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Unique Challenges for WHO Emergency Medical Teams in Ukraine: Field Assessment and Global Recommendations

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Abstract

The purpose of World Health Organization (WHO) Emergency Medical Teams (EMT) is to provide timely, high-quality health services in the immediate aftermath of disasters and during disease outbreaks and other emergencies, including conflict and insecurity.

The war in Ukraine has presented all health-care providers with many unique challenges. This assessment addresses the importance and the complexities of the global spread of the Emergency Medical Team system challenges to meet a wide variety of crises including war, those that are unique to this very complex crisis in Ukraine, and the essential role of educational initiatives, not only in professional development but also in teamwork and cultural integration.

The challenges facing the international health organizations in Haiti in 2010 and the subsequent review of the consequences of Sudden-Impact disasters by both the World Health Organization (WHO) and the Pan American Health Organization designed to building a mechanism that would define a broad and comprehensive operating concept for Emergency Medical Teams (EMTs). The review also resulted in the identification of improper care, unnecessary medical and non-medical procedures, and lack of coordination, transparency, accountability, and cultural and language insensitivities. These shortcomings indicated inadequate preparedness and a lack of oversight of deployed health-care workers.¹

With several reports indicating the unsuccessful management of disasters by deployed resources, the groundwork was initiated by WHO to develop principles, criteria, and standards for foreign EMTs.² As part of this process, first the WHO-EMT had to identify the number of levels of medical teams according to their size, capabilities, and specialties, as the determinant in a certification method. The main purpose of establishing such a mechanism was to improve the operating mechanism of all medical teams that are activated and arrive at disaster areas and to create an integrated system that meets the needs in the field collaboratively, preventing previous situations where medical teams worked on a stand-alone basis.

The conceptual basis of coordination and certification, as well as the criteria and minimum standards, was taken from the coordination system built by the International Search and Rescue Advisory Group (INSARAG) for the Urban Search and Rescue units (USAR). This system, with a history dating back 30 y ago of functionality in disaster areas has provided necessary adjustments and developments of the concept to meet the needs and the concept of international health assistance.³

The aim was to integrate the EMT mechanism into a large variety of challenging local health systems in disaster areas.

The Right Approach to Achieve the Right Outcome

The idea of using EMTs to improve the coordination of health-care services between the affected countries and deployed medical teams to provide appropriate and needed health-care would certainly be beneficial to the victims of disasters and emergencies. However, it has been shown that an essential component to achieving a better outcome of EMT deployment is to use the current disaster education and training programs to improve the EMTs' operational performance rather than individuals' professional development.⁴ Such an improvement, in turn, depends on the existence of standardized training frameworks, which not only increase the collaborative engagement of all participants but also enhances their skills in decision-making at different levels of engagement. An earlier report proposed a three-step operational learning framework that could be used for EMTs globally that emphasized: (1) ensuring professional

competence and license to practice, (2) supporting the adaptation of technical and non-technical professional capacities into the low-resource and emergency context, (3) preparing for effective team performance in the field. These requirements can be fulfilled by some of the current simulation training exercises.⁵ (4) Additionally, the coronavirus disease 2019 (COVID-19) response and EMT deployments in protracted crises.

The gradual improvement in EMT deployment to diverse disaster areas was observed in the subsequent super-typhoon in the Philippines in 2013, the earthquake in Nepal in 2015, the Ebola epidemic in West Africa, the earthquake in Haiti in 2021, and other emergencies globally.^{6,7}

In subsequent years, written and updated criteria were published by WHO-EMT with the assistance of experts in the field. The consultatory books (eg, Red Book, and Blue Book), which include the concept, the method, the minimum standards, the criteria, the classification, and more have, along with the improved process of mentoring and certification system have greatly impacted the quality of medical units that go through the certification process.⁸

The Ukrainian Experience

While the concept of the EMT system is gaining momentum, it must be constantly examined to identify the gaps and issues that may arise from the field experiences that need to be resolved before the subsequent missions occur. In March 2022, after Russia invaded Ukraine, one of the authors (K.P.) of this study was asked by the WHO-EMT to lead the coordination of the WHO-EMTCCs in Ukraine. On arrival, he observed first-hand the differences between diverse international medical teams already deployed. Some were certified after going through the entire WHO-EMT certification process, while others were not certified, or their certification process was not completed. Consequently, the major question was whether all international medical teams that had arrived in the field should be included in the mutual response and the WHO-EMTCC mechanism to operate optimally, or to exclude medical teams that were not certified or engaged in the process of certification. It was recognized that there were both advantages and disadvantages to the inclusion of all medical teams.

