



# Solution Exchange for the Disaster Management Community Consolidated Reply

Query: Community Based Health Care and Psychosocial interventions Following Disasters – Experiences; Examples

Compiled by <u>G. Padmanabhan</u>, Resource Person and <u>Nupur Arora</u>, Research Associate Issue Date: 27 March 2008

# From Deepa Prasad, United Nations Development Programme (UNDP), New Delhi

# Posted 20 February 2008

Natural disasters, rapid or slow onset, come with serious health, social, and economic consequences. Deaths associated with natural disasters, particularly rapid-onset disasters, are overwhelmingly due to trauma, injuries, or drowning. Deaths from communicable diseases after natural disasters are usually less common.

However, after disasters the potential for communicable diseases increases due to the following reasons:

- Social disruption,
- Changes and/or cessation of public health measures with the risk primarily associated to the size and characteristics of the population displaced,
- · Availability of safe water and functioning latrines,
- Nutritional status of the population,
- Level of coverage and immunity to vaccine-preventable diseases such as measles, and the access to healthcare services.

Given the limited availability of professional and trained health care staff and the drawbacks of the Public health system it becomes crucial that community based informal systems are strengthening to facilitate and assist the public health system to prevent outbreak of diseases. Such systems would play a crucial role during disasters and also at normal times.

I would request community members to share:

- Models of community based disaster preparedness that have effectively addressed or attempted prevention of disease outbreaks
- Any innovative and sustainable strategies adopted to involve the community/volunteers in recognizing the risk of infectious diseases and alerting the appropriate authorities (surveillance)
- Experiences on community based interventions for psychosocial care and support during a disaster

Your rich experiences would not only help us in strengthening community based disaster management to address public health issues of disasters, but also would provide insights to any members from the health sector to take advantage of such informal systems for disease surveillance and prevention of outbreaks.

This would be particularly useful in the wake of avian influenza or any such outbreaks.

# Responses were received, with thanks, from

- 1. Atul Bakshi, Public Works Department, Jammu
- 2. Vinod. K Sharma, Indian Institute of Public Administration, New Delhi
- 3. E. Mohamed Rafique, UNAIDS India Office, New Delhi
- 4. Amit Sharma, International Federation of Red Cross and Red Crescent Societies New Delhi
- 5. Mona Chhabra Anand, Development Alternatives, New Delhi
- 6. Mohammed Ahsan Abid, Centre for Public Policy and Governance, Administrative Staff College of India, Hyderabad
- 7. Pradeep Roy, Inter Agency Group, Kolkata
- 8. <u>Prasad Sankpal</u>, GoI-United Nations Development Programme (UNDP) Disaster Risk Management Programme, Kolhapur
- 9. Alok Lodh, Movement Against AIDS, Muzaffarpur
- 10. Suresh Bada Math, National Institute of Mental Health and Neuro Sciences, Bangalore
- 11. <u>Kailash Ch Pandey</u>, Gol-United Nations Development Programme (UNDP) Disaster Risk Management Programme, Dehradun
- 12. Samuel Arthur, Rail Coach Factory, Kapurthala

Further contributions are welcome!

Summary of Responses
Comparative Experiences
Related Resources
Responses in Full

# **Summary of Responses**

During any natural disaster (particularly rapid-onset ones), deaths due to trauma and injuries are overwhelmingly high, whereas, deaths from communicable diseases are usually less common. However, after disasters, risk of an outbreak of communicable diseases increases and therefore innovative and sustainable strategies to effectively addressed disease outbreak are necessary.

Sharing examples of **interventions designed to prevent disease outbreaks**, members listed experiences from India and abroad. For example, in **Zambia**, the Red Cross Society prevented a cholera outbreak through various strategic interventions; and in **India**, the Indian Red Cross built raised platforms and tube wells in rural areas to provide fresh drinking water during the 2007 floods, along with training volunteers to deliver basic health tips to families. Again, in **India** during the Bird Flu out break of 2006, the Red Cross volunteers displayed messages with "do's and don'ts" to prevent the disease.

Respondents outlined several disease control strategies, including:

- Preventing water stagnation by covering it with sand or available clay, etc.
- Constructing toilets at a distance of at least 250 to 300 meters from habilitations

- Filling human excreta pits with removable metallic/plastic containers to dispose them scientifically, in the nearest town's sewer
- Promoting non-pharmaceutical interventions, such as hand washing, use of masks, taking care for suspected human cases, dissemination of information, and the training of animal health workers on how to prevent the disease in poultry (in case of avian influenza)
- Organizing awareness campaigns in coordination with local governments and other authorities (i.e. distribution of information about the potentially deadly H5N1 strain of avian influenza, visiting and sensitizing communities)

Discussants also shared various **strategies adopted to involve the community/volunteers** in recognizing the risk of infectious diseases and alerting the appropriate authorities. In <u>Nagapattinam</u> during the floods, the community was involved in recognizing the risk of infectious diseases and alerting appropriate authorities. Another example mentioned came from <u>Pakistan</u>, where after the recent earthquake, Community Volunteers trained by the International Federation of Red Cross and Red Crescent Societies carried out heath and hugiene related activities. Volunteers were also used by the Red Cross in <u>Niger</u>, to campaign to raise awareness no how to prevent malaria and in the <u>Maldives</u>, community volunteers provided waste management training by organizing door-to-door education tours.

