SPECIAL REPORT

Emerging Issues and Future Needs in Humanitarian Assistance

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Keywords: aid; assistance, humaniarian; barriers; complex emergencies; dangers; data; development; disaster; effects; efficiency; evaluation; health system; managers; non-governmental agencies; participation; policy-making; prevention; recipients; reform; volunteers; workers, field

Abbreviations:
CHART = Combined Humanitarian Assistance Response Training
HELP = Health Emergencies in Large Populations
ICRC = International Committee of the Red Cross
NGO = non-governmental organization
OFDA = Office of Foreign Disaster Assistance
PAHO = the Pan-American Health Organization
WHO = World Health Organization

Abstract
During the past two decades, there has been tremendous investment in the ability to intervene in disaster settings, and significant barriers remain to providing appropriate services to populations affected by natural and man-made calamities. Many of the barriers to providing effective assistance exist within the NGO community, and illustrate emerging needs for international agencies. These emerging needs include improving methods of recipient participation to promote the local health system, developing improved methods for quality assurance, enhancing options for personnel development, and addressing long-term needs of reconstruction and rehabilitation. Relief agencies face challenges on all levels to develop sound practices in providing humanitarian assistance that can lead to long-term benefits to populations affected by disaster.

VanRooyen MJ, Hansch S, Curtis D, Burnham G: Emerging issues and future needs in humanitarian assistance. ***Prehosp Disast Med*** **2001; 16(4):216–222.**

Introduction

Disasters are occurring with increasing frequency because of explosive population growth, rapid urbanization, poor land use, and industrialization. In addition, modern warfare in the post-cold-war era has caused profound effects on the health and productivity of entire populations. During the past two decades, there has been tremendous investment in the ability to intervene in disaster settings. Unfortunately, many of these efforts have been ineffective.[1,2] While advances in telecommunications have improved our ability to access and characterize a disaster, significant barriers remain to providing appropriate services to people and communities affected by natural and man-made calamities.

Many of these barriers to aid are due to the nature and complexity of specific human emergencies, such as multiethnic conflicts (Bosnia), new frontiers in military intervention (Somalia, Kosovo), and those with disregard for non-governmental organization (NGO) neutrality (Sierra Leone, Chechnya). However, many of the barriers to providing effective assistance also exist within organizations; many lack the professional support or institutional memory to continually improve operations.

Humanitarian aid still is a young science (and art). Significant needs and deficits remain in the organization and provision of aid. In addition, there are entrenched, vested interests that prevent even the best aid organizations from objectively evaluating their own work. Despite efforts to standardize and coordinate humanitarian activities, the relief community remains an intricate mosaic of people, capabilities, and allegiances. As this mosaic recreates itself with every new major emergency, there are a number of recurrent incongruities that emerge. The goal of this paper is to

Field Operations
Recipient participation
Promoting the local health system
Evaluation and Assurance
Improving field data collection and analysis
Using qualitative data and field measurements to improve program quality
Human Resources
Enhancing training and professionalism in humanitarian workers
Improving the effectiveness of field managers
Utilizing short term volunteers
Addressing psychological needs of field workers
Addressing danger to field workers and the need for security training
Organizational Policy
Using health as a bridge to peace
Increasing focus on disaster prevention
Addressing post-crisis reconstruction of health services
Anticipating the harmful effects of aid

Table 1—Emerging issues and future trends

explore emerging issues of importance in humanitarian assistance, particularly in the health sector, and to discuss future trends. In all cases, the intent of the authors is to open a dialogue on how the variations in practice among the organizations can be improved for the sake of excellence in humanitarian assistance.

Emerging Issues and Future Trends

In the context of this discussion, emerging issues are defined, in general terms, as issues that are understood to be of significance, but are not well-developed in the practice of humanitarian assistance. These key issues significantly impact the operation and performance of providers of humanitarian assistance, particularly in the health sector. These issues are divided into the topics listed in Table 1.

