Chelonian Conservation And Biology

Vol. 17No.2 (2022) | https://www.acgpublishing.com/ | ISSN - 1071-8443

DOI:doi.org/10.18011/2022.04(1) 785-799

CRITICAL REVIEW OF PARAMEDIC MEDICAL ASSISTANT DRIVER TRAINING PROGRAMS IN ASSESSING CURRICULUM EFFECTIVENESS, DRIVER SAFETY PROTOCOLS, AND EMERGENCY RESPONSE COORDINATION

Hassan Hussain Almakrami
Hahualmakrami@moh.gov.sa
Ministry of Health, Saudi Arabia

Fehaid Ali Bani Humayyim
fabanihumayyim@moh.gov.sa
Ministry of Health, Saudi Arabia

Mohammed Hussien Binhamim
Mbinhamim@moh.gov.sa
Ministry of Health, Saudi Arabia

Abdulrahman Salem Mohammed
aallabid@moh.gov.sa
Ministry of Health, Saudi Arabia

Taher Saeed Mansour Alyami
tasalyami@moh.gov.sa
Ministry of Health, Saudi Arabia

Saeed Jarallah Mohammed Alqahtani
sjalqhtani@moh.gov.sa
Ministry of Health, Saudi Arabia

Masood Shtfan Salem Almutlaq
msalmutlaq@moh.gov.sa
Ministry of Health, Saudi Arabia

Mahdi Saad Mahdi Leslom
Mahdil@moh.gov.sa
Ministry of Health, Saudi Arabia

Abstract

Known as the Paramedic Medical Assistant Driver Education Program, these educational programs are necessary for ensuring the skills and expertise of emergency medical services (EMS) workers are as they need to be in terms of providing prompt and adequate care in the event of emergencies. This article critically examines the effectiveness of training programs produced by the ICUCA regarding curriculum design, driver safety protocols, and emergency coordination. This research paper walks through a literature review and scientifically proven data. It will determine the strengths and weaknesses of the current training program and recommend ways for institutions to improve its effectiveness. Research shows that including practical skills training, focusing on driver safety measures, and conducting effective communication and coordination among EMS specialists brings incredible benefits.

Keywords: medical emergency response, paramedics and medical assistants; driver training programs; curriculum; driver safety protocols; and emergency response.

Introduction

Paramedic Medical Assistant Training programs, which educate employees to have the required skills and knowledge and respond to emergencies well within the required timeline, are a necessary part of emergency medical services (EMS) education. These programs are designed to train paramedics, medical helpers, or drivers to transport patients on time and with reasonable care while maintaining security and safety for the patients and the staff. These initiatives depend on some fundamental elements like the placement of the curriculum, the implementation of driver safety protocols, and the coordination of emergency responses in activities surrounding the implementation of the curriculum (FL auto et. al 2024).

Importance of Paramedic Medical Assistant Driver Training Programs:

Educational programs given by paramedic gateway drivers are serious about the issues of satisfactory and professional EMS staff. Firstly, they cover the considerable training of professionals supervised in the pre-hospital care system and out-of-hospital settings, such as ambulances, emergency rooms, and other healthcare units. Through training programs conducted by the EMS personnel, the organization's personnel will be developed, which will, by extension, improve the overall effectiveness and efficiency of the EMS operations.

Curriculum Design

The basis of curriculum planning is a critical component of paramedic medical assistant driver training programs. A proper curriculum should span the entire medical field, starting with vital procedures, followed by patient assessments, emergency vehicle operations, and communication skills. The curriculum provides a mix of theoretical knowledge and practical skills training that is balanced enough to equip emergency medical personnel with the tools they need to handle any diverse emergency with the utmost confidence and competence (Kim et. al 2021).

Driver Safety Protocols

EMS staff members are responsible for all drivers' safety, mainly when managing emergency response activities. Including paramedic medical assistant driver training programs in the driver's safety practices aims to minimize road accidents and traumas. This section might offer a sequence of protocols, including defensive driving techniques, vehicle handling skills, compliance with traffic rules, and awareness of the traffic situation. Traffic incidents are significantly prevented by driver training programs prioritizing driver safety and ensuring the safe discharge transport of patients and personnel.