On this issue of involving the community/volunteers, members recommended providing trainings and orientation to local volunteer groups, NGOs, area specific institutions (i.e. members of Nehru Yuva Kendra and Mahila Mangal Dal), and self-help group extension staff of the local administration. They also advised involving women as they a vulnerable section of society and therefore involving them for psychosocial treatment of victims will be ideal as they would understand their situation and this will also help them to overcome their trauma if there is any.

Responding to the request for experiences with **community based interventions for psychosocial care** and support during a disaster, discussants shared initiatives that are directly or indirectly community driven. For example, a Government of India initiative trained their medical staff on hospital preparedness and emergency and another initiative, the <u>Programme for Enhancement of Emergency Response (PEER)</u> prepared training modules on psychological interventions and epidemic prevention after disasters.

Members noted that it is necessary to conduct a lot more research and fieldwork before appropriate psychosocial interventions are developed. This is especially the case in culturally rich, indigenous and/or remote areas, because it is necessary to understand a community's traditional coping mechanisms in order to address their psychosocial needs post-disaster. They also suggested providing the services of psychological counselors to victims immediately after disasters to reduce the affect of trauma. Discussing the rehabilitation phase interventions, members suggested creating living conditions resembling the original ones and providing immediate employment to keep people busy can the affects of depression on people.

In addition, respondents suggested various ways to make psychosocial interventions more effective:

- Target patients intensively in the third phase (i.e. disillusionment phase)
- Makes plans in accordance with the local cultural and traditional practices
- Focus rehabilitation efforts towards empowering the affected community and involving them in the rehabilitation to enable them develop skills to handle the future disasters
- Target vulnerable populations like children, senior citizens, women, and the disabled
- Compile the necessary legal amendments to ensure smooth operations
- Foster on factors such as religious, spiritual, family, and cultural belief systems

Finally, members felt that it is a good idea to concentrate on community-based disaster preparedness, because people living in high-risk areas have often developed their own coping mechanisms and

strategies to reduce the impact of disaster. It is therefore important to appreciate local knowledge and resources and build on them in order to improve people's capacity to withstand the impact of disasters.

# **Comparative Experiences**

#### **Tamil Nadu**

Communities Involved in Preventing Infectious Diseases, Nagapattinam (from <u>E. Mohamed</u> <u>Rafique</u>, UNAIDS India Office, New Delhi)

In Thanjavur, about twenty-five years ago during floods in the Cauvery delta, medical volunteer doctors and paramedics reached there before the army could be deployed. They involved the community volunteers in recognizing the risk of infectious diseases and alerting the appropriate authorities. Various government officials like the District Collector and the District Medical Officer were involved for various functions, thus preventing the spread of communicable diseases after the flood.

#### All India

From Amit Sharma, International Federation of Red Cross and Red Crescent Societies, New Delhi

#### **Traning Public Health Workers**

After the 2007 floods in many Indian states, the Indian Red Cross Society took various steps to improve the understanding of the public health issues during emergencies at the national, state and district level among its volunteers, state level medical and paramedical staff, teachers, personnel from government and NGO staff. Forty training workshops were organised where a total of 400 personnel were trained. The trained cadres of public health emergency experts are now used during emergencies. Read more

#### Preventing Bird Flu in 2006

During the outburst of Bird Flu, Red Cross volunteers displayed messages with information on disease prevention in key public places, like petrol stations, bus stands, railway stations, health centres, municipal buildings and village administrative offices. They also printed and distributed informational brochures in the local language to ensure that their message reached as many people as possible, thus controlling the spread of the disease.

#### Fresh Drinking Water and Health Services During the Floods of 2007

The Red Cross built raised platforms and tube wells to provide fresh drinking water during floods. Additionally, trained volunteers played a crucial role during the recent floods by teaching basic health tips to families. Volunteers trained in first aid and public health awareness provided useful tips to villagers and helped in preventing outbreak of water-borne diseases, thus ensuring health safety.

Training on Hospital Preparedness and Emergency (from <u>Vinod K Sharma</u>, Indian Institute of Public Administration, New Delhi)

In India the Ministry of Health trained their medical staff on 'Hospital Preparedness for Emergency', a course developed during the Programme for Enhancement of Emergency Response (PEER). The module had a very important component on psychological interventions and prevention of epidemics after a disaster. It was developed by regional experts and tested in six Asian countries (India, Nepal, Bangladesh, Pakistan, Indonesia and the Philippines). Read <a href="mailto:more">more</a>

#### International

From Amit Sharma, International Federation of Red Cross and Red Crescent Societies (IFRC), New Delhi

## **Pakistan**

# Health and Hygiene Care Activities after Pakistan Earthquake

After the Pakistan Earthquake, the IFRC provided clean water to many people who were left homeless and lived near rivers. Also female hygiene promoters, trained by Red Cross and Crescent Society community volunteers, carried out other hygiene related activities. In addition to this, puppets shows were organized to communicate messages of health and hygiene in the community thus ensuring there were no outbreaks of any communicable diseases.

#### Zambia

#### **Preventing Cholera through the Efforts of Volunteers**

The Zambian Red Cross worked to prevent cholera outbreaks by doing a need assessment and deploying volunteers trained in cholera prevention and control activities at various sites. They promoted proper hygiene and sanitation, use of safe water and carried out disinfection of water at the household level, along with actively identifying cases and referring them to health centres. This resulted in the prevention of disease outburst in the country.

