

Primary Health Care (PHC) Approach in Emergencies

*Report of a regional meeting
Dhaka, Bangladesh, 28-30 September 2010*



**World Health
Organization**

Regional Office for South-East Asia

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1. Background

Both natural and complex emergencies are the common occurrences in countries in WHO's South-East Asia Region. The World Disaster Report (2009) indicated that during the last 10 years, about 61.6% of the total number of people killed in disasters were from countries of South-East Asia Region. The devastating Asian tsunami of 2004 hit six countries in the South-East Asia Region, with an estimated 230000 people missing or dead. In 2007, cyclone Sidr inflicted over 3000 deaths in Bangladesh. In 2008, cyclone Nargis affected Myanmar and left 133665 dead or missing. In this context, appropriate assistance by the community-based health-care system plays a significant role in alleviating immediate suffering of the affected population because it is one of the first responders during such situations.

In this context, the regional meeting on the "Primary Health Care (PHC) approach in emergencies" was organized in response to an invitation from Bangladesh to take stock of emergency preparedness and response at the community level; achievements, challenges and lessons learnt from recent emergencies/disasters in the member states; and to prepare a road map to meet future emergencies in a timely and effective way. This is especially important because affected communities often remain isolated specifically during the emergency phase.

The meeting was attended by participants from Bangladesh, Bhutan, Democratic Peoples' Republic of Korea, Indonesia, Maldives, Nepal, Sri Lanka, Thailand and Timor-Leste; from non governmental organizations (NGOs), United Nations agencies and WHO staff from head quarters and the South-East Asia Regional Office. A list of participants is given in Annex-2.

The regional meeting discussed emergency-related issues and capacity of the community-based health delivery system.

2. Meeting proceedings

2.1 Inaugural Session

The inaugural session started with welcome remarks from the representatives from the Government of Bangladesh. The secretary, Ministry of Health and Family Welfare, Bangladesh highlighted the success of primary health care in Bangladesh in areas such as smallpox, polio, filariasis and blindness control through the primary health care approach and quality health-care provision through manpower training and making available required resources and technology. He emphasized the need to strengthen capacity of community health workers including volunteers as well as community-level government and nongovernmental organizations.

Dr Samlee Plianbangchang, WHO Regional Director, South-East Asia gave an opening address in which he emphasized the need to revitalize primary health care (PHC) to deal with increasingly frequent and severe emergencies in the countries of the SEA Region. The impact of emergencies is seen not only in injuries and deaths, but it increased risks for diseases, decreased food security and diminished access to basic services such as water, sanitation and waste disposal. Recent experiences in the Region also demonstrated increased inequities in both social and economic terms. Prevailing health problems were aggravated during emergencies. The hardest hit were the vulnerable population including the poor, women, children the disabled and the elderly. In such situations, universal coverage of humanitarian health action would facilitate provision of a package of essential emergency services extended to all affected areas in an equitable manner.

Universal coverage being the key element of the PHC approach, its adoption in the context of emergency preparedness and response would mean putting people at the core of humanitarian action. This would ensure effective health protection, promoting community participation and intersectoral collaboration. The community and with its own resources make appropriate choices of action to protect health, livelihoods and assets during the response phase of the emergency and would also address rehabilitation issues in the recovery phase with limited outside assistance. A coordinated emergency response from the community and local government could produce a positive outcome in emergency humanitarian efforts. Still the challenges are immense and it takes time to turn such thoughts into practice

at ground level. There are several constraints such as inappropriate policies that focus mainly on emergency response rather than preparedness; community involvement and actions; unavailability of community-based workers/volunteers; inadequate community capacity for effective emergency response; inadequate information systems for early warning and surveillance and ineffective coordination at both national and community levels.

Despite the challenges, application of PHC principles has proven to be the best strategy and most cost-effective investment to ensure equitable access of populations to essential high quality health care. It also reduces vulnerabilities and enhances the resilience of communities. This approach promotes self-determination and self-reliance of the vulnerable population and reduces dependence on external assistance.

Dr Captain (Retired) Mozibur Rahman Fakir, State Minister of Health and Family Welfare said that Bangladesh has been experiencing natural calamities such as cyclones, tornadoes, tidal surges, floods and landslides more frequently because of various factors. Bangladesh has also experienced human-induced disasters like fire, infrastructure collapse and road and river accidents. Bangladesh has undertaken a series of steps to reduce mortality and maintain a healthy population. The primary health care approach is not only a health sector responsibility; intersectoral and interministerial collaboration and coordination would provide a better response and quality of care to the disaster victims.

Prof. Syed Modasser Ali, Advisor to the Honorable Prime Minister of Bangladesh, highlighted the global challenges to public health such as climate change, environmental pollution and natural and man-made disasters. Community resilience and community preparedness, increased collaboration in social sectors and adoption of a community clinic approach would bring health facilities closer to the people. The decision of the Government of Bangladesh to establish “community clinics”, one for every 6000 people, is expected to be the hub and foundation for effective community health action. Adoption of the PHC approach can contribute substantially to minimizing the negative impact of disasters and emergencies.

Dr Moazzem Hossain, Line Director Disease Control, DGHS, Bangladesh recounted the experience of cyclone Sidr in Bangladesh in 2007, which severely disrupted PHC services in several parts of the country. The community-based early warning system, evacuation to cyclone centres and provision of services to those affected helped to reduce mortality and

the adverse effects on public health. This was also the first time the U.N. health cluster approach was adopted and it facilitated coordination of the health response.