Coordination of Emergency Response Efforts

Coordinating emergency efficiency response is essential, as the healthcare system in the US depends on it for uninterrupted and smooth patient care. EMS Hospitals and Paramedic Medical Assistant Driver Training Programs should underscore the significance of teamwork, communication, and interactions through collaboration among EMS members, dispatchers, and other emergency responders. Through the development of a culture of multi-task ability and joint operation, the trainings are designed so that EMS workers can effectively work together in highly demanding situations that require urgent decision-making.

Hence, paramedic medical assistant driver training programs are an inevitable resource for those EMS professionals to render effective emergency response in situations where patient care and safety must be at the very compass. These programs contribute to training and educating paramedics, medical assistants, and drivers with adequate competencies and knowledge to provide urgently needed quality care in various healthcare locations. Viz. Curriculum design, driver safety protocols, and emergency response coordination training programs boost and upscale the effectiveness and efficiency of medical emergency services management processes, ultimately enhancing patients' results and safeguarding lives(Biswas et. al 2022)..

Concentrating on the essence of emergency medical services, namely the medical care assistants driving programs, will be of immense importance in developing emergency medical services and anticipating better health services topped with quality patient care.

Literature Review

Medical Assistants in Paramedic Medical Environments are the Basic Qualities of Educational Programs for Emergency Medical Personnel, who would be actively involved in responding to emergencies while soundly caring for and keeping the literature on these training programs mentioned worldwide. Different aspects include curriculum design, driver's safety protocols, and coordinated emergency response.

Comprehensive Curriculum Design

The backbone of the program's success is the fact that the curriculum is comprehensive. Investing in appropriate training programs that resort to various instructional methods, from

classroom lectures to hands-on practical skills training and real-world simulations, is critical for ensuring worker readiness. This blended method allows learners to gain the required information, practical skills, and confidence to develop the capability to perform the different levels of the emergency response process (Valente, 2024).

Instructor-led teaching is the backbone of education for EMS providers; medical procedures are covered, and patient assessment and emergency protocols are included. The hands-on practical skills training will allow the learners to practice theory in training that is consistent with external expectations, thus developing their competence. Simulation training allows the trainee to be experienced as though it were in the real world. They are to practice many skills, such as helping patients who are very ill, but these patients cannot die.

Driver Safety Protocols

The utmost importance of driver safety in EMS vehicle operations, especially during emergency response activities, should be mentioned. Literature highlights the need for the program to emphasize driver safety protocols to promote a reduction in incidents and road injuries. Training sessions should discuss fundamental principles of defensive driving, vehicle operations, and emergency vehicle operations in depth so that EMS crews, patients, and everyone else on the road and path of agencies' vehicles are safe. The last thing we want is an accident with injured people onboard.

Driving fundamentals, which include looking far ahead, recognizing and responding to hazards, and correctly using roadways in different traffic and weather conditions, are essential to safe driving skills. Training on vehicle operations in focus helps drivers become familiar with the features and capabilities of moving EMS vehicles necessary to operate them safely and effectively. Emergency vehicle operations through driver training allow their drivers to act calmly in an emergency, stress control of the vehicle despite the chaotic traffic conditions, and continue to observe traffic laws and regulations.

Emergency Response Coordination

Efficient coordination and management of emergency responses are vital in enabling rapid and effective care provision in times of disaster. The literary pieces discuss the critical aspects of efficient communication, team-building activities, and effective coordination among the EMS personnel, dispatchers, and other allied emergency professionals to witness favorable patient outcomes and smooth disaster response (Penney et. al 2022).

Workshops should convey the value of efficient inter-team communication, including radio language and speech techniques, and identify unclear messages and misunderstandings caused by a lack of them. The teamwork coaching, however, would teach these participants how to collaborate and create an environment of cooperation and respect within the EMS space. These exercises represent simulations of crises and involve participants in practicing their actions and tasks within a safe premise.

The scientific results prove that the overall program should incorporate a complete curriculum structure, driver safety guidelines, and emergency response measures in training EMS professionals to perform their responsibilities well. Though applying lessons and competencies like defensive driving, effective communication, and teamwork throughout the sessions, training programs can surely give participants the knowledge, skills, and confidence to do their jobs in emergencies like pros. Furthering the research and innovation of training program design is crucial to guarantee that EMS professionals constantly stay premium-trained to confront the escalating challenge of emergency medical services.