#### Niger

#### Awareness Campaign against Malaria

As the rainy season approached in Niger in the year 2007, hundreds of Red Cross volunteers started their campaign to raise awareness on malaria and encourage mothers to protect their children by using treated mosquito nets. The Red Cross volunteers went door to door, visiting mothers and educating them about the causes of malaria and how to prevent it, particularly emphasizing the correct use of the nets. These efforts resulted in preventing the outbreak of disease in many parts of the country

#### **Maldives**

### **Volunteers Providing Waste Management Training**

After the 2004 Tsunami large piles of debris were lying on the island, such as broken glass, battery acid and rubble from destroyed buildings, creating numerous health problems amongst the population. To help address the problem, Red Cross volunteers provided waste management training by conducting door-to-door education tours, and developing carrying bags and stickers with "reduce reuse recycle" printed in the local language. This resulted in raising awareness on various diseases and their prevention.

# **Related Resources**

## Recommended Organizations and Programmes

From Vinod. K Sharma, Indian Institute of Public Administration, New Delhi

#### Programme for Enhancement of Emergency Response (PEER), New Delhi

Ministry of Home Affairs, National Disaster Management Division, North Block, New Delhi; Tel: 23092923/3054/2885/3897; Fax: 23092763, 23093750;

http://www.ndmindia.nic.in/projects/projects.html

Aimed to enhance disaster response capacities in six Asian countries by training; includes information on psychological interventions and epidemic prevention after the disasters in training

#### Sustainable Environment and Ecological Development Society (SEEDS) India, New Delhi

D-11, Panchsheel Enclave, New Delhi 110017; Tel: 91-11-26498371, 41748008; Fax: 91-11-26498372; <a href="http://www.seedsindia.org/our\_campaign.htm">http://www.seedsindia.org/our\_campaign.htm</a>

Working towards making communities resilient to disasters, they have carried out programmes on psychosocial care for Tsunami victims in the Andaman and Nicobar islands.

#### Oxfam Trust India, New Delhi

B-121, Second Floor, Malviya Nagar, New Delhi, 110017; Tel: 91-11-2667-3763; Fax: 2668-3089; info@oxfamint.org.in; http://www.oxfamint.org.in/wwd\_emergencies\_temp.htm

Works during disasters by providing support like clean drinking water, temporary shelter and toilets; and has expertise in public health measures necessary in emergencies

#### Tata Institute of Social Science, Mumbai

P.O. Box 8313 , Deonar, Mumbai 400088 Maharasthra; Tel: 91-22-2556 3289; <a href="www.tiss.edu/institute.htm">webmaster@tiss.edu/institute.htm</a>

Works to provide a professional response to national calamities, through relief, rehabilitation and disaster management with focus on using traditional methods of psychosocial care

From Amit Sharma, International Federation of Red Cross And Red Crescent Societies, New Delhi

#### International Federation of Red Cross and Red Crescent Societies, Switzerland

Chemin des Crêts, 17, Petit-Saconnex, Geneva, Switzerland; Tel: 41-22-730-42-22; Fax: 41-22-733-03; 95; <a href="http://www.ifrc.org/what/disasters/index.asp?navid=04\_03">http://www.ifrc.org/what/disasters/index.asp?navid=04\_03</a>

Disaster response represents the largest portion of the International Federation' work; it has also worked on few public health interventions at the community level.

# Indian Federation for Red Cross and Crescent Societies (IFRC), New Delhi

Red Cross Building1 Red Cross Road, New Delhi 110001; Tel: 91-112- 371-64-24; <a href="mailto:index.asp">index.asp</a> <a href="mailto:http://www.ifrc.org/what/disasters/response/tsunamis/index.asp">index.asp</a>

Programmes include promoting humanitarian principles and values, disaster response, disaster preparedness and healthcare in the community

**Vestergaard Frandsen**, **New Delhi** (From <u>Mona Chhabra Anand</u>, Development Alternatives, New Delhi)

302 Rectangle One, Saket, (Behind ITC Welcome Hotel), New Delhi 110017; Tel: +91-11-4055-3666; Fax: +91-11-4055-3600; ra@vestergaard-frandsen.com; http://www.vestergaard-frandsen.com/site/index.php?sid=7bae70633f761609b08cabcef4145e8d&slq=en&sbw=h

Specialises in complex emergency response and disease control textiles, and has carried out research on public health products such as Lifestraw for water and Permanets..

#### Recommended Portals and Information Bases

National Institute of Mental Health and Neuro Sciences, Bangalore (from <u>Vinod. K Sharma</u>, Indian Institute of Public Administration, New Delhi)

http://www.nimhans.kar.nic.in/dis\_man/default.htm; Contact Mr.; Murthy and Mr. Shekhar; Department of Psychiatric Social Work

Portal contains standardized materials that need to be used for psychosocial care during rescue, relief, rehabilitation, and rebuilding phases of a disaster.

