

# The Management of Crisis Situations - Medical Involvement

ROTARU LUCIANA<sup>(1)</sup>, CIULU C.<sup>(2)</sup>

<sup>(1)</sup>Department of Emergency Medicine University of Medicine and Pharmacy of Craiova, SMURD Department, Emergency University Hospital Craiova; <sup>(2)</sup> General Inspectorate for Emergency Situations

**ABSTRACT** Summary Regardless the cause, succeeding and time, crisis situations are characterized by the absolute need for cooperation between and within institutions to induce an efficient answer. Medical implication is always present and extremely diverse and the integration of medical answer needs knowing the objectives, resources, specific procedures and never the less a good communication between medical and general command. To achieve this, building commanding structures implicated in answering the crisis situation needs to develop towards knowing medical actions and practice often together complex and various scenarios.

**KEY WORDS** *keywords medical emergency systems, disasters, mass accidents*

## Introduction

Text Beyond all the peculiarities of type, initiation and conduct of the crisis, which ultimately determines the peculiarities of management, medical implication is ever present and very often definitive, by the severity of the event, in establishing its balance sheet. This means that, on the one hand, the warning, the information and the medical links in the multilateral negotiation of the situation is a prerequisite, on the other, for the medical link itself to become part of the overall plan for crisis management, whose features will be medically adequate resulting a response that is consistent, energetic and perfectly adapted to such situations that can develop permanent action scenarios

If it were only to illustrate the integrated anti-terrorist response, the organization of the system is capital: early recognition of the bomber profile may assess not only the extend, the seriousness and the material damage but also the volume and severity of the lesion profile and the condition of the victims, as well as the risks derived from the initial attack or subsequent ambush. All this will lead to a more specific answer of the intervention forces, especially the medical ones, in what the profile intervention is concerned (chemical, radiological, blast, burns, trauma, biological), the necessary of protective equipment and assistance/prosthetic respiratory or trauma, staffing, extrication equipment, evacuation, transport, estimated time of work, allocation of patients to hospitals in the region, specific ways of putting into action, "the white plan" for hospitals to receive training for a large number of casualties. An effective area of exclusion in case of a contamination risk can also be done if the type of intervention requires.

Both the assignment and the exercise of command operation (according to Romanian legislation in force, provided by the Romanian Intelligence Service - combat terrorism Brigade) as well as the communication and cooperation with medical echelon are defining for the success of a mission, in which accuracy and speed of collection, processing and circulation of information direct and value the efforts of the intervention forces. There are many examples in this direction, providing a specific value to the medical intervention in case of suffocating gas attack (sarin), organized by the Aum sect in the Tokyo subway in which the intervention profile was given by the huge numbers of patients needing respiratory assistance as a result of the blocking of the neuromuscular plate. Another illustration of a particular medical intervention is the case of a hostage-taking by Chechen commandos, a number of 800 people – in a theater in Moscow, where the anti-terrorist tactics of the intervention team assault involved the use of a narcotic for the annihilation of terrorists, which induced a large number of intoxicated persons among the innocents, also. In this situation, the poor communication between the command echelon of the operation and the medical forces has generated the latter's inability to respond effectively in the neutralization of the toxicant used with a specific antidote, the medical team not being in possession of the information on the substance used (fentanyl - anesthetic opioid type of substance for which there is an antidote). This led to a disproportionately high number of casualties as compared to initial estimates, deaths otherwise avoidable in the case of an effective cooperation.

The essence of medical action in - a crisis situation is the same that governs the entire action: command, control, coordination, communication, cooperation, readjustment (assessment, planning, organization)

The method and accuracy of the implementation of the 'red plan' for medical intervention medication in the pre-hospital environment and the 'white plan' to prepare the hospital for special situations of mass casualties depends largely on the harmonization of legislation, communication and information flow between different structures that cooperate to solve emergency situations.

Thus, by the law 95/2006 (Law Hospital) and its secondary legislation (1091/2006 OMSP - the inter-clinic transfer of critical patients, and MIRA- MSP Joint Order of 1092 / 1500 / 2006 – regarding the competence of crews operating in pre-hospital phase, OMSP 1706/2007 regulating the organization, operation, management and financing of the UPU – SMURD, the joint orders of MAI and MS No. 2011 and 2021/2008) are covered both the structure and the powers of medical and paramedical crews operating in pre-hospital phase of medical intervention as well as the duties, the responsibilities and the powers of SMURD local and regional command structures and not least the transition method from current emergency activity to the crisis situation by redistributing the powers and medical intervention sectors for each of the medical emergency structures. Finally, medical emergency legislation in the field of emergency healthcare in Romania, one of the most modern in Europe, specifically provides direct subordination of the action of medical intervention services to the County Inspectorates for Emergency Situations, or where applicable to the General Inspectorate for Emergency Situations, as soon as they fulfill the conditions to embark on a plan for a crisis intervention.

