that gives them the possibility to put into practice their knowledge in a field in which "time" is a detail of primary importance.

Our area has been providing refresher training courses for a long time. These courses are addressed to local physicians and their task is to provide them the technical and practical information that usually are requested in cases of emergency. Their principal aim is to show how to behave in these particular situations: they teach how to make use of technologies. After considering all of these factors, we think it is necessary to mention some distinctive features that determine the knowledge base of a physician who operate in the prehospital emergency field. This physician must be able to:

1) Identify and deal with the main internal acute pathologies;
2) Carry out a simple or complete cardiopulmonary resuscitation in proper way;
3) Stabilize and immobilize a polytraumatised;
4) Know the tectonics of auto-protection in order to work in safe conditions;
5) Use the radio properly;
6) Know the location of each hospital provided with departments for critical patients;
7) Know the several types of sanitary means of transportation;
8) Organize and regulate a sanitary intervention in case of emergency, from the "yard" to the "PMA";
9) Keep a cool head even in the most uncomfortable situations;
10) Have an aptitude for command–being able to keep up the position of "leader" in the management of the aid;
11) Have and keep a physics performance that allows any working condition; and
12) Check and update the organizing, technical and medical knowledge every so often.

This kind of training has been brought into action for some years and it has improved both the cultural level and the performances of each operator. Besides, thanks to this sort of initiative, the same operators have considered the opportunity of cooperating together with the other components of the rescue chain.

039.
Modeling Disasters

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It is common believe that disasters create chaos. Yet, it is possible to bring order into these events. By dividing the chain of medical care into phases, each of them can be analyzed according to personnel, material and methods utilized, resulting in a capacity for each phase. Not only are these principles of importance in the response stage, but also in the preparedness stage. This model could be used to develop scenarios for different areas (centers) and sites at risk (airports, stadiums, industrial sites, etc.) possibly with the aid of a computer.

038.
Education and Training in Disaster Medicine

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Without proper education and training of personnel, the use of excellent material and efficient methods is worthless for managing a disaster adequately and efficiently. Therefore, in 1992, the International Society of Disaster Medicine issued a curriculum for education and training in disaster medicine. Seven levels of knowledge and practical skill are defined, varying from ambulance staff to medical coordinators. The topics included are medical care, public health, disaster management, and education and training.

The most logical next step ought to be the production of a uniform and standardized text. In this respect, however, the problems encounterred are two-fold: 1) disaster management proper is mainly determined by the socio-economic and the lego-administrative infrastructure of a specific country; and 2) by the various "schools" responsible for teaching disaster medicine. The International Society of Disaster Medicine and the World Association of Disaster and Emergency Medicine could play an important role in solving these problems.

128.
Multimedia Teaching in Disaster Medicine

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The use of multiple media resources (text, graphics, video, and sound) in teaching applications increases a student's attention and allows self-instruction, putting the user in a computer-simulated environment, where he can test his capacity to make appropriate decisions and actions. This is useful in particularly disaster medicine, which requires the capacity to follow scheduled flowcharts, and to apply a high number of manoeuvres that cannot be described effectively using only text and figures.

In 1995, our department, in cooperation with the TELEMED Consortium, set up courseware on basic cardiopulmonary resuscitation. Every page of the courseware describes a life-support procedure using text and digital video. Hypertext allows the user to browse between related concepts. Rapid data access is provided by automated analytical indexes and by an operative flowchart that summarizes the sequence of procedures to be carried out. A training section includes various types of test (multiple choice, graphic choice, open-ended answers) and a simple simulation which allows the user to learn the correct tempo and alternation of CPR manouvres .

The multimedia courseware on basic CPR presently is used by our sixth-year medical students during the academic year 1994–95. Pre-test versus post-test comparison showed a satisfactory global increment of student performance.