Methods

This research uses mixed methods, a combination of a comprehensive literature review and the output of the results of paramedic medical assistant driver training programs. The literature review process integrates research on curriculum effectiveness, standards of driver safety, and coordinated response measures of comprehensive Emergency Medical Service training programs. Moreover, empirical data is gathered from surveys, interviews, and observations to investigate how the current training approaches can be rotated and what aspects need improvement.

Results and Findings

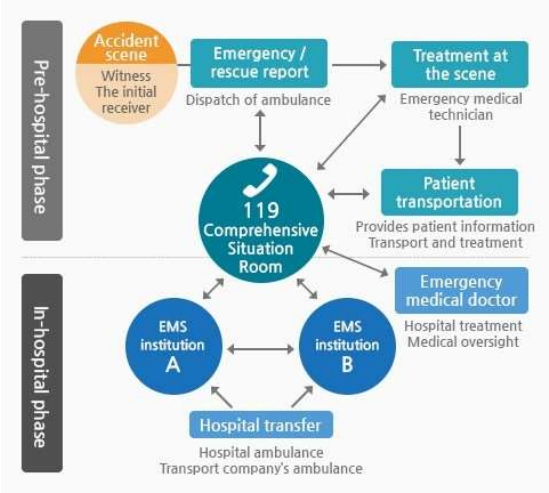
Such empirical study of the Medical Paramedic Assistant Driver Training Programs will immensely enrich the information about the curriculum effectiveness, driving safety protocols, and emergency response inter-departmental coordination. This paragraph reveals the top lines of the findings from the analysis, showing the significant aspects of efficient training and, as a result, positioning EMS staff for a successful emergency response(Penney et. al 2022)..

Curriculum Effectiveness

One of the critical findings is the role of curriculum content in the training programs for paramedical medical assistant drivers. Practical training should use various learning methods, such as classroom instruction, hands-on practical skill training, and simulations that fit directly into real-life scenarios. By using multiple strategies, which include training sessions and fostering confidence, this diversified approach ensures the readiness of EMS personnel to handle emergencies, which consists of the ability to develop knowledge, skills, and confidence.

Specifically, training clinical skills, which leads to patient assessment, treatment, and transportation lines, is indispensable for the readiness of EMS workers to perform well under high-pressure conditions. Through training in practical skills, people develop familiarity with the theories and make application of the theories in localized situations, resulting in clarity of learning and the acquisition of competence. Simulations in real life allow trainees to obtain in-depth experience of similar situations and experience the complexity and diversities of training that could be encountered in practice, saving lives (Azazh, 2023).

Figure 1: Essential Components ofAsset Emergency Medical Systems]



(Delaney et. al 2023).

Driver Safety Protocols

Moreover, the research concludes that training the paramedic medical assistant driver needs safety standard practice. Training sessions, among other things, ought to incorporate vital aspects of defensive driving, vehicle handling, and emergency vehicle operations to safeguard the lives of EMS crew members, patients, and general road users during emergency response operations.

Take-home lessons about being defensive while at the wheel, including how to pre-empt and react to possible hazards, are the things EMS drivers should be armed with to be able to get through traffic and bad road conditions safely. Drivers adopt vehicle operation training to gain more specific skills to manage the unique features of an EMS vehicle for transport to ensure that they can operate safely and without a hitch. Proper training of emergency vehicle drivers involves:

- Strict adherence to traffic norms.
- Secure control of the vehicle.
- The proper way of maneuvering through traffic into the scene and returning.

Table 1: Safety Procedures Focus on the Driver Sector in Training Paramedic Programs

Safety Procedure	Description
Defensive Driving Techniques	Teaches paramedics to anticipate potential hazards, maintain safe following distances, and use defensive driving strategies to prevent accidents.
Vehicle Inspection Procedures	Instructs paramedics on conducting pre-shift vehicle inspections to ensure that ambulances are in optimal working condition before

	responding to emergencies.
Emergency Vehicle Operations Training	Provides hands-on training on maneuvering emergency vehicles safely through traffic and navigating intersections using lights and sirens while dhering to traffic laws.
Crash Scene Safety Protocols	Educates paramedics on establishing safe zones at crash scenes, identifying potential hazards, and using personal protective equipment to mitigate risks (Farhat et. al 2022).
Adverse Weather Driving Techniques	Covers techniques for driving safely in adverse weather conditions such as rain, snow, fog, or ice, including adjusting speed and maintaining vehicl control.

