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Title: A Qualitative Investigation of the Lived Psychological Experiences of Emergency Medicine Specialists: Challenges and Strategies

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Abstract

Background: Emergency medicine specialists face high occupational stress, ethical challenges, and psychological burden, which may affect their mental health, professional performance, and patient care. This study explored their lived psychological experiences in Iran, focusing on workplace challenges, coping strategies, and sources of motivation.

Materials and Method: A qualitative, descriptive phenomenological study was conducted with 15 emergency medicine specialists in Mashhad, Iran. Semi-structured in-depth interviews were performed, transcribed verbatim, and analyzed using Colaizzi's phenomenological method. Trustworthiness was ensured through credibility, transferability, dependability, and confirmability measures, including member checking and peer debriefing.

Results: Four main themes emerged: psychological experiences, occupational challenges, coping strategies, and motivation/job satisfaction. Participants reported high stress, fatigue, burnout, and emotional impact from patient deaths. Key occupational stressors included high patient volume, workplace violence, insufficient resources, and career uncertainty. Coping strategies involved personal practices such as physical activity and professional adaptation through experience, alongside a need for systemic support including manageable working hours, adequate staffing, and supportive leadership. Despite these challenges, participants reported motivation and satisfaction derived from patient care, professional growth, and clinical variety.

conclusion: Emergency medicine specialists experience complex psychological stress shaped by clinical, ethical, organizational, and systemic factors. Addressing their mental health requires integrated individual, organizational, and policy-level interventions, including structured psychological support, staff protection, and recognition of professional contributions. Enhancing well-being is essential for workforce sustainability, patient safety, and healthcare system efficiency.

Keyword: Emergency Medicine**,** Physicians**,** Occupational Stress**,** Qualitative Research**,** Professional Satisfaction

Introduction

Emergency medicine is widely regarded as one of the most demanding medical specialties. Emergency physicians routinely work under intense time pressure, manage clinically uncertain situations, and make rapid decisions in life-threatening conditions. Frequent exposure to critically ill patients, traumatic injuries, and unexpected deaths places these physicians under considerable psychological strain. Previous studies have shown that such working conditions increase the risk of occupational stress, burnout, and emotional exhaustion, all of which may negatively affect physicians' mental health, quality of life, and professional functioning (1). These pressures may also affect patient safety, quality of care, and the overall performance of healthcare systems (2).

The psychological burden experienced by emergency physicians is shaped by more than workload alone. In emergency settings, physicians must simultaneously respond to emotional, cognitive, ethical, and organizational demands. They are often required to make urgent clinical decisions with incomplete information while managing critically ill patients, distressed family members, overcrowded emergency departments, and limited resources. Over time, repeated exposure to these stressful conditions may contribute to psychological fatigue, reduced professional satisfaction, and burnout (3,4).

Over the past decades, quantitative studies have extensively examined the mental health of emergency personnel using standardized psychological instruments. High levels of stress, anxiety, burnout, and reduced job satisfaction have consistently been reported among emergency physicians and nurses (2,5). Although some post-pandemic studies have noted modest improvements in psychological well-being, evidence suggests that burnout and emotional distress among healthcare workers remain higher than pre-pandemic levels in many healthcare settings (6).

In Iran, studies have similarly documented considerable psychological distress among emergency healthcare personnel. Research on prehospital emergency staff has reported high levels of burnout and death anxiety, while resilience appears to play a protective role against psychological distress (7). Other studies have demonstrated significant associations between workplace bullying, employment conditions, and occupational stress among emergency nurses (8). More recent Iranian studies have also highlighted the long-term psychological consequences of occupational distress and the biopsychosocial challenges experienced by emergency personnel (9–11). Collectively, these findings emphasize the importance of organizational, occupational, and contextual factors in shaping the mental health of emergency healthcare workers.

Despite the contribution of quantitative research in identifying the prevalence of stress and burnout, these studies provide limited understanding of how emergency physicians themselves interpret and experience such pressures in their daily professional lives. Qualitative studies suggest that emergency personnel often experience psychological distress not only as stress or

exhaustion, but also as moral conflict, emotional burden, professional uncertainty, and, at times, personal growth following adversity (12,13).

Qualitative research conducted in Iran further indicates that the experiences of emergency personnel are closely influenced by cultural expectations, organizational limitations, and legal concerns that may not be adequately captured through quantitative approaches alone (14). Phenomenological studies conducted during the COVID-19 pandemic described experiences of helplessness, emotional exhaustion, fear, and psychological growth among Iranian emergency healthcare workers (15). International qualitative studies have also emphasized the importance of organizational support, collegial relationships, and supportive leadership in maintaining resilience and psychological well-being among emergency physicians and residents (16).