3 Introductory session:

The participants were introduced by Dr Roderico Ofrin. The Regional Director then nominated Dr Moazzeim Hussain, Director General, Health Services, Bangladesh and Line Director Disease Control as the chairperson and Dr H D B Herath, Co-ordinator, Disease Preparedness Unit, Ministry of Health, Sri Lanka, as the rapporteur of the meeting

3.1 Objectives of the meeting and expected outcome

- To update the member countries on concepts of PHC and its application in emergency and humanitarian action.
- To share the experiences in community preparedness and response before, during and after emergencies.
- To describe the capacities and needs for community preparedness and response for emergencies.
- To prepare a roadmap to enhance the community capacity using a PHC approach in emergency and humanitarian action.

3.2 Expected outputs

- Sharing of experiences:
 - (1) Community-based emergency preparedness and response
 - (2) Preparing health systems to meet emergency health needs
- Outline of a way forward to strengthen community capacities for emergency preparedness and response.

The agenda for the meeting is summarized in the annexure.

3.3 Introduction of the topics PHC and emergency humanitarian action, revitalization processes of PHC:

In emergency situations, there is often an imbalance between increased local public health needs and the limited resources available in the affected community. At the community level, the period during the first few hours to a few days from the onset of an emergency is quite dynamic, forcing the community to face the catastrophic results themselves. Invariably the community must rely upon its own resources due to disruption of communications and damage to road/transport facilities leaving it without any external assistance.

During this initial phase the affected community has no option but to meet its emergency survival needs on its own, including taking care of the injured and dead, finding immediate safe shelter, safe water, food etc. Community public health needs also keep on changing in the different phases of an emergency starting from the phase of isolation when community links with the outside are disrupted and later the relief, recovery, rehabilitation and reconstruction phases.

From day 2 to day 30, the affected communities move to shelters or safe places, staying together irrespective of essential considerations such as water safety, food availability, inadequate sanitation and waste facilities, including human waste disposal systems. These temporary shelters gradually produce unhygienic conditions, leading to mosquito and fly breeding. Overcrowding in camps leads to the fastspread of potential disease outbreaks. Additionally, those who previously were on treatment for diseases like hypertension and other cardiovascular diseases, asthma and peptic ulcers need to resume the treatment protocols.

Emergency health sector management issues beyond 30 days shift to new town/village planning sites and rehabilitation sites, proper housing facilities, and location of new public health facilities as part of rehabilitation needs.

Emergency events not only cause injuries and deaths but also destroy houses and communications including roads and other community infrastructure. As far as the health sector is concerned, community-based health facilities are often destroyed, including public health buildings (e.g.

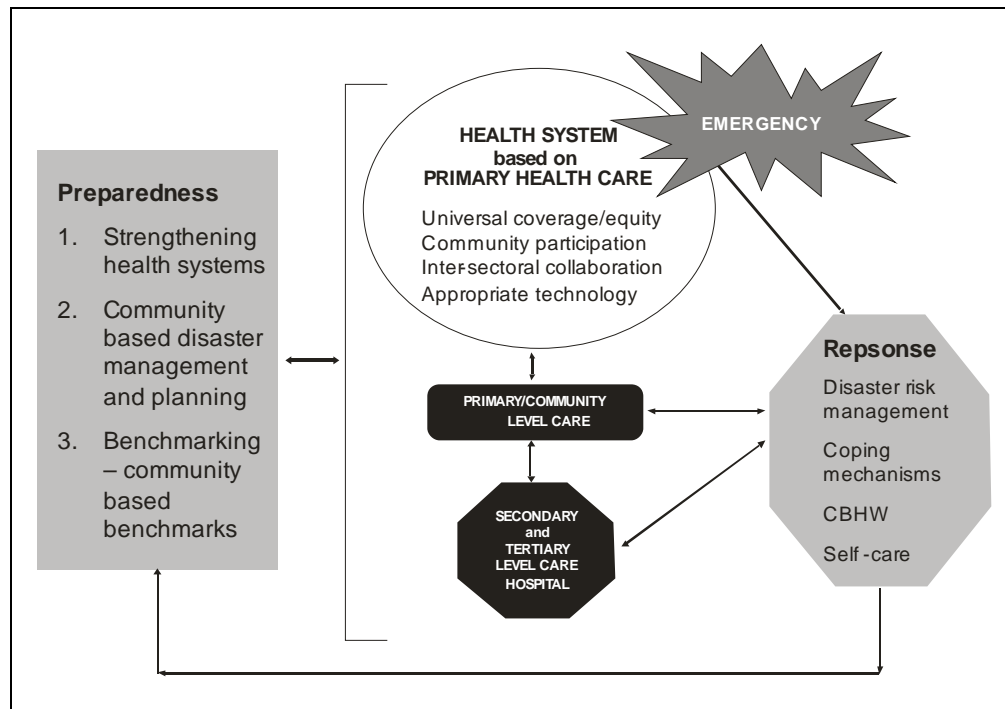
administrative offices), damage to equipment and medical stores and disruption of life-line support (loss of electricity, water supply etc). It also inflicts injuries and deaths among public health workers and their families. Despite such difficult conditions in which resources may not meet the need, the community-based health sector is expected to prepare itself to address changing public health needs. Initially it has to take care of large numbers of casualties of the disaster and then keep alert through the public-health warning system to detect and prevent potential outbreaks of communicable diseases and resume attention to the existing medical needs among the survivors in temporary shelters.

To meet the emergency public health needs of the population, there is no other option than to strengthen the PHC system, to prepare the health system for timely emergency response and to make community-based public health facilities, vulnerable areas disaster-resilient/resistant.

Strengthening PHC to meet emergency public health needs can be done by adopting the “revitalization of PHC approach” before, during and after emergencies including (a) universal coverage/equity; (b) community participation; (c) intersectoral collaboration; and (d) use of appropriate technology.