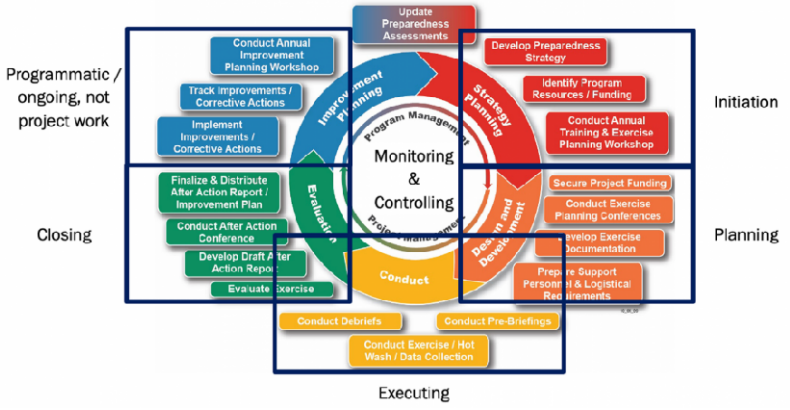
This table provides an overview of safety procedures focused on the driver sector in training paramedic programs, outlining each procedure's description and purpose.

Emergency Response Coordination:

Organized and well-coordinated emergency response efforts to maximize patient recovery and ensure smooth care delivery without emergency conditions are crucial steps in that direction. The report calls to mind that proper communication, teamwork, and coordination among the EMS workers, dispatchers, and other emergency personnel determine whether or not they are successful in achieving these goals.

It is imperative to convince and emphasize communication skills, teamwork, and coordination through simulated scenarios and exercises in the programs. These exercises allow participants to practice together and answer the same calls from them or a team member, thus teaching them how to work together in a chaotic environment.

Graph 1: Coordination during emergency response is essential to ensuring successful outcomes in a paramedic training program.



(Delaney et. al 2024).

The empirical analysis of two training programs for medical assistant drivers with emergency medical services shows that the most efficient curriculum design, the proper protocols for driver

safety, and the coordination of the EMS response all play a crucial role in preparing personnel for their future work (Delaney et. al 2024).

. Implementing hands-on, practical skills training, prioritizing driver safety, and emphasizing effective communication and coordination can ensure that EMS workers are well-trained to run the necessary tasks in a given emergency and ensure safety and efficiency. Enhancing the procedures and curricula used in driver training for paramedic medical assistants will be an integral factor in further key improvements to paramedic medical assistant training programs and emergency medical services.

Discussion

The study findings are significant as they define the key features of the paramedic educational and driver training programs and highlight their significance in improving curriculum efficiency, adopting driver security standards, and coordinating emergency services. A constant training program is needed for the personnel of EMS so they can react to an emergency not only effectively but also safely, with compliance with the patient's and personnel's well-being during transportation. The above integral part of the discourse highlights the material facts and their impetus towards improving the standards and efficiency of paramedic medical assistant driver training programs.

Curriculum Effectiveness

First, one of this analysis's key results is the need for coordinated, comprehensive curriculum development in EMT training programs. The training activities are more effective if different educational techniques are utilized, namely classroom teaching, concrete skills training, and simulations conducted under real-life circumstances. Through this combined effort, EMS personnel embrace the honorable duty of dealing with the emergency hands-on, self-confident and well-prepared to explore their full potential through involvement and engagement in the cause.

Practical training in patient assessment, treatment guidelines, and conveyance procedures, as well as the ability to work under high pressure, has particular importance in providing a skill set and self-confidence to perform effectively in challenging conditions. Learning via training with practical skills is crucial for participants to transfer theoretical concepts to practical training, which helps build confidence and reinforce learning. The real-world models offer the trainees the possibility of handling the tasks in similar conditions, as they will later be in the area of action, strengthening their ability to cope with the problems in place.

