### **Report**

# CME cum Workshop on "Disaster Preparedness and Post- Disaster Management"

held on 3<sup>rd</sup> August, 2013

Department of Community Medicine, HIMS, HIHT University, Swami Ram Nagar

## Report of CME cum Workshop on "Disaster Preparedness and Post- Disaster Management"

The department of Community Medicine, Himalayan Institute of Medical Sciences, HIHT University, Dehradun organized a one day workshop on 3<sup>rd</sup> August 2013 on "Disaster Preparedness and Post- Disaster Management" for health care professionals, NGOs, Social Workers, government officials (CMOs and Dy.CMOs of state Govt. and survey of India) etc.



The programme started with Guru Vandana and dignitaries on the dais paid their reverence to HH Swami Rama and asked for his blessings.



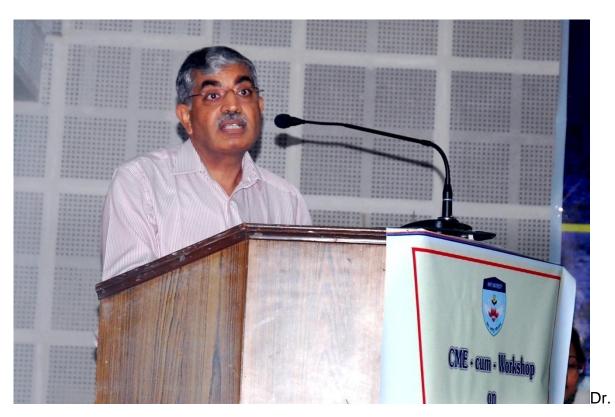


Welcoming the delegates Dr.Jayanti Semwal, Organizing chairperson of the workshop and head of the department emphasized about the need of the hour to have practical guidelines for the grass-root level workers as well as the medical officers at the time of disaster. She also talked about the importance of disaster preparedness and mitigation plans.



Sh. Prem Budakoti, "Sangathan Mantri", Uttaranchal Daiviya Aapda Peedit Sahayata Samiti, special invitee expressed his views and experiences about the recent disaster in Kedarnath on the 15<sup>th</sup>- 17<sup>th</sup> of July, 2013. According to him in this high tech era also, the news that disaster had struck Kedarnath reached the government official very late, which in turn delayed the relief operations. All communication with this region had broken and there was no means to reach it. The unregulated human activities have disturbed the ecosystem of the Himalayas and thus we are also responsible for the disaster in a way. He further said that people of Uttarakhand opened their homes and hearts to the stranded people from other states in this need of hour and faced it very bravely. He also highlighted the role of local people, army men and air-force in relief and rescue mission.





Vijender Chauhan, Vice Chancellor of HIHT University emphasized that the relief and response to any disaster should be planned and channelized prior to any catastrophe strike.

He gave the example of Japan, which deals with earthquakes, nuclear leaks so efficiently. He also said that, the best way to be prepared for any disaster is to have knowledge of how to respond and mitigate the effects of any disaster. He also said that the vision of HH Dr. Swami Rama was such that he built this Hospital close to the Airport which was a great help to the people who were airlifted from Kedarnath area. These people received immediate free treatment in this hospital.

Guest of honour of the workshop Dr. Vijay Dhasmana, Vice-Chancellor, Himalayan University humbly put forth the contribution of the Himalayan Institute during the disaster, by providing free shelter and food for the patients as well as their relatives.



He further emphasized that policy makers should make policies not in AC rooms, instead involve the community and grass root level workers after a proper needs assessment, so that the community has an ownership in these programmes. This should involve training local people like old retired army men; young enthusiastic people who want to make a difference, already trained ANMs etc. He then shared the vision of Himalayan Institute to adopt disaster struck villages, train local people for disaster preparedness and mitigate the effects of even day to day hazardous situations. He informed that Himalayan Institute will do capacity building of locals, impart preparedness skills and thus empower them to respond to

the hazards and disasters quickly and save themselves and their community in such conditions.

Chief guest Dr. Y.C. Sharma, DGHS, Uttarakhand, congratulated the Institute and the department of Community Medicine for their initiative taken toward disaster preparedness



and for organizing such a workshop, which is the need of the hour.