A conceptual framework depicting some common issues faced in implementing primary health care and challenges that need to be addressed is shown in Figure 1.

Figure 1: A conceptual framework



Successful examples of adopting the PHC approach during emergencies were effectively demonstrated in Bangladesh, where there was a gradual reduction of the post-flood case-fatality rates due to diseases like diarrhoea to 0.2/1000 during 2007. The emergency preparedness measures included community education, universal coverage of health-sector emergency action, training of community based health workers, use of ORS or oral rehydration salts (appropriate technology) and participation of health-related sectors for water safety and other issues (intersectoral collaboration). The role of community based health workers following tsunami in Thailand in 2004, earthquake preparedness in Sumatra, and early warning and evacuation before cyclones in Bangladesh and preparing health facilities for disasters in Nepal are illustrations of the PHC approach in emergencies/disasters.

4. Challenges to PHC in emergencies/disasters

➤ **Frequent occurrence with wide-spread impact and limited community coping capacity**

Countries in the SEA Region have experienced humanitarian crises in the form of natural emergencies and complex emergencies including conflicts. The devastating Asian tsunami of 2004 hit six countries in the Region and left an estimated 230 000 people missing or dead. In 2008, cyclone Nargis hit Myanmar and left 133 665 dead or missing. The World Disaster Report (2009) indicated that during the last 10 years, about 61.6% of the total number of people killed were from SEA Region countries. During this time the highest number of natural disasters (1273 events) and technological disasters (1387 reported events) occurred in Asia, representing 44% of the reported events worldwide. The impact of these events is disproportionately felt by those members of the community who are in a weaker position including women, children, the elderly and the disabled.

➤ **Enhanced public health needs and compromised community-based public health systems:**

Crises situations and their demands often expose limited health delivery capacity. Health system capability during any emergency is substantially dependent on the capacity of the first responders, community-based health workers and the functional health facilities. Issues relating to community-based health system include; variable presence of community based health workers/volunteers with the requisite capacity to respond to emergencies; early warning and surveillance system capacity; effective coordination amongst key sectors; and preparedness and response capacity.

5. Business session and thematic discussions

The meeting was organized in the form of two panel discussions to identify issues relating to health sector emergency preparedness and health system emergency preparedness adopting the PHC approach. After each panel discussion, the specific issues were further discussed in groups in light of

country experience. Based on the group discussions, recommendations were formulated.

As there were some issues in use of terminologies and concepts in the course of discussions, Dr Kumara Rai presented a short session to clarify these issues. He referred to the booklet “Frequently Asked Questions on Primary Health Care – the basis for health system strengthening”. The following points were clarified:

➤ **PHC concept**

The PHC concept encompasses three aspects: (1) a package or a set of activities; (2) referring to a level of care and (3) an approach, which has been used interchangeably with the terms, PHC principles, PHC pillars and PHC strategy. In this meeting it is the third aspect that is in focus.

➤ **Health systems and health-care services**

The health system consists of people, organizations and actions whose “primary intent” is to promote, restore and maintain health. It includes such activities as behaviour change programmes, an informed mother caring for a sick child, health legislation and school or occupational health programmes. “Health care services” refers to medical and public health services provided by both public (government) and private sectors.

➤ **Health systems strengthening based on the PHC approach**

Health systems and the PHC approach are linked but are not the same. A health system should, can or may be based on the PHC approach. A health system based on PHC is one that aims to provide cost-effective, comprehensive, equitable and high quality care to the entire population, including the poor and vulnerable.

In essence using the PHC approach in emergencies means integrating the PHC principles into all activities that build the capacity of communities to prepare, respond and recover from emergencies, building on their resilience.

Table 1: PHC approach in emergencies and disasters

Panel	Title	Discussion points
1	Community Emergency Preparedness & Response	<ul style="list-style-type: none">• Involving community-based organizations in delivering primary care service during emergencies and strengthening multisectoral coordination• Involvement of civil society organizations in emergency response• Roles of community-based health workers and community health volunteers and their skill development to meet emergency public health needs
2	Preparing health systems to meet emergency public health needs	<ul style="list-style-type: none">• Reorientation of PHC to meet public health challenges caused by emergencies• Government and nongovernmental partnerships to strengthen community-based emergency preparedness and response• Initiatives to protect health facilities against emergencies/disasters so as to continue to provide public health care in the aftermath of emergencies

5.1 Panel and group discussion:

Panel 1: Community Emergency Preparedness and Response

Involving community-based organizations in delivering Primary Care Service during emergencies and strengthening multisectoral coordination (Dr Lalit Chandradasa, Medical Director, Sarvodaya Shramadana Movement, Colombo, Sri Lanka)

Communities bear the direct impact of a disaster and are the first real-time responders. They are aware of the available resources, can assess the damage, and have the knowledge of local risks and vulnerabilities. Communities have time-tested knowledge and coping mechanisms. Therefore, communities are an integral part of the contingency plan.

Communities should determine the priorities in dealing with the problems that they face; the enormous depth and breadth of collective experience and knowledge in a community can be used to bring about change and improvements and would also increase sustainability. They should be supported to solve their own problems. Community involvement does not mean just using community members as a labour force. They need to be actively involved and empowered. The elite and the vulnerable groups of any community need to be equally involved, with a focus on women's groups, bridging of social divides and building capacity. A crisis situation creates an imbalance between supply and demand. The ability of the health system to respond depends on the first responders and their capacity, community-based health workers (CBHW) and health volunteers and functional health facilities. The PHC principles of equity and multi-sectoral involvement make very well in crisis situations and throughout the disaster cycle.