1. Field Operations

The need for improving field operations has increased as NGOs function in conflict and post-conflict settings with a number of competing and complicating factors. In these situations, there is pressure to perform rapid evaluations, respond to emergency needs, and simultaneously integrate the mechanisms of transition from relief to development operations. There have been many lessons learned from past emergency activities. The most important include involving the recipients and local health providers and promoting the local health system.

Recipient participation

Relief workers, disaster managers, and journalists alike often forget that most of the life-saving action—whether search and rescue or food acquisition—is performed by the communities themselves, with limited help from international agencies.[1] They are the survivors and often heroes, though we rarely acknowledge or publicize their efforts. Even where NGOs deploy in large numbers, the vast majority of NGO staff doing the immunizations and feeding and building are local hires—the emergency-affected populations.

The neglect to incorporate the recipients of aid into the selection and design of relief efforts has contributed to the ineffectiveness of numerous field programs. Recipients are not consulted routinely, and if they are, typically it is late in the process. Early efforts using participatory methods for program design have been encouraging, but it is not clear how these methods may be translated into the acute disaster setting. One attempt to address this issue is the Ombudsman Project, which aims to provide an official avenue for recipients to participate in the management of relief efforts.[2] This type of "field friendly" method for ensuring recipient participation should be incorporated into the design of relief efforts, so that NGOs can more easily and more reliably work with the beneficiaries of assistance.

Promoting the local health system

Both military and civilian organizations have utilized mobile clinics that can set-up on a site, draw large numbers of patients, provide mass treatments, and then, pack-up at sundown.[3] Transient clinical programs rarely are sound medically, and often may be dangerous; such mobile health clinics and transient curative programs can quickly undermine the local primary health care system. Thus, individuals and communities are encouraged to bypass local personnel in favor of expatriates, who may not necessarily be trained appropriately to handle the medical needs of the affected population. Inappropriate health care is not better than no health care—because of the risks involved in spreading disease, community dissatisfaction, and risks often incurred in traveling to and from distant medical facilities.[4]

Transient health posts in refugee settings certainly serve a purpose, but even in this setting, early investments in training indigenous personnel and adaptation to a system familiar to the constituents will yield long-term benefits in the post-emergency phase. The promotion of primary and community-based care by equipping and supporting local health posts, can stabilize the health of the population, provide essential community-based care, and form the foundation for the next tentative steps toward rehabilitation, reconstruction, and long-term development.

2. Evaluation and Assurance

The principal way to ensure efficacy of humanitarian aid programs is to study what has been successful in the past, and to use this evidence to design future programs and create policies.[4] In order to institute these 'evidence-based policies', the international relief community must develop and streamline systems for data collection and analysis, and then, translate the information into implementing changes to improve their programs.

Improving field data collection and analysis

In the past several years, there has been concern voiced about the quality of health information systems in emergency situations. Often, the individuals or organizations that provide initial statistics, such as mortality rates and infant death rates, are wrong. The net death totals spoken about and published for various disasters often are quite inaccurate. Reasons for this imprecision range from incompetence to deliberate political fudging. Because there is no

central credible and honest authority to gather epidemiological data, there often is room for insertion of bias by news agencies or governments that may report erroneous numbers to justify their intervention.

The essential task of reliable data collection in emergencies must lie with international aid agencies working with the affected population. When governmental statistics fail and military estimates are biased, NGO statistics are one of the most reliable sources of information. Accurate statistics require compliance among the major players on the ground and a standardized method of data collection. It is an unfortunate myth that statistical analysis is too time consuming to perform during a humanitarian crisis. On the contrary, because of time constraints, lead agencies can't afford NOT to perform accurate and statistically sound assessments. Without doing so, organizations will risk misplacing much-needed assistance.