Advantages of Including All International Medical Teams in the Mechanism:

In the Ukrania case, benefits include (1) socializing the EMT system to those organizations that are not verified; (2) improving coordination with local NGOs and response organizations that do not currently have the capacity to engage in verification; (3) maximum use of existing medical resources in the field; (4) being already in the field, they could contribute to the mission if they worked as part of a coordinated effort which would be more efficient than letting them work independently; (5) some un-verified medical teams were the first to reach and work in high risk areas, and their knowledge of existing risks was essential for the mission's outcome.

Disadvantages of Including All International Medical Teams in the Mechanism:

- a) Maximum utilization of existing medical resources in the field.
- b) Medical units that have not gone through the WHO EMT certification process - do not "speak the same professional

language" and do not necessarily meet the same standards - which can harm the quality of the overall medical relief system in the affected area.

- c) Being already in the field they could contribute to the mission if they worked as part of a coordinated effort which would be more efficient than letting them work independently.
- d) In the Ukrainian case, some were the first to work in this specific risk area and their knowledge of existing risks was essential for the mission's outcome.

There is risk that noncertified staff may present low-quality medical teams with inappropriate standards without suitable equipment and independent capacity and need both equipment and assistance for a reasonable period, which must be provided by the local government that itself experiences a supply shortage.

The provocative question does represent the opportunity to reiterate few important concepts such as (1) the EMT mechanism is now well established; (2) the advantages of requiring that deploying international teams commit to accepted standards are clear; (3) EMT mechanism ensures that medical teams are known quantities, means high level of predictability and reliability on deployment; (4) increasing awareness on country ownership and benefits on applying a surge coordination mechanism such as the EMTCC is required.

Discussion

The management of disasters and emergencies is a multi-agency task and consists of several groups, agencies, and organizations with diverse backgrounds and knowledge.⁹ Although emergency medical teams are designed and consist of necessary specialists with a standardized approach, these teams need to collaborate with other teams in an intense period, requiring not only considerations for surging capacity but also interactive and collaborative factors that lead them to achieve the same goal.¹⁰ These collaborative points and knowledge increase the confidence and willingness of staff to work, even under the most severe conditions.¹¹

The EMTs are essential for response to and management of disasters and emergencies. However, they are not the only ones participating in the incident management system, and several teams with varying knowledge, competence, and experience may be presented at the same time and in the same risk zone.¹² Although theoretically only qualified EMTs should be included in the coordination mechanism in disaster areas, the current example from the Ukrainian conflict shows that reality is more complex than theory because, by definition, only the sovereign is given the authority to decide who enters the affected state, that is, the government of the affected state.

As such, it is important to recognize that the affected country has many more pressing issues and considerations more critical than to finance a foreign medical mission during a disaster. In a disaster or war situation especially when there is a lack of staff, they would prefer to deploy as many medical teams as possible if they can, even if medical service persons may have lower quality and less experience. These teams may also come from diverse regions, backgrounds, and cultures, having diverse risk perceptions.¹³ Such deployment may even make more sense during a war and in a state of emergency, when the scarcity of resources may simplify decision-making, not to "waste" resources and energies on bureaucratic procedures with no proof of efficiency. This is especially so if there are not enough qualified EMTs.

Are there optimal solutions to the problem? We are not sure. Whereas we have no intention of providing solutions to the problems in this article, it is our understanding that the problems are complex. Any decisions will have implications, some of which will improve the situation, and some may overwhelm other problems. However, the reason for writing this article is that we believe that the thought processes must be exhausted considering the experience and problems that have been revealed. This war, no matter what the outcome, will provoke many brainstorming sessions of experts and opinion leaders to foster in-depth discussions on the subject and examine what solutions and actions can be implemented to resolve or at least mitigate the problems observed. Civil wars historically have always been major challenges with "Every attempt to make war easy and safe resulting in humiliation and disaster."14 With the introduction of hybrid warfare,¹⁵ Ukraine from February 24 to July 27 has experienced attacks "against health facilities, transport, personnel, patients, supplies and warehouses, depriving people of urgently needed care, endangering health-care providers, and undermining health systems."16

Conclusions

EMTs may substantially improve the management of disasters and emergencies. However, although there are instructions and guidelines, such a management system depends on collaborative and interactive points-of concern which must be exercised and trained before any multiagency engagement. Additionally, any standards and guidelines should be accessible globally in a proactive system.

