Panel 2.1: Assessing Impact and Needs

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Abbreviations:
WHO = World Health Organization

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Abstract
This is a summary of the presentations and discussion of Panel 2.1 of the Conference, Health Aspects of the Tsunami Disaster in Asia, convened by the World Health Organization (WHO) in Phuket, Thailand, 04–06 May 2005. The topics discussed included issues related to assessing needs and measuring impact as pertaining to the responses to the damage created by the Tsunami. It is presented in the following major sections: (1) key questions; (2) assessing needs; (3) measuring impact; and (4) lessons learned and recommendations.

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Background

Initially, the Tsunami challenged the World Health Organization (WHO) to perform its core functions, specifically in the very early stages. Rapid health assessment missions involving multi-agency teams to access isolated, affected communities turned out to be crucial to provide basic data on the resources that were required to determine and address effectively the priority health needs of the affected population. Information sharing and the involvement of other partners and stakeholders enabled the WHO to develop a strategy with identified health priorities at a very early stage of the disaster. This strategy provided donors with a clear perspective of the needs to be addressed, gaps to be filled, and a projection of required resources. The continuous exchange of information facilitated the transition from the immediate relief operation to rehabilitation activities of a more long-term nature and enabled informed decision-making based on the actual needs of local communities.

The Tsunami responses by the WHO demonstrated its organizational capability to mobilize quickly internal and external technical and financial resources in order to fulfill its core functions to respond to crises of such an extreme dimension. These included: (1) assessment and information gathering; (2) identifying gaps; (3) effective coordination with partners; and (4) building local capacity. The success rates in achieving these four functions varied. These factors constitute an opportunity for the WHO to reflect on its organizational performance and to evaluate what worked well and where alternative managerial and administrative procedures must be considered that are likely to improve future performances.

Key Questions

There are multiple questions that should be addressed relative to needs assessments and assessing the impact of the event.

1. Are there sufficiently clear performance indicators in place to evaluate and assess the impact of the WHO responses and to determine the extent to which the WHO was able to effectively use them?
2. Was the strategy adopted needs based, and did it identify the correct priorities and implement appropriate measures?

3. How effective was the WHO in collaborating with the international community in addressing the immediate health needs of the people affected?
4. Was the initial response based on actual needs and were the initial assessments correct in identifying priority areas for interventions?
5. How effective was the WHO in keeping other stakeholders informed on actual needs, gaps in the responses that needed to be filled, and coordinating the relief efforts in order to close the gaps as much as possible in a timely manner?
6. To what extent was the WHO successful in channeling resources to support and build local capacity and to avoid duplication and the creation of parallel structures?
7. What went particularly well and can be used as an example of best practice in future crisis situations?
8. How can the organization support a learning environment that ensures that the lessons learned actually are integrated into plans and strategies to guide future health and humanitarian actions?
9. Are there specific, technical areas for which there is a need for updated guidelines and standards for future response operations in order to avoid shortfalls or problems in the future, (i.e., in-kind donations, drug donations, dead body management)?
10. Is there a need for improved criteria to assess the impact?;
11. Was the WHO sufficiently convincing that humanitarian action was guided by a clear understanding of the disaster myths and realities articulated by the WHO/Pan-American Health Organization (PAHO)?
12. To what extent did the WHO ensure that the massive response and resource mobilization did not divert donor support from other "forgotten crises and emergencies"?

Discussion

The Earthquake and the following Tsunami that affected South East Asia on 26 December 2004 has been a horrible and unique experience for the international community, and for the WHO in particular. For the WHO, it was crucial, particularly in the very early stages, to demonstrate its ability to effectively perform its core functions in emergencies, specifically: (1) health needs assessments; (2) coordination; (3) filling gaps in provision of needed services; and (4) local capacity strengthening.

As if the experience from previous events would have required yet another painful confirmation, the lessons learned from the Tsunami demonstrated again that: (1) no community or country can consider itself safe from disasters or crises; and (2) that only a consolidated effort to invest in building local capacity to cope with health aspects of future crises can provide sustainable coping capabilities for local communities and health systems. Often times, insufficiently prepared and equipped local systems were the ones that had to respond immediately, until the external assistance (for various reasons extremely generous this time) began to flow in—effectively and appropriate in some areas, late and sometimes too late in some of the heaviest damaged locations.

Assessing needs

Rapid health assessment missions, connected with partners and involving multi-agency teams to access isolated, affected communities became crucial to provide reliable data to determine the resources required in order to address effectively the identified health needs of the affected population. One limitation was the lack of uniform data sets and, in some areas, the questionable validity of data at the country level. Specifically, the lack of accurate population data as well as missing critical information on the location of essential health-related infrastructure, water supplies, wells, health facilities, etc., seriously hampered the compilation of a comprehensive situation analysis. In combination with the insufficient quality of the geographical information, it was, extremely difficult, particularly in the early assessment efforts, to estimate accurately the actual number of affected victims and to develop a reasonably realistic impact assessment, particularly for some of the more secluded areas.

