Summary of the International Scientific Conference "Civil Military Cooperation Enhancing Combat Trauma System and Disaster Medical Management Capabilities" (12-14 September 2012, Nunziatella Military School, Naples, Italy)

Last decades have recorded a dramatic increase in the frequency and severity of manmade and natural disasters occurrence. Climate change and technological
developments create new sources of disaster. The population growth contributes to the
severity of disasters' impact, and emerging infectious diseases present new challenges
to crisis managers. With the globalization society is becoming more complex and
interdependent. Medical science and technological development have significantly
increased the capabilities and capacities of the disaster response community over the
last 20 years. Despite the fact that rescue and medical teams are becoming more
professional and better skilled, the modern world is seeing an inexorable rise in the
impact of disasters. Faced with more intense, frequent and complex impacts, there is a
pressing need to conduct research into the sources of hazard, vulnerability and risks,
the planning and organization of the disaster medical support, as well as the required
cooperation and coordination between the rescue teams and organizations during
disaster medical response execution, to disseminate the results and use them for the
purposes of reducing or coping better with the threats and risks.

There is a growing interest among scientists in many countries for new approaches to disaster medical support management. Consequently, the international community is paying increasing attention to enhancing national capabilities for disaster response and reducing population vulnerability in case of calamities.

Proactive and timely civil military medical cooperation and coordination of performed activities is an example of measures aimed to reduce the potential disasters' impact.

In convening the International Scientific Conference, "Civil Military Cooperation Enhancing Combat Trauma System and Disaster Medical Management Capabilities" (CMCECTSDMMC-2012), the Italian Military Medical Service understands the need for scientific discussion on medical coordination and cooperation issues, international exchange of information and best practices, on Disaster Medical Support plans and standard operating procedures.

The CMCECTSDMMC-2012 international organizing committee defined the key topic areas for the conference, namely National Civilian and Military Medical Services in the Disaster Management; International Coordination in the Disaster Medical Management; Multinational Experience in Disaster Relief Operation; Civil-Military Cooperation in Training, Planning and Execution of Disaster Medical Support.

A total of 100 members from national and international military medical services, military logistic commands, civilian medical entities, academia and experts attended the conference, representing 8 countries of Europe and America, NGOs, businesses and international organizations. In accordance with the CMCECTSDMMC-2012 agenda, six scientific sessions ending with panel discussions, a poster session and three round table were organized. There were 44 oral presentations and 15 poster presentations made on the four key topic areas of the conference. Forty-five (45) interventions were made at the roundtable and panel discussions. The scientific sessions were organized

in the following six panels - Italian Military Medical Experience in Disaster Medical Management and Support; Italian Civilian Medical Experience in Disaster Medical Management and Support; National Medical Experience in Disaster Medical Management and Support; Multinational Military Medical Experience in Disaster Medical Management and Support; Clinical and organizational aspects of Disaster Medical Support and Disaster Medical Management and Support – Education and Training. During the last panel Civil Military Medical Cooperation in Disaster Medical Management and Support – Way Ahead summary of the key conclusions, assessments and proposals made was presented for final discussions.

The conference presentations on Italian Civilian and Military Medical Experience in Disaster Medical Management and Support represented experience gained by the Italian Armed Forces and Italian Healthcare System during medical support to the disaster relief and humanitarian operations in Italy and abroad.

Moderators and delegates of the conference noted that:

- Civil-Military Cooperation in the Medical Support to ITA-led disaster relief operation was executed in various calamities and proved to be efficient and effective;
- ITA Military Medical Entities have capabilities and are ready to provide support to civilian healthcare providers when requested and where required;
- The capabilities required for disaster medical support differ from those for medical support to military operations;
- The established civilian and military medical standard operating procedures (SOPs) in case of disaster medical support coincide in their majority.

When discussing the issues of Italian civilian and military medical support in disaster relief and humanitarian operation the moderators of the panels concluded that for achieving better preparedness and more efficient medical support several challenges have to be addressed:

- Better coordination and information exchange between civil and military medical services is required
- The radiological health risk management and mitigation needs further studies and protocols clarification
- The differences between Trauma system and Combat Trauma system could form basis for development of the both systems

The discussion at the conference indicated that in Italy the civil-military medical cooperation during disaster relief operations is not a top national priority. The significance of the problem is also underestimated by the healthcare authorities in many other countries. During the panels National Medical Experience and Multinational Military Medical Experience in Disaster Medical Management and Support several speakers noted that civil-military medical cooperation issues should be incorporated in national development plans and into the planning of the international organizations, as well.