He said that all the delegates would give there valuable inputs and would help everyone to understand how the state can be better prepared for such situations in future. He also said that by being prepared for a disaster the effects can be mitigated.

Vote of thanks was proposed by Dr.S.D.Kandpal in which he thanked all the Guest speakers, delegates and all those who had contributed in the organization of this workshop.



Prof Sanjoy Das and Prof. JP Sharma shared personal and HIHT experience in relation to this disaster and disseminated the pioneering role that the institute undertook in taking care of the disaster victims and their relatives.





Prof J.P.Sharma detailed the overview regarding general effects of disaster and management frame work towards it. He also emphasized the importance of HIHT hospital adjoining the Jolygrant airport and the vital role of our hospital to the disaster hit population landing at airport. He emphasized the preparedness of our hospital in form of special beds, ICU,CCU, blood products and emergency OT to accommodate as many patients as required. He stressed upon that our hospital has been a boon for survivors in this scenario.





Prof. Das being in the group of health officials who first reached the disaster site without much knowledge about the amount of destruction and loss that had occurred, he shared what he saw and how the affected people managed to survive themselves and also helped others at the same time. They further shared how their group took DNA samples, packed the bodies or cremated if they could, cleared the temple area, sealed the belongings of those people etc. He further emphasized the significant role that HIHT had played when Uttarakhand was struck by disaster by providing medical aid to as many as possible & shared his photographs which he had taken during his stay in the affected area.

Following introduction of the present scenario and sharing first-hand experiences, there was a sessions by eminent speaker Mr. Sanjay Jhaldiyal (member Disaster Management Cell, UP) who spoke in detail about the 'Disaster Preparedness'.





He discussed in detail about its importance at the hour of need. He further discussed the annual global economic loss due to disasters, hazard vulnerability in India, different types of disasters, aims of managing disasters, disaster mitigation etc. At last he emphasized on the 'New Culture of Disaster Management - Culture of Preparedness, Culture of Quick

Response, Culture of Strategic Thinking, and Culture of Prevention Necessary to change the attitude'. He also emphasized that need of the hour is to train local people in large numbers for Capacity-building of the locals, development of in-house skills, standard guidelines, convergence of funds and professionalism.

After this very enriching session on Disaster Preparedness, Dr P L Joshi (Advisor to WHO), Delhi and Dr. B. P. Mathur (Prof & Head. Deptt. of Community Medicine), Jhansi explained at length about **Anticipated Problems & Role of Public Health in a Disaster**.





In the session eminent speaker Dr. P.L. Joshi explained about different types of disasters, the disaster cycle or different phases of disaster (inter-disaster or non-disaster Phase, pre-disaster, impact, emergency, reconstruction) and the role of Public Health in each phase of disaster. He emphasized the role of Psychological and Social support after such catastrophe since it may lead to epidemic of post-traumatic stress disorder (PTSD), that should not be neglected. People who have lost everything during disaster are in need of Post Traumatic Counseling and rehabilitation.

This was followed by talk of Dr. B. P. Mathur (Prof & Head. Deptt. of Community Medicine), Jhansi, who explained about the disaster situation and its management in Uttarakhand on the 16th and 17th June 2013. He also talked about the broad priorities in a disaster rehabilitation plan and post disaster-phases (Rescue Within- 7 days, Relief Within- 3 months and Rehabilitation- 5 years or more). He discussed rescue, relief and rehabilitation in length and also explained the role of public health and difficulties faced during these activities.

This was followed by group dynamics in which participants brainstormed in different groups on health, livelihood promotion and local level risk management in disaster situations and came up with a draft plan of action for the state of Uttarakhand.

At the end of the CME Prof. Uday Mohan (Prof & Head, Deptt. of Comm. Medicine, KGMU, Lucknow), Senior expert & Master Trainer, DMC(UP) informed the house that disasters are quite devastating and usually leave a trail of human agony including loss of human lives, livestock, property, livelihood etc. that have a significant impact on the survivors' quality of life. Along with relief, rehabilitation and care of physical health and injuries, psycho-social and mental health issues are also important that need to be addressed on priority. Apart from logistic and material help, the survivors will require psycho-social and mental health interventions.