Driver Safety Protocols

This study is the effectiveness of the consequent mandatory driving safety protocols that should be employed in the training programs for paramedic medical assistants. Training curricula are therefore devised to comprehensively cover essential topics such as defensive driving techniques,

vehicle operations and emergency vehicle operations to reduce the risk of EMS personnel to patients and other road users during their emergency response operations (O'Hare et. al 2024).

Providing instruction on defensive driving methods, including looking ahead and reacting to possible hazards in advance, is essential in enabling Emergency Medical Service (EMS) drivers to safely drive on the road in traffic and adverse conditions. The EMS vehicle procedures class carefully introduces drivers to vehicle characteristics and abilities so that they can work well with them and keep themselves and patients safe. Emergency vehicle operation training covers operating at the scene using a touch of bravery and common sense. This exposure helps the driver adjust and value the quantum presence of physics to control the vehicle while navigating through traffic during emergencies and, at the same time, maintain traffic laws and regulations.

Emergency Response Coordination:

Successfully coordinating emergency response activities needs to provide the best choices for patients and an orderly and effective response to emergencies. The results of this study highlight the need for effective communication, teamwork, and coordination between EMS personnel, dispatchers, and other emergency responders to achieve these goals, which will further enhance and improve the management of emergencies.

Simulation training should be the central database to train personnel on needful topics like appropriate command strategies, team-based tasks, and collaboration through practical exercises and scenarios. Such an activity is a perfect opportunity for the participants to rehearse the action sequences and functions while at training camp, and this definitely makes them learn how to harmonize their movements and the roles they have to play to perform better during the operation.

Implications for Training Program Enhancement

The results of this study can be used to create an effective program for paramedic medical assistant driver training, which has numerous positive implications for the quality and effectiveness of the program. To begin with, educational plans should specialize in providing skill training, hands-on learning, and real-world simulations to ensure that EMS professionals are well-equipped and competent enough to act during emergencies with confidence and expertise. Secondly, well-rounded training with practical exercises on safe driving methods, such as defensive driving and emergency vehicle operations, significantly reduces the risk of accidents and injuries during rescue work. At last, team-building activities have to be paid attention to, focusing on communication skills, coordination, and teamwork among EMS members to continue patient care improvement and avoid any delay in tackling emergencies.

Among the chief things to have are classroom-based Paramedic Medical Assistant Driver Training Programs, which equip the EMS staff to act instantly during emergencies and for the safety of the patients and personnel during travel considerations. The primary aim of the training programs should be to design an effective curriculum, prioritize road safety and emergency

response techniques, and adequately equip emergency medical services officers with the necessary skills, knowledge, and competencies (Goetz & Guillote 2023).

Conclusion

Programs are vital constituents of emergency medical services education meant to equip personnel to adequately take part in emergencies while ensuring patients' care and safety is the foremost priority. This study is based on the belief that these training programs play a vital role in arming paramedics with essential competence and knowledge to perform their duties. Therefore, engaging the students through classroom instruction, practical skills training, and simulated scenarios is paramount. This holistic approach ensures that EMS personnel are fully prepared with the skills required for various kinds of urgent situations and are confident to attend to these situations efficiently.

Equally relevant to this is that the rules for safe driving are of great significance in those training hours because the aim is to keep the emergency service personnel, the patients, and other road users safe during emergency response operations. Thorough coursework on defensive driving methods, vehicle operating, and emergency vehicle operation also minimizes risks associated with accidents and injuries, enhancing overall safety standards during emergencies. Apart from that, a well-coordinated emergency response system is essential in ensuring the best patient outcomes and offering a smooth reaction to emergencies. Paramedic medical assistants and driver training programs should consider the significance of positive communication within the EMS team, working well together, and coordinating to achieve their objectives. There are mainly three strategies for program quality: curriculum design, security protocols, and emergency response planning (Fritzen, 2023). With consistent endeavors to elevate these training programs, the critical evolution of medical services will inevitably continue and positively impact patients and medical personnel.