Delegates of the conference noted that international organizations and individual countries have already accumulated a large amount of data and experience and highlighted that:

- Great majority of nations has similar national approach to disaster medical support:
 - The disaster medical support is under the lead of civilian healthcare authorities;
 - There is a need of specific training, specialties and equipment for disaster medical support provision;
 - Presented national coordinating systems are complicated and relatively slow and the coordination and cooperation between the actors have to be improved;
 - Shorten the time for capabilities and resources allocation and transportation will increase the efficiency of the medical support.
- During medical support to disaster relief and humanitarian operations planning and management coordination and cooperation with Governmental Organizations (GOs), Non Governmental Organizations (NGOs) and International Organizations (IOs) are required and have to be broaden:
 - The national and international medical communities level of ambition is high, but there are several obstacles and challenges to be addressed and differences to be converged;
 - Despite the different environments and experience all the rescue and humanitarian actors have common goal and similar tasks;
 - The best way for convergence is sharing of the capabilities and information;
 - The Medical Information exchange is the achievable and realistic bridge.
- NATO poses civilian and military capabilities that could be utilized after NAC approval and only in supporting role. The experience and organization of the medical support in NATO environment could become basis for international medical support solutions development;
- Multinationality and close cooperation in the medical support to devastating disasters will reduce the financial burden and enhance the national capabilities;
- Elements of the military medicine could enhance the disaster medicine capabilities C4I (Command, Control, Coordination, Cooperation, Information), SOPs, triage, treatment and evacuation principles, to mention just a few;
- The focused education and training could reduce the population vulnerability and increase the possibilities for better medical preparedness and responsiveness.

During the Panel Clinical and organizational aspects of Disaster Medical Support conference delegates agree that every effort should be made to bridge the gap between the patients' need for emergency life, limb and eyesight saving medical assistance and the population expectation of medical assistance equal to the best practice and the paucity of medical means and capabilities available.

In concert with reducing the population vulnerabilities and enhancing the rescue teams' preparedness, the conference stressed that education and training are key to reducing disaster risks. The presentations and discussions in panel Disaster Medical Management and Support – Education and Training emphasized on:

• The requirement students to be better prepared for the challenges of medical support to military operations;

- The transparent objectives and tasks of the proposed master program in Military Medicine:
- The different approaches for students better preparations for disaster relief and humanitarian operations medical support:
 - Disaster medicine course in the Medical universities' programs also in the postgraduate specializations;
 - Trauma care course for surgical specialties;
 - Major Incident Medical Management and Support advanced course;
 - Forward MEDEVAC course for military medical officers.
- The requirement for common standard operating procedures for civilian and military field hospital organization and management in case of disaster relief operations;
- The requirement for advance technologies implication in the training process;
- The paramount of preventive measures in the Disaster Response Planning and Execution:
- The significance of rescue teams' safety training and research;
- The need of Disaster Medicine national systems to be focused on research and education not only of the medical professionals, but also to the trainers, therefore to the continuity of the Disaster Medicine education;
- The requirement acquired knowledge to be shared between the countries for benefit their training and educational programs;
- The option NATO to play greater role in prevention and preparedness for Disaster Medical Support Management by sharing its experience in multinational medical support provision in austere and hostile environments;
- The utilization of all available data bases and trauma registries in Disaster Response Planning and Execution;
- The healthcare system resilience in case of Disaster the objective of the preparedness process;
- The importance of the fitness and training of the emergency care providers;
- Familiarization of all healthcare providers with their community plan for Disaster Response and their training to fulfill their specific duties according to the planned activities;
- The exploration of all possible means of education from online courses to postgraduate master programs and specializations;
- The recommendation that Disaster Medicine concepts and principles have to be included in all medical residencies:
- That to be educated means to be ready;
- Base knowledge for disaster medical support has to be included in the theoretical and practical surgical courses;

During final panel all issues were discussed and the delegates reached consensus and provided some proposals for achieving better civil military medical cooperation in the provision of medical support to disaster relief and humanitarian operations:

- 1. With regards to Trauma System and Combat TRAUMA System the similarities between the two systems as their common objective could form basis for common education and training of civilian and military healthcare providers;
- 2. It is desirable Disaster Medicine to enter in the Italian civilian and military medicine educational programs;
- 3. The Disaster Medicine education should be continuous and gradual;
- Specific medical training, assuring rescue teams' safety has to be planned and executed;
- 5. The integration between civilian and military medical systems is required in the medical support to Disaster Response Planning and Execution;
- 6. The requirement for realism in the Disaster Medicine education and training processes' length and content was noted:
- 7. The role of International Organizations as NATO in supporting educational, training, planning and execution of Disaster Medical Support Management was highlighted;
- 8. The interoperability between civilian and military medical equipment and Standard Operating Procedures has to be addressed;
- 9. As a final conclusion the requirement for better information exchange in health risk evaluation and common Disaster Medical Response Planning with clear and transparent Command, Control, Communication and Coordination between military and civilian medical entities was noted.
- 10. The delegates proposed establishment of International Civil-Military Medical Board in order to prepare proposals to the civil and military medical authorities for educational, training and planning measures to be implemented for assuring better Disaster Medical Support Management preparedness.

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