

## Summary of the International Conference "Civil Military Cooperation in Trauma and Combat Trauma System Education and Training" (September 26-27, 2013, Nunziatella Military School, Naples, Italy)

Contemporary world is facing one constant increase in the number of the man-made and natural disasters occurrence and related to them consequences – loss of human lives, growing number of displaced people and refugees, increase in the spending for recovery and rebuilding the affected areas and for support and assistance to the temporally or permanent disabled survivors.

For the provision of prompt and adequate medical support to population affected by calamities specific competencies are required by the medical personnel involved in the trauma system, combat trauma system and disaster medical support planning and execution.

Despite the fact that great majority of the established national civil and military systems are based on common principles for the organization of the immediate medical response in case of major incident, war or other disastrous event, the educational, tutorial and training processes differ even in one country, not to compare the programs on international or interagency levels.

Armed forces have noted the requirement for establishing a simplified medical support to the injured on the battlefield from the beginning of the warfare and during millennia have developed this nowadays evolving Combat Trauma System. From the times of the first industrial installations and first road accidents, the civil healthcare system has started to face the similar challenges as the military one – great number of affected requiring urgent medical assistance in limited time frame and scarcity of medical capabilities and resources. Therefore, medical community is recognizing the need for additional education and training regarding formation of knowledge and skills, allocating resources and establishing an operational and effective system for care of traumatized, injured and affected by disasters'.

In convening the International Conference "Civil Military Cooperation in Trauma and Combat Trauma System Education and Training" (CMCTCTSET-2013), the Italian Armed Forces Medical Service and the International Disaster Medical Association (IDMA) are providing open forum for scientific discussions on how to ameliorate the existing medical education and training processes through international, civil-military exchange of information and best practices.

The Conference was organized by the Italian Army Logistics Command, Department of Health, Rome and the International Disaster Medicine Association (IDMA), Naples, in collaboration with A.O.R.N. "A. Cardarelli", Naples, A.O. Hospital "Niguarda Ca'Granda" - Trauma Team, Milan, Maggiore Hospital, Emergency Department, Bologna, University of Modena and Reggio Emilia, School of Medicine, Military Academy of Modena, US Naval Forces Europe Medical, Naples, NATO Allied Joint Force Command Headquarters, Medical Division, Naples, Policlinico Militare "Celio", Rome, Health and Veterinary Services Studies and Researches Centre, Rome.

The CMCTCTSET-2013 organizing and scientific committees defined the key topic areas for the conference, namely

- Trauma and Combat Trauma Systems; Disaster Medicine and Military Medicine Education Similarities, Objectives, Tasks, Challenges
- Combat Trauma System Education, Training and Implementation Challenges
- Medical Information Management Challenges in National and International Disaster Medical Support
- Civil-Military Cooperation in Disaster Medical Support Education and Training More than 120 members from military medical services, military logistic commands, civilian medical entities, academia and experts attended the conference, representing 10 countries of Europe and America, NGOs, businesses and international organizations. In accordance with the CMCECTSDMMC-2013 agenda, eight scientific sessions ending with panel discussions, a poster session and one round table were organized. There were 45 oral presentations and 10 poster presentations made on the four key topic areas of the conference. More than 50 interventions were made at the roundtable and panel discussions. The scientific sessions were organized in the following panels:
  - Education in the field of Trauma System, Combat Trauma System and Disaster Medicine:
  - 2. Military Medical Preparedness;
  - 3. Training Programs and Experience;
  - 4. Civilian Medical Preparedness for Emergencies;
  - 5. Clinical Challenges;
  - 6. Experience and Competence;
  - 7. Specifics requirements to the Disaster/ Trauma and Combat Trauma System education and training;
  - 8. National Practice.

Way Ahead summary of the key conclusions, assessments and proposals made was presented for final discussions.

The conference presentations on Education in the field of Trauma System, Combat Trauma System and Disaster Medicine represented different aspects of the tutorial process and the challenges faced during the programs establishment and their implementation in university, college or postgraduate courses.

Lecturers and moderators highlighted that:

- There is a great variety of different courses and training programs established in various Italian and International medical, military medical and military faculties, centers, organizations focused on emergency medical care, trauma, combat trauma and disaster medicine;
- There is still no coordination between the different entities providing education and training on the above mentioned areas of medical knowledge;
- There are no unified requirements about the knowledge provided and skills trained during these courses;

- There are still no established civilian or military medical standard operating procedures (SOPs) for the educational and training processes agreed among the providers;
- There is a requirement for developing one common, accepted curriculum for the scope, objectives and tasks of the educational and training process;
- There is a need for an agency or association to be selected or established for certification of the tutorial programs, courses organization and courses outcome;
- An Italian National Registry for medical specialist who successfully completed the trauma, combat trauma and disaster medicine tutorial and training programs has to be established;
- There is not a significant difference between the emergency medicine protocols implemented in military and civilian medical practices, the combat trauma system, trauma system and disaster medicine principles and objectives, therefore they could become a base for developing of common unified protocols;
- The issue regarding maintenance of the knowledge and skills obtained during the education and training has also to be addressed;
- The requirements regarding the resources, professional integration and the multidisciplinary approach that are prerequisite for the establishment of the proper, comprehensive, joint and common education and training, also have to be adequately addressed;
- Medical Intelligence cycle and procedures have to become a basic for medical specialists;
- The importance and the significance of the education and training for medical care provision in extreme and unconventional situation has to be noted by every single medical specialist from the university professor to the sanitary attendant.