# Related Consolidated Replies

Mass Casualty Management, from Deepa Prasad, United Nations Development Programme, Bhubaneswar (Experiences; Advice). Disaster Management Community. Issued 28 December 2007 Available at <a href="http://www.solutionexchange-un.net.in/drm/cr/cr-se-drm-11110701-public.pdf">http://www.solutionexchange-un.net.in/drm/cr/cr-se-drm-11110701-public.pdf</a> (PDF, Size: 139 KB)

Shares experiences on existing Mass Casualty Management systems at city level, challenges faced to implement them and ways to improve in cities and hospitals

Strengthening Pre-Hospital Care Systems during Emergencies, from Deepa Prasad, United Nations Development Programme, Bhubaneswar (Experiences; Advice). Disaster Management Community. Issued 28 February 2007

Available at <a href="http://www.solutionexchange-un.net.in/drm/cr/cr-se-drm-05120701-public.pdf">http://www.solutionexchange-un.net.in/drm/cr/cr-se-drm-05120701-public.pdf</a> (PDF, Size: 99 KB)

Shares experiences of linking volunteers with public health systems and suggestions to improve pre-hospital care systems and involving volunteers in Mass Casualty Incidents

Improving Preparedness and Community Participation, from N. C. Vij, National Disaster Management Authority, Government of India, New Delhi (Experiences) Disaster Management Community. Issued 29 May 2007

Available at <a href="http://www.solutionexchange-un.net.in/drm/cr/cr-se-drm-29050701-public.pdf">http://www.solutionexchange-un.net.in/drm/cr/cr-se-drm-29050701-public.pdf</a> (PDF Size: 311 KB)

Shares experiences for improving preparedness and community participation levels for efficient management of disasters

# **Responses in Full**

# Atul Bakshi, Public Works Department, Jammu

As far as the psychological trauma after any disaster occurs to the affected population the impact is naturally very severe as the lifestyle changes drastically which has an adverse impact on the personality of the victims.

Briefly the steps which may be taken to reduce the impact/depression on the affected people are:

- 1. Services of efficient psychological counselors should be availed of as the people have somebody to talk, hence they give vent to their emotions which in itself is a remedy.
- 2. During the rehabilitation phase conditions of living should be created which resemble the original condition.
- 3. If the above is not possible at a short notice then the people should be given some work immediately even in the form of volunteers in various disciplines like reconstruction, setting up of makeshift schools and dispensaries. In other words they should be kept busy as far as possible which reduces the depression on the affected people.

As far as the epidemics are concerned we should follow the below mentioned points:

- 1. No water should be allowed to stagnate at a particular place. This can be covered by sand or available clay etc.
- 2. The toilets should be at a distance of about at least 250 to 300 meters from where the population has been rehabilitated.
- 3. The pits where the human excreta go, should be fitted with removable metallic/ plastic containers so that these can be taken and disposed off scientifically at the nearest towns sewer. This is important so that the ground water of that area is not adversely affected.

#### Vinod K Sharma, Indian Institute of Public Administration, New Delhi

Deepa has raised a very important issue- Community Based Health Care and Psychological Interventions following any natural or man made disaster.

At the Government level, Ministry of Health (GOI) trained their medical people in the 'Hospital Preparedness for Emergency', a course developed during Programme for Enhancement of Emergency Response (PEER). This is having a very important component of Psychological Interventions as well as

prevention of any epidemic after the disaster. The course is developed by the regional experts of Asia and fine tuned by the Johns Hopkins University. It is tested in six Asian countries (India, Nepal, Bangladesh, Pakistan, Indonesia and the Philippines)

In India, Prof. Murty and Prof. Shekhar and their team of NIMHANS, Bangalore have done very good work in this area. They have developed a training module to train the people willing to work with the affected community. This is one of very important area and I will recommend that well trained people only should work with the affected community.

There are few NGOs taking lots of interest in the area such as OXFAM, SEEDS, ACTIONAID etc. They may train trainers in this particular area who can help at the time of any disasters.

Our traditional practices can also be very useful in this. We may document some of the traditional practices of Psychological Interventions. Tata Institute of Social Science students used some of the traditional practices (such as listening only to the affected people, talking to them so that they may come out of their trauma) was found very useful.

Any way the disaster management community may come out with few other ideas, how to work in this important area.

## E. Mohamed Rafique, UNAIDS India Office, New Delhi

I would like to respond based on my experience as a volunteer medical officer to flood affected areas in Cauvery delta while I was in the final year of residency at Medical College, Thanjavur, about twenty-five years ago. The villages around the town of Nagapattinam were the most affected, and the medical volunteer doctors and paramedics would reach there before the army could be deployed. The strategies adopted by us to involve the community or the volunteers in recognizing the risk of infectious diseases and alerting the appropriate authorities were:

- Involvement of the District Collector and other relevant officers in the District:
  - To vacate one or two large buildings that could be used as a temporary shelter camps to house the flood-affected
  - o Mobilize transport for affected people and patients to these shelter camps
  - o Arrange for food and medicines at the shelter camps
  - Arrange for food and medicines as well as transport logistics for the marooned population if the numbers were too large to rescue
- Involvement of District Medical Officer or Dean of nearby Medical Colleges and Hospitals, or Superintendent of District Hospitals for
  - o Regular supply of medicines, with large amounts of vaccines, bleach, disinfectants, antipyretics, and anti-diarrhoeals
  - Secondary and tertiary care of patients referred from the shelter camp that does not have specialist services
  - Arranging relief teams of the medical volunteer doctors and paramedics, who in our experience could not stand the working conditions after the first two weeks
- Other arrangements that were done later at the camps
  - o Aid in-kind like clothes and building materials
  - o Community volunteers who could rebuild washed away homes or huts
  - Financial or aid in-kind for restarting livelihoods like damaged fields or poultry

Memories of my duties include those of carrying medicines across hip-deep waters, sloshing through villages in soaked clothes and shoes, injecting typhoid vaccines into arms of Muslim women - arms thrust out between doors from within the house as they did not want to come out of their houses! One persistent memory that still resides with me is that of having to put up with rice that was soaked in the flood and therefore had a bad smell and taste. Two weeks of eating such stuff and sleeping on benches

in the local school, to the tune of mosquitoes humming in the ear, was enough for me to look out for the relief team!

