistan

Highlights

What is known about this topic?

Moral distress threatens emergency care quality and workforce stability, yet remains largely unexplored in health systems within prolonged conflict-affected, resource-scarce settings.

What does this article add to the existing knowledge?

This study provides the first empirical baseline on moral distress among emergency nurses in Afghanistan, showing how systemic constraints in a conflict-affected, low-resource setting directly influence ethical decision-making and staff resilience during routine and mass casualty responses.

What is the contribution to the field?

The findings offer practical evidence for emergency managers, disaster preparedness planners, and health policymakers to incorporate workforce well-being into disaster risk reduction strategies, thereby enhancing the sustainability and surge capacity of EDs in similarly vulnerable, conflict-prone environments.

Introduction

Emergency departments (EDs) serve as the frontline of health systems during natural disasters, unforeseen incidents, and mass casualty events, yet they are persistently subjected to overwhelming pressures that challenge the operational resilience of the workforce [1]. ED nurses, as primary care providers, face not only high patient volumes but also complex ethical dilemmas arising from severe resource shortages, overcrowding, and the need for rapid decision-making in crisis conditions. One of the most significant psychological and moral challenges in this context is moral distress—a phenomenon that occurs when a nurse recognizes the morally appropriate action to take but feels powerless to act due to institutional constraints, hierarchical dynamics, or resource limitations [2].

The concept of moral distress was first introduced by Jameton, who defined it as the psychological disequilibrium experienced when one is constrained from acting in accordance with professional ethical obligations [3]. Subsequent research, particularly in emergency settings, has demonstrated that critical decision-making under acute time pressure, lack of adequate information during crises, and direct exposure to life-threatening cases render EDs among the highest-risk environments for this condition [2]. During emergencies and especially in mass casualty incidents, nurses are compelled to prioritize triage and allocate scarce resources—practices that inherently generate profound ethical conflicts [4]. Additional contributing factors such as severe staffing shortages, time constraints, inappropriate organizational policies, and conflicting demands from patients, families, and physicians further intensify this psycho-ethical burden [4, 5, 6-8].

Moral distress is a well-recognized global challenge among nurses, particularly in EDs across countries including the United States, Canada, Iran, and the United Kingdom, where its extensive impact on psychological well-being, job satisfaction, and patient care quality has been documented [2-5]. It is associated with emotional exhaustion, burnout, and even professional turnover [2, 3]. However, within the field of disaster management and health system resilience planning, moral distress has often been overlooked as a factor that undermines sustainable surge capacity and the retention of skilled personnel during emergencies [4, 5]. In fragile health systems, this neglect can critically jeopardize the continuity of services in future disasters.

Despite the growing international attention to this issue, there is a striking gap in empirical research on moral distress in conflict-affected, resource-limited settings such as Afghanistan [9]. The Afghan health system faces not only chronic infrastructural constraints and workforce shortages but also recurrent exposure to earthquakes, floods, and armed conflicts due to climatic and security vulnerabilities—all of which place additional strain on hospital EDs. Prolonged armed conflict has further eroded health governance, disrupted supply chains, and increased the influx of trauma patients, intensifying the ethical pressures on frontline nurses. The absence of standardized clinical guidelines and fragile health governance further widens the gap between ethical imperatives and clinical realities. Therefore, understanding the level of moral distress and its contributing factors in this specific context is an indispensable prerequisite for developing effective supportive policies and enhancing workforce resilience in the face of disasters [10].

This study is specifically focused on Herat, a major strategic city in Afghanistan characterized by high population density and transit routes, which consistently experiences high demand for emergency services and is prone to both natural and man-made disasters as well as periodic security incidents [10, 11]. ED nurses in Herat serve as first responders to critical and ethically complex situations, often under severe structural limitations and resource scarcity compounded by the ongoing conflict [11]. Exploring their experiences of moral distress can provide meaningful insights into both individual and systemic drivers of this phenomenon in crisis-prone environments.