In Sri Lanka, the Asian tsunami in 2004 led to 31000 dead within 20 minutes, 99000 houses destroyed, 550000 IDP's and US\$ 1.3 billion in damage. In the first 48 hours even without any plans or trainings, the media and community provided a response. The response from the government and international agencies occurred after this crucial phase. Through community involvement with external assistance, it was possible to manage the camps, epidemics could be prevented/controlled, riots could be prevented and psycho-social problems managed. Training, capacity

development, resilience building, and reconstruction were possible through joint efforts.

The policy is sound but practice is not. During these phases, public health becomes the top priority including mass casualty management and dealing with infrastructure; equipment and supplies are also a problem. The affected area can become inaccessible. The community, while being badly affected, is also expected to provide solutions. To tackle the problem a new paradigm is required. Community-Based Disaster Risk Management (CBDRM) should be given greater importance and institutional arrangements for mitigation, response and warning systems should be reviewed, re-evaluated and clarified. The community has a crucial role during all phases of the emergency/disaster; maximum involvement helps in mitigating the physical and psychological impact and ensuring timely response.

**Involvement of civil society organizations in emergency response
(Dr Alok Mukhopadhyay, Chief Executive Officer, Voluntary Health Association of India, New Delhi)**

Bangladesh, it was noted, has done very well in managing disasters despite numerous constraints. There are a large number of events that have not been traditionally the focus of preparedness response, and which should be looked into. This includes climate change and even cyber crime. The importance of involvement of the religious groups in disaster planning and management was stressed. The relationship and the terms of engagement between the community and the relief providers need to be defined and clarified early. After an event the community can be flooded with relief supplies, but the community has to be engaged to take it in and use it. Sometimes it does not have the capacity to manage an overflow of relief goods. Communities need to be nurtured from disaster to development; disasters should be used as an opportunity to re-build a better society through empowerment and building self-care and community resilience. After the 2001 earthquake in Bhuj in Gujarat, India, the super-cyclone in Orissa and the 2004 tsunami in the Andaman islands, the community rebuilding has served as an opportunity. The potential of the community should be the focus. Social determinants of health play an important role in the adoption of a PHC approach in the context of emergencies/disasters.

Mental health is a huge challenge since everyone is affected with variable psychosocial impact. Counsellors are not the solution. Very simple

measures were recommended. Give the communities seeds and fertilizers and their mental attitude improves, since they can see the future. Place a TV and light to help the people and provide hope. Rights-based disaster mitigation is important. Civil society has a responsibility to help people get their rights. Example was given of the Bhopal tragedy, which has involved two decades of persistent work and advocacy for compensation and justice for the victims.

Roles of community-based health workers and community health volunteers and their skill development to meet emergency public health needs (Dr A K M Sidiquei, ICDDR,B,Bangladesh)

A case was presented on the declining deaths that occur after a cyclone as per the Bangladesh experience. It was noted that in 1971, the cyclone caused half a million deaths. In 1991 a super cyclone caused 143000 deaths; but in cyclone Sidr in 2007 there were only 3000 deaths. However, other disasters such as massive floods and tidal surges are also of concern. The effect of climate change is also further increasing vulnerability; it is expected to affect 15 million people in the country. As such the work for risk reduction and good preparedness are keys to keep mortality at the minimum following any disaster.

In disasters, proper information management is of paramount importance. Following floods in Bangladesh, the main causes of death were diarrhoea, acute respiratory infections and accidents. Diarrhoea affected all age groups and acute respiratory infections mainly children. However, the elderly are also vulnerable. Drowning was one of the major causes of deaths in children under the age of 14. Snake bites were also concentrated in the same age group. Health information from past events have shown that there can be an explosive outbreak of diarrhoea following floods. Comparing data before a cyclone and weeks after the cyclone, it was found that the diarrhoea attack rate increased dramatically in weeks 2 and 3 after the cyclone. Health information management helps in projecting interventions and resources.

Looking at such epidemiological features of cyclones, there may be only one week's time to prepare to respond and work begins during the preparedness phase to reduce risk of such diseases. The experience in Bangladesh emphasized the importance of early warning and evacuation. Cyclone shelters have been saving lives in all cyclones. Data has shown that

there were minimal deaths in areas with cyclone shelters but high numbers of deaths of people who were at home. The adverse factors included distance to shelter, late warning, late or absence of information, lack of education and lack of conviction. Following this evidence, the government built a large number of shelters, established a system for early warning and information and an organized system for training of community based health workers including volunteers. The results are seen in the low mortality in cyclone Sidr. Based on data and accurate information, the government was able to take policy decisions that have helped in reducing the impact of disasters. From this experience, the following actions make a strong case for application of the PHC approach in emergencies; (1) Proper health: information management at community/primary health care level (2) Health workers trained in disaster preparedness and response (3) Organized communication for early warning and evacuation. Moreover the need for continued operational research and accurate information to build and shape safer policies and provide evidence for in disaster risk reduction.

5.2 Summary of discussion of the panel

The panel discussion was summarized by Dr Tim Evans, Dean (BRAC University, Bangladesh). It was pointed out that

- There is a considerable overlap in all types of emergencies.
- Intersectoral co-ordination is good during the emergency but it is not sustained after;
- There is a crucial need for organizing 24-hour services for example shelters and early warning systems.
- There is a huge potential to use appropriate technology and there is a need to look at local traditional care, as well as locally applicable interventions. Often when things are getting better the support is withdrawn, and this can be quite damaging.
- The interventions introduced during an emergency should be made a part of the system - e.g. cyclone shelters can be used in day-to-day lives. Severe Acute Malnutrition (SAM) could be reduced from 15% to 4% through improved nutrition management. Community-based management of pneumonia is important since ARI is a leading cause for excess mortality following emergency/disaster.