#### Amit Sharma, International Federation of Red Cross and Red Crescent Societies New Delhi

The reason to invest in community based disaster preparedness is based on the recognition that people in high risk areas have often developed their own coping mechanisms and strategies to reduce the impact of disaster. It is important to appreciate this local knowledge and resources and to build on them in order to improve people's capacity to withstand the impact of disasters. Furthermore, the inhabitants of disaster prone communities will always be the first to respond to a disaster.

I am sharing few public health interventions at community level done by Red Cross and Red Crescent Societies in different parts of the globe:

**Pakistan Earthquake** - Many people left homeless by the earthquake live near rivers to have access to clean water. Along with all the other hygiene related activities carried out by the female hygiene promoters trained by Red Cross & Crescent community volunteers, puppets shows were also used to communicate messages in the community.

**Cholera in Zambia -** Zambia Red Cross used its experience in implementing cholera prevention and control activities by adopting the following steps: Assessment to determine the needs, deployment of volunteers trained in cholera prevention and control activities, promoting proper hygiene and sanitation, promoting the use of safe water and disinfection of water at household level, actively identifying cases and referring them to health centres, preventing dehydration and preparedness meetings with other stakeholders.

Malaria in Niger 2007 – As the rainy season approached in Niger, hundreds of Red Cross volunteers started their campaign to raise awareness of malaria and encouraged mothers to protect their children by using treated mosquito nets. Red Cross volunteers went from door to door, visiting mothers and educating them about the causes and prevention of malaria, particularly emphasizing the correct use of the

Improving health with waste management in Maldives - Large piles of tsunami debris remaining in the Maldives, such as: broken glass, battery acid and rubble from destroyed buildings can cause numerous health problems amongst the population. Red Cross volunteers have been provided waste management training and they are heading out on door-to-door education tours carrying bags and stickers with "reduce reuse recycle" printed in the local language.

**India Floods 2007** – In hardware component, Red Cross raised platforms and raised tube wells once again helped in reducing deaths during the floods. Villagers in affected communities really appreciated the utility and were able to get fresh drinking water. Trained Red Cross volunteers played a crucial role during the floods by teaching families basic health tips. Volunteers trained in the disaster preparedness trainings in first aid and public health awareness have been instrumental in providing useful tips to the villagers and helped in preventing water-borne diseases.

In software component of the Indian Red Cross Society, 15 workshops were organized to improve the understanding about public health in emergencies (PHiE) at National, State level and District level for the volunteers, State level medical and paramedical staff, teachers, personnel from government and non-government sector. In these workshops a total of 400 personnel have been trained. These trained cadres of public health emergency experts have been used during emergencies.

**During the Bird Flu outbreak in 2006**, the Red Cross volunteers displayed messages in key public places, like petrol stations, bus stands, railway stations, health centres, municipal buildings and village administrative offices. They also printed and distributed information brochures in the local language to ensure that their message reached as many people as possible. Even local government vehicles carried Red Cross awareness banners during the campaign.

#### Suggestions:

- a) Preparedness is the key to fighting the spread of avian influenza and combating the threat of a possible human pandemic of the disease. The importance of trained professional at the community level is essential in limiting the expansion of infection in birds and its spread to humans.
- b) Their contribution is remarkable in promoting non-pharmaceutical interventions such as hand washing, the use of masks, care for suspected human cases, dissemination of information, and the training of animal health workers on how to prevent the disease in poultry.
- c) Trained disaster management volunteers can start an awareness campaign in coordination with local governments and other authorities i.e. distribution of information about the potentially deadly H5N1 strain of avian influenza, visiting and sensitizing communities.
- d) The key issues in emergencies include employing a systematic approach, understanding community health status prior to disaster, providing greatest benefit to maximum people, control of diseases with epidemic proportion, supporting health authorities to fill the gap, building local capacities, identification and coordination with other players involved in providing services to avoid duplication of efforts and optimal utilization of resources. The package of services during the emergency depends upon the nature of disaster and need of affected population.

This type of awareness initiative is just one example of the many ways in which all of us are working to improve public health by helping to reduce communities' vulnerability to disasters and disease.

#### Mona Chhabra Anand, Development Alternatives, New Delhi

I would like to share corporate sector initiative wherein the research carried out by them has resulted in to invention of Public Health Products such as Lifestraw for water, Permanets etc. Please refer to their website. Its interesting and time tested. You may email at <a href="mailto:ra@vestergaard-frandsen.com">ra@vestergaard-frandsen.com</a> for more information or log on to <a href="mailto:www.vestergaard-frandsen.com">www.vestergaard-frandsen.com</a>.

# Mohammed Ahsan Abid, Centre for Public Policy and Governance, Administrative Staff College of India, Hyderabad

I am glad you have us to discuss post disaster psychosocial care, which is a very important aspect of disaster management. Mr. Vinod Sharma has given us examples of some of the good initiatives in this area. These have been successfully used with mainstream groups in urban and rural areas. I however feel that we need to do a lot more research and fieldwork before we can make appropriate psycho social interventions especially in case of culturally rich, indigenous, remotely located disaster affected communities.