Given the above, this study aimed to assess the level of moral distress and identify demographic and organizational factors associated with it among nurses working in EDs of hospitals in Afghanistan. The findings of this research, while filling an existing scientific gap in the international disaster management literature, can offer practical and actionable implications for emergency managers, health policymakers, and nursing educators to foster supportive work environments, reduce workforce vulnerability, and enhance surge response capacity in low-resource and similarly fragile health systems.

Methods

This study employed a descriptive-analytical cross-sectional design to investigate the level of moral distress and its associated factors among nurses working in the EDs of Herat hospitals during the year 2024.

Study Setting and Population

The study was conducted in four major hospitals in Herat city, Afghanistan: Herat Regional Hospital, Noor Hospital, Shaidayee Hospital, and Zonal Hospital. These hospitals were selected due to their high patient turnover and active EDs. The target population consisted of all registered nurses working in the EDs of these hospitals.

Sampling Method and Sample Size

A quota sampling method was used to ensure proportional representation from each hospital based on the number of emergency nurses employed. The minimum required sample size was calculated using Cochran's formula for a finite population, with an expected prevalence of moral distress, a 5% margin of error, and a 95% confidence interval. Based on this, a total of 313 nurses were enrolled in the study.

Inclusion and Exclusion Criteria

Inclusion criteria were:

- At least six months of experience working in an emergency department.
- Willingness to participate in the study.
- Completion of the informed consent form.

Exclusion criteria included:

- Nurses on leave or absent during data collection.
- Incomplete questionnaire responses.

Data Collection Tool

Data were collected using a standardized moral distress questionnaire developed by Corley, which has been validated in multiple settings including Persian-language adaptations [12]. All participating nurses were fluent in Dari Persian, and a native researcher clarified any ambiguous terms. The questionnaire consists of 21 items, each measuring the frequency and intensity of morally distressing situations on a 5-point Likert scale (from "never" to "always" for frequency, and from "none" to "very high" for intensity). The total moral distress score is calculated by multiplying frequency by intensity for each item, yielding a possible range of 0 to 441.

In addition to the core scale, the questionnaire included a demographic information section covering age, gender, marital status, level of education, work experience, number of shifts per month, and employment type.

Validity and Reliability

The Persian version of the Corley Moral Distress Scale used in this study had previously demonstrated strong psychometric properties. In this study, the reliability of the tool was confirmed with a Cronbach's alpha coefficient of 0.89, indicating high internal consistency.

Data Collection Procedure

After obtaining ethical approval from the relevant academic and hospital authorities, data collection was carried out over a one-month period. Questionnaires were distributed in paper form and collected in sealed envelopes to ensure confidentiality. Participation in the study was entirely voluntary. All participants were informed about the aims and procedures of the study and provided written informed consent before data collection. Anonymity and confidentiality were ensured throughout, and the study adhered to the ethical principles of the Declaration of Helsinki, including respect for autonomy, beneficence, and non-maleficence.

Data Analysis

Data were analyzed using SPSS version 26. Descriptive statistics (means, standard deviations, frequencies, and percentages) were used to summarize demographic variables and moral distress scores. Inferential statistics, including the Mann-Whitney U test and Spearman correlation

coefficient, were employed to examine the relationships between moral distress and demographic variables. A p-value of less than 0.05 was considered statistically significant.

Results

A total of 313 nurses working in the EDs of four hospitals in Herat participated in this study. All participants completed the moral distress questionnaire in full.

Demographic Characteristics

Of the 313 nurses, 86.3% (n=270) were female and 13.7% (n=43) were male. The mean age of participants was 23.4 ± 4.79 years, with ages ranging from 21 to 45 years. The majority of participants (62.9%) were single. The mean work experience in emergency care was 2.96 ± 3.44 years, and the mean number of shifts per month was 18.46 ± 9.30 (Table 1).