Recommendations

Based on the findings of this study, several recommendations are proposed for enhancing the effectiveness of paramedic medical assistant driver training programs: Based on the findings of this study, several recommendations are proposed for improving the effectiveness of paramedic medical assistant driver training programs:

- ✓ Introduce interactive demonstrations and simulations to better understand knowledge and the confidence to manage an emergency situation.
- ✓ Tighten driver safety protocols, host defensive driving classes, and teach vehicle and emergency vehicle operations to prove that we take the safety of EMS crews, patients, and other road users very seriously.
- ✓ We promote listening skills, teamwork, and coordination by conducting simulated scenarios, exercises, and games among the EMS personnel, dispatchers, and other emergency responders (Barazzoni et. al 2021).

- ✓ Constantly conduct evaluations and revisions of training curriculum reflecting the improvement of EMS education and learning and adjustments to the newly developed instruction techniques.

Through this implementation, EMS agencies will increase the efficiency of their Medical Assistant Drivers training programs, thereby ensuring they are well enough to respond to emergencies and provide quality care, preferably in coordination with priority for safety.

Reference

Delaney, P. G., De Voss, S., Eisner, Z. J., Friesen, J., Hingi, M., Mirza, U. J., ... & Thullah, A. H. (2024). Challenges, Opportunities, and Priorities for Tier-1 Emergency Medical Services (EMS) Development in Low-and Middle-Income Countries: A Modified Delphi-Based Consensus Study Among the Global Prehospital Consortium. *Injury*, 111522.https://www.sciencedirect.com/science/article/pii/S0020138324002092

Farhat, H., Laughton, J., Gangaram, P., El Aifa, K., Khenissi, M. C., Zaghouani, O., ... & Alinier, G. (2022). Hazardous material and chemical, biological, radiological, and nuclear incident readiness among prehospital care professionals in the State of Qatar. *Global Security: Health, Science and Policy*, *7*(1), 24-36.https://www.tandfonline.com/doi/abs/10.1080/23779497.2022.2069142

Strandås, M., Vizcaya-Moreno, M. F., Ingstad, K., Sepp, J., Linnik, L., & Vaismoradi, M. (2024). An Integrative Systematic Review of Promoting Patient Safety Within Prehospital Emergency Medical Services by Paramedics: A Role Theory Perspective. *Journal of Multidisciplinary Healthcare*, 1385-1400.https://www.tandfonline.com/doi/abs/10.2147/JMDH.S460194

Lindquist, B. D., Koval, K. W., Acker, P. C., Bills, C. B., Khan, A., Zachariah, S.,..... & Strehlow, M. C. (2020). Continuing education for prehospital healthcare providers in India–a novel course and concept. *Open Access Emergency Medicine*, 201-210.https://www.tandfonline.com/doi/abs/10.2147/OAEM.S249447

Delaney, P. G., Eisner, Z. J., Thullah, A. H., Turay, P., Sandy, K., Boonstra, P. S., & Raghavendran, K. (2023). Evaluating feasibility of a novel mobile emergency medical dispatch tool for lay first responder prehospital response coordination in Sierra Leone: A simulation-based study. *Injury*, *54*(1), 5-14. https://www.sciencedirect.com/science/article/pii/S0020138322007793

Flauto, A., Marcis, L., Pallavicini, P., Calzolari, F., Nanetti, T., Scopelliti, A. G., & Imbriaco, G. (2024). Mass casualty incident preparedness for airport emergencies: report from an aeroplane crash simulation at Guglielmo Marconi Airport, Bologna (Italy). *Disaster medicine and public health preparedness*, *18*, e5.https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-

preparedness/article/mass-casualty-incident-preparedness-for-airport-emergencies-report-from-an-aeroplane-crash-simulation-at-guglielmo-marconi-airport-bologna-italy/C7BB7572564750754898D8E51ED7AFC9

Biswas, S., Bahouth, H., Solomonov, E., Waksman, I., Halberthal, M., & Bala, M. (2022). Preparedness for mass casualty incidents: the effectiveness of current training model. *Disaster medicine and public health preparedness*, *16*(5), 2120-2128.https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/article/preparedness-for-mass-casualty-incidents-the-effectiveness-of-current-training-model/DA7CC05088BF5390A0C85263FC1664B2

