



Large Scale Emergencies: proposing a supportive mobile unit for the management of patients with disabling pain as well for palliation of distressing symptoms related to life-threatening diseases

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Dear editor,

in the year 2009, a series of disasters have occurred. Abruzzi: 293 fatalities and 1500 wounded people. Viareggio: 29 fatalities and 30 wounded people. Messina: 35 fatalities and 40 wounded people. Samoa Island: more than 1000 dead and more than 700 wounded people. These are just some of the tragic events that have occurred in 2009 over a period of eight months.

Catastrophes can cause a high number of victims. During large scale emergencies caused by either natural disasters (earthquakes, avalanches, floods, tornados) or human acts (conflagrations, terroristic acts, etc) the first aid philosophy is to recognize the need for triage so to help foremost the individuals with more severe injuries. In Italy, the so called advanced medical structure (Postazione Medica Avanzata, PMA) is assigned to triage and stabilize patients' vital signs, and then coordinate the transfer of these patients to operational tertiary care centers. The PMA staff includes physicians and nurses. There are two types of PMAs. The PMA level I is a motorized agile health care delivery unit that has the ability to assist at least 10 patients, and operate thanks to one or more vehicles or a transportation system that will allow the PMA unit to travel and move to where it is most needed. The PMA level II is a more complex hospital camp-like structure that is able to provide assistance for 50 patients over a period of 72 hours.

In large scale emergencies, a great number of patients with pain, whether directly related to the acute traumatic event or to a chronic disease, including cancer, remain without a medical home. Indeed, many patients end up with the loss of their existing medical home due to the local and regional health care organization upheaval caused by the catastrophe. Considering the high prevalence of chronic pain, a vast population of patients is left with unnecessary suffering and unmanaged pain. The Joint Commission on Accreditation of Healthcare Organization (JCAHO, 2000) has stated that pain should be considered as the fifth vital sign. Despite the JCAHO recommendations, the management of acute and/or chronic pain during catastrophes has never been adequately addressed and handled.

Our proposal of a special mobile pain management PMA calls for immediate action on a territory in case of a catastrophe with the primary goals of integrating the action of the 2 levels PMAs as far as the management of acute pain related to traumas and supporting the local health care system for the management of patients with chronic painful illnesses. The necessity of treating the acute post-traumatic pain is based not only on the need to relieve unnecessary suffering, but also to minimize or prevent the deleterious biological effects (e.g., tachypnea, hypertension, tachycardia, vasoconstriction) stress and excruciating pain may cause for the injured patients. Of note, the use of nonsteroidal anti-inflammatory drugs remains contraindicated in situations such as the "crush syndrome" due to a higher risk of organ damage and internal bleeding. Therefore, knowledge and skills in alternative treatments, including the use of opioid agents, are necessary. Opioids should be used and recommended as first line agents in post-trauma patients with internal organ injury, bleeding, or kidney damage.

The special mobile pain management PMA will continue to be involved for at least six months in the care of patients with chronic painful illnesses. These are individuals who have suffered injury and may continue to suffer from post-traumatic pain and there are existing patients who have a history of chronic pain prior to the catastrophe, e.g., patients with cancer related chronic pain. In these cases especially when interventional techniques or opioid agents need to be used, a special pain management PMA will be ethically and medically fundamental and highly required.