Using qualitative data measurements to improve program quality

Steps have been taken to ensure that most humanitarian organizations use a standard information system, with very basic indicators, that begins during the emergency phase. Appropriate emphasis has been placed on crude mortality rates as an overall health status indicator. Surveillance using case sentinel events has been used successfully to characterize the health status of affected populations. In a recent study of 45 refugee camps, Spiegel *et al* found that although there was extensive variation, the health information system broadly represented the health events in the refugee community.[5]

How relevant is this information for future planning? It is likely that during the post-emergency phase, a different type of information is needed for program design and monitoring than is provided through use of standard disease tally sheets. For example, in the post-emergency phase, crude mortality rates lose much of their value as indicators. Bolton describes a qualitative assessment methodology that can be applied in order to understand how a community perceives its health needs.[6] Using this approach in refugee populations, health services may be redesigned to better meet community needs. Since emergencies are lasting longer, there is a major need to improve qualitative measures and strengthen the monitoring so that these programs can transition more efficiently into development. It is time to look beyond the simple outputs of numbers of reported cases, and to begin to measure the outcomes and impacts of health programs for displaced populations.

Collection and analysis of data not only are important for future planning, but they also can be used to evaluate the effectiveness of an intervention, and to compare it to other interventions in order to set priorities on the basis of relative effectiveness, efficiency, costs, and benefits that result. Large amounts of money often are donated to disaster relief operations, yet little has been done to study the cost-effectiveness of various relief activities.[4] Cost-effectiveness may not be the only element used in planning and prioritizing relief activities, but cost-effective analysis will provide another tool for comparing and evaluating relief activities. Loevinsohn *et al* used cost-effective analysis to evaluate whether vitamin A supplementation should be targeted to high-risk populations. They found that targeting was not cost-effective, and that vitamin A supplementation should be administered to all of the pre-schoolers in the developing countries.[7]

Such studies use evidence collected from the field to determine the effectiveness of a program, and can be used by other organizations to improve their programs. Griekspoor *et al* also conducted a study on cost-effective analysis of treating visceral leishmaniasis in the Sudan as an example of using the Disability Adjusted Life Years (DALY) to evaluate health interventions.[8] In this particular situation, treatment of visceral leishmaniasis proved to be a very good value. The development of these types of evaluation tools for field operations could prove extremely helpful in comparing, evaluating, and prioritizing health interventions.[8,9]

3. Human Resources

The success of a humanitarian intervention hinges on the personnel in the field. Therefore, training and support of field personnel is crucial to the implementation of any organization's programs.

Enhancing training and professionalization of humanitarian workers

Improving the performance and effectiveness of humanitarian workers has been a goal of many graduate-degree and short-course programs.[10] The International Committee of the Red Cross (ICRC) course Health Emergencies in Large Populations (HELP), the Combined Humanitarian Assistance Response Training (CHART) course, and the Office of Foreign Disaster Assistance (OFDA) funded courses, and others have attempted to address this issue. In addition, management of health programs in humanitarian emergencies is now well-established in the curriculum of some schools of public health.[10,11] It seems intuitive that health managers trained in basic principles will make more appropriate decisions and avoid costly mistakes. However, with the rapid turnover of personnel and the trends of using more professional staff from developing countries, there still is a long way to go in order to create a stable cadre of readily available, skilled, health managers.

Experience in other areas shows that the lack of needed skills is a major cause of poor employee morale. Inadequate skills and lack of technical support may be a major reason for the high turnover of health workers, and the large number of health workers in some organizations who leave before the end of their contracts.[12] Waldman *et al* discuss new conditions that public health workers must face when working in disaster relief.[10] Today's disasters often are complex emergencies precipitated by conflict between states; they commonly involve large populations and human rights abuses.[10] These new disaster scenarios should be addressed by NGOs as they prepare their leaders for work in the field.

Improving the effectiveness of field managers

Much of the immediate responsibility for any relief operation lies in the hands of the NGO field manager.

