

Addressing Mental Health Crises: A Collaborative Approach between Emergency Medical Services and Nursing in Prehospital Settings

Wayel Omair Saleh Altowajri¹, Nasser Tuaymis Muqbil Alharbi², Rakan Saad Bin Turki Alharbi³, Muqrin Saad Turki Alharbi⁴, Faisal Awadh Nami Alharbi⁵, Faisal MUSAAD Awadh Alharbi⁶, Ayman Mohammed Sulaiman Alfowzan⁷, Khalid Saleem Khuwayshan Almutairi⁸, Ziyad Saad Alanazi⁹, Abdulmajeed Rabeh Atiah Alrashdi¹⁰

¹Technician-Emergency Medical Services, Eradah And Mental Health Hospital Qassim

²Specialist-Nursing, Eradah And Mental Health Hospital Qassim

³Specialist-Nursing, Eradah And Mental Health Hospital Qassim

⁴Specialist-Nursing, Eradah And Mental Health Hospital Qassim

⁵Technician-Nursing, Eradah And Mental Health Hospital Qassim

⁶Specialist-Nursing, Eradah And Mental Health Hospital Qassim

⁷Technician-Nursing, Eradah And Mental Health Hospital Qassim

⁸Specialist-Nursing, Eradah And Mental Health Hospital Qassim

⁹Specialist-Nursing, Eradah And Mental Health Hospital Qassim

¹⁰Specialist-Nursing, Eradah And Mental Health Hospital Qassim

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ABSTRACT

Mental health crises represent a significant challenge in prehospital care, with Emergency Medical Services (EMS) often serving as the first point of contact for individuals experiencing psychiatric distress. This paper explores the importance of a collaborative approach between EMS providers and nurses in addressing mental health crises effectively in the prehospital setting. Through enhanced communication, joint training, and structured protocols, EMS and nursing professionals can improve patient outcomes, de-escalate crises, and ensure appropriate care. This manuscript highlights key strategies for successful collaboration, discusses the role of each discipline in crisis intervention, and advocates for a comprehensive approach to mental health crises that promotes safety, effective care, and patient well-being.

Keywords: Mental Health Crisis, Prehospital Care, Emergency Medical Services, Nursing, Collaborative Care, Crisis Intervention, EMS, Psychiatric Emergencies

INTRODUCTION

Mental health crises are an increasing concern in prehospital care settings, with a growing number of individuals experiencing mental health emergencies in the community. Emergency Medical Services (EMS) are frequently the first healthcare providers to respond to psychiatric crises, yet they are primarily trained to handle physical medical emergencies. (1)

As mental health issues become more prevalent, it is essential to enhance EMS's ability to manage such crises.

One way to achieve this is through a collaborative approach between EMS personnel and nursing staff.(2)

Nurses, with their comprehensive training in patient care and mental health assessments, are well-positioned to complement the skills of EMS personnel in crisis situations. This manuscript explores the benefits, challenges, and strategies for creating a successful collaborative model between EMS and nursing professionals in the prehospital setting, aimed at improving outcomes for individuals in mental health crises.(3)

Mental health crises are an increasing concern within prehospital care settings. Emergency Medical Services (EMS) are often the first point of contact for individuals in mental health distress, ranging from anxiety and depression to acute psychiatric disorders and substance abuse crises. (4)

Prehospital care is an essential component of the healthcare system, with Emergency Medical Services (EMS) often being the first point of contact for patients experiencing medical emergencies. (5)

EMS personnel, including paramedics and emergency medical technicians (EMTs), provide life-saving interventions in high-pressure environments, typically en route to hospitals. However, the growing complexity

of medical conditions and the increasing need for specialized care call for more coordinated and collaborative efforts within the prehospital system.(6)

Nurses, with their advanced clinical skills and experience in patient management, are often key players in acute care settings, including prehospital environments. Whether through mobile health units, partnerships with EMS teams, or direct involvement in response teams, nurses bring invaluable expertise to the prehospital response. (7) This manuscript discusses the benefits and challenges of collaboration between EMS and nursing teams in prehospital care, highlighting the critical role that integrated care approaches play in improving patient outcomes.(8)

