Victory I Consensus Document

Proposal for the Implementation of the Hartford Doctrine in the Spanish Context

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ABSTRACT

Several international recommendations advise adapting military healthcare response models to intentional mass casualty incidents (IMCIs) in civil environments. The IMCI experience and associated published research from the United States, where these situations are frequent and properly analyzed more often, are, unfortunately, not directly applicable to the Spanish model of emergency medical services (EMS), where each autonomous region has its own competencies and protocols. However, there is a series of common elements that served as a reference for the development of an effective, evidence-based, IMCI consensus response plan called Victoria I. In this plan, we have tried to define each intervening role during an IMCI, from the occasional first responder to the final hospital staff at the reference trauma centers. We believe that each professional role in this response chain, on and off the scene, must have a clear mission and function to improve victim survival.

LETTER to the EDITOR

Keywords: Victoria consensus; Hartford consensus; terrorist attack; intentional mass casualty incident; Spain

Introduction

Currently, in Spain, there is no standard intentional mass casualty incident (IMCI) response plan that coordinates the multiple emergency medical response levels and the state security forces. Therefore, there is a need to create a specific action proposal. The distinct features of IMCIs require a change in the type of healthcare response and an adaptation of the usual concepts and procedures to these kinds of scenarios. ¹⁻⁴ Such an adaptation translates into a specific preparedness and training program adapted to the rapid evolution of this type of threat. ⁵⁻⁸

Improving Survival Rates in Terrorist Incidents: The Hartford Consensus as an International Reference

The increase in multiple active shooter incidents in the United States has resulted in the need to respond in such a way that survival rates of victims are improved. On 2 April 2013, healthcare representatives, police, private and armed forces, firefighters, and emergency medical services (EMS) responders participated in the Hartford Consensus Conference. There they had the chance to report on and analyze the current military and civil experience with respect to these types of attacks. The result of this conference was the "Improving Survival from Active Shooter Events" document that aims to promote local and national policies to improve victim survival in these increasingly common situations. 10,11

General Principles of the Victoria I Consensus Document

The Victoria I document¹² takes the Hartford Consensus as an international theoretical framework and adapts it to Spain's EMS and healthcare response reality, establishing a civil–tactical chain of survival based on the available scientific evidence.¹³ The key points of the document are (1) the analysis of current threats; (2) the proposal of a public integrated response system that includes population, security and armed forces, emergency response teams, and trauma centers; and (3) the development of training strategies for each of the key participants in the incident response.

The Victoria I document has been elaborated by 32 multidisciplinary experts who participate in six different workforces within the Spanish Emergency Medicine Society and are affiliated with 15 public institutions, ranging from prehospital emergency care, hospital staff, and high-end researchers to police and armed forces.

Prevention and Action Strategies for IMCI Response

IMCIs must be approached from the prevention perspective, emphasizing the importance of education, ¹⁴⁻¹⁶ and from the perspective of active response in two tiers: secondary and tertiary action.

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Primary Prevention

Prevention should be aimed at educating the population to be aware of what actions should be carried out during an active shooter situation or terrorist attack. This formative strategy is where the so called chain of survival in IMCIs starts.

Secondary Action

Early activation of the competent local or regional IMCI plans is the key to rapid suppression and response to these kinds of threats. In the way that the Hartford Consensus uses the THREAT acronym (Threat suppression, Hemorrhage control, Rapid Extrication to safety, Assessment by medical providers and Transport to definitive care) to refer to the need to respond to active shooter events and IMCIs, the Victoria I proposes the Spanish adaptation: AMHENAZA (approximately translated as Annul Menace, HEmorrhage control, No extraction delays, Assistance in the Zone, Activate Trauma Code). 17-28 It is important to highlight that the adapted acronym in Spanish comes from the word *amenaza*, which literally means "threat."

During secondary action, responders will divide the scene into safety zone for further rapid medical response according to the threat risk. It is important to note that advanced medical response will always be subordinate to the security zoning. This response zoning can be stratified into three safety levels: (1) care under direct threat, where there is a direct hostile situation and only security forces, assault teams, or armed forces should be involved to avoid further victims and minimize hemorrhage control, if possible; (2) care under indirect threat, where people usually are within a safer area but are still at high risk, and victim prioritization and limited stabilization management are performed, if possible; and (3) low risk for responders and victims, and evacuation and further patient management are performed until arrival at a definitive trauma center.

Tertiary Action

Tertiary action involves the definitive treatment of victims in receiving hospitals. These hospitals must undergo an official trauma level accreditation. It is essential that the reference healthcare facilities also adopt the standard trauma code used by the EMS and dispatch centers so that coordination is smooth and hospitals are optimally alerted of specific victim arrivals.

Conclusion

IMCI response requires a multidisciplinary coordination and the ability and capacity to adapt to dynamic threat environments. In the face of a growing global threat, and inspired by the spirit of the Hartford Consensus, the Victoria I document establishes an integrated, seamless response within a new framework of the tactical–civilian chain of survival.

Disclosures

The authors have indicated they have no financial relationships relevant to this article to disclose.

Author Contributions

All authors contributed to writing the manuscript. BL translated the manuscript from Spanish to English. All authors read and approved the final manuscript.