End of comments.

This report emphasizes both the importance of and the complexities of the global spread of the system and the essential role of educational initiatives, not only in professional development but also in teamwork and cultural integration.

Competing interests. None.

Abbreviations. WHO: World Health Organization; INSARAG: The International Search and Rescue Advisory Group; USAR: Urban Search and Rescue units.

References

 Albina A, Archer L, Boivin M, et al. International emergency medical teams training workshop special report. Prehosp Disaster Med. 2018;33(3):335-338. doi: 10.1017/S1049023X18000262

- World Health Organization (WHO). Classification and minimum standards for emergency medical teams. Accessed May 11, 2024. https:// www.who.int/publications/i/item/9789240029330
- International Search and Rescue Advisory Group (INSARAG). Operations. Accessed May 11, 2024. https://www.insarag.org/technical-re ference-library/operations/
- Amat Camacho N, Hughes A, Burkle FM Jr, et al. Education and training of emergency medical teams: recommendations for a global operational learning framework. PLoS Curr. 2016;8:ecurrents.dis.292033689209611ad5e4a7a3e61520d0. doi: 10.1371/currents.dis.292033689209611ad5e4a7a3e61520d0
- Khorram-Manesh A, Berlin J, Carlström E. Two validated ways of improving the ability of decision-making in emergencies; results from a literature review. *Bull Emerg Trauma*. 2016;4(4):186-196.
- Amat Camacho N, Karki K, Subedi S, et al. International emergency medical teams in the aftermath of the 2015 Nepal Earthquake. Prehosp Disaster Med. 2019;34(3):260-264. doi: 10.1017/S1049023X19004291
- Brolin Ribacke KJ, Saulnier DD, Eriksson A, et al. Effects of the West Africa Ebola Virus Disease on health-care utilization - a systematic review. Front Public Health. 2016;4:222. doi: 10.3389/fpubh.2016.00222
- World Health Organization (WHO). The consultant (Red Book). Accessed May 11, 2024. https://extranet.who.int/emt/consultant-red-book.
- Phattharapornjaroen P, Glantz V, Carlström E, et al. The feasibility of implementing the flexible surge capacity concept in Bangkok: willing participants and educational gaps. Int J Environ Res Public Health. 2021;18(15):7793. doi: 10.3390/ijerph18157793
- Phattharapornjaroen P, Carlström E, Khorram-Manesh A. Developing a conceptual framework for flexible surge capacity based on complexity and collaborative theoretical frameworks. *Public Health.* 2022;208:46-51. doi: 10.1016/j.puhe.2022.04.012
- Sultan MAS, Løwe Sørensen J, Carlström E, et al. Emergency healthcare providers' perceptions of preparedness and willingness to work during disasters and public health emergencies. *Healthcare (Basel)*. 2020;8(4):442. doi: 10.3390/healthcare8040442
- Burkle FM Jr. Measures of effectiveness in large-scale bioterrorism events. Prehosp Disaster Med. 2003;18(3):258-262. doi: 10.1017/s1049023x0000114x
- Appleby-Arnold S, Brockdorff N, Jakovljev I, et al. Applying cultural values to encourage disaster preparedness: lessons from a low-hazard country. Int J Disaster Risk Reduct. 2018;31:37-44. doi: 10.1016/j.ijdrr.2018. 04.015
- AZ Quotes. Memoirs of General W.T. Sherman, page 898, 1990. Library of America. Accessed May 12, 2024. https://www.azquotes.com/quote/270121
- Burkle FM, Goniewicz K, Khorram-Manesh A. Bastardizing peacekeeping and the birth of hybrid warfare. *Prehosp Disaster Med.* 2022;37(2):147-149. doi: 10.1017/S1049023X22000425
- WHO. Emergency in Ukraine: External Situation Report #18. Published 28 July 2022. Reporting period 14-27 July 2022. Accessed May 12, 2024. https://www.who.int/publications/i/item/WHO-EURO-2022-5152-44915-65585