- A community-based health worker and volunteer is a local person and is available 24 hours in a day. They need to be trained in disaster management first and SOPs need to be developed.
- Disaster-prone areas are mapped but vulnerability mapping is not happening and this should be a matter of compulsion for the poor people.

5.3 Group Discussion:

Group 1.a Community Emergency Preparedness and Response

Summary of findings:

- (1) **Putting people first:** how do we initiate community involvement in meeting emergency public health needs?
 - Systems need to be set up in the government from the national down to the village level. SOPs, guidelines based on SOPs, and training tools should be made available. These should be flexible enough to be applicable in different areas with different situations depending on the geography, needs and facilities. Each of the areas will need to have its own disaster management plan based on the risk.
 - The community programme has to be aligned with primary health care principles, including all the elements of PHC. A standardized system on how to apply this approach is also needed.
 - For sustainability, the community programme needs to be based on need and have the ownership of the community. The programme has to involve all stakeholders, including community and religious leaders, and be supported by local government
 - Awareness programmes will need to be included in the community programme. This requires application of information technology and accurate information for communities.
 - A focal point will need to be appointed in the community; there is a suggestion to link the programme to an existing health or disaster preparedness programme that is already established and sustainable.

- (2) **Generation and use of information:** How to make the vulnerable community aware about emergencies, vulnerabilities and public health risks?
- Emergency information has to use any available communication system in the community, such as an SMS gateway, amateur radio, traditional communication systems, satellite phones, toll-free numbers. There are several options to use appropriate technology for a wider penetration of messages.
 - We have to ensure that briefing and debriefing of the information should reach up to community level. All information should be shared with the community using all available media, through friendly, simple and reliable messages using local language.
 - Primary health care plays a key role in the implementation, monitoring and evaluation of the community programmes, as well as in generating and guiding the community to use the information properly.

Recommendations for WHO

- Continue technical support for community empowerment and awareness.
- Help the Member states to develop guidelines for emergency preparedness and response down to community level (raising community awareness and involving the community in emergency public health).

Group 1.B

- **Health workforce:** How to strengthen skill development efforts including efforts to rapidly expand the skilled health workforce to meet the emergency community public health needs?
- **Moving towards a rights-based approach:** how to address human rights and gender inequity issues during emergency?

Strengthening of health workforce

- Develop SOPs based on roles and responsibilities for all categories, with a focus on community based health workers, including volunteers.

- Organize ongoing trainings and orientation regarding emergencies and disasters. Sustain efforts through drills and interactive training.
- Train volunteers in basic and advanced first aid.
- Triage training and effective use of referral systems are essential key to saving lives in the first few hours after an emergency.
- Organize training on search-and-rescue so the community can react immediately.
- Include safe transportation and evacuation in the training of the target groups identified.
- Adopt an all-hazard approach and include specific aspects of specific disasters in training.

Needs of the health workforce

- Vulnerability assessment.
- Information regarding events, self-care and services and their dissemination.
- Communication and transportation options.
- Resources in financial, human and knowledge related.
- Facility-based support – health facilities must be prepared and equipped to deal with sudden-onset events.
- The referral system needs to be activated for any of these emergencies.

Adopt a rights-based approach

- Identify vulnerable groups within and across communities (eg. women, the elderly and the disabled). The needs of vulnerable groups are diverse. Provision of systems and utilities to carry out activities on daily living should be provided and facilitated.
- Meet the gender needs and ensure safety accordingly.
- Involve women's groups in the planning phase.
- Identify needs relating to public health (nutrition, water, psycho-social needs and shelter) especially for vulnerable groups.
- Prioritize services and facilities according to identified needs.
- Provide for equity and resource distribution.

Group 1.C

- **Using humanitarian health action to move towards universal coverage and equity:** What action should be initiated to support equity and universal coverage and their monitoring?
- **Reinforcing leadership for effective emergency risk management and intersectoral collaboration:**
 - (1) How can we strengthen the intersectoral involvement and strengthening coordination mechanism?
 - (2) How should resource needs and timely availability of required resources during emergencies (decentralized action) be addressed?

Universal coverage and equity

Universal coverage and equity are an important challenge. Some groups are likely to be ignored during emergencies/disasters. Efforts are needed to ensure that they are covered before, during and after emergencies/disasters. All community-based plans should include support for vulnerable groups which include the following:

- People who are extremely poor and those who are isolated
- Women and children
- The elderly
- People with disability or with special needs
- People with chronic diseases (to ensure continuation of treatment)

Reinforcing leadership

It is important to first (1) identify leaders from each group and involve all the stakeholders at the community level in a sustained manner; (2) Identify the various stakeholders in the community. These include groups working in public health, women, community leaders who may be formal (elected) or informal, local NGOs, farmer's groups, teachers from schools and colleges, peer groups etc. It is then necessary to identify leadership from these groups, identify their capacity and plan for capacity development. Regular meetings should be organized to help them develop and implement their plans and

monitor the implementation on a regular basis. Leadership includes representatives of the poor, vulnerable groups, women, youth and minority groups. They should be involved to address the problems relating to risk analysis and risk management. Community leadership should be involved to develop contingency plans, implement and then monitor the progress of implementation. For capacity development, SOPs should be provided by the national/subnational authorities.