I would like to share my own post Tsunami experience of working with the Nicobarese in the Andaman & Nicobar Islands. I was deputed from Delhi to work in the Central Nicobars soon after the disaster. I found the Nicobarese to be quiet, mild mannered and reticent. Unlike most mainland communities, they are not given to hysterical public expressions of grief. It is difficult for outsiders to interact with them and

draw them out into discussions. Pre designed modules cannot be used in such situations. In fact, a team from NIMHANS, which came to the Nicobars soon after the disaster, is a witness to this phenomenon. These professionals left after a couple of days candidly admitting that they are not equipped to intervene in this kind of a situation and they would need to reconceptualise and reformulate their interventions modules if they are to work with these indigenous people.

Such communities have their own ways of coping with grief and loss, which are rooted in their cultural socialisation and their worldview. We cannot address their psychosocial needs unless we understand their traditional coping mechanisms. Unfortunately there is very little research and documentation in this regard. The Tata Institute students (who worked with me on the islands) spent a lot of time with the community, talking and listening to them. This helped them to establish rapport with the people. Out of my experience of working with the Nicoabrese, I can say that the clue to their psychosocial recovery lies in the way they perceive their organic relationship with the islands - their habitat and its ecosystems. Such communities live in harmony with nature and have a cyclic view of life. More than loss of life, it is the loss of their habitat and way of life, which troubles them. Interventions need to address these concerns.

There are also many other groups of population in our country who have cultures and worldviews similar to the Nicobarese. These are also among the most vulnerable communities. Disaster preparedness demands that we make efforts to know and document their self-perceptions, their understanding of the world, and their existing coping mechanisms if we are to make effective psychosocial interventions in the event of a disaster.

#### Pradeep Roy, Inter Agency Group, Kolkata

Regarding psychological issues, recently we had a workshop on this and we have just begun to help the people to develop community based support systems and psychological first aid, in the spirit of Community Based Disaster Preparedness. The basic idea of CBDP is to empower the community to take care of themselves as much as possible rather than depend on external intervention.

Role of the NGOs need to be that of facilitators rather than being providers. This applies also to psychological issues. The family and the community are the best support in time of disasters. The professionals have a role to train the community level volunteers and task forces. Trained persons in the task forces can support the community to identify those who need professional help. The role of the community is to be supported with adequate referral system.

There is also a danger of disaster management being commercialized. The answer to this is to promote community-based processes. Our thinking needs to become more and more community based and bottom-up.

# Prasad Sankpal, Gol-United Nations Development Programme (UNDP) Disaster Risk Management Programme, Kolhapur

I would like to add some in this query. The affected population in any kind of disaster supposes to mentally disturbed and in such condition they should get proper counseling. In this case, we can use the force of Counselors which available with the health department in the entire country, these peoples are working with the NACO and each state's AIDS control society.

In the preparedness measure, we can train these people especially in the field of trauma counseling after disaster. In my DRM district, I have planned a workshop for these counselors force.

#### Alok Lodh, Movement against AIDS, Muzaffarpur

I have noted with interest this discussion and would like to share some of my few experiences from the Bihar floods and also reflect upon high altitude flash floods.

I have been a personal witness to the severe flooding of 2004 in North Bihar, which was sudden in onset and lasted a short time as compared to the severe floods of 2007, which had a slow built up and lasted for many months altogether. In both the cases in addition to the causes of morbidity, which you have correctly pointed out, a singular common observation was the sudden increment in biodegradable matter in food and drinking water. This contamination results in the increase in pathogens and parasites, which increase the morbidity (and also mortality in many cases). Carcass disposal, disposal of rotten vegetable matter and other such organic products including sewage and excreta becomes a necessity for ensuring community health during floods. Unfortunately, they are given the least importance and in many cases we have been witness to communities dumping carcass of animals, family generated waste and other similar rotting products into the water. Particularly during floods, these should actually be disposed off in high land if available and buried if space permits. Upstream infections caused by these misplaced good intentions result in severe fatalities downstream.

There are some communities living by the water bodies in Darbhanga who have infected themselves while consuming infected fish. Anecdotal reports allege that these fish are infected with various pathogens including bacteria. Most of the fresh water fish start feeding on these biodegradable matter and transmit infections/ infestations.

One more significant contaminant are the various chemicals used commonly at community level which includes anything from Pesticides to detergents to dyes, fertilisers, solvents, oils, bleaching powder etc. etc. Over enthusiastic use of bleaching powder has also caused serious health issues particularly with infants and children.

I have also witnessed the flash floods of Himachal Pradesh in the month of August 1998 (I think) where I lost two entire medical search & rescue teams at Sholding where we were providing relief services to the Nathpa Jhakri Hydro Electric Power Project staff. Our high altitude field hospital was lifted up with medical staff inside and thrown into the raging Sutlej by a 150 feet high wall of gushing water. We could neither locate the hospital nor the bodies of our teammates. In such situations injuries due to unnatural shifting of forces, vibrations from water and boulders, electrocutions from live wires, crush injuries from moving machinery and house hold items create circumstances which can severely challenge even the best disaster management teams however well prepared they may be (forget about the common man moreover in a rural setting!)