Improving field operations starts with improving the leadership and administrative capacity of field managers. Field program leadership requires management skills in project assessment and planning, finance, personnel and human resources, and quality assurance and reporting. Field managers from most NGOs have little experience in program management, and typically arrive in this position from a technical background, with sector-specific skills in food and nutrition, water and sanitation, or health. In order to improve field operations, the NGOs must identify and train field personnel in basic management principles. While larger NGOs may provide such training, there are no management courses available for the greater NGO community.

Utilizing short-term volunteers

There have been numerous criticisms of NGOs for being insufficiently professional, but bureaucrats and pundits neglect the soul of NGOs — that the best work done by many NGOs is by intelligent, motivated, specialist *volunteers* who are not able to commit decades or careers to working abroad. Very often, they just are willing to take off from their jobs for a few months in order to help out during the worst crisis periods. 'Burnout' (spiritual fatigue) is not the only reason that field staff stay only for short periods. It also is due to the fact that the best aid workers have high opportunity costs; that is, better-paying positions waiting for them at home. Indeed, the NGOs have a difficult, perhaps impossible, job retaining intelligent, educated, creative individuals on whom there is enormous pressure to relocate to the commercial world of stability, safety, and job security.[10]

There is no perfect balance for recruiting the right people for long-term commitments, and the most qualified or skilled individuals often are the least able to stay for long periods. The NGOs provide value precisely in creating opportunities for top-talent volunteers to jump in for those periods that their schedules allow. The answer then, lies in the ability of NGOs to manage short-term personnel, and to provide innovative, educational options for field staff.

Addressing the psychological needs of field workers

As health personnel are caught-up in conflict situations, and are confronted by unspeakable atrocities, the emotional toll on these health workers is likely to be high.[13] But how high, of what kind, and of what duration? What measures are effective in ameliorating the consequences? Are the emotions experienced by national relief workers different from those of expatriate workers? We know few answers for any of these questions.

Although some organizations provide active psychological support, many relief organizations continue to recruit and debrief employees by telephone. In the USA, a legal precedent has been set for providing psychological support to fire and police personnel who have been emotionally traumatized in their work. Relief organizations have the same responsibility to their staff traumatized in the course of duties in Bosnia, East Timor, or the Congo. One example of such a program is the Caribbean Stress Management in Disasters Program, created in 1998 by PAHO/WHO to address the psychological needs of disaster workers. An added benefit to such a program is that it can be modified to address the psychological needs of local employees and the aid recipients.[5] Evaluation of the success of the program and its applicability to other countries and situations will yield important information that can be used by other organizations. There still is much to study, learn, and apply from these experiences.

Addressing danger to field workers and need for security training

Humanitarian assistance places individuals in complex and often hostile political settings. Neutrality for relief workers no longer can be assumed, just as the symbol of the Red Cross or Red Crescent no longer can provide immunity from violence. Many present-day combatants not only ignore NGO neutrality, but use NGOs and the relief they provide as weapons of war. A number of factors combine to create hazards for NGO workers. The speed at which NGOs enter a humanitarian arena, pressure from headquarters, and the denial of the real risks in the field create dangerous and potentially life-threatening situations for humanitarian aid workers.

Until recently, personnel in headquarters and field managers alike have received little or no formal training in security and personal safety, and often are unaware of field concerns until they are on the ground. A number of NGOs have undertaken security training for field staff, and many have adopted security policies for field operations. Yet, because of high turnover and short institutional memory, these efforts are insufficient. Improved security training, contingency planning, and site-specific situational analysis are important practical issues that must be addressed.

But the question remains to be answered: Are humanitarian workers at greater risk today compared to the past? Although this is a common perception, solid data are not readily available. In an analysis of data from 382 deaths, Sheik *et al* found that deaths from intentional violence accounted for 67% of all humanitarian worker death.[14] The study suggested that deaths due to hostile acts were increasing. In an analysis of deaths among UN peacekeepers, the same trend was noted, with the Middle East and Africa being the most dangerous locations. Nevertheless, understanding of the causes of injury and death among humanitarian workers continues to be hampered by lack of clear information.[15] Solid prospective data with denominators for the number of humanitarian workers at risk are needed to quantify morbidity and mortality.

