

Perceptions of Job Stress and Burnout among Emergency Medical Service Providers: A Qualitative Study

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Abstract

Background: Emergency Medical Service (EMS) providers are frequently exposed to high-stress environments, traumatic incidents, and demanding workloads, making them particularly vulnerable to job stress and burnout. Understanding their lived experiences is essential to inform interventions that enhance their well-being and the quality of prehospital care.

Objective: This study aimed to explore the perceptions of job stress and burnout among EMS providers working in a tertiary hospital, focusing on the factors contributing to these conditions, their manifestations, and the coping strategies employed.

Methods: A qualitative phenomenological design was used to capture the lived experiences of 15 EMS providers at a tertiary hospital. Data were collected through semi-structured interviews and analyzed using thematic analysis. Four major themes emerged, providing insights into the multifaceted nature of stress and burnout in this workforce.

Results: Four themes were identified: (1) **Sources of Stress**, including high workload, long hours, and emotional impact of traumatic cases; (2) **Manifestations of Burnout**, characterized by emotional exhaustion and depersonalization; (3) **Coping Mechanisms**, such as peer support, physical activity, and hobbies; and (4) **Perceived Organizational Support**, highlighting the need for structured debriefing sessions and mental health resources. Participants emphasized the importance of both individual and organizational strategies in mitigating stress and burnout.

Conclusion: This study underscores the significant impact of job stress and burnout on EMS providers and identifies critical areas for intervention. Addressing systemic challenges, such as inadequate staffing and lack of mental health resources, and fostering a supportive work environment are essential for improving the mental health and professional satisfaction of EMS personnel.

Keywords: Emergency Medical Services, Job Stress, Burnout, Coping Strategies, Qualitative Research, Mental Health

Introduction

Emergency Medical Service (EMS) providers play a critical role in delivering prehospital care in high-stress, time-sensitive environments. These professionals often face significant occupational stressors, including exposure to traumatic incidents, unpredictable work conditions, and extended working hours, all of which can lead to psychological distress (Regehr and LeBlanc, 2011). Among the most prevalent

psychological challenges in this workforce is burnout, a condition characterized by emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment (Maslach & Leiter, 2016). Studies indicate that burnout rates among EMS personnel are alarmingly high, with detrimental effects on both their well-being and patient care quality (Adriaenssens et al., 2015).

In addition to burnout, EMS providers are at risk of vicarious traumatization and compassion fatigue, resulting from repeated exposure to patients' trauma and suffering (Cocker & Joss, 2016). Vicarious traumatization refers to the negative psychological changes that occur when caregivers empathize deeply with traumatized individuals (McCann & Pearlman, 1990). Compassion fatigue, a closely related phenomenon, encompasses the emotional and physical exhaustion experienced by caregivers, reducing their capacity to care effectively (Figley, 2002). These conditions are associated with increased absenteeism, turnover, and suicidal ideation among EMS professionals (Stanley et al., 2016).

Understanding how EMS providers perceive job stress and burnout is essential for designing effective interventions to mitigate these issues. Qualitative research methods, such as interviews and focus groups, offer valuable insights into the lived experiences of EMS personnel, revealing the multifaceted nature of stress and identifying practical coping strategies (Morse, 2016). This study seeks to explore EMS providers' perceptions of job stress and burnout, examining contributing factors and coping mechanisms. The findings aim to inform organizational policies and interventions to improve EMS personnel's mental health and enhance the quality of prehospital care.

Literature Review

Job Stress in Emergency Medical Services

EMS providers face unique occupational stressors that are distinct from other healthcare professionals. The demanding nature of the job, characterized by irregular work hours, exposure to traumatic events, and high physical and emotional demands, places EMS personnel at heightened risk for psychological distress (Regehr and LeBlanc, 2011). Research indicates that stress levels are further compounded by inadequate resources, public expectations, and the unpredictability of emergencies (Adriaenssens et al., 2015). These factors create a work environment that is often described as chaotic and emotionally taxing, contributing to both acute and chronic stress.