References

- 1. Eastridge BJ, Mabry RL, Seguin P, et al. Death on the battlefield (2001–2011). *J Trauma Acute Care Surg*. 2012;73:S431–437.
- Haus-Cheymol R, Bouguerra C, Mayorg E, et al. Blessures par arme à feu et engins explosifs dans les armées. Résultats de la surveillance épidémiologique de 2004 à 2008. Médecine et Armées. 2011;39(1): 89–96.
- Bellamy RF. The causes of death in conventional land warfare: implications for combat casualty care research. Mil Med. 1984; 149:55-62.
- Eastridge BJ, Hardin M, Cantrell J, et al. Died of wounds on the battlefield: causation and implications for improving combat casualty care. *J Trauma*. 2011;71:S4–8.
- US Department of Homeland Security. Active Shooter. How to Respond. Washington, DC: US Department of Homeland Security; 2008. https://www.dhs.gov/xlibrary/assets/active_shooter _booklet.pdf. Accessed 26 February 2018.
- Real Academia Española. Diccionario de la Lengua Española. 2017. http://dle.rae.es/?id=DgIqVCc. Accessed 20 February 2018.
- North Atlantic Treaty Organization. Glossary of Terms and Definitions. 2014. http://wcnjk.wp.mil.pl/plik/file/N_20130808 _AAP6EN.pdf. Accessed 25 February 2018.
- Giménez Mediavilla JJ, Castillo Ruiz de Apodaca M del C, González Rodríguez D. Actuación Sanitaria en Incidentes NRBQ. Madrid, Spain: AWWE Editorial Médica; 2016.
- Jacobs LM, Joint Committee to Create a National Policy to Enhance Survivability from Intentional Mass-Casualty and Active Shooter Events. The Hartford Consensus III: Implementation of bleeding control—if you see something do something. *Bull Am Coll Surg*. 2015;100:20–26.
- American College of Surgeons. Hartford Consensus III focuses on empowering the public to serve as first responders. *Bull Am Coll Surg.* 2015;100:52.
- 11. Callaway D, Bobko J, Smith ER, et al. Building community resilience to dynamic mass casualty incidents. *J Trauma Acute Care Surg.* 2016;80:665–669.
- Martín L, Pérez J, Zamora D, et al. Consenso Victoria I: la cadena de supervivencia táctica—civil ante incidentes de múltiples victimas intencionados. *Emergencias*. In press.
- 13. Usero-Pérez C, González Alonso V, Orbañanos Peiro L, et al. Implementation of the Hartford Consensus and Tactical Combat Casualty Care recommendations in emergency services: a review of the literature. *Emergencias*. 2017;29:416–421.
- 14. Federal Bureau of Investigation. Active Shooter Event Quick Reference Guide. 2015. https://www.fbi.gov/file-repository/active-shooter-event-quick-reference-guide_2015.pdf/view. Accessed 27 January 2018.
- 15. American College of Surgeons. Homepage. 2018. https://www.bleedingcontrol.org/. Accessed 12 February.
- Committee for Tactical Emergency Casualty Care. Homepage. http://www.c-tecc.org/. Accessed 12 February 2018.
- 17. Bulger EM, Snyder D, Schoelles K, et al. An evidence-based prehospital guideline for external hemorrhage control: American College of Surgeons Committee on Trauma. *Prehosp Emerg Care*. 2014;18:163–173.
- 18. Ramly E, Runyan G, King DR. The state of the union. *J Trauma Acute Care Surg.* 2016;80:787–791.
- National Registry of Emergency Medical Technicians. National Continued Competency Program. 2018. https://www.nremt.org/rwd/public/document/nccp. Accessed 12 February 2018.
- 20. Real Decreto 836/2012, de 25 de mayo, por el que se establecen las características técnicas, el equipamiento sanitario y la dotación de personal de los vehículos de transporte sanitario por carretera. Boletin Oficial del Estado, núm. 137, de 8 de junio de 2012, 41589–41595.
- 21. Real Decreto 22/2014, de 17 de enero, por el que se modifica el Real Decreto 836/2012, de 25 de mayo, por el que se establecen las características técnicas, el equipamiento sanitario y la dotación de personal de los vehículos de transporte sanitario por carretera. Boletin Oficial del Estado, núm. 22, de 25 de enero de 2014, 4700–4701. https://www.boe.es/boe/dias/2014/01/25/pdfs/BOE-A-2014-749.pdf.

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22. Real Decreto 1397/2007, de 29 de octubre, por el que se establece 25. MacKenzie EJ, Weir S, Rivara FP, et al. The value of trauma cen-

- el título de Técnico en Emergencias Sanitarias y se fijan sus enseñanzas mínimas. Boletin Oficial del Estado, núm. 282, de 24 de noviembre de 2007, 48178-48211. https://www.boe.es/boe/dias /2007/11/24/pdfs/A48178-48211.pdf.
- 23. Haas B, Stukel TA, Gomez D, et al. The mortality benefit of direct trauma center transport in a regional trauma system. I Trauma Acute Care Surg. 2012;72:1510-1517.
- Spijkers ATE, Meylaerts SAG, Leenen LPH. Mortality decreases by implementing a level I trauma center in a Dutch hospital. J Trauma. 2010;69:1138-1142.
- ter care. J Trauma. 2010;69:1-10.
- 26. Davenport RA, Tai N, West A, et al. A major trauma centre is a specialty hospital not a hospital of specialties. Br J Surg. 2009;97: 109-117.
- 27. Stelfox HT, Khandwala F, Kirkpatrick AW, et al. Trauma center volume and quality improvement programs. I Trauma Acute Care Surg. 2012;72:962-967.
- 28. Turégano F, Ots JR, Martín JR, et al. Mortalidad hospitalaria en pacientes con traumatismos graves. Cirugía Española. 2001;70: 21-26.

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