

# Nostradamus

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**Abbreviations:**

EMS = emergency medical services  
AIDS = autoimmune deficiency syndrome

The view that I will share is one that I have come to believe from my past 35 years of experience in the areas of Emergency and Disaster Medicine — the field of medicine that is influenced exceptionally by society. Thus, Emergency Medical Services (EMS) Systems should be designed with social factors weighted as heavily as are the medical ones. When you consider the kinds of emergencies to which we respond as medical personnel, it becomes apparent that often it is the activities of the community that dictate the kinds of emergencies with which we will be faced. On the other hand, by definition, a community is a group of people that is “organized”, i.e., they need to have systems such as EMS in order to function in the capacity of a stable community.

The two, EMS and the community, are interdependent. The community needs us — emergency medical personnel — to have the know-how and organization to deal with any emergency situation that might arise, both the routine as well as the unexpected. They rely on us to ensure their safety. Likewise, EMS need the community to support us with funding and assistance in establishing laws and procedures that mitigate the loss of life in emergencies. They need our cooperation in disseminating instructional information for use in educating the general public in methods that allow them to support and participate in our efforts to save lives. We need each other, and we need to understand the ways in which we both are affected by the social environment.

Social needs for emergency care change unceasingly, both qualitatively and quantitatively. This indicates a need for researchers in Emergency and Disaster Medicine to foresee the future *social changes* in order to create and establish better strategies and to improve the

EMS systems.

But is this possible? Can people foresee the future? I believe they can. Nostradamus, the world famous, 16th Century French physician is reputed as having had such an ability. And, in fact, when one reads his writings entitled “The Centuries”, it seems that he predicted the future with startling accuracy. Among his predictions were calamities such as the Great Fire of London, wars like the French and American Revolutions, atrocities such as the assassinations of the Kennedys, and the arrival and eventual proliferation of such diseases as AIDS — just to name a few. Natural disaster, conflict, violence, epidemics: these are the things that he predicted. Is it supernatural power that offered him the ability to do so? Perhaps.

Personally, however, I do believe that each of us not only could, but should try to predict the future. Not visions in the hazy, mystical sense of Nostradamus, but “vision” in the very tangible sense of seeing that which is before our eyes. I believe that by looking at our respective cultural and social environments, with the keen observation of a trained eye, we possibly could anticipate to a certain extent, that which could prove disastrous in the future. Of course, doing so would allow us to design EMS systems that efficiently and effectively could deal with and mitigate the loss of life in emergency situations.

Let us look at a few examples. Take Japan, for instance. It is common knowledge that the economic bubble has burst, and we are in the midst of a recession. While on the surface, this seemingly is an occurrence that has little to do with the field of Emergency Medicine, in actuality, it has had a very significant effect on the emergency medical needs of the community. This is evident when one notes that last year alone, Senri Critical

Care Center, where I work, has seen a 100% increase in the number of suicide attempts among men, many of whom are forlorn over their monetary situation. After the oil crisis, some years ago, there was a sudden increase in the number of bicyclers on the streets which, in turn, resulted in a large increase in the number of traumatic injuries from bicycle accidents. Also prevalent is the phenomena of copy-cat crime, as was seen four years ago, after the Sarin gas attack in the Tokyo subway. Soon after that attack, there were various attempts involving similar activities.

There have been some more subtle, gradual changes as well. For example, a change of diet and eating patterns has evolved over the past decade. Just look around at the plethora of fast food restaurants that abound. This transformation is sure to increase the number of cardiac- and stroke-related emergencies that we encounter in the Emergency Department.

Other gradual changes that occur within the social environment and play a role in emergency medical structures include public awareness and opinions of emergency medical practices. For example, over the years, we have seen a change in attitude among the public in dealing with intensive care (ICU) cases where resuscitation is not desired. The public is very much a part of EMS, and we need to consider the ever-evolving needs of the community when designing an EMS system.

We must be aware of such cultural trends and deal with them appropriately, as it is quite conceivable that we could speculate about the problems that will arise, meet the needs, and consequently, minimize the number of related deaths.

Asia provides a good model for speculating about the

problems that are bound to surface in the new millennium. It is in a whirlwind of change. Refugees are increasing as the unrest among ailing political situations continues to grow. The environment is becoming worse as pollution increases. Urgent problems in dealing with the proper functioning of basic systems like sanitation, clean water, safe housing are emerging as the population increases exponentially and the number of mega-cities multiplies yearly.

We must look at all of these situations carefully and predict. Social factors are inherent in emergencies, and thus, must be analyzed when creating a solid and effective EMS system. Likewise, EMS needs social approval and investment to function properly. What takes priority in people's lives *is* what is happening, *not* what is possible. Therefore, it is essential that we, as emergency and disaster specialists, keep abreast of the social environment, analyze, and educate people about the connections between a good EMS system and social conditions. Public awareness is sure to keep EMS running smoothly. As interdependent parts of a safer world, EMS and the community provide the foundation for the other. And, the maturity of a society can be evaluated by the investment made by the society.

In the 21st century, we are destined to face many new events. Nostradamus predicts massive disasters worldwide as we enter the new millennium. I believe that we should make our own predictions based on assessments of our respective social cultures, and we must see to it that we design our EMS systems to adequately deal with the potential emergencies that we envision, and thus, ensure that Nostradamus' premonition of mass disaster across the globe is not, in fact, realized.

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