[Table 1 here]

Moral Distress Scores

The mean total moral distress score among nurses was 64.03 ± 49.79 (range: 0–336). The mean frequency score of moral distress was 30.10 ± 14.47 , and the mean intensity score was 38.34 ± 15.93 . These scores indicate a low to moderate level of moral distress among the participants (Table 2).

[Table 2 here]

Relationship Between Moral Distress and Demographic Variables

Table 3 presents the results of the Kolmogorov–Smirnov test used to assess the normality of the data. The data in Table 3 indicate that the distributions of all quantitative variables, including age, work experience, number of shifts per month, and total moral distress score, were not normal.

Table 4 shows the results of tests examining the relationship between demographic variables and moral distress scores. No statistically significant relationship was found between the total moral distress score and the demographic variables.

These results were derived using the Mann-Whitney U test for categorical variables and Spearman correlation coefficient for continuous variables.

[Table 3 here]

[Table 4 here]

Item-Level Findings

Among the 21 items in the Corley Moral Distress Scale, the highest distress scores were associated with:

- *“Witnessing patients being discharged too early for administrative reasons.”*
- *“Providing care that the nurse believes to be futile or non-beneficial.”*

Conversely, the lowest distress scores were reported for items related to:

- *“Working with colleagues who are not competent.”*
- *“Being unable to provide necessary emotional support due to lack of time.”*

These findings suggest that institutional and systemic constraints—rather than interpersonal conflicts—were more significant contributors to moral distress among the participants.

Discussion

This study investigated the prevalence and associated factors of moral distress among nurses working in the EDs of hospitals in Herat. The results revealed that the overall level of moral distress was below average, with mean scores indicating a low to moderate intensity and frequency. These findings are notable, particularly given the challenging nature of emergency care environments where nurses frequently encounter ethically complex and high-stakes situations.

The mean total moral distress score in this study (64.03 ± 49.79) was lower than that reported in studies conducted in other countries such as Iran, the United States, and Canada, where moral distress levels among emergency and critical care nurses are often found to be moderate to high [13-16]. At first glance, these lower scores might appear somewhat unexpected. However, drawing on organizational justice theory, it is plausible that nurses in Afghanistan may perceive systemic constraints (e.g., administrative early discharges, futile care) as unavoidable realities rather than correctable injustices. In healthcare systems with weak organizational ethics infrastructure and limited accountability, nurses might gradually lower their ethical expectations and could stop

perceiving routine violations as distressing. This phenomenon—referred to in sociology as the "normalization of moral poverty"—occur when chronically low standards make previously unacceptable situations seem normal [17, 18, 19]. Therefore, the lower moral distress scores in our sample should perhaps not be interpreted as evidence of fewer ethical conflicts, but rather as a potential indicator of desensitization resulting from prolonged exposure to systemic dysfunction.

The lack of statistically significant associations between moral distress and demographic variables such as gender, age, marital status, education level, work experience, and number of shifts is consistent with the findings of some previous studies [20] but contrasts with others that found correlations between moral distress and factors such as gender or work experience [21-22]. This variation in results may reflect differences in sample size, measurement tools, and health system characteristics.

An important observation from item-level analysis was that organizational and systemic constraints, such as early discharge of patients due to administrative decisions or providing futile care, were the most distressing experiences for nurses. These findings are consistent with earlier literature indicating that moral distress often arises not from ethical uncertainty, but from being unable to act on what is already known to be ethically right, primarily due to institutional barriers [23].

In contrast, issues such as dealing with incompetent colleagues or the inability to offer emotional support, while ethically significant, were perceived as less distressing by participants. This may indicate a strong professional resilience among nurses in Herat or a normalization of certain types of ethical challenges due to longstanding exposure in a resource-limited context.

While the relatively low levels of reported moral distress might appear reassuring, they should not be interpreted as an absence of ethical conflict. On the contrary, consistent with the concept of "normalization of moral poverty," chronic exposure to systemic constraints may have raised nurses' tolerance threshold to the point where ethically troubling situations are no longer consciously registered as distressing. This desensitization does not eliminate moral conflict; it merely drives it underground, where it can accumulate as moral residue and eventually compromise patient care, job satisfaction, and retention [24,25].