Information sharing and the involvement of other partners and stakeholders seemed to work better, with the WHO broadly sharing available situation reports on health issues of the affected communities. Although initially based on incomplete data from some of the affected regions, information sharing and the integration of information from various sources enabled the WHO to develop a strategy that identified health priorities at an early stage of the disaster. This provided the international relief and donor community with a reasonably well-defined perspective of the immediate health needs that should be addressed, as well as the service gaps to be filled, and a projection of the resources required. The continuous exchange of information facilitated the transition from the immediate relief operations to rehabilitation activities of a more long-term nature, and enabled informed decision-making based on the needs of local communities.

The broad diversity of the regions struck by the Tsunami posed specific logistical challenges to conducting the impact and needs (damage) assessments in a timely manner in the post-event context. Some geographical areas only were accessible with sophisticated transport equipment, and assessment missions became an increasingly complex task, accomplishable only through the support and involvement of military assets, with a collaborative effort involving local authorities, United Nations' agencies and non-governmental organizations. A clear picture of the devastation, the impact on the health facilities, and the loss of human resources (local health professionals became disaster victims), the damages to other health-related infrastructure with its implications now is available. The long-term health effects only became apparent with a substantial delay for some of the worst hit communities. It took several months after the Tsunami until certain long-term consequences were understood. This was based on the increasing availability of detailed information and a more thorough analysis of the social impact. Again, diversity is an important factor reflected in the health impact of specific population segments, with vulnerable groups (women, children, and the elderly) showing higher mortality rates and a greater risk to suffer from disaster-related ill health.

Assessing impact

Assessing the impact of the international health response still is based largely on the application of quantitative techniques. Several of the traditionally used indicators, which often are based on population figures with questionable reliability, might have to be reconsidered as far as their relevance and credibility is concerned. Some of the internationally promoted, quality standards for humanitarian assistance provided basic guidance, but, in practical terms, often were unrealistic and culturally insensitive. For a comprehensive evaluation of the impact of the international health relief, the necessary data and evidence still must be collected and compiled.

Discussion

One of the lessons learned is that a well-prepared and well-equipped local health system is able to cope—even with a dramatic increase in service demand [conditional needs], and can absorb the resources provided by external assistance and can coordinate more effectively through channeling international support through the local systems. In some regions, the severe structural damages of health facilities and a seriously affected local medical community compromised the response capacity of the local system to the extent that external support was mobilized to provide essential health services. The deployment of field hospitals in previous disaster situations, often was inappropriate to serve the needs of local communities; their effects on the Tsunami response still must be evaluated.

Evidence-supported interventions, such as the WHO guidelines and the Cochrane recommendations "evidence aid", must be shared among relief organizations to ensure that potentially harmful interventions are avoided. These are available via the Internet, and provide evidence-based treatment and intervention protocols relevant in the post-event context, including specific recommendations on post-traumatic stress disorder (PTSD).

Lessons Learned and Recommendations

Health aspects have played a key role in the Tsunami response. The WHO was able to quickly mobilize health intelligence and to assess the health needs of local communities. In certain areas, rapid assessments were extremely complex, requiring extensive coordination and civil-military collaboration. Basic agreements to quickly mobilize required resources in future crises should be negotiated up front to facilitate a quicker response. Coordination of needs-assessment missions still must be improved to avoid overloading local victims with questionnaires addressing similar issues. Also, a common understanding on the scientific methodologies that should be approved must be clarified.

Specific lessons and recommendations are:

1. A clear set of standards for an institutional confirmation of publicly disseminated figures and statistics must be defined;
2. Thorough needs assessments provided timely and more reliable information, where national frameworks existed, and where the local health system was grounded on a sound and comprehensive strategy for health systems preparedness, and was supported by a strong, institutionalized, public health infrastructure;
3. Impact assessment criteria must be reconsidered regarding their relevance and validity: In order to assess effectively the responsiveness of the international health response to the actual needs of the affected communities, quantitative indicators might be misleading, and more analytical methods must be developed that analyze the processes and structures before and after the intervention. International relief interventions can cause substantial changes in national health systems. They can provide a window of opportunity to trigger reform processes, but, on the other hand, can potentially cause serious side effects;
4. There is a clear role for the WHO to promote and articulate the desirability to adhere to well-established, existing guidelines (i.e., on drug donations), and to develop, modify, and/or promote new guidelines on certain technical issues (i.e., on in-kind donations and the management of dead bodies, including the forensic identification of disaster victims), and to support evidence-based interventions; and
5. Even help organized by the most sophisticated and fastest responses by the international community cannot substitute for what the affected communities must establish to take care of their most urgent needs during the first hours after a devestating event. Therefore, the WHO needs to prioritize further capacity strengthening in order to enhance the capacity of national health systems and empower local communities, to reinforce preparedness, and to reduce vulnerabilities. This requires a stronger institutional capacity to work with member states to develop sustainable local preparedness and response mechanisms that enable health systems to become increasingly resilient to health aspects of crises.

Summary

Many of the problems encountered in responses to disasters were reported following the Tsunami. Recommendations for enhancing both the damage and needs assessments include: (1) standardizing the methodologies; (2) enhancing the public health infrastructure; (3) developing valid indicators; (4) reviewing and improving current guidelines; and (5) augmenting the local capacities.