#### **GROUP DYNAMICS**

Dr. P. L. Joshi (Advisor of WHO, Former Director of NVBDCP), Delhi, Dr. Surekha Kishore (Prof & Head. Deptt. Of Comm. Medicine), AIIMS, Rishikesh; Mr. Sanjay Jhaldiyal (DMC, UPAAM, Lucknow) were the Chairpersons for these group dynamics and they guided, encouraged and gave their valuable inputs to all the delegates participating in this event. Dr. Uday Mohan (Prof & Head, Deptt. of Comm. Medicine), KGMU, Lucknow was the overall coordinator of the group dynamics. Faculty of Community Medicine facilitated the whole group activity.

#### Group I:

Topic: Health- Addressing health issues at all dimensions & innovations at different level of prevention.

Resource person- Dr Surekha Kishore

Facilitators- Dr S.D. kandpal, Dr R.Kakkar, Dr Shaili Vyas

Rapporteur-Dr Gagan deep kaur, Dr Richa Sinha

#### Participants-

Dr Anita Sharma, Dr Anurag Bhargva, Dr Monika kakkar, Dr Alpa Gupta, Dr Sadhna Singh, Dr Sunil, Dr Navneet Jain, Dr Y.S payal, Dr Bachan Singh, Dr Amit Kumar Samuel Deane, Dr Praveen kumar, Dr Roopa Hansraj, Dr Harpreet Singh, Dr S.S Dugten,

Presenter - Dr Anita Sharma





#### Group 2:

Topic: Health- Addressing health issues at all dimensions & innovations at different level of prevention.

Resource person- Mr.Sanjay Jhaldiyal

Facilitators- Dr D.roy, Dr. Ruchi Juyal, Dr Deep Shikha

Rapporteur- Dr Ravleen kaur, Dr Amit kumar, Dr Shivasheesh Gupta

#### Participants-

Dr J.P Sharma, Dr R.K.Rohatgi, Dr Sanjay Aggarwal, Dr Prerna Jagdish, Dr Richa Garg, Dr Abhishek Deshwal Dr G.k. Naresh, Dr Sachin Garg, Dr Aditya Suan, ,Dr Chanderkant, Dr H. C. Martolia ,Dr Mesar B Singh, Dr D.P. Joshi ,Dr Jangpangi





Presenter-Dr D.P. Joshi & Dr Jangpangi

#### Group 3

Resource person- Dr P.L. Joshi

Facilitators- Dr Jayanti semwal, Dr A.K Shrivastav, Dr. P. Aggarwal

#### Rapporteur- Dr Madhavi Bhargav, Dr Satpal Singh, Dr Shubham Sharma





#### Participants-

Dr Babar Rehmani, Dr Deepa Singh, Dr V.P. Maurya, Dr Nadia Shirazi, Dr Dayal Sharan, Dr Alka Aggarwal, Dr Akshat, Dr Prabhnoor, Dr Richa Sinha, Dr Anu Goel, Dr Chandra Pant, Dr Sanjay Tiwari, Ms Prabha Joshi

Presenter-Dr Sanjay Tiwari

#### **Group Dynamics**

Objective: What kind of long term rehabilitation services should be developed after disaster in Uttarakhand?

#### **Recommendations of Group 1:**

The topic give to group 1 for brainstorming was **Health Component (Physical, Mental and Social)** 

The group came up with the unanimous idea that PLANNING SHOULD BE DONE AT ALL LEVELS.

PREDISASTER PREPAREDNESS: Identification of areas prone to particular disasters for e.g. Earthquake, Flood, Landslides and Drought etc. should be done beforehand followed by population enlisting (Estimate amount of population of particular area so that exact number of causalities can be estimated) along with the documentation of all migratory population.

To raise an ALARM, First aid kit, Rope, Communication apparatus – local as well as intersectoral, Transportation – alternative – making rope ways, boats, motor boats, airplanes, availability of dholi system in hilly areas, Alternative for power, Adequate clothing

according to weather, Ready made food, natural sources (fruits, vegetables, roots, fish, etc), Setting up community kitchen, List of red cross trained person – first medical respondents

The area where disaster victims would be treated should be identified and informed to the rescue teams.