We acknowledge that key environmental variables (e.g., perceived organizational support, burnout, resilience) were not examined, as the Corley questionnaire does not measure them and our primary aim was to establish baseline moral distress in an understudied population. Future research should incorporate these variables.

Implications

The findings of this study offer several practical implications for emergency health systems, particularly those operating in resource-constrained and crisis-affected settings. First, reducing systemic constraints—such as unclear triage protocols and administrative delays during patient surges—may help alleviate moral distress and thereby support more stable workforce functioning during high-demand periods. Second, integrating moral resilience training into disaster preparedness programs could be a useful strategy to better equip emergency nurses for ethically challenging situations, especially when resources are limited and decisions must be made rapidly. Third, establishing regular opportunities for open dialogue and structured debriefing around ethical concerns may contribute to a healthier organizational culture and could be considered by hospital disaster committees as part of routine staff support mechanisms. Finally, the possibility of desensitization to ethical conflicts—sometimes referred to as the "normalization of moral poverty"—suggests that monitoring moral distress over time, rather than relying on single cross-sectional assessments, could provide a more accurate picture of staff well-being and help identify emerging threats to retention and care quality in emergency settings.

Recommendations

To effectively mitigate moral distress and reinforce the resilience of emergency health workforces in crisis vulnerable settings, health administrators and disaster preparedness officers should take the following actions:

- Establish rapid response ethics support teams that can be activated immediately during disasters and mass casualty events to assist ED staff with real time triage dilemmas, resource allocation, and end of life decisions, thereby reducing the ethical isolation of frontline providers.
- Integrate context specific, scenario based ethics training into routine disaster drills and continuing education programs, emphasizing moral reasoning under surge conditions and the application of crisis standards of care when resources are overwhelmed.

- Address systemic bottlenecks—particularly chronic understaffing, unclear escalation pathways, and ambiguous contingency protocols—through evidence based surge workforce planning, clearly predefined crisis guidelines, and streamlined administrative processes that minimize preventable ethical conflicts.
- Cultivate responsive, visible leadership that prioritizes non punitive reporting channels and regular moral distress assessments using validated tools, enabling early detection of rising distress levels and timely deployment of supportive countermeasures.
- Embed moral distress monitoring into hospital disaster risk reduction strategies, treating workforce well being as an integral pillar of overall emergency preparedness, thereby enhancing staff retention, preserving quality of care, and sustaining health system functionality across recurrent disasters and public health emergencies in low resource and fragile contexts.

Limitations

The working conditions and psychological states of nurses may influence the way they respond to questions. To address this, data were collected during appropriate job situations and in accordance with the nurses' preferences. Additionally, since many nurses were not fully familiar with completing an electronic questionnaire, the researcher provided training, used their personal mobile phone for data collection, and was present during the process. These factors may have influenced the nurses' responses.

More importantly, the Persian version of the Corley questionnaire had been validated only in Iran, not in Afghanistan. No formal translation-back translation or cross-cultural validation was performed for the Afghan context. Consequently, the questionnaire may lack sufficient cultural sensitivity for Afghanistan. Furthermore, due to working in harsher conditions and chronic exposure to ethical dilemmas, Afghan nurses may have developed a higher tolerance threshold for ethical conflicts. This could lead to lower reported moral distress scores without necessarily indicating the absence of moral distress. These limitations should be considered when interpreting the findings. Future research should focus on developing culturally adapted instruments and investigating the phenomenon of normalization in this context.

Conclusion

This study assessed the level of moral distress and its related factors among emergency nurses working in Herat hospitals. The findings indicate that although the overall levels of moral distress were below average, nurses in EDs still experience ethical conflicts, particularly in relation to institutional limitations and administrative decisions. Crucially, these lower scores should not be taken as evidence of fewer ethical problems. Instead, they may signal a process of normalization of moral poverty—a phenomenon in which chronically low ethical standards and systemic dysfunction lead nurses to stop perceiving routine violations as distressing. These challenges can influence the moral climate of healthcare settings and, over time, impact job satisfaction, care quality, and staff retention.