Prevalence and Impact of Burnout

Burnout among EMS providers has been widely documented, with studies reporting alarmingly high prevalence rates. Burnout manifests through three primary dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Leiter, 2016). Adriaenssens et al. (2015) found that emotional exhaustion is the most frequently reported symptom among EMS workers, driven by high workload and prolonged exposure to traumatic events. Burnout not only affects the mental health of providers but also undermines the quality of patient care, increases absenteeism, and contributes to high turnover rates in the field (Cocker & Joss, 2016).

Vicarious Traumatization and Compassion Fatigue

EMS providers are frequently exposed to the trauma of others, which can lead to vicarious traumatization. McCann and Pearlman (1990) define this phenomenon as the negative psychological effects resulting from

empathetic engagement with individuals experiencing trauma. Compassion fatigue, a related concept, refers to the emotional erosion that occurs when caregivers repeatedly witness suffering without adequate emotional recovery (Figley, 2002). Both conditions are prevalent among EMS personnel and are associated with symptoms such as emotional numbness, intrusive thoughts, and a diminished sense of empathy (Stanley et al., 2016).

Coping Mechanisms and Resilience

The literature identifies various coping strategies that EMS providers use to manage job-related stress. Adaptive coping mechanisms, such as seeking social support, engaging in physical activity, and practicing mindfulness, have been shown to mitigate the impact of stress and burnout (Morse, 2016). However, many EMS workers resort to maladaptive strategies, such as substance use or emotional withdrawal, which exacerbate psychological distress (Regehr and LeBlanc, 2011). Resilience training and peer support programs are increasingly recognized as effective interventions to enhance coping and reduce burnout in this population (Cocker & Joss, 2016).

Organizational Interventions

The role of organizational support in mitigating stress and burnout is well-documented. Studies suggest that providing regular debriefings, fostering a supportive work culture, and ensuring adequate staffing levels are critical in reducing job stress among EMS personnel (Adriaenssens et al., 2015). Additionally, access to mental health resources, such as counseling and stress management workshops, has been linked to improved well-being and job satisfaction (Stanley et al., 2016). Despite these findings, many EMS organizations face challenges in implementing such interventions due to limited funding and logistical constraints.

Gaps in Existing Literature

While considerable research has been conducted on stress and burnout in EMS, several gaps remain. First, most studies rely on quantitative methods, leaving a need for in-depth qualitative research to explore the lived experiences of EMS providers. Second, there is limited data on the long-term effectiveness of organizational interventions aimed at reducing stress. Finally, few studies have examined how cultural and regional differences influence stress and burnout among EMS personnel, highlighting an area for future investigation.

Methodology

Study Design

This qualitative study employed a phenomenological approach to explore the perceptions of job stress and burnout among Emergency Medical Service (EMS) providers working in a tertiary hospital. The phenomenological method was chosen to gain an in-depth understanding of the lived experiences of EMS personnel and their coping strategies.

Setting

The study was conducted at Tertiary Hospital, a leading healthcare facility with a high-volume emergency

department. The EMS department at this hospital serves a diverse population and handles a broad range of emergency cases, including trauma, cardiac emergencies, and critical care transport.

Participants

Participants were EMS providers employed at the hospital, including paramedics and emergency medical technicians (EMTs) with at least two years of field experience. Purposive sampling was used to recruit 15 participants, ensuring a mix of gender, age, and experience levels to capture diverse perspectives. Participants were informed about the study's purpose and provided written consent before participation.

Data Collection

Data were collected using semi-structured interviews conducted in a private setting within the hospital. Each interview lasted approximately 45–60 minutes and was audio-recorded with participants' consent. The interview guide included open-ended questions such as:

- "Can you describe a situation where you felt particularly stressed while on duty?"
- "What factors do you believe contribute the most to stress and burnout in your role?"
- "How do you typically cope with job-related stress?"
- "What support systems or resources do you find helpful or lacking in your work environment?"