Military Medical Preparedness panel started with presentation of the results regarding self evaluation of the military servicemen on their preparedness to survive and to assist affected populations and medical teams during the disasters. These results were obtained by the IDMA via anonymous survey among 305 military officers from 22 countries. The lower self confidence, its origin and measures required by the participants to be taken were discussed and the capabilities of IDMA to address these requirements were also noted.

The lecturers, moderators and the conference attendees discussed during the second panel the importance of timely performed vascular surgery intervention, as well as the most appropriate techniques, equipment and SOPs applicable for the contemporary world warfare.

The NATO Medical community research on how to address the challenges of the new NATO role and level of ambition was presented and the required broad NATO medical staff officers' qualifications were discussed along with the ways of obtaining those.

The delegates of the conference also noted that despite the differences in the available means and capabilities, implemented SOPs and established organization, the effective cooperation between the military and civil medical teams and services has been reached when and where it was required, demonstrated via presenting the experience gained in medical support provision during different disastrous events. As a conclusion of the presented experience was noted that:

Joint Training:

- Joint Exercises;
- Common SOPs;
- Common understanding,

could contribute to the better medical community preparedness to organize and manage the medical support to populations affected by major incidents or disasters.

The third panel presented the various programs and approaches, implemented by nations, centers, international organizations etc., implemented in their educational and training processes established in order to enhance the medical community capabilities to adequately and promptly respond to the affected population requirements.

All lecturers, moderators and attendees unanimously noted the significance of the cooperation in the training and educational programs research, development and implementation between civil and military medical communities. The experience of multinational cooperation within the West Balkans countries in establishing the Balkan Medical Tasks Force provided the audience with the functional and operational example of how the differences could be addressed.

The first conference day ended with discussion on civilian medical preparedness for emergencies, where IDMA once again presented the surprisingly low self confidence for disaster medical preparedness: this time the results were from the medical community survey. The role and importance of the pediatric assistance during disaster medical assistance was highlighted, as well as the requirement of unified ambulances inventory and equipment. Last panel presentation provided delegates with comprehensive information about the trends in new technologies implementation in the medical support equipment in order to better address the health challenges related to the environmental pollution.

The panel Clinical Challenges revealed different techniques and protocols applied in critical patients care. The discussions were aimed to contributing for ameliorating the existing clinical protocols.

The last two panels of the Conference scientific program were dedicated to how the specific requirements for the combat trauma and trauma systems and disaster medicine education and training are already addressed by different entities. The implementation of the foreign and Italian experience in establishing the trauma centers and the tutorial process within these centers, the buildup of the clinical competences during the university education both in military and civilian sides were presented and their advantages and shortfalls were discussed.

The discussions orientated to finding the best possible solution were supported by IDMA presenting the survey results, where military personnel, medical and tutorial community, as well as the Media representatives and population have expressed their preferences regarding the courses for disaster medical preparedness they would like to attend.

During final discussion all raised questions and provided proposals and solutions were reviewed and analyzed. Great majority of conference participants reached consensus about the conclusions of the two-day scientific work:

 From the array of existing course, educational and training programs a selection in regards to their effectiveness, applicability, comprehensiveness and feasibility has to be performed;

- The advantages of existing organizations and training programs have to be utilized as a base for establishing a new common joint civil-military medical educational and training process for achieving better disaster medical preparedness and establishing more sophisticated and efficient Trauma System and Combat Trauma Systems or one unified System;
- 3. The IDMA capabilities and capacities could be utilized as a valuable asset in Trauma System and Combat Trauma Systems education and training;
- The research, scientific and organizational capabilities of IDMA possibly could evolve to a level for educational and training outcome certification and knowledge and skills maintenance monitoring;
- 5. The integration between civilian and military medical educational and training systems and programs is required;
- 6. The requirement for realism in the Disaster Medicine education and training processes' length and content is significant;
- 7. The experience of International Organizations as NATO, Centers of Excellence, IDMA in supporting educational, training, planning and execution of Disaster Medical Support Management should be utilized;
- 8. Better information exchange in all educational, training and organizational topics between civil and military medical communities is of utmost importance.

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