

## Evaluation of the Emergency Management in Developing Countries

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The careful evaluation of the management of emergencies needs wider attention. As the population exposed to hazards increases world wide, and as risks multiply, there is more that we need to know in order to manage them. Furthermore, as conflict-related emergencies increasingly are becoming chronic, evaluation methods need to demonstrate not only that assistance is maintaining health, but also that it is not prolonging the conflict. Although some tools have been used for many years in developed countries, new approaches are needed for developing countries. Characteristics of many developing countries are a weak central planning and management capacity, a lack of strong decentralized emergency response capacity, and dependence on the international organizations for a response. Robust tools that will work in this environment are needed.

A variety of evaluation tools exist that can be adapted and applied as program indicators, particularly in public health activities. Key benchmarks have been developed and published as the SPHERE standards. These cover not only the traditional outputs and outcomes, but also the process used to establish assistance.

Despite traditional planning tools, we, also, have increasing problems preparing for emergencies, which have no organizations able to play a leadership role. Even within the UN system, the Consolidated Appeal Process has many duplicate and uncertain steps. A community-based approach is needed for developing countries; yet, traditionally, vulnerability assessment is addressed from a central-based approach.

There is now the need to more aggressively address the economic indicators of emergencies, moving beyond the usual assessment of dollar value of property loss. What was the number of Disability-Adjusted Life Years lost in an earthquake? How has an event affected the productivity of a population? Can we compare—in terms of human existence—earthquakes, road traffic accidents, and childhood diseases in a way that will help countries effectively allocate meager resources?

Beyond these, questions about the consequence of emergency aid remain. What are the effects of assistance on market prices or employment patterns? More importantly, what effects may international assistance have on the nature of conflicts? Does it extend the life of conflict by fueling it? Does it raise the stakes and make the individual and/or communities more vulnerable? Does it impede the post-conflict rehabilitation of infrastructure?

There is much we need to know to be effective managers. Some instruments are on hand, others need to be developed. Perhaps the most critical element is guaranteeing that learnt information is used properly in the decision-making process.

**Keywords:** aid; community; developing countries; emergency, evaluation; indicators; outcomes; planning; rehabilitation

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## 2.8. Technologies in Defence Medicine

### Why Use Simulation in Military Medicine?

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Three factors make simulation a vital and timely part of training in military medicine: the nature of the work, the technology available and the developments in educational techniques.

Resuscitation of critically ill casualties forms a significant part of military medical work. The wide variety of clinical problems includes blunt and penetrating trauma, chemical and biological agent exposures, hyperthermia, envenomation, electrocution, drowning and myocardial ischaemia. Dealing with these conditions requires a rapid coordinated team response in varying environments.

Recent developments in simulation technologies now permit recreation of many physical signs and monitoring displays. They have created robot patients that can react realistically to a wide variety of interventions. In addition the ready availability of audiovisual and computing resources make recording and reviewing scenarios easier.

Perhaps the most significant changes though have been in educational strategies that enable us to make best use of this technology. It is clear that it is not enough to have only theoretical knowledge about all these problems. We need to rehearse our solutions. The understanding and techniques become ineffective without the ability to plan and coordinate their application. Increasing emphasis is being put on issues that relate to teamwork and communication in delivering effective treatment. The use of interactive, small group learning with practical scenarios and immediate debriefing enable review of events and answers to two important questions: 1) What did we do well, and 2) What can we improve on in the future?

Military training has used simulation for many years. Recent developments in patient simulation have brought new opportunities for improvements in medical training. The dictionary defines skilled as having knowledge, dexterity and preparedness to act. Simulation is the next best thing to real life experience in improving our skills.

**Keywords:** Military medicine; preparedness; simulation; training

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### The Organisation and Design of Field Hospitals

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SO1 Force Development, Army Medical Directorate, MOD, Royal Army Medical Corps United Kingdom. The organisation and design of field hospitals within the British Army is evolving in line with the trend to more expeditionary operations. This presentation will discuss principles