However, several gaps remain in the existing literature. Many previous studies have focused primarily on nurses, emergency technicians, or prehospital personnel, while fewer studies have specifically explored the lived experiences of emergency medicine specialists themselves. In addition, a large proportion of available qualitative research has examined experiences during exceptional circumstances such as the COVID-19 pandemic rather than routine emergency practice. Consequently, there remains limited understanding of how emergency medicine specialists in Iran experience and make sense of ongoing occupational pressures, ethical challenges, and psychological strain within everyday clinical practice (17).

Recent Iranian studies have also highlighted the long-term psychological consequences of occupational distress and the biopsychosocial burden experienced by emergency personnel, further emphasizing the importance of examining mental health experiences within emergency care settings in Iran (18,19).

The present study was designed to address this gap by exploring the lived psychological experiences of emergency medicine specialists working in private hospitals in Mashhad, Iran. Particular attention was paid to workplace challenges, coping strategies, and sources of professional motivation. A qualitative phenomenological approach was considered appropriate because it allows researchers to explore subjective meanings and personal experiences in depth and to better understand dimensions of psychological experience that are difficult to capture using quantitative methods alone (20). By focusing specifically on emergency medicine specialists within the Iranian healthcare context, this study seeks to provide a more nuanced understanding of the psychological realities of emergency practice and to generate evidence that may inform organizational support strategies and workforce mental health policies.

The central research question of this study was: What are the lived psychological experiences of emergency medicine specialists, and what challenges and coping strategies do they encounter in their professional practice?

Materials and Method

Study Design

This qualitative study was conducted using a descriptive phenomenological approach to explore the lived psychological experiences of emergency medicine specialists in relation to workplace challenges and coping strategies. A phenomenological design was considered appropriate because the study aimed to understand how emergency physicians perceive, interpret, and make meaning of their daily psychological experiences within emergency care settings. This approach enabled the researchers to examine the deeper emotional, cognitive, and professional dimensions of participants' experiences that may not be adequately captured through quantitative methods. The findings may contribute to the development of practical and context-based strategies to support the mental health of emergency medicine professionals (16).

Participants

Participants were selected through purposive sampling from emergency departments of private hospitals in Mashhad, Iran. Private hospitals were specifically chosen because of the relatively stable staffing structures, accessibility of participants, and the opportunity to conduct interviews in less crowded and more flexible clinical environments compared with public emergency centers. In addition, emergency specialists working in private hospitals were found to have substantial experience managing high patient turnover and occupational stressors comparable to other emergency settings.

The inclusion criteria were:

1. Being an emergency medicine specialist;
2. Having at least 2–3 years of work experience in emergency departments;
3. Willingness to participate in the study and provide informed consent;
4. Ability to express personal experiences in Persian.

Exclusion criteria included unwillingness to continue participation or incomplete interviews. Sampling continued until data saturation was achieved. Ultimately, 15 emergency medicine specialists participated in the study. To maintain confidentiality, each participant was assigned a unique identification code.

Data Collection

Data were collected through semi-structured, in-depth interviews. Prior to data collection, the researchers reviewed the relevant literature and conducted several preliminary exploratory interviews with emergency medicine specialists to identify key concepts and recurring issues related to the phenomenon under study. Based on these findings, an interview guide containing open-ended and flexible questions was developed.

The interviews were conducted individually by the researcher in a quiet and private setting within or near the participants' workplace. At the beginning of each interview, participants were informed about the aims of the study and assured that all information would remain confidential.

Examples of the interview questions included:

- What motivated you to specialize in emergency medicine?
- Can you describe a typical working day in the emergency department?
- What kinds of psychological experiences do you usually encounter during stressful or critical situations?
- How do these experiences affect your personal life and relationships?
- Which workplace factors have the greatest impact on your psychological well-being?

Depending on participants' responses, additional probing questions were asked to further explore important experiences and meanings. Each interview lasted approximately 45–90 minutes. All interviews were audio-recorded with participants' consent and transcribed verbatim immediately after completion. Data collection and analysis were conducted concurrently so that emerging concepts could guide subsequent interviews.