Field notes were taken to document non-verbal cues and contextual details during the interviews.

Data Analysis

The recorded interviews were transcribed verbatim, and thematic analysis was used to identify recurring themes and patterns. Transcripts were coded independently by two researchers to ensure reliability. The analysis followed Braun and Clarke's six-step framework:

1. Familiarization with the data.
2. Generating initial codes.
3. Searching for themes.
4. Reviewing themes.
5. Defining and naming themes.
6. Producing the final report.

NVivo software was utilized to manage and analyze the qualitative data. Emerging themes were compared across participants to identify commonalities and differences in their experiences.

Ethical Considerations

Ethical approval was obtained from the ethics committee. Confidentiality was maintained by assigning pseudonyms to participants, and all data were stored securely. Participants were informed of their right to withdraw from the study at any time without repercussions.

Rigor and Trustworthiness

To enhance the credibility and trustworthiness of the findings, member checking was conducted, where participants reviewed the preliminary themes to ensure accuracy. Triangulation was achieved by comparing interview data with field notes. Reflexivity was maintained by documenting the researchers' biases and assumptions throughout the study.

Findings

The analysis of interview data revealed several key themes and sub-themes that capture EMS providers' perceptions of job stress and burnout. These themes provide insights into the challenges they face and the coping mechanisms they employ.

Theme 1: Sources of Stress

Sub-theme 1.1: High Workload and Long Hours

Participants consistently highlighted that extended shifts and high patient volumes contribute significantly to their stress levels.

- *"Sometimes we don't even get a chance to take a break between calls. It feels like we're constantly running from one emergency to another."* (Participant 3)
- *"The long hours really take a toll on you, especially when you're already tired, but you know people are depending on you."* (Participant 8)

Sub-theme 1.2: Emotional Impact of Traumatic Cases

Dealing with traumatic incidents, particularly those involving children or fatalities, was frequently mentioned as a source of emotional distress.

- *"It's the cases with kids that stay with you the most. You go home, and you can't stop thinking about it."* (Participant 5)
- *"When you lose someone despite all your efforts, it's hard not to take it personally."* (Participant 10)

Theme 2: Manifestations of Burnout

Sub-theme 2.1: Emotional Exhaustion

Many participants described feelings of being emotionally drained and unable to recover between shifts.

- *"By the end of the week, I feel completely empty, like I have nothing left to give."* (Participant 7)
- *"I get home and don't even want to talk to my family because I'm so emotionally spent."* (Participant 12)

Sub-theme 2.2: Depersonalization and Detachment

Some participants admitted to becoming emotionally detached as a coping mechanism.

- *"You start to feel like you're just going through the motions, not really connecting with patients."* (Participant 4)

- *"Sometimes I catch myself treating patients as just another case rather than as people, and that's when I know I need a break."* (Participant 9)

Theme 3: Coping Mechanisms

Sub-theme 3.1: Peer Support and Camaraderie

Many participants emphasized the importance of support from colleagues in managing stress.

- *"Talking to my team after a tough shift helps a lot. They're the only ones who really understand what it's like."* (Participant 1)
- *"We share stories and vent to each other—it's a way of letting it out so it doesn't build up."* (Participant 6)

Sub-theme 3.2: Physical Activity and Hobbies

Engaging in physical exercise and hobbies was a common way to decompress.

- *"I go to the gym after my shift. It helps me clear my mind and release the tension."* (Participant 11)
- *"I try to spend time on my hobbies, like painting. It helps me shift my focus and relax."* (Participant 14)

Theme 4: Perceived Organizational Support

Sub-theme 4.1: Lack of Adequate Resources

Participants expressed frustration with inadequate staffing and lack of mental health resources.