One possible way to combat the violation of medical neutrality, is through the collection and documentation of these abuses. David Stein and Barbara Ayotte documented the abuses of the population and healthcare workers in East Timor.[16] There were clear breaches of the Geneva Conventions, and their documentation provides evidence of the violations of medical neutrality that are indictable crimes.[16]

4. Organizational Policy

Using health as a bridge to peace

The notion that health professionals and organizations can exert a positive influence for peace in the political strata has

been well-documented in the humanitarian efforts of number of organizations. Médecins sans Frontières won the Nobel Peace Prize in 1999 for humanitarian efforts contributing to peace, and in 1997, the Physicians for Human Rights shared the Nobel Peace Prize as a founding member of the International Campaign to Ban Landmines. High profile public health campaigns have led to cease-fires to accomplish child immunizations, onchocerciasis control, and other health access issues. While there are many conferences and papers on the concept, the solid evidence for the long-term impact on political instability is unsubstantiated. As Banatvala and Zwi observe, no study has evaluated the effects of humanitarian aid on the duration or effects of war.[4] Although temporary cease-fires can be brokered and transient corridors of peace negotiated, the impact of these measures is unknown.

Conversely, the phenomenon of rehabilitated health facilities serving as a magnet for hostilities, the deliberate targeting of health workers and bombing of hospitals now is common practice. With civilians being the deliberate targets of warring parties, the health benefits of transient cease-fires seem a weak incentive compared to the risk of brokering such deals. When looking to provide a response by health workers, often the first concern is to protect the victims from violence. But the role that healthcare workers can play in a conflict situation has not been well-studied, nor are healthcare workers usually trained to handle this role.

The concept of health as a bridge to peace may be seized by policy-makers to institute humanitarian activities in volatile situations as an alternative to making difficult political decisions.[4,17] Use of this "humanitarian fig leaf" by policy-makers has exposed relief personnel to physical danger in political stalemates, while there is a continuing failure of political will to address the root causes. Graphic media attention to human suffering has prompted relief responses in situations that simply are not ready for political resolution. There are an increasing number of situations in which humanitarian organizations probably can relieve more suffering through political advocacy.[18,19] Holding policy-makers accountable for inaction and lack of political will, in some instances, should supplant traditional apolitical relief activities.

Increasing focus on disaster prevention

The drama of people dying of war wounds vividly displayed in the media, compels us to act. Yet, it is uncommon that the media depicts the significant successes of programs that prevent crises and avoid deaths. Disaster responders most commonly appear in the later stages of crises, and do not even realize that disaster prevention and mitigation strategies were in place long before their arrival. Many of the most profound achievements of the aid community have been the least documented. One example was the work of the International Committee of the Red Cross (ICRC) in the early part of 1992 in Somalia, which saved tens of thousands of lives many months before the rest of the aid community (and US military) became involved. Arguably, our finest achievements have been the least visible.

Disaster prevention requires a complex combination of local political will, appropriate administrative infrastructure, available funding, and expertise in disaster planning. Developmental activities that improve infrastructure ultimately improve the response capacity of communities or nations, but targeted development of a county's ability to respond to disasters requires specific preparedness. Too few of these national programs exist, and there is need for funding organizations to promote disaster planning and preparedness.

Addressing post-crisis reconstruction of health services

Following a protracted conflict, the health infrastructure often is left in disarray through direct effects such as destruction of facilities, and indirect effects such as loss of health personnel and economic collapse. Relief organizations are not the best suited for long-term health system reconstruction, and development organizations understandably are hesitant to begin programs in unstable, post-conflict circumstances. Donor organizations tend to concentrate heavily on restoring the economic structure. Where funding for rebuilding health services is available, often there still is an emergency focus such as rehabilitating physical structures and supplying equipment from the donor country. The hard decisions about what type of health services a devastated country needs often are not addressed in the rush to restore the previous system.