Despite the relatively low intensity and frequency scores, moral distress remains a critical concern that warrants ongoing attention. The possibility of desensitization and normalization makes it even more urgent to address systemic barriers, as the absence of reported distress does not equate to the absence of harm. The lack of statistically significant relationships between moral distress and demographic variables suggests that moral distress is a systemic issue, not one confined to specific nurse subgroups. Therefore, addressing moral distress requires organizational-level interventions rather than targeting individual characteristics alone.

Future research should use qualitative or mixed methods and longitudinal designs to better understand nurses' moral distress over time and across different hospital settings. Comparing departments and hospital types, exploring links between moral distress, patient outcomes, burnout, and job retention, and examining organizational and leadership factors in low-resource environments will provide deeper insights. These studies will help develop evidence-based policies and education tailored to Afghanistan's healthcare context.

Declarations

Ethics approval and consent to participate

This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. Approval was obtained from the Ethics Committee of Mashhad University of Medical Sciences (Approval code: IR.MUMS.FHMPM.REC.1403.041).

Consent for publication

All participants in this study provided informed consent for their data to be published. Participants were made aware of the purpose of the research and the nature of the publication. They were assured that their anonymity would be preserved, and that any identifying information would be removed prior to publication. Consent was obtained in writing prior to participation in the study.

Availability of data and materials

The datasets generated and/or analyzed during the current study are not publicly available due to privacy concerns and the sensitive nature of the data, which may compromise participant confidentiality. However, they are available from the corresponding author on reasonable request.

Competing interests

The authors declare no conflict of interest.

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Authors' contributions

All authors have read and approved the manuscript. HSH, VGH and SV are responsible for the overall conceptualization and oversight of the study, including study design, data interpretation, and manuscript write-up. AT and FK is responsible for the first draft. All authors reviewed and provided feedback on the manuscript prior to submission.

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Table 1. Demographic characteristics of study participants

Variables		Number (percentage)
Gender		
	Male	39 (12/5%)
	Female	270 (86/3%)
Marital Status		
	Married	107 (34.2%)
	Single	197 (62.9%)
		Mean (standard deviation)
Age		23.4 ± 4.79
Number of Shifts per Month		18.46 ± 9.30
Work Experience		2.96 ± 3.44

Table 2. Moral Distress Scores in the Dimensions of Frequency, Distress, and Total

Dimension	Mean	Standard Deviation
Frequency	30.10	14.47
Distress	38.34	15.93
Total	64.03	49.79

Table 3. Kolmogorov–Smirnov Test Results

Variable	Sample Size	Mean	SD	K-S Statistic (D)	P-value
Age	313	23.40	4.799	0.141	<0.001
Total Moral Distress	313	64.03	49.79	0.075	<0.001
Work Experience	313	2.96	3.44	0.071	*0.010
Shifts per Month	313	18.46	9.30	0.113	*<0.001

*P-value ≤ 0.05

Table 4. Relationship Between Demographic Variables and Moral Distress Scores

Variable		Mean Moral Distress Score $\pm$ SD	Test Statistic (# or Φ)	P-value (\$ or *)
Gender				
	Male	63.96 $\pm$ 44.28	-0.646#	0.518\$
	Female	63.52 $\pm$ 50.61		
Marital Status				
	Single	62.22 $\pm$ 47.49	-0.555#	0.579\$
	Married	68.57 $\pm$ 54.41		
Age	-		0.004 Φ	*0.943
Shifts/Month	-		-0.044 Φ	*0.580
Work Experience	-		0.107 Φ	*0.140

*Spearman test

\$Mann-Whitney test

#Z score

Φ Correlation coefficient