Data Analysis

Data were analyzed using Colaizzi's seven-step phenomenological method. First, all interview transcripts were read repeatedly to obtain a comprehensive understanding of participants' experiences. Significant statements relevant to the research question were then extracted, and meanings were formulated from these statements. Similar meanings were grouped into thematic clusters and subsequently organized into broader themes and subthemes. Finally, an exhaustive description of the phenomenon was developed and returned to several participants for validation through member checking.

MAXQDA software was used to facilitate data organization and management throughout the analytic process.

To ensure trustworthiness, the study adhered to Lincoln and Guba's criteria, including credibility, dependability, confirmability, and transferability. Credibility was strengthened through prolonged engagement with the data, member checking, and peer review of coding and thematic extraction. Transferability was enhanced through detailed descriptions of the participants and study context. Dependability and confirmability were maintained through careful documentation of all stages of data collection and analysis.

Researcher Reflexivity

Given the qualitative and phenomenological nature of this study, reflexivity was considered throughout the research process. The research team consisted of a psychologist and an

emergency medicine specialist. While the psychologist contributed expertise in qualitative inquiry and interpretation of psychological experiences, the emergency medicine specialist provided insight into the clinical context and occupational realities of emergency care. The researchers were aware that their professional backgrounds could influence data collection and interpretation. To minimize potential bias, reflective discussions were conducted throughout the study, emerging themes were reviewed collaboratively, and interpretations were continually compared with participants' accounts. In addition, member checking and peer debriefing were used to enhance the credibility and trustworthiness of the findings.

Ethical Considerations

This study was approved by the Ethics Committee in Research of Imam Reza International University, Mashhad, Iran (Ethics code: IR.IMAMREZA.REC.1404.024). Participants were informed about the objectives of the study, interview procedures, confidentiality of information, and their right to withdraw from the study at any stage without any consequences. Written informed consent was obtained from all participants prior to the interviews. All audio files, transcripts, and related documents were stored securely and were accessible only to the research team.

Data Management

All interview transcripts were anonymized prior to analysis, and any identifying information was removed. Audio recordings and textual data were stored in password-protected files to maintain confidentiality and data security.

Results

Table 1. Demographic Characteristics of Participants

Characteristic	Mean ± SD
Age (years)	40.20 ± 6.46
Gender	
– Male	9 (60%)
– Female	6 (40%)
Marital Status	
– Single	4 (26.7%)
– Married	10 (66.7%)
Number of Children	
0	5 (33.3%)
1	3 (20%)
2	5 (33%)
3	2 (13%)
Work Experience (years)	10.26 ± 6.32

Table 1 presents the demographic characteristics of the 15 participants in the study. Participants' ages ranged from 34 to 60 years, with 10.26 years of clinical experience on average. The majority were male, and all worked full-time in emergency departments across various hospitals. This overview provides context for interpreting the qualitative findings

Analysis of 15 interviews with emergency medicine specialists revealed four overarching themes: psychological experiences, occupational challenges, coping strategies, and motivation and job satisfaction.

Psychological Experiences. Participants reported high levels of stress and anxiety due to the acute and unpredictable nature of emergency care. One participant stated, "In a 12-hour shift, especially with critical patients, I feel intense anxiety because any mistake can harm the patient" (Code 3). Fatigue and burnout were also prevalent, as noted by another participant: "Most of the shift we are standing or constantly active, and there is barely an hour to rest" (Code 1). Emotional responses to patient death were profound and enduring, with one specialist explaining, "Even after years of experience, witnessing the death of children or young patients remains emotionally devastating" (Code 1). Participants also described a strong sense of compassion and empathy, particularly when resuscitation efforts succeeded: "When a young patient survives after resuscitation, I feel a deep sense of pride and fulfillment" (Code 2).

Occupational Challenges. Emergency specialists faced multiple workplace stressors, including high patient volume, violence from patients or families, insufficient resources, and uncertainty regarding career security. One participant emphasized, "In very crowded emergency departments, the large number of patients makes it impossible to provide proper care for each" (Code 3), while another highlighted the frequency of aggression: "On average, there is at least one incident of verbal or physical aggression per night shift" (Code 1). Challenges in interacting with families were recurrent, as a participant noted, "The biggest challenge is interacting with families who are anxious, demanding, or uninformed, leading to conflict" (Code 3). Concerns regarding long-term career sustainability and job security were also prominent: "I often wonder until what age I can continue these shifts, and whether my future career and income will be secure" (Code 10).