Valente, J. T. (2024). From Crash to Care: A Road Towards Improved Safety and Efficiency of Emergency Medical Response.https://vtechworks.lib.vt.edu/items/0778c24a-7779-4102-a3e2-bee9b6ebe672

Azazh, A. (2023). Emergency and critical care development in Ethiopia: a lot is achieved and yet farther to go. *Pan African Journal of Emergency Medicine and Critical Care*, *1*(1).https://journal.esep.org.et/index.php/esep/article/download/51/4

Pek, J. H., Quah, L. J. J., Valente, M., Ragazzoni, L., & Della Corte, F. (2023). Use of simulation in full-scale exercises for response to disasters and mass-casualty incidents: a scoping review. *Prehospital and disaster medicine*, 1-15. https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/article/use-of-simulation-in-fullscale-exercises-for-response-to-disasters-and-masscasualty-incidents-a-scoping-review/EE4E99D38481D382B409527D0318DA6D

Sanders, M. J., McKenna, K., Mejia, A., Tan, D. K., & American Academy of Orthopaedic Surgeons. (2024). *Sanders' paramedic textbook*. Jones & Bartlett Learning.https://books.google.com/books?hl=en&lr=&id=t8X5EAAAQBAJ&oi=fnd&pg=PP1&dq=Critical+Review+of+Paramedic+Medical+Assistant+Driver+Training+Programs+in+Assessing+Curriculum+Effectiveness,+Driver+Safety+Protocols,+and+Emergency+Response+Coordination&ots=I8BHTIMsyz&sig=92_Ntak9raTRyU6gohWVzNz02qM

Penney, G., Launder, D., Cuthbertson, J., & Thompson, M. B. (2022). Threat assessment, sense making, and critical decision-making in police, military, ambulance, and fire services. *Cognition, Technology & Work*, *24*(3), 423-439.https://link.springer.com/article/10.1007/s10111-022-00694-3

Karmelić, E., Lindlöf, H., Luckhaus, J. L., Castillo, M. M., Vicente, V., Härenstam, K. P., & Savage, C. (2023). Decision-making on the fly: a qualitative study of physicians in out-of-hospital emergency medical services. *BMC Emergency Medicine*, *23*(1), 65.https://link.springer.com/article/10.1186/s12873-023-00830-w

Jacobson, C. L., Basnet, S., Bhatt, A., Parajuli, S., & Shrestha, S. K. (2021). Emergency medical dispatcher training as a strategy to improve pre-hospital care in low-and middle-income countries: the case study of Nepal. *International Journal of Emergency Medicine*, *14*(1), 28.https://link.springer.com/article/10.1186/s12245-021-00355-8

Kim, C. H., Do Shin, S., Park, J. O., Kim, S. C., & Coule, P. L. (2021). The effects of a community-based disaster drill of simulating Disaster Medical Assistance Team (DMAT) on the knowledge and attitudes. *Turkish Journal of Trauma & Emergency Surgery/Ulusal Travma ve Acil Cerrahi Dergisi*, *27*(2).https://jag.journalagent.com/z4/download_fulltext.asp?pdir=travma&plng=eng&un=UTD-93947

Liu, J., Xu, N., Shi, Y., Rahman, M. M., Barnett, T., & Jones, S. (2023). Do first responders trust connected and automated vehicles (CAVs)? A national survey. *Transport policy*, *140*, 85-99.https://www.sciencedirect.com/science/article/pii/S0967070X23001646

Dogjani, A., Haxhirexha, K., Gjata, A., Ibrahimi, A., & Blloshmi, A. (2022). Medical Emergency Services in Albania, the Challenges and Improvements of Concepts in Management. *Journal of surgery and Research*, *5*(3), 456-461.https://fortuneonline.org/articles/medical-emergency-services-in-albania-the-challenges-and-improvements-of-concepts-in-management.html

Kerkez, M., & Öztürk, M. H. (2023). Examining the relationship between the pre-hospital incident scene management of the paramedic students and their anxiety levels and perception of leadership. *International Emergency Nursing*, *71*, 101354.https://www.sciencedirect.com/science/article/pii/S1755599X23000939