Awareness should be generated at community level & Community Empowerment should be done by training of gram panchayat, graduate people, local leaders in the disaster prone area.

There should be resource mapping, strengthening the surrounding area with health facilities to manage the disaster ,preparation of a SOP for different disasters and involvement of different gov. and NGO & media in the team

There should be proper communication between different members of teams at all levels.

Paramedics trained in BLS should be present with all the required accessories. Flowchart for referral to be kept ready and hard and soft copies of it should be there with every active member of the team.

#### Management at health canters:

- ▶ PHC –first aid training can be given to all patients, ABC and spine immobilization should be established for sick patients. Splints can be given for fractures and complex fracture cases should be referred to higher facility with proper immobilisation.
- ▶ CHC- mass causality care is given at CHC. It should have triage capability, ALS capability, holding the patients.

**Transportation measures** like via helicopters should be ready. IN case of floods transportation can also be done via boats.

#### Care at tertiary center

The hospital should be notified by proper notification procedure for eg-switch board..

Triage system of the referral hospital should be well functioning at all levels. Mobile medical team should be there who can move to the desired site as soon as possible after notification. Allocation of duties should be done for proper patient management.

All level of medical care PHC, CHC, tertiary care disaster management teams should communicate at 6 months at state level and 6 month for enhancement of disaster management.

Regular Workshops, Mock drills, Refresher training programmes should be conducted by the government in collaboration with Medical Colleges and PPP.

Fund raising activities should be conducted and managed properly.

Training of teachers and students at school level and at college levels in first aid and BLS.

#### Post disaster phase

#### Initial phase:

Activation of quick response team should be done at various levels. Segregating the patient should be done according to the injuries and the type of disaster. Direction manual should be given to all the members of quick response team. According to the seriousness of the condition of the patient proper referral should be done.

Mental health-counselors should be present for the people suffering from depression, PTSD after the disaster.

There should be provision of safe food and clean water to the victims. Proper disposal of dead bodies should be done according to the preordered instructions

Assessment of remaining resources of the area should be done by the experts.

#### Recovery phase

Focus should be on vector control measures and provision of the safe water and sanitary system. Enhanced immunization should be done at all levels along with provision of safe food and water to all victims.

This group concluded that planning should be focused on pre disaster, during disaster & post disaster phase. Training at community level of gram panchayat, graduate people, local leaders in the risk area & Resource mapping were re-emphasized. Public private partnership and organized management during disaster at health centres (PHC, CHC, and tertiary care centre) through training in pre-disaster phase were the other areas of concern.





#### **Recommendations of Group 2:**

The topic given to group 2 for brainstorming was Livelihood promotion (Identify survival needs, community empowerment, involvement of others etc).

The group identified the need of addressing this rehabilitation in the following heads:

- Community Needs Assessment (CNA) is required for:
  - Immediate /short term rehabilitation (Ready to wear clothes, ready to eat food, shelter etc.)
  - Medium term rehabilitation
  - o Long term rehabilitation

The assessment to support livelihood recovery should include 4 aspects:

(1) Damage assessment: The resulting damage estimations about tangible and intangible losses will give a basis for the projection of financial needs for rebuilding and defining priorities and focus.

As such, accurate damage assessments and a comprehensive plan of action in terms of minimum financial needs, necessary capacity, and priorities correlate to a high degree.

- (2) Risk assessment: The participation of the affected communities in the risk assessment is essential. It will serve as an educational process for the communities to learn about imminent dangers and potential risks in their environment.
- (3) Capacity Mapping: The findings from the mapping exercise will help to determine a range of technical training needs, as well as supported appropriate resource allocation for capacity building.
- (4) Vulnerability assessment: will be used to create an understanding about social and economic vulnerabilities in terms of who, why, what, and how.

#### Medium Term...

Involvements of the locals, BDO, ASHA, ANM, etc is essential for the community participation along with involvement of other agencies. Food, drinking water, clothing, sanitary care, hygiene maintenance should be provided to the victims along with the health education to minimize the risk of outbreak of diseases particularly water borne diseases.

Vulnerable group support is very important as well as taking care of the education of children and livelihood. Psycho – social care is an integral part of supporting the victims.

For employment generation Identification of cottage industries can be done like dried leaves of pine trees can be collected – which is bought in turn by the Forest Department or bee farming or poultry or basket weaving or carpet making etc. can be taught to the locals by governmental or non- governmental organization in PPP.

Fabricated sheet huts or steel sheet houses can be provided to the locals till permanent houses are made.

#### Long term...

Rehabilitation of affected community in terms of houses, power supply, health services, schools, panchayat ghar, banks/ post-offices or PDS ration shops etc.

Rehabilitation of villages in safer area from disaster prone area is of paramount importance.

Strengthening of routine immunization is must.

Internalization of disaster management in the planning and development process of the village should be done by involvement of Village Health and Sanitation Committee.

Finally in the group conclusion three very important things were emphasized by the speaker that it is important to understand that the concept of livelihood is distinct from income generating activities or employment. So, various factors should be identified that restrict or permit the choice of livelihoods for a poor household. To gather and analyze data collected on these factors to identify an appropriate livelihood intervention is very important. The short term, medium term and long term livelihood promotion activities following disaster is the key to battle any unforeseen incidence.





#### **Recommendations of Group 3:**

Local level Risk Management or Preparedness and Mitigation Plans: capacity building, local level task force, Contingency Planning

It was discussed that the activity should begin with identification of risks in the region. The possible disasters can thus be classified as:

- 1) Natural disasters
- 2) Man-made disasters

The natural disasters are landslides, mudflows, cloudbursts, flash floods, earthquakes and forest fires. The man-made disasters are accidents, stampedes, air crashes, etc.

The main aim of mitigation is to reduce the possibility of the hazard: this can be through well planned construction, law enforcement, avoid deforestation, replantation where ever there are less trees, controlled tourism, identify nodal agency to control tourists who are registered at entry.

We have to strike a balance between the environment and developmental activities.

Ways to reduce man-made disasters: Better roads, checking of functioning of vehicles, skills and health which includes mental and physical health of the drivers, stricter licensing authorities, safe speed limits and limit night driving

Various levels at which preparedness can be done are at PHC, CHC and SC level and at the community level. Before the disaster the preparedness can be done by capacity building of medical and paramedical staff (mock drills), skill based rather than knowledge based, team based training which includes job description and mock drill of each function,

mitigation protocol and guidelines, material and logistic arrangements, reserve stocks, first aid material and ready kits, standard list (comprehensive and ready), contingency untied funds for disaster, communication system like mobiles, satellite phones.

There should be proper communication plans and guidelines regarding who will communicate what and to whom.

Proper functioning emergency transport should be there along with prior identification of referral centre. "Doli transport/stretcher" can be adopted when regular transport not available/ possible.

#### At the community level:

Disaster management should be on the agenda of VHSC. AWWs and ASHAs should be part of the preparedness team. The "Triple S" scheme (**sudurvarti swasthya sahayak**) should be revived.

The training should be team based. It is important to identify volunteers who are motivated and properly trained. Such volunteers can be retired army officials, NCC cadres, etc. Youth from high schools and colleges should be given incentives in terms of marks for such training.

Psychosocial and cultural issues should be kept in mind when training. IEC at village level should be done about the possible disasters. There should be monitoring and evaluation of all these activities.

#### **Specific requirements raised by the government doctors** in the group activity:

- Air ambulance may be required for this kind of terrain which is known to have damaged roads.
- Local teams should know the danger signs and should have a protocol in place.
- Control of common illnesses and safe water supply: chlorine tablets.
- For forest fire: community should be made aware for this.

The workshop ended with thanks to all the guest speakers & delegates for their active participation.



#### **Acknowledgement-**

The entire organizing team is thankful to the Chief Guest, Guest of Honor, Special invitee, VC HIHTU, Dean HIHTU, MS HIHTU, Speakers and Delegates.

We are thankful to our funding & supporting partners - HIHT University, Kalptaru Pharmacy, HIHTU, Indian Public Health Association, IAPSM (UP-UK chapter), Director RDI, Director Nursing and Mr. MBL