Panel 2 - Preparing health systems to meet emergency public health needs

Reorientation of PHC to meet public health challenges caused by emergencies; Presentation by BRAC Bangladesh

Dr Tanzeba Ambereen Huq, Senior Sector Specialist, Water, Sanitation and Hygiene Programme (BRAC) summarized the response of BRAC starting from the famine in 1974 to cyclone Aila in 2009 in Bangladesh. The trend of response and activities has evolved into a programme that is built on development of institutional capacity and application of the PHC approach. The institutional goal is to build capacity to respond to natural disasters. Increasingly the aim is to facilitate the application of government policies, information technology and help maximize the use of resources. BRAC has made very useful contributions in diagnosis and treatment of illnesses and injuries that are associated with excess mortality after an emergency or disaster. They have also made initiatives in improving access to use of clean water, provision of nutrition support and intersectoral efforts at the community level. BRAC has made significant efforts during rehabilitation and recovery phases through continued efforts in water and sanitation, assisting in building livelihoods of people (e.g. salt-tolerant seed, fish cultivation, crab fattening) and building early-warning systems that are accessible to the communities. One example of the application of appropriate technology is the use of alum to purify drinking water in the community. Efforts to build the capacity of the communities and institutions continued. There are emerging issues related to the effects of climate change. It is proposed to make efforts to meet emergency standards, and provide special attention to vulnerable groups such as children, women, the aged, and physically and mentally challenged people in emergencies and disasters; integrate a community-based holistic development approach; adapt new technology and knowledge at all levels; prepare for new kinds of

calamities (such as salinity intrusion in coastal belts) and minimize their effects; strengthen coordination and collaboration with other organizations; address new and emerging communicable diseases; and provide support to the community in the event of pandemics such as HIV/ AIDS, H1N1.

Government and nongovernment partnerships to strengthen community-based emergency preparedness and response (Presentation by DGHS Bangladesh)

Dr Moazzem Hossain, Director, Communicable Disease Control, Ministry of Health and Family Welfare, Bangladesh, stated that through government non-government partnerships the excess mortality has been substantially reduced though morbidity has continued to be high. This is based on the information on floods during 2004 and 2007, cyclone Sidr in 2007, and cyclone Aila 2009. The overall strategy has comprised of a plan for co-ordination, identification of tasks and responsibilities based on mandate and capacity and advocacy based on humanitarian principles. Based on this strategy, the programme has initiated inter-sectoral collaboration through the adoption of the cluster approach, filling of gaps by the NGOs and participation in disease surveillance, case treatment, and information dissemination. Coordination is facilitated by regular meetings throughout the disaster cycle, information sharing and dissemination. The partnership with NGOs has helped in taking the programme to the communities and the monitoring of efforts in the health sector and other key sectors. With active participation of WHO in the health sector, it has been possible to refine the information system and strengthen surveillance. The scope of work in the health sector has also expanded through the formation of 4 subgroups in the health cluster. Disease surveillance, reproductive health, mental health, nutrition support and psychosocial first aid to vulnerable groups. The challenges to be addressed include building of capacity of CBHWs and volunteers in the community, filling of vacant positions, strengthening of transport and communications, (including the use of information technology), and support to the CBHWs (including volunteers and relief workers) to provide services during emergencies and disasters. At the same time, support is required so that health facilities continue to function.

Initiatives to protect health facilities against emergencies/disasters so as to continue to provide public health care in the aftermath (presented by

Dr Roderico Ofrin, Regional Adviser, Emergency and Humanitarian Action, SEARO WHO)

Following cyclone Sidr in Bangladesh, 7 out of 16 district hospitals and 69 of 249 upazila hospitals were damaged. After cyclone Nargis in Myanmar, some 57% of the health facilities in the affected areas were damaged and 10-15% were completely destroyed. The Kosi river floods in India and Nepal either severely damaged health facilities or made them inaccessible. The earthquake in Sumatra in Indonesia damaged 10 hospitals, 53 health centres and 137 health facilities.

Emergencies amplify the need for intact and functioning health facilities because of the increased demand for services. Attention is needed for the adoption of an intersectoral approach, consideration of health facilities at all levels of health-care delivery, (keeping a focus on those that are located in the community and should remain accessible to people) and the use of appropriate technology. Recognizing the importance of making health facilities safe from disasters, the health ministers of the Member States, signed a declaration at their meeting in Kathmandu, Nepal in September 2009. Following the declaration, there has been an increasing focus on efforts towards making health facilities safe from disasters, for example through incorporation of this goal in national policy and planning, assessment for disaster resilience and development and use of assessment tools including benchmarks. The assessment comprises structural, non-structural and functional aspects.

Following the earthquake tsunami of 24 December 2004, the Member States agreed on 12 benchmarks for quality assessment and quality improvements in the event of an emergency or disaster. Out of these, three are related directly to the use of PHC approach. These are Benchmark 5 (community planning), Benchmark 6 (community-based response and preparedness capacity) and Benchmark 7 (local capacity to provide emergency essential services and supplies). These benchmarks have been assessed in four countries to determine the current status and improve preparedness and response.

Summary of the panel 2

Dr Vijay Kumar, temporary advisor to the Regional Director, summarized the issues that should be addressed during the group discussion. These

included: (a) efforts towards preparing for a response during the first 24-48 hours after the emergency/disaster; (b) the focus on use of community benchmarks; (c) development of SOPs; (d) an effort to continue to build multi-sectoral efforts that focus on water and sanitation, food, shelter, protection of the vulnerable groups; and (e) increasing attention to neglected areas like reproductive health, psycho-social aspects, livelihoods of people, gender and safety and security.