A timely and appropriate response is critical to ensure the safety and well-being of patients while also navigating the complexities of mental health in emergency situations. Collaboration between EMS professionals and nurses in prehospital settings offers a promising approach to managing mental health crises effectively and efficiently.(9)

The Role of Emergency Medical Services (EMS) in Mental Health Crises

Emergency Medical Services (EMS) play a critical role in the initial management of individuals experiencing mental health crises. EMS providers, including paramedics and emergency medical technicians (EMTs), are typically dispatched to manage physical emergencies but are increasingly called to respond to psychiatric crises as well. These crises may include severe anxiety, panic attacks, substance use disorders, suicidal ideation, and psychiatric conditions such as schizophrenia or bipolar disorder.(10)

EMS personnel are trained to perform initial assessments, ensure patient safety, and stabilize individuals in acute distress. However, EMS teams are often not equipped with specialized knowledge in psychiatry or crisis de-escalation, which may limit their ability to fully address the underlying mental health issues.(11)

EMS personnel, typically paramedics and emergency medical technicians (EMTs), are trained to respond to medical emergencies. (12)

While their primary focus is on the physical health of patients, they are often required to address mental health crises as well. EMS teams are frequently dispatched to situations involving psychiatric emergencies, substance use disorders, self-harm, or even suicidal ideation.(13)

EMS providers are trained to assess the patient's immediate safety, ensure they are not a danger to themselves or others, and provide basic interventions. However, these professionals may not always have the expertise or resources to manage mental health conditions comprehensively. (14)

The lack of mental health training in EMS curricula is a limitation, but this can be addressed through continued education and partnerships with other healthcare professionals, such as nurses, psychiatrists, or mental health specialists.(15)

The Role of Nurses in Prehospital Care

Nurses play a vital role in the healthcare system, bridging the gap between acute and long-term care. (16)

In prehospital settings, nurses are integral to patient assessment and care, especially in scenarios that involve complex medical or mental health crises. Nurses possess advanced skills in patient evaluation, decision-making, and coordination of care, making them invaluable in managing individuals experiencing mental health crises.(17)

Nurses are essential in managing both physical and mental health conditions. In the prehospital setting, nurses can play an invaluable role in addressing mental health crises.(18)

They bring advanced skills in patient assessment, clinical decision-making, and the administration of medications that can help stabilize individuals in crisis. Additionally, nurses' expertise in patient communication and their ability to develop therapeutic relationships are instrumental in de-escalating emotionally charged situations.(19)

In many EMS systems, nurses may be part of specialized mobile crisis units, or they may collaborate with EMS personnel in a broader response model. Nurses can help assess a patient's psychiatric condition, guide decision-making regarding transport options (e.g., emergency psychiatric facility vs. emergency department), and communicate with other healthcare providers, ensuring that appropriate care is delivered.(20)

In prehospital settings, nurses often work in tandem with EMS to provide a more holistic approach to care. They may assist with medication administration (e.g., antipsychotics or sedatives), collaborate with EMS personnel to assess the patient's condition, and facilitate communication with psychiatric facilities or crisis intervention teams.(21)

Collaborative Approaches to Mental Health Crisis Management

A collaborative approach between EMS and nursing professionals in managing mental health crises can significantly enhance the quality of care. By combining the clinical expertise of nurses with the emergency response skills of EMS providers, the following outcomes can be achieved:(22)

1. **Comprehensive Assessment and Intervention:**

- EMS personnel and nurses can work together to conduct a thorough assessment of the patient's mental and physical health. While EMS is focused on ensuring immediate safety, nurses can evaluate the underlying psychiatric condition and facilitate interventions such as calming techniques or medication management.
2. **Effective Communication and Referral Systems:**
 - Collaboration between EMS and nursing staff ensures seamless communication and quick referrals to specialized mental health services or hospitals. Nurses can take the lead in communicating with psychiatric facilities, ensuring the appropriate level of care is provided post-transport. This improves continuity of care and reduces the likelihood of patients falling through the cracks.
 3. **Crisis De-escalation:**
 - Both EMS and nursing professionals are trained to de-escalate situations involving agitated or violent patients. Nurses, with their interpersonal and communication skills, can contribute to this process by providing emotional support, creating a calming environment, and helping the patient regain control of their emotions.
 4. **Training and Education:**
 - Regular joint training sessions and continuing education programs for EMS and nursing staff can improve knowledge of mental health conditions and crisis intervention strategies. This can enhance the ability of both teams to respond appropriately to patients in distress and work collaboratively in the field.
 5. **Reducing Emergency Room Overcrowding:**
 - By addressing mental health crises more effectively in the prehospital setting, EMS and nursing teams can help prevent unnecessary emergency room visits. This allows hospitals to focus on other urgent medical issues while ensuring individuals in psychiatric distress receive the appropriate care and support.(15)

