



Psychological Impact and Coping Mechanisms Among Saudi Red Crescent Paramedics After Critical Incidents

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Abstract

Paramedics are often the first to respond to emergencies, facing traumatic and high-stress situations that can have profound psychological consequences. In Saudi Arabia, Red Crescent paramedics play a critical role in emergency medical services (EMS), often encountering incidents involving severe injury, death, and distressing events. These experiences can lead to psychological strain, post-traumatic stress disorder (PTSD), anxiety, depression, and emotional exhaustion. This paper examines the psychological impact of critical incidents on Saudi Red Crescent paramedics and explores the coping mechanisms they adopt to maintain mental resilience. Through an analysis of psychological, occupational, cultural, and social factors, this paper highlights the urgent need for organizational support, mental health awareness, and structured interventions within Saudi EMS systems.

Introduction

Emergency medical service (EMS) personnel, including paramedics, operate in high-intensity environments where exposure to traumatic incidents is routine. Critical incidents such as fatal accidents, resuscitations, and mass casualty events can have lasting psychological effects on those involved. For Saudi Red Crescent paramedics—who serve across urban, rural, and desert regions—such exposure often occurs daily.

In Saudi Arabia, the Red Crescent Authority is the national body responsible for pre-hospital emergency care. Its paramedics are exposed to diverse emergencies, from road traffic collisions (RTCs) to cardiac arrests, mass gatherings (e.g., Hajj and Umrah), and natural disasters. These situations test not only their clinical competence but also their psychological endurance.

Research on the mental health of EMS workers in Saudi Arabia remains limited, yet anecdotal and empirical evidence suggests a high prevalence of occupational stress, burnout, and post-traumatic symptoms. The aim of this paper is to explore the psychological impact of critical incidents on Saudi Red Crescent paramedics and to identify the coping strategies—both adaptive and maladaptive—they employ to manage emotional strain.



This analysis will address ten key discussion areas, including the nature of critical incidents, psychological consequences, cultural influences, gender differences, coping frameworks, and organizational interventions. The findings aim to inform policy, training, and mental health practices for Saudi emergency responders.

1. The Nature of Critical Incidents in Paramedic Work

A “critical incident” refers to any event that causes a high level of emotional stress or psychological disruption in emergency responders. Common examples for Saudi Red Crescent paramedics include responding to fatal road accidents (particularly common in Saudi Arabia), resuscitating children, managing multiple casualties, and witnessing death.

The unpredictability and intensity of these situations trigger physiological stress responses—adrenaline surges, elevated heart rate, and hypervigilance—which, if repeated without adequate recovery, can result in cumulative trauma. Critical incidents are therefore both a professional challenge and a psychological hazard.

2. Psychological Impact: PTSD, Anxiety, and Depression

Prolonged exposure to traumatic scenes can lead to Post-Traumatic Stress Disorder (PTSD), characterized by intrusive memories, flashbacks, and emotional numbness. Studies conducted on EMS personnel globally show PTSD prevalence ranging from 10% to 20%, with some reports suggesting even higher rates in Middle Eastern contexts due to repeated trauma exposure and limited psychological support.

Saudi Red Crescent paramedics often report similar symptoms—nightmares, avoidance behaviors, and irritability—especially after severe accidents or unsuccessful resuscitations. Alongside PTSD, depression and generalized anxiety are also prevalent, manifesting as fatigue, hopelessness, and reduced job satisfaction. The combination of life-threatening calls and societal stigma around mental health exacerbates emotional suffering.

3. Occupational Stress and Burnout

Paramedics operate under high workloads, irregular hours, and frequent exposure to suffering and death—all of which contribute to occupational burnout. Burnout is defined by emotional exhaustion, depersonalization (a sense of detachment from patients), and a reduced sense of accomplishment.

For Saudi paramedics, burnout can stem from long shifts, insufficient rest periods, and limited psychological debriefing after traumatic incidents. Cultural expectations of stoicism and masculine endurance may discourage emotional expression, leading to emotional



suppression and chronic stress accumulation. Burnout not only impacts mental health but also reduces job performance, increasing the risk of medical errors and poor patient outcomes.

4. Cultural and Religious Influences on Coping

In Saudi Arabia, cultural and religious values deeply shape responses to stress and trauma. Islamic beliefs often serve as both a coping resource and a framework for meaning-making. Many Saudi Red Crescent paramedics report relying on prayer (salah), remembrance of God (dhikr), and trust in divine will (tawakkul) as methods to manage emotional distress.

Religious coping can provide resilience and emotional stability, reinforcing a sense of purpose in life-saving work. However, cultural stigma around psychological disorders sometimes discourages seeking professional help. Paramedics may view distress as a test from God, leading them to endure silently rather than pursue counseling. Thus, while faith-based coping is beneficial, organizational systems must also encourage evidence-based psychological care.

Conclusion

Saudi Red Crescent paramedics are the frontline heroes of emergency response, yet their repeated exposure to critical incidents carries profound psychological risks. Depression, anxiety, and PTSD are real consequences of their professional dedication. While cultural and religious coping mechanisms provide resilience, organizational interventions remain vital for sustained well-being.

Developing structured debriefing programs, mental health training, and peer-support networks will help reduce stigma and enhance emotional strength among Saudi paramedics. By acknowledging the psychological impact of their work, the Saudi Red Crescent Authority can foster a healthier, more resilient EMS workforce capable of continuing its life-saving mission with strength and compassion.

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