The importance of incorporating development activities into relief efforts is becoming increasingly apparent. There often is a forced dichotomy between relief and development activities by funding agencies, and the large amount of money appropriated to relief efforts compared to development, necessitates the incorporation of development activities into relief responses.[20] Providing better transition between relief and development can ensure long-term sustainability of efforts and can minimize the long-term effects of disasters.[20] The importance of transition activities is highlighted by the fact that there usually are large amounts of money donated to a disaster relief effort in the beginning, but the quantities quickly fade with time, unfortunately, as the needs increase. Reconstruction of the health sector should begin as soon as possible after conflict cessation, and should take into consideration the new needs of the population and economy.[21]

Structural reform often means comprehensive changes that involve both dismantling as well as creating new institutions.[22] This transition period from initial relief to development should not be rushed, with 2–5 years commonly being the transition period.[23,24] Examples of post-conflict development programs can be found with the World Bank Post-Conflict Unit, and successful programs such as the reconstruction of health services in Mozambique. Successful rehabilitation programs require a critical need for proactive cooperation between relief and development organizations and donor support of transitional activities. Health policy-makers and donors likewise must fully understand issues before reconstruction is undertaken blindly by the implementing partners. Although the central structures of government ministries may be tenuous, implementing reform and reconstruction by bypassing established systems will undermine legitimacy, and leave these institutions weak.[22]

Anticipating and avoiding the harmful effects of aid

"Do no harm" is an axiom to be heeded by aid organizations to encourage a careful examination of aid approaches and the importance of trying to see the unforeseen. We now know that pulling people into dense refugee camps is very dangerous. Tens of thousands of deaths from a measles epidemic occurred in the Ethiopian refugee famine camps in 1985. They resulted from the international community's style of effectively delivering bulk food by drawing the populations into United Nations Commissioner for Refugees (UNHCR)-managed camps where sanitation and rates of child-to-child transmission of communicable diseases were incredibly high. It is fairly certain that mortality due to measles epidemics, diarrhea, and cholera would have been far less had the communities stayed dispersed. The NGOs and other relief organizations need to examine ways to distribute food and supplies effectively, while at the same time, addressing very real public health concerns.[25] Likewise, creating health services for a displaced population while ignoring the needs of the local population may result in the development of hostile relationships. Relief organizations may institute treatment protocols, which, while being international or organizational standards, differ from host government policies. This may accomplish better outcomes at the expense of coordination with national disease control programs. When relief ceases, patients with conditions requiring prolonged treatment may be left in a vacuum.

Creation of new health facilities also may serve as a magnet for population movement, drawing people away from their communities, social support, and primary health centers into areas with increased danger from land mines or combat. The presence of large quantities of medications and supplies can encourage raids from various insurgency groups, putting surrounding populations at risk. Rehabilitated health facilities may become military targets, and communities 'punished' for participating in rehabilitating facilities that are identified as being government or sympathetic to other factions. All of these factors should be considered on a case-by-case basis when considering efforts to rebuild the medical system. Thus far, there has been no systematic study of the untoward effects of medical reconstruction.

Conclusion

Humanitarian agencies, both large, well-established organizations and newer, smaller aid groups face challenges on all levels, from field programs to the central coordination. As the complexities of field activity increase, the internal demand grows for capacity building, education, and donor relations balanced with needs for rapid deployment and response.

Sound practices in disaster assessment and knowledge of their health effects can improve greatly the provision of appropriate resources for those affected by disaster. Appropriate health and logistics personnel are needed, but only those which complement the ability of each region to provide for itself. Knowledge of disaster effects and mitigation can be an important first step to assisting a region or country toward rehabilitation. And perhaps most importantly, more research is needed into almost every aspect of humanitarian aid from studies to evaluate the long-term effects of relief activities on field personnel as well as the population studied.

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