Group Discussion 2: Preparing the health system to meet emergency public health needs

Group 2.A

- What steps should be taken to strengthen health systems in the community to improve intersectoral coordination, universal coverage, community participation and use of appropriate technology both during emergencies and in general?
- What steps should governments take to ensure uninterrupted health services during disasters and before the emergencies/disasters?

Strengthening of health system with a focus on the community

Resource needs and resource availability

Several materials are needed to keep health services functioning in an emergency. This can range from essential medicines, first aid kits, and other life saving equipment. In the discussions it was pointed out that a proper listing of these materials based on epidemiology of the area, and hazards that might occur vis-a-vis the health human resource available should be put together. This will provide a good estimation of quantity of materials. A storage, distribution and inventory system in place for such materials is essential. In many cases these are built-in as part of the existing medicines and supplies system. With the above in place, the issue of proper stockpiling (drugs, equipment, other supplies) then becomes much easier, appropriate and manageable. A policy and process for replenishment of these essential medicines and supplies can then be prepared as part of this system.

In many cases, especially remote areas, referring and transporting patients are the main need and so telecommunications and transportation

(ambulances) need to be available. This is a major investment but provides a network for support that is essential in saving lives.

Financial resources also need to be available: (1) for preparedness activities and (2) during response. Administrative & Financial Procedures have to be designed to support the easy disbursement and appropriate monitoring of implementation of such funds. Participants then also proposed if community based financing arrangements can be explored, similar to micro finance systems that are common in the SEAR countries. Lastly, it was pointed out the the community itself has resources that need to be first recognized and strengthened such as : (1) its coping mechanisms; (2) skills of the people themselves as per their experience from previous disasters – eg early warning, mobilization of support, first aid; (3) knowledge of the community, environment and traditional practises. Tapping such resources can help bring the community capacity in preparedness and response to a higher level of functioning.

Community Emergency Preparedness and Response

- How do we strengthen health workforce?
- Identify the community strength and weaknesses – this entails identifying skilled people and potential leaders who can be tapped.
- Involving the community in participatory processes and increasing the workforce, including relief workers, volunteers (school teachers, religious figures), health workers, health facilitators;
- NGO-government partnerships should be institutionalized.
- Mapping of stakeholders will clarify the health workforce sector.
- Preparing the health system to meet emergency public health needs is also key. The health workforce needs to have the experience, resource and environment to be able to perform this function.

Group 2.B

Guiding questions for group discussion were as follows:

- What initiatives are to be undertaken to protect health facilities (in particular those located in communities) against disasters so as

to continue to provide public health care in the aftermath of emergencies?

- Initiatives should address three dimensions: structural, non-structural and functional.

Making health facilities safe from disasters

Group conclusions were:

- Assessment of the condition of the structure of health facilities is the key first step. Adaptation of available tools may be needed so that these are appropriate to local conditions.
- Putting equal emphasis on nonstructural and structural elements in health facilities was another recommendation. Usually the efforts are lopsided and health facilities remain vulnerable.
- Hazard to health facilities should be the prime consideration for choosing the location and design.
- Structural redundancy should be covered for health facilities to remain functional in a crisis. As such critical areas such as emergency and trauma rooms should/can be relocated or re-set-up easily.
- Depending on the facility, retrofitting or shifting of the structure should be considered.
- Community involvement in preparedness plan is needed. Usually planning is relegated to emergency or hospital managers. The involvement of the community engages them early – these plans can be better implemented due to the early buy-in.
- The community should be sensitized and trained in safe building techniques.
- Mitigation methods should have coherence and consistence within the context of the community.
- Mock drills should be conducted regularly.

Nonstructural factors should be assessed in terms of:

- Safety and placement of supplies and equipment
- Storage of equipment and materials
- Barrier-free passages

- Provision for removal or relocation of items/materials
- Arrangement for back-up of all utility and lifelines
- Changing or adapting system for allocating, assignment of hospital beds when an emergency occurs.
- Modification and substitution of materials that keep structures safe.

Functional Factors:

- Community involvement in preparedness and response plans is necessary so that people themselves can engage in efforts to keep health facilities safe and functional.
- Strengthen human resource and other components of the health system based on the skills necessary to implement contingency and response plans

Group conclusions were:

It was suggested that Member States, governments should proceed in initiatives that :

- Include disaster and emergency management in the educational curriculums of all health professionals.
- Strengthen health systems for health emergency management.
- Apply benchmarks for emergency preparedness and response using the standards.
- Conduct periodic assessments of the health system and safety of health facilities.
- Ensure community participation.
- Ensure functioning of proper health facilities and services in the community.

Some action points were also suggested for WHO

- Provide guidelines and help support policy and strategy for development of safe hospitals.
- Provide technical assistance and facilitate strengthening of health systems for health emergency management.

- Support benchmarking for emergency preparedness and response.
- Help facilitate government on periodic assessment of the health system and safety of health facilities.

Group 2.C

Guiding questions:

- What policies should be adopted to continue implementation of the primary health care approach in the community, before, during and after emergencies?
 - To enhance government, NGO and private sector partnerships
 - To address sustainability in terms of cost and efficiency

Policy formulation with a focus on the communities

The PHC approach in emergencies requires universal coverage including national, provincial, district and village/community involvement. The policy should include the four principles of universal coverage; community participations; intersectoral coordination; and appropriate technology and the essential elements of safe water and sanitation, food and nutrition, maternal and child health, immunization, curative care, essential drugs, health education, traditional medicine and community development .

Linkages with national disaster management policy are important.

For health system integration, components of policy should be integrated into health systems and government and NGO partnerships should be strengthened. This means identify partners, involvement at all levels (i.e. policy formulation, implementation and monitoring) and establishing and coordinating coordination mechanisms.