Key Strategies for Successful Collaboration

To maximize the effectiveness of EMS and nursing collaboration, the following strategies are essential:(23)

1. **Joint Training Programs:** EMS personnel and nurses should undergo joint training on mental health first aid, crisis intervention, and de-escalation techniques. Understanding each other's roles and responsibilities will lead to better teamwork in critical situations.
2. **Developing Clear Protocols:** Clear guidelines should be established for managing mental health crises in prehospital settings, including protocols for assessment, treatment, and transport. These protocols should also outline how to work effectively with mental health professionals, ensuring that EMS and nursing teams know when to involve psychiatric specialists.
3. **Crisis Intervention Teams (CIT):** EMS and nursing teams can collaborate with specialized Crisis Intervention Teams (CIT), which consist of trained professionals capable of addressing psychiatric emergencies. CITs provide valuable support and expertise, guiding prehospital teams in delivering the most appropriate care.
4. **Telemedicine and Remote Psychiatric Support:** Utilizing telemedicine, EMS teams can connect with mental health professionals in real-time during a crisis. Nurses can act as intermediaries, facilitating communication and ensuring the patient receives the most appropriate care while on the way to the hospital or a psychiatric facility.
5. **Ongoing Evaluation and Feedback:** After each mental health crisis intervention, EMS and nursing teams should evaluate their response and identify opportunities for improvement. Regular feedback sessions and case debriefings can highlight successful strategies and areas where additional training may be required.(24)

A collaborative approach between Emergency Medical Services (EMS) and nursing professionals in the prehospital setting holds significant promise for improving the management of mental health crises. By working together, these two groups can offer comprehensive, patient-centered care that addresses both the physical and mental health needs of individuals in crisis.(25)

Through joint training, clear protocols, and effective communication, EMS and nursing teams can enhance outcomes, reduce emergency room visits, and improve the overall response to mental health emergencies. Future research and policy changes should focus on enhancing these collaborative models, ensuring that mental health crises are managed with the same level of care and professionalism as physical health emergencies.(26)

EMS and nursing teams should engage in regular post-incident evaluations to review their approach to managing mental health crises. Feedback loops, including case reviews and peer support, can highlight strengths and identify areas for improvement, fostering a culture of continuous improvement.(27)

Telemedicine allows EMS teams to connect with mental health professionals during a crisis in real-time. Nurses can help facilitate communication, ensuring that the patient receives the right interventions. This remote support

can ensure that EMS teams have access to specialized guidance when needed, improving the overall quality of care.(28)

Crisis Intervention Teams (CIT), which include trained police officers, mental health professionals, and sometimes EMS providers, are a proven model for managing mental health crises. Nurses can play a critical role within CITs by assisting with patient care, facilitating transport, and offering expertise in medication management.(29)

Establishing clear protocols for mental health crises management is essential. These protocols should outline roles and responsibilities, communication strategies, and guidelines for transport and referral to mental health facilities. Well-defined guidelines will help EMS and nurses work cohesively and ensure the delivery of the best care.(30)

Collaboration between Emergency Medical Services (EMS) and nursing professionals in prehospital settings is critical to providing high-quality patient care. By combining their skills and expertise, EMS and nurses can ensure a comprehensive, coordinated response to emergencies, addressing both physical and psychological needs. Effective collaboration enhances patient outcomes, improves crisis management, and helps reduce strain on hospitals. (31)

To optimize these benefits, it is essential to focus on joint training, clear protocols, integrated communication systems, and collaborative decision-making. By strengthening the partnership between EMS and nursing staff, the healthcare system can better meet the needs of patients in prehospital settings.(32)

CONCLUSION

Addressing mental health crises in prehospital settings requires a collaborative approach that leverages the strengths of both EMS personnel and nursing staff. By combining their skills, knowledge, and resources, they can provide more comprehensive care, reduce risks, and ensure patients receive the appropriate mental health interventions. Fostering collaboration through joint training, clear protocols, and communication with mental health professionals can significantly improve outcomes for individuals in crisis and reduce the strain on emergency services and hospital systems.