The rapid integration of the medical action with that of the Inspectorate for Emergency Situations is expressed not only through the cooperation of the SMURD crews at different levels, but more accurately through the distribution of responsibilities in the scene:

- COS (commander of security operations) - firefighter
- DSM (medical director of security) - chief intervention doctor
- Field Triage Officer –doctor/Medical Assistant
- PMA triage officer (advanced medical point) - Doctor / nurse

- Doctors - MAP assistants
- Physician - CME assistants (health center drain)
- Exhaust Officer - Assistant / firefighter
- Pharmacist - Assistant
- Logistics Officer - Firefighter + doctor / nurse
- Communications Officer - Firefighter
- media relations officer - firefighter

All medical operations at the scene, the triage field and a minimum saving gesture, the stretch-carrying, the advanced medical triage point, treatment in the PMA, the triage at the eviction to the medical evacuation center or evacuation if it necessary directly to medical facilities established, subject to strict protocols and work plans and working circuits activated by joint decision of the officer responsible for coordinating the operation and the medical director of SMURD at the scene.

Regarding the activation and implementation of the 'White Plan', it also means setting at the level of each hospital alerted the role of the crisis cell to ensure the functionality in the new conditions assuming command, logistics, regulation, action plan, internal-communication, with the press, authorities, families.

The crisis unit, consisting of medical officers, technical personnel, security, administration, care, support services, IT, pharmacy) the logistics cell, respectively, cell communication, etc., is required to contain in its establishment a physician trained in emergency situations who has the task to perform an analysis of the situation, needs and risks, to provide material resources and personnel management, allocation and control tasks and responsibilities such as layering the levels of responsibility according to different tasks.

Alarming the staff, organizing the movement and flow of patients and hospital attendants inside and outside it, organizing services (reviewing and enhancing the capacity of receiving, reviewing the free spaces, the transfer of patients to other hospitals, early discharge, postponement of scheduled interventions and planned admissions, differentiated hospitalization of the non-emergencies, engaging in action the related departments by groups of diseases, the mortuary, the investigation platform, the activation of sterilization, all the plans being subject to special types of situations as part of medical involvement in the crisis management.

What can make a difference, however, in a consistent intervention, organized and successful is the single command, communication and integration of the medical effort throughout the technical assistance, which cannot only be

obtained through planning, as minute as it were , but through sustained training on the default plans by simulating actions in complex cooperation, especially through continuous training together with the echelons of command of all these structures to obtain an orchestrated, orderly and efficient response to the emergency situations.

### References

1. Bioterrorism Incident Preplanning & Response Guide (second edition) – INTERPOL bioterrorism prevention programme – Lyon, 2010
2. Emergency Ordinance no. 21 of 15 April 2004 on the National System of Emergency Management - Updated Text based on modifying the normative acts published in the Official Gazette of Romania, Part I by March 7, 2005
3. International health regulations (second edition) – World Health Organization - ISBN 9789241580410, WHO Press, Geneva, 2005
4. Law 95 of April 14<sup>th</sup>, 2006 on health reform published in the Official Gazette of Romania, Part 1, no. 28.04 372. 2006
5. MSP 2011/2007 and MIRA 21386 / 2007 joint Order regarding certain measures in the pre-hospital emergency care
6. Order determining the powers and duties of public intervention crews of different levels in pre-hospital phase, the Official Gazette of Romania, Part I, No. 982, 12/08/2006
7. Order of the Minister of Public Health. No.2011/22 November 2007 and the Minister of Interior and Administrative Reform no. 21386 / 27 November 2007 - regarding certain measures in pre-hospital emergency care
8. Public Health Ministerial Order no. 1764 / 2006 on the approval criteria for the classification of local, county and regional emergency hospitals, in terms of skills, material and human resources and their ability to provide emergency care and definitive medical care of critically ill patients - published in the Official Gazette of Romania, part I, no. 63 of 26 January 2007
9. Tintinalli J.E (Editor), Gabor D., Kelen Md. (Editor), Stapczynski J. S. (Editor) Emergency Medicine: A Comprehensive Study Guide 6th edition By McGraw-Hill Professional; (9):65 – 107: (192). 6178 – 82: (246) 6808 – 16: (251) 6900 – 13 : (252) 6929 – 42: (255) 6960 – 81, 2003– authorized translation, Alpha Buzău publishing, ISBN 978 973 139 000 0, 2008

---

*Correspondence Adress: Rotaru Luciana, MD, PhD, Department of Emergency Medicine University of Medicine and Pharmacy of Craiova, Str Petru Rares nr. 4, 200456, Craiova, Dolj, Romania*