Coping Strategies. Participants employed various personal and professional strategies to manage stress. Engaging in physical activity and spending time with family were common: "After heavy shifts, I engage in exercise, yoga, or spend time in nature to relieve stress" (Code 2). Experience allowed specialists to better navigate interactions with patients and families: "Experience teaches you how to communicate effectively with patients and families to reduce stress during high-pressure situations" (Code 5). Participants also suggested systemic improvements to mitigate stress, including reducing working hours, increasing remuneration, and ensuring sufficient staffing: "Reducing weekly working hours, ensuring adequate pay, and increasing the number of specialists per shift would significantly reduce stress" (Code 11).

Motivation and Job Satisfaction. Despite the challenges, participants described high motivation and professional satisfaction derived from patient care. They emphasized the rewarding nature of helping patients and the intellectual stimulation offered by the diversity of cases: "I enjoy being able to help patients; saving lives gives me energy and satisfaction" (Code 2), and "The variety in cases—trauma, cardiac arrest, accidents—keeps the work interesting and stimulating" (Code 3). Additionally, participants noted that the novelty of the emergency medicine specialty provided opportunities for career advancement and academic recognition: "The newness of the emergency specialty initially provided opportunities for academic and career growth" (Code 1).

Table 2. Themes, Sub-themes, and Illustrative Quotes

Theme	Sub-theme	Illustrative Quotes
Psychological Experiences	Stress and Anxiety	"In a 12-hour shift, especially with critical patients, I feel intense anxiety because any mistake can harm the patient." (Code 3)
	Compassion and Empathy	"When a young patient survives after resuscitation, I feel a deep sense of pride and fulfillment." (Code 2)
	Fatigue and Burnout	"Most of the shift we are standing or constantly active, and there is barely an hour to rest." (Code 1)

	Emotional Impact of Patient Death	"Even after years of experience, witnessing the death of children or young patients remains emotionally devastating." (Code 1)
Occupational Challenges	High Patient Volume	"In very crowded emergency departments, the large number of patients makes it impossible to provide proper care for each." (Code 3)
	Workplace Violence	"On average, there is at least one incident of verbal or physical aggression per night shift." (Code 1)
	Lack of Resources	"Due to insufficient resources, even if I want to help every patient, sometimes it is not possible." (Code 3)
	Security and Career Concerns	"I often wonder until what age I can continue these shifts, and whether my future career and income will be secure." (Code 10)
	Difficult Interactions with Families	"The biggest challenge is interacting with families who are anxious, demanding, or uninformed, leading to conflict." (Code 3)
Coping Strategies	Personal Strategies	"After heavy shifts, I engage in exercise, yoga, or spend time in nature to relieve stress." (Code 2)
	Professional Adaptation	"Experience teaches you how to communicate effectively with patients and families to reduce stress during high-pressure situations." (Code 5)
	Proposed Systemic Improvements	"Reducing weekly working hours, ensuring adequate pay, and increasing the number of specialists per shift would significantly reduce stress." (Code 11)
Motivation and Job Satisfaction	Helping Patients	"I enjoy being able to help patients; saving lives gives me energy and satisfaction." (Code 2)
	Intellectual and Professional Interest	"The variety in cases—trauma, cardiac arrest, accidents—keeps the work interesting and stimulating." (Code 3)
	Recognition and Career Advancement	"The newness of the emergency specialty initially provided opportunities for academic and career growth." (Code 1)