REFERENCES

1. Alzylai A, saad s Alanazi M, Garout MNM, Gabil KMM, Almalki AYA, Alshahrani FMH, et al. Telemedicine and Mobile Health, Current Challenges and Future opportunities in Emergency Medical services. Are we ready.
2. Martínez B, Aranda MP, Sanko S, Aguilar I, Vega WA. Older Adult Frequent 9-1-1 Callers for Emergency Medical Services in a Large Metropolitan City: Individual-and System-Level Considerations. *J Emerg Med.* 2023;65(6):e522–30.
3. Gee B, Nicholls H, Rivett S, Clarke T, Wilson J, Prothero L. ‘Very hit and miss’: an interpretive phenomenological analysis of ambulance service care for young people experiencing mental health crisis. *Br Paramed J.* 2022;7(1):43–50.
4. Lakey MJ. *Mental Health-Medical Crisis Team Impact on First Responder Outcomes on Persons with Mental Illness.* Walden University; 2022.
5. Lindström V, Stureson L, Carlborg A. Patients’ experiences of the caring encounter with the psychiatric emergency response team in the emergency medical service—A qualitative interview study. *Heal Expect.* 2020;23(2):442–9.
6. Rowland M, Adefuye AO, Vincent-Lambert C. The need for purposeful teaching, learning and assessment of crisis resource management principles and practices in the undergraduate pre-hospital emergency care curriculum: A narrative literature review. *Australas J Paramed.* 2021;18:1–9.
7. Vuilleumier S, Fiorentino A, Dénéreaz S, Spichiger T. Identification of new demands regarding prehospital care based on 35,188 missions in 2018. *BMC Emerg Med.* 2021;21(1):63.
8. Bijani M, Moradian MJ, Najafi H, Arbon P, Abedi S. Pre-hospital emergency care personnel’s challenges in providing care in mass casualty incidents: A qualitative study. *Int Emerg Nurs.* 2024;77:101522.
9. da Silva SDV, de OliveiraII AMN, MedeirosIII SP, SalgadoIV RGF, LourençãoV LG. Nurses’ conceptions regarding to the use of psychiatric emergency protocols in mobile pre-hospital care.
10. Friedman NMG, Dingler BJ, Gorstein LN, Epstein JA. Implementation of a Mental Health Task Force in a collegiate-based emergency medical services organization. *J Am Coll Heal.* 2020;68(5):460–4.
11. Crilly J, Huang Y, Krahe M, Wilhelms D, Ekelund U, Hörlin E, et al. Research priority setting in emergency care: A scoping review. *J Am Coll Emerg physicians open.* 2022;3(6):e12852.
12. Roberts L, Hains D. *Mental Health and Mental Illness in Paramedic Practice.* Elsevier Health Sciences; 2020.
13. Maguire BJ, Maniscalco PM, Cormier SB. *Creating the Emergency Medical Services System of the Future: the role of the EMS Education Agenda.* 2024;
14. de Jong IC, van der Ham LAJ, Waltz MM. Responding to persons in mental health crisis: A cross-country