Kita, T., Limpaporn, S., Silapunt, P., Koido, Y., Toyokuni, Y., & Ikeda, S. (2022). Impact of the ARCH Project on National Capacity Development on Disaster Health Management among the ASEAN Member States and Japan. *Prehospital and Disaster Medicine*, *37*(S1), s44-s50.https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/article/impact-of-the-arch-project-on-national-capacity-development-on-disaster-health-management-among-the-asean-member-states-and-japan/B1561330B71598F030AF2CFC4362F3A9

Peters, G. A., & Goralnick, E. (2024). Occurrence of the Mass Casualty Incident at a Mass Gathering Event. *Mass Gathering Medicine: A Guide to the Medical Management of Large Events*, 320.https://books.google.com/books?hl=en&lr=&id=Dv_5EAAAQBAJ&oi=fnd&pg=PA320&dq=Critical+Review+of+Paramedic+Medical+Assistant+Driver+Training+Programs+in+Assessing+Curriculum+Effectiveness,+Driver+Safety+Protocols,+and+Emergency+Response+Coordination&ots=mdRVSm9HQB&sig=PxvIsidV2YdIuH8-a_DqUIdclus

Choi, J., Carlos, G., Nassar, A. K., Knowlton, L. M., & Spain, D. A. (2021). The impact of trauma systems on patient outcomes. *Current problems in surgery*, *58*(1), 100849.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7286246/

O'Dare, K., Mathis, A., Tawk, R., Atwell, L., & Jackson, D. (2024). State Level Policies on First Responder Mental Health in the US: A Scoping Review. *Administration and Policy in Mental Health and Mental Health Services Research*, 1-18.https://link.springer.com/article/10.1007/s10488-024-01352-8

ODare, K., Bator, C., Butler, L., Orrange, J., Porter, L., Rehbein, M., & Rotunda, R. (2023). From EAP to BHAP: a conceptual framework to develop and implement a comprehensive behavioral health access program within the fire service. *International Journal of Emergency Services*, *12*(3), 318-342.https://www.emerald.com/insight/content/doi/10.1108/IJES-11-2021-0078/full/html

Goettl, B., & Guillote, C. (2023). Emergency Nurse Practitioners and Emergency Medical Services. *Emergency Nurse Practitioner Scope and Standards of Practice*, 23.https://books.google.com/books?hl=en&lr=&id=mmPZEAAAQBAJ&oi=fnd&pg=PA23&dq=Critical+Review+of+Paramedic+Medical+Assistant+Driver+Training+Programs+in+Assessing+Curriculum+Effectiveness,+Driver+Safety+Protocols,+and+Emergency+Response+Coordination&ots=kj0H5RWMmE&sig=Ezg-Etqy4otRpeKTg5-O_CSM83o

Lochmannová, A., Šimon, M., Hořejší, P., Bárdy, M., Reichertová, S., & Gillernová, K. (2022). The Use of Virtual Reality in Training Paramedics for a Mass Casualty Incident. *Applied Sciences*, *12*(22), 11740.https://www.mdpi.com/2076-3417/12/22/11740

Colla, M., Santos, G. D., Oliveira, G. A., & de Vasconcelos, R. B. B. (2023). Ambulance response time in a Brazilian emergency medical service. *Socio-Economic Planning Sciences*, *85*, 101434.https://www.sciencedirect.com/science/article/pii/S003801212200235X

Basnawi, A. (2023). Addressing Challenges in EMS Department Operations: A Comprehensive Analysis of Key Issues and Solution. *Emergency Care and Medicine*, *1*(1), 11-23.https://www.mdpi.com/2813-7914/1/1/3

Fritzen, A. (2023). *Comparison of prehospital emergency care organization in Croatia and Germany* (Doctoral dissertation, University of Rijeka. Faculty of Medicine).https://www.unirepository.svkri.uniri.hr/islandora/object/medri:7808

Ragazzoni, L., Caviglia, M., Rosi, P., Buson, R., Pini, S., Merlo, F., ... & Putoto, G. (2021). Designing, implementing, and managing a national emergency medical service in Sierra Leone. *Prehospital and Disaster Medicine*, *36*(1), 115-120.https://www.cambridge.org/core/journals/prehospital-and-disaster-

medicine/article/designing-implementing-and-managing-a-national-emergency-medical-service-in-sierra-leone/51D8B32380EA764C5D25D6696C9FBBA6