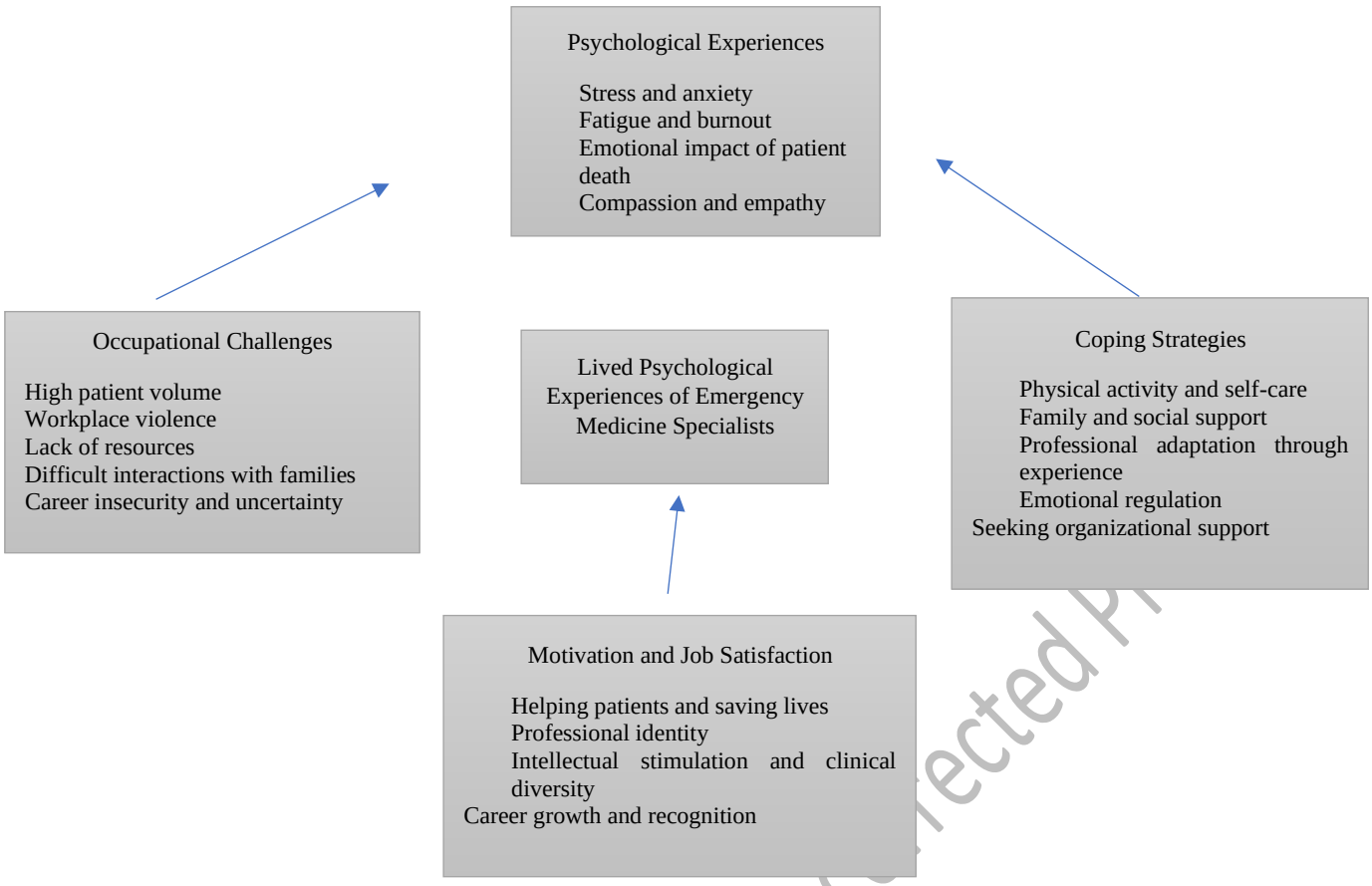

Figure 1. Conceptual Relationships Among the Main Themes of Emergency Medicine Specialists' Lived Psychological Experiences

Discussion

The present qualitative study provided an in-depth understanding of the lived psychological experiences of emergency medicine specialists and demonstrated how occupational stress develops through the interaction of clinical intensity, ethical responsibility, organizational pressures, and broader healthcare system conditions. Consistent with previous quantitative evidence documenting high levels of burnout and psychological distress among emergency physicians (2,4) the findings of the current study suggest that psychological strain in emergency medicine extends beyond heavy workload and is deeply embedded in the everyday realities and meanings of emergency clinical practice.

Participants described persistent anxiety, emotional exhaustion, and psychological fatigue resulting from repeated exposure to critically ill patients, traumatic events, patient death, and high-stakes decision-making under uncertainty. These findings are consistent with previous studies reporting that emergency physicians experience distinct emotional and ethical burdens compared with many other medical specialties (3). The present study further expands existing knowledge by showing how these pressures gradually accumulate over time and become integrated into physicians' professional identities, often manifesting as emotional exhaustion, self-doubt, and ongoing psychological tension.

Another important finding of this study was the prominent role of organizational and structural stressors in shaping participants' psychological experiences. Overcrowded emergency departments, staff shortages, workplace violence, insufficient resources, and concerns regarding career stability were repeatedly identified as major contributors to distress. Similar findings have been reported in previous studies on emergency healthcare personnel, where inadequate institutional support and workplace violence were identified as serious threats to workforce well-being and sustainability (5,17,18). These findings indicate that focusing solely on individual resilience and coping skills is insufficient. Organizational and policy-level interventions are also necessary to improve the psychological well-being of emergency medicine specialists.