- comparative study of professionals' perspectives on psychiatric ambulance and street triage models. *J Community Saf Well-Being*. 2022;7(Suppl_1):S36–44.
15. Ford-Jones PC. Enhancing Safety and Mitigating Violence on Prehospital Mental Health Calls: For the Care Providers and Care Recipients. *Can J Community Ment Heal*. 2023;42(2):17–31.
 16. Abbaspour S, Tajik R, Atif K, Eshghi H, Teimori G, Ghodrati-Torbati A, et al. Prevalence and correlates of mental health status among pre-hospital healthcare staff. *Clin Pract Epidemiol Ment Heal CP EMH*. 2020;16:17.
 17. Todorova L, Johansson A, Ivarsson B. Perceptions of ambulance nurses on their knowledge and competence when assessing psychiatric mental illness. *Nurs open*. 2021;8(2):946–56.
 18. Balfour ME, Hahn Stephenson A, Delany-Brumsey A, Winsky J, Goldman ML. Cops, clinicians, or both? Collaborative approaches to responding to behavioral health emergencies. *Psychiatr Serv*. 2022;73(6):658–69.
 19. Alrashidi FMH, Al Muhamidh HHS, Aljali YHS, Al-Mutrad AAH, Alsalem NM, Al-Otaibi MS, et al. Paramedics And Nurses As Advocates For Vulnerable Populations: A Case Study Approach. *J Namibian Stud Hist Polit Cult*. 2022;32:1205–15.
 20. Kamrujjaman MD, Demetriou C, Álvarez TC, Delgado RC. The role of Social Work for Emergency Medical Services (EMS): a systematic review. *Prehosp Disaster Med*. 2023;1–8.
 21. Bruun H, Milling L, Mikkelsen S, Huniche L. Ethical challenges experienced by prehospital emergency personnel: a practice-based model of analysis. *BMC Med Ethics*. 2022;23(1):80.
 22. Al Anazi KL, Almutairi SM, Al-Dhafeeri DE, Al-dhafeeri LA, Aldhafiri AA, Aldhofeery WN, et al. The Role of Nursing Professionals in Crisis Management: Enhancing Patient Care and Support in Emergency and Mental Health Settings. *J Int Cris Risk Commun Res*. 2024;7(2):29–35.
 23. Ding ML, Gerberi DJ, McCoy RG. Engaging emergency medical services to improve postacute management of behavioural health emergency calls: a protocol of a scoping literature review. *BMJ Open*. 2023;13(3):e067272.
 24. Alkuwayti MA, Abusaleh MA, Alsmail IM, Alsalem SN, Alodhayb AS, Alrumi BA, et al. Emergency Medical Services (Ems) Response Systems: Enhancing Efficiency And Effectiveness. *J Namibian Stud Hist Polit Cult*. 2023;36:321–33.
 25. Johanna Z, Elin V, Mats H, Henrik A, Jonas A. Nurses' experiences of encountering patients with mental illness in prehospital emergency care—a qualitative interview study. *BMC Nurs*. 2022;21(1):89.
 26. Stigter-Outshoven C, Van de Glind G, Wieberdink LJ, van Zelm R, Braam A. Competencies emergency and mental health nurses need in triage in acute mental health care: a narrative review. *J Emerg Nurs*. 2024;50(1):55–71.
 27. Ivarsson B, Johansson A, Todorova L. Prehospital emergency nurses' competence progress in assessing psychiatric disorders; 1-year follow-up of a psychiatric emergency response unit. *Int Emerg Nurs*. 2022;62:101149.
 28. Evans A, Rolfe U, Phillips P, Iannelli H. Paramedic management of patients with mental health issues: a scoping review. *J Paramed Pract*. 2024;16(10):404–15.
 29. Sunnqvist C, Bergarn A, Ezinne Ekezie P, Lundgren E, Nilsson E, Örmon K. A pilot evaluation of a prehospital emergency psychiatric unit: The experiences of patients, psychiatric and mental health nurses, and significant others. *Perspect Psychiatr Care*. 2022;58(4):2255–62.
 30. Meijer P, Ford-Jones P, Carter D, Duhaney P, Adam S, Pomeroy D, et al. Examining an Alternate Care Pathway for Mental Health and Addiction Prehospital Emergencies in Ontario, Canada: A Critical Analysis. *Int J Environ Res Public Health*. 2024;21(2):146.
 31. Vicente V, Jansson J, Wickström M, Danehorn E, Wahlin RR. Prehospital Emergency Nurses' coping strategies associated to traumatic experiences. *Int Emerg Nurs*. 2021;59:101083.
 32. Marks P. Mental health in emergency care. Elsevier Health Sciences; 2022.