- *"We're understaffed most of the time, and it just adds to the pressure because we're stretched so thin."* (Participant 2)
- *"There's no real mental health support for us, and we're expected to just deal with it on our own."* (Participant 13)

Sub-theme 4.2: Desire for Debriefing and Counseling

Participants highlighted the need for structured debriefing sessions and access to counseling services.

- *"I think regular debriefings after critical incidents would really help us process what we go through."* (Participant 10)
- *"Having someone to talk to who's trained in this area could make a huge difference."* (Participant 15)

Discussion

The findings of this study provide a comprehensive understanding of the perceptions of job stress and burnout among EMS providers in a tertiary hospital setting. Four major themes emerged, shedding light on the complex interplay of stressors, burnout symptoms, coping strategies, and organizational support.

Sources of Stress

High workload and long hours were identified as significant stressors for EMS providers, consistent with previous research highlighting the physical and emotional toll of extended shifts (Adriaenssens et al., 2015). The relentless pace of emergencies often leaves little room for recovery, exacerbating fatigue and stress. Additionally, the emotional impact of handling traumatic cases, particularly those involving pediatric patients or fatalities, resonates with studies that link frequent exposure to trauma with heightened psychological distress (Regehr and LeBlanc, 2011). These findings reinforce the need for organizational policies aimed at balancing workload and providing emotional support for EMS personnel.

Manifestations of Burnout

Participants described emotional exhaustion as a pervasive issue, aligning with the three-dimensional model of burnout proposed by Maslach and Leiter (2016). The emotional depletion experienced by EMS providers impairs their ability to engage meaningfully with patients, contributing to depersonalization and detachment. While detachment can serve as a temporary coping mechanism, it risks diminishing the quality of care and professional satisfaction over time. The findings are consistent with research indicating that burnout is both a personal and systemic issue requiring targeted interventions (Cocker & Joss, 2016).

Coping Mechanisms

The reliance on peer support emerged as a critical coping strategy, underscoring the importance of camaraderie among EMS teams. Similar to previous studies, the findings highlight how informal support networks act as a buffer against stress (Morse, 2016). Physical activity and engaging in hobbies were also frequently mentioned as effective coping strategies, aligning with evidence suggesting that exercise and leisure activities improve mental health and resilience (Stanley et al., 2016). However, the variability in coping effectiveness suggests the need for structured interventions, such as resilience training and mindfulness programs, to provide EMS providers with additional tools for managing stress.

Perceived Organizational Support

Participants expressed frustration with inadequate staffing and limited access to mental health resources, echoing concerns raised in the literature about systemic barriers to addressing stress in EMS settings (Adriaenssens et al., 2015). The absence of structured debriefing sessions and counseling opportunities was a recurring theme, highlighting a gap in organizational support. Studies have shown that debriefing and mental health services are effective in mitigating the long-term psychological effects of trauma (Cocker & Joss, 2016). Addressing these gaps could significantly enhance the well-being of EMS providers and improve retention in the workforce.

Implications for Practice

The findings of this study have several implications for practice. First, healthcare organizations should prioritize implementing structured debriefing sessions and providing accessible mental health resources. Regular debriefings after critical incidents can help EMS providers process their experiences and reduce emotional burden. Second, fostering a supportive work culture that encourages peer support and open communication is essential. Finally, addressing systemic issues such as staffing shortages and workload imbalances is critical to reducing stress and preventing burnout.

Limitations

This study is not without limitations. The sample was drawn from a single tertiary hospital, which may limit the generalizability of the findings to other settings. Additionally, the reliance on self-reported data introduces the potential for recall bias. Future studies could include a more diverse sample and employ longitudinal designs to explore the long-term effects of stress and burnout interventions.

Conclusion

This study highlights the multifaceted nature of stress and burnout among EMS providers, emphasizing the urgent need for organizational and individual-level interventions. By addressing the identified stressors and enhancing support systems, healthcare organizations can improve the mental health and professional satisfaction of EMS personnel, ultimately benefiting the quality of patient care.

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