Participants also emphasized that coping with occupational stress requires both personal and systemic resources. Although many physicians relied on personal coping mechanisms such as physical activity, emotional regulation, professional experience, and family support, they repeatedly highlighted the importance of organizational support, manageable working conditions, supportive leadership, and adequate staffing. These findings are in line with prior evidence suggesting that organizational interventions are more effective than individual-focused approaches alone in reducing burnout and improving physician well-being (4).

Despite the considerable psychological burden described by participants, many also reported strong professional motivation and job satisfaction. Helping critically ill patients, saving lives, and working in a dynamic and intellectually stimulating environment were described as important sources of meaning and professional fulfillment. Similar findings have been reported in qualitative studies demonstrating that professional identity, meaning-making, and perceived social value may function as protective factors despite high occupational stress (9,10). Therefore, improving physicians' well-being should involve not only reducing occupational stressors but also strengthening sources of professional meaning and recognition.

Taken together, the findings of this study suggest several practical implications for healthcare systems and policymakers:

- improving staffing and reducing excessive workload in emergency departments;
- implementing workplace violence prevention policies;
- providing accessible psychological support and peer-support programs;
- promoting supportive leadership and psychologically safe work environments;
- creating clearer professional development and career support pathways for emergency medicine specialists.

The findings of the present study can also be interpreted through established occupational stress frameworks. From the perspective of the Job Demands–Resources (JD–R) model, participants described substantial job demands, including high workload, time pressure, emotional involvement with critically ill patients, workplace violence, and ethical decision-making under uncertainty, while simultaneously reporting insufficient organizational resources such as staffing shortages, limited institutional support, and concerns about career stability (21,22).

Furthermore, participants' concerns regarding workload, professional recognition, and occupational security are consistent with the Effort–Reward Imbalance model, which suggests that sustained imbalance between professional effort and received rewards may adversely affect psychological well-being (23). Collectively, these theoretical perspectives support the interpretation that the psychological experiences of emergency medicine specialists are shaped not only by individual coping capacities but also by organizational and structural conditions, highlighting the need for system-level interventions.

Limitations

Several limitations should be considered when interpreting the findings of this study. First, participants were recruited exclusively from private hospitals in Mashhad, Iran. Although these settings provided appropriate access to experienced emergency medicine specialists and facilitated in-depth interviews, the findings may not fully reflect the experiences of physicians working in public hospitals or other healthcare settings. Therefore, transferability of the results to other organizational contexts should be approached with caution.

Second, as with all qualitative studies, the findings are based on participants' subjective experiences and interpretations, which may have been influenced by individual, cultural, and contextual factors. Third, the perspectives of other emergency healthcare professionals, including nurses, paramedics, and residents, were not included in the present study. Finally, the cross-sectional nature of the study did not allow exploration of changes in psychological experiences over time or during large-scale crises.

Future studies using longitudinal and mixed-methods approaches across different healthcare settings may provide a broader understanding of the psychological experiences of emergency healthcare personnel.

Conclusions

This study demonstrated that emergency medicine specialists experience complex and persistent psychological stress influenced by clinical, ethical, organizational, and systemic factors. Although participants employed various personal coping strategies and derived meaning from patient care and professional achievement, these resources alone were insufficient in the absence of supportive organizational structures.

The findings highlight the importance of moving beyond exclusively individual-centered approaches toward integrated organizational and policy-level strategies aimed at supporting the mental health of emergency medicine specialists. Strengthening psychological support systems, improving workplace conditions, reducing organizational stressors, and recognizing physicians' professional contributions may contribute not only to physician well-being, but also to patient safety, quality of care, and healthcare system sustainability.

Declarations

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Ethical Approval

Ethical approval (IR.IMAMREZA.REC.1404.024) was obtained from the Research Ethics Committee of Imam Reza International University, Mashhad, Iran. All study procedures were conducted in accordance with relevant ethical guidelines and regulations to ensure participants' confidentiality, privacy, and rights.

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Conflict of Interest

The authors declare that they have no conflict of interest regarding the publication of this study.

Authors' Contributions

All authors contributed substantially to the conception and design of the study, data collection, analysis and interpretation of findings, and manuscript preparation. All authors participated in critical revision of the manuscript, approved the final version, and accepted responsibility for the integrity and accuracy of the work.

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