Health system preparedness:

Before an emergency:

The following steps to be taken include:

- Establish partnerships between government, NGOs and the private sector
- Undertake a mapping exercise – a description of all players/ stakeholders using a who/ what /where? – framework
- Develop a contingency plan focusing on the PHC approach and the cluster approach
- Organize capacity building, based on the PHC approach
- Develop baseline database (PHC)

During an emergency

The following steps to be taken include:

- Operationalise the health sector contingency plan
- Conduct a rapid health needs assessment and use results of those for action
- Establish collaboration among partners and identify additional health sector partners
- Regular monitoring and reporting after the emergency
- Collaborate with the recovery planning process
- Involve the health sector in the early recovery planning process
- Plan for sustainability
- The safe hospital initiative should be linked with the recovery planning process
- System integration will lead to cost effectiveness and sustainability

Role of WHO

- Technical assistance: policy formulation, adaptation of tools and guidelines, emergency health sector contingency plans
- Support/start/facilitate capacity building initiatives
- Provide a platform for sharing good practices of other countries
- Establish health sector linkages with UN partners and other donor agencies
- Support institutionalization of health sector emergency management within the national health system

Initiatives should be undertaken to protect health facilities against emergencies/disasters and to continue to provide public health care in the aftermath.

6. Conclusions

- (1) The PHC approach in emergency preparedness and response exists in member States. However, there are some aspects that still need improvement such as community empowerment and resilience, self-care, generation and use of information and early warning systems.
- (2) The existing intersectoral coordination to enhance community participation at the national level needs to be extended to the subnational level, in particular in communities during the whole disaster cycle.
- (3) Reductions of morbidity and mortality associated with disasters (eg diarrhoea) by using appropriate technology, community engagement, deployment of resources, a policy of universal coverage and the application of a rights approach provide valuable lessons in the application of principles of PHC in non-emergency situations as well.
- (4) During disasters, maintaining the functionality of community-based care and the referral system and adapting to address new needs is critical. Ongoing pre-disaster initiatives to revitalize PHC can contribute to reducing the public health-related impact of emergencies.
- (5) Basic post-emergency health care, including community and hospital care, clean water, food, clothing, shelter, sanitation, hygiene, lighting and livelihood and safety needs, to be improved, with an emphasis on provision for the poor and vulnerable communities.
- (6) The involvement of CBHW and volunteers (including relief workers) is of paramount importance. Their function in the health system and communities, with continual training before emergencies/disasters, can enhance their capacity to respond to basic public health needs and adapt to new needs in a more appropriate and timely manner.

7. Recommendations

Member States:

- (1) The national health policy should include a policy on health emergency as part of health systems strengthening based on PHC. The focus of such policies should be on implementation at the subnational level with involvement of key stakeholders throughout the emergency cycle.
- (2) Prepare subnational contingency plans based on national frameworks/policy and SEAR benchmarks for emergency preparedness and response.
- (3) Sustain mechanisms of intersectoral collaboration, governing authorities, NGOs and private sector at the national and sub-national levels.
- (4) Draw on appropriate technologies and interventions that have proven to be successful to improve health emergency management programmes. The application of appropriate technology should be expanded to include the most recent developments in ICT.
- (5) Efforts should be made for provision of knowledge to strengthen community resilience, including self-care and community coping mechanisms.

WHO

- (1) Strengthen collaboration with other UN agencies and other development partners to improve preparedness and response mechanisms to deal with emergencies.
- (2) Facilitate intercountry networking on health sector emergency preparedness and response and sharing of experiences through documentation of best practices of the PHC approach in emergencies.
- (3) Develop a community resilience package that includes key policy recommendations, guidelines on self-care and involving communities in disaster planning and programming.
- (4) Support training of CBHW, including community volunteers, and subnational planning to integrate and institutionalize efforts that

contribute to strengthening of health care required during the different phases of the emergency cycle.

- (5) Support member states in monitoring the progress of the application of best practices in the application of the PHC approach during the emergency cycle, including the application of key SEAR benchmarks in emergency preparedness and response.

Annex 1

Agenda

- (1) Inaugural session
- (2) Introductory session
 - Introductory remarks
 - Introduction of participants
 - Review of agenda and adoption
- (3) Business Session
 - Objectives of the Meeting
 - Primary health care approach in emergencies: an overview
- (4) Panel Discussions
 - Community Emergency Preparedness and Response
 - Preparing health systems to meet emergency public health needs
- (5) Group Discussions
- (6) Recommendations
- (7) Closing session

Annex 2

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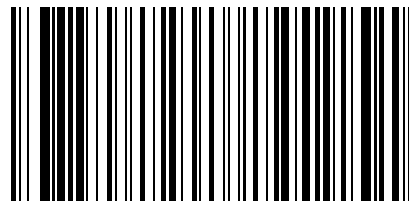
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Emergencies, both natural and complex are a near common occurrence in South-East Asia Region and the World Disaster Report (2009) indicates that about 61.6% of the total number of people killed in various disasters in the decade 1998-2008 is from countries of this Region. Timely and appropriate assistance through communities plays a vital and significant role in alleviating immediate suffering of the affected population. This is more manifested for health needs because community members themselves are the first responders during any emergency. Investing time and resources in emergency preparedness and response at community level; strengthening capacity of community health workers including volunteers as well as linking sub-national level government and nongovernmental organizations is critical for an effective response in an emergency and support early recovery. Methods to achieve this community engagement are best encapsulated and applied efficiently through the primary health care approach. The report of the meeting summarizes the challenges, good practices and ways forward so that communities capacities for emergency preparedness and response are built through the primary health care approach.



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