In both these cases (Bihar & HP), we had tried to educate the community about the causes of morbidity and mortality. Most of the health issues are usually the result of ignorance more so given that health is the last priority in the family budget of the common man (Both rural and urban). As an integral part of the Govt. led initiative (Supported by UNDP), we had created village level disaster mitigation committees but they had their serious qualitative lapses (which is besides the point). However during these recent floods of 2007, we managed to service more than 30000 families in 154 villages and in almost 80 of the villages we managed to take an on the spot exit CNASE of the beneficiaries. Surprisingly we found that it is the common women in the normal village household who was instrumental/ in charge of providing safe food and drinking water to the family even during floods (the men as usual spent their time on lofts many playing cards to abide the time!).

Thus for disaster related community health safety net, the women may need to be targeted in a more specific manner and their capacity built. Here I would also like to mention that we created a District level Disease Outbreak Surveillance Unit which essentially was a 24 hr call center with computerised data feed facilities which monitored community generated calls for help and situational analysis. Most of the calls

generated actually provided deep insights into the common community behavior including their misconceptions and perceptions.

Generating/ building community knowledge particularly among the women on the causes of morbidity & mortality and identifying the point / time of safe referral may prevent may untimely deaths during such disasters.

#### Suresh Bada Math, National Institute of Mental Health and Neuro Sciences, Bangalore

I do agree with <u>Mohammed A. Abid</u>, Admin Officer. Social-cultural issues play a very important role in shaping the understanding of the disaster, coping pattern, and planning rehabilitation.

In any psychosocial intervention, following things should be kept in mind.

A typical pattern of mental, emotional, and physical response is observed in the majority of people after exposure to any disaster.

Natural disasters like Tsunami evoke the most severe mental health effects. The severity of the symptoms depends upon mainly on three factors:

- a) Individual,
- b) Socio-cultural and
- c) Severity of the disaster

Individual factors are coping pattern, premorbid personality and resilience factors.

Socio-cultural factors like social and family support, characteristics of the community.

Severity of the disaster includes numbers of fatalities and injuries, nature of the property damage, size of the geographic area involved, duration of exposure, and recurrence of the event would be indicators of disaster severity associated with severity of mental health consequences.

#### Lessons from Andaman & Nicobar Islands (A&N):

People of Andaman & Nicobar Islands (A&N): Population of A&N can be divided into settlers and scheduled tribes. Settlers form a majority of the population in A&N. Settlers can be divided from the area of origin from various part of India like Tamil Nadu, Andhra Pradesh, Jharkhand, Punjab, Kerala etc. There are also refugees settled in these Islands from Sri Lanka, Burma etc. Hence, it is also called "Mini India" since it represents most of the Indian culture.

Scheduled tribes have been divided into Mongoloid & Negrito tribes. Nicobarese & Shompens form the Mongoloid tribes. Onges, Great Andamanese, Jarwas & Sentinilese form the Negrito tribes. Integration of Nicobarese in the past to the existing civilization has yielded fruit. However, on the other hand, attempts to rehabilitate Onge and Great Andamanese failed and they are on the verge of disappearance from human race. Subsequently jarwas and sentinilese are left in their world without any attempts to integrate to the existing civilization since these tribes were not cooperative towards the outsiders. All these settlers and tribal groups have their own culture, traditions, belief systems, occupations & languages. Hence, their needs differ from each others. During the preparation of relief and rehabilitation package the above points were relevant.

These tribal groups have their own system of hierarchy, which can be traced to the British navy system. Each village has one or more captains and sub-captains, who function like the heads of the joint families. Each family may comprise of 40-120 members. Any type of interventions requires permission from the

captain. Without the captain's approval nobody in the community would co-operate. The joint family system appears to buffer the early phase of impact of stress. These tribal populations are community and kinship oriented rather than individualistic. Tribal population are looking for the rehabilitation in terms of permission to clear the forest for their settlement in tikri (Highest place on the island), providing raw material for building house, boats etc.

Resilience Factors: The Nicobarese continue to live in extended joint families, which may consist of 40–120 members. Leadership patterns and boundaries are well demarcated in the joint family, which are headed by sub-captains and in the village headed by well respected chieftains called "captains". The interactions of the members of the families and the village hierarchies are marked by unusual levels of altruism. Communication is open. Women and children are given high priority with regard to social status, safety and security. The community and kinship orientation of the Nicobarese also dictated their subsequent actions after the disaster; they either refused to move from their islands, or, even when displaced to relief camps, persisted with their accustomed cohesiveness and kinship hierarchies.

Consequently, orphans were immediately 'adopted' after the disaster and were taken care of, and families started their traditional rituals within a week after the disaster. The Nicobarese are a shy, reserved community, who do not display their emotional distress easily to outsiders. Any interaction with 'outsiders' or even acceptance of any type of intervention requires permission from the captain. Without the captain's approval, nobody in the community would co-operate. The joint family system appears to buffer the early phase of impact of stress. In contrast, settler families are by and large nuclear families comprising of 4-6 members, who have lost touch with their extended families on the mainland. They tend to be individualistic rather than community-oriented and expressed their distress easily and ventilate their problems to others.

The culture, tradition, language, belief, family structure (nuclear), leadership patterns of the settler population are similar to main land hence it is called "MINI INDIA". Dealing with this population is also challenging because of the language and cultural barriers. Many of the settlers have fled to their native places in the main land after the disaster. But there are high chances of anticipated conflicts on return of repatriated settler population. Settler's populations who have stayed back in the island are looking for rehabilitation in terms of financial compensation. The settler populations are individualistic.

A cohesive community and family system and the altruistic behavior of the community leaders played a major role in providing support and mobilizing other survivors and youngsters in the community to help each other. Natives have a very simple life style. Their dependency on the materialistic needs of the contemporary world is very minimal, which added to their resilience. Though there is vast diversity with regard to religion and cultural practices in the A&N population, they proved to have 'unity in diversity' even under adverse conditions.

Religious institutions assumed different roles, from organizing camps to providing food for the survivors, and religious leaders gave their valuable time to the survivors by providing traditional and spiritual preaching. This religious grounding of the people played a major role in helping them come to terms with the destruction. They started their family and religious rituals by rebuilding their religious institutions collectively within few weeks after the disaster using their own resources. This finding is in accordance with previous observations that religious beliefs and social support can provide a basis for coping.

Rehabilitation: During the early phase of the relief work, tsunami survivors were supplied with clothes which were not accepted by many tribal communities, because they were not appropriate to their culture. Therefore when any kind of psychosocial interventions is planned without considering the local cultural and traditional practices, the planned intervention may be rejected. Hence, rehabilitation efforts should be culturally appropriate and to be targeted towards empowering the affected community to enhance their camaraderie and competence to deal with any kind of disaster in the future.

Psychosocial interventions should be:

- a) Targeted (intensively) in the third phase i.e. Disillusionment phase [See the attachment]
- b) Should be planned according to the local cultural and traditional practices [otherwise it will be rejected by the survivors] E.g. Many people refused to eat packed food supplied during the disaster.
- c) Rehabilitation efforts should be targeted towards empowering the affected community. Involvement of the local people in the rehabilitation will allow them to develop skills to handle the future disaters
- e) Focus should be high-risk populations (like children, geriatric, women, disabled and so forth)
- f) Necessary legal amendments should be done at the earliest to help the needy [Rules which are obstructing the rehabilitation should be amended]
- g) To foster the resilience factors (religious /spiritual /family /cultural /belief system)
- h) To follow the ethical principles
- i) To work towards the common goal with high interdisciplinary co-ordination

Building a 'house' (physical structure) is 'rehabilitation'.

Building a 'home' (psychological, social, cultural and religious) is 'psychosocial rehabilitation'

Hence the role of multi-disciplinary, multi-dimensional, involving GO, NGO's and local population is highly essential.

# Kailash Ch Pandey, GoI-United Nations Development Programme (UNDP) Disaster Risk Management Programme, Dehradun

As far as model concept of prevention of diseases after any disaster is concern there is no any certain guideline can be drawn treated as ideal way to intervene in the area specific. The experiences may different and vary place to place depending upon the social geological factors of the area.

The one way that could be helpful is provide trainings and orientation to the volunteer groups of area, CBOs, area specific institutions like members of NYK, Mahila Mangal Dal and self-help group extension staff of the local administration. It will also help to ensure women participation in the process as they are considered the most vulnerable section of the society in the context of disaster and diseases.

In the context of hilly terrain, as I belong and working in that area, without connectivity of roads, the normal distance from one cluster of village to other is five to six km and the distance can be further multiplied as far as the availability of near most government health care centers/ facilities are concern, the strategies would shape differently. The local indigenous knowledge and local resources like those people who posses the traditional skills of medicine and treatment using locally available remedies may help to facilitate the health issues related with disasters.

The identification of those and after imparting some health related technical know-how and practices could be taken as significant key players for health care in community based disaster management process.

#### Samuel Arthur, Rail Coach Factory, Kapurthala

Disaster management in Punjab: As I see, this does not exist anywhere. I beg to differ that we should expect sole participation from NGO's only and restrict role of state governments in this vital service to citizens of this country. I have seen rail accidents and floods in Punjab and in both these incidents- it is common man which had come forward before any planned approach of state government or any Government body action.

Common man had come to rescue people trapped in charred bogies of trains, handling dead bodies, handling injured and even providing food and support to those who survived. I can be wrong, but why we do not emphasize role of states, why we do not raise voice against corruption where huge amount is being swallowed by men in white.

Second most important issue is - educating people. We should do something concrete, where students in schools and colleges should be informed about how to handle disasters and I am sure that we never ran short of human hands and hearts to come forward for a social cause. It needs right approach with positive mind.

It is always a delight to read your views and articles. Please keep the fire ON.

#### Many thanks to all who contributed to this query!

If you have further information to share on this topic, please send it to Solution Exchange for the Disaster Management Community in India at <u>se-drm@solutionexchange-un.net.in</u> with the subject heading "Re: [se-drm] QUERY: Community Based Health Care and Psychosocial Interventions Following Disasters – Experiences; Examples. Additional Reply."

**Disclaimer:** In posting messages or incorporating these messages into synthesized responses, the UN accepts no responsibility for their veracity or authenticity. Members intending to use or transmit the information contained in these messages should be aware that they are relying on their own judgment.



Copyrighted under Creative Commons License "<u>Attribution-NonCommercial-ShareAlike 2.5</u>". Re-users of this material must cite as their source Solution Exchange as well as the item's recommender, if relevant, and must share any derivative work with the Solution Exchange Community.



Solution Exchange is a UN initiative for development practitioners in India. For more information please visit <a href="https://www.solutionexchange-un.net.in">www.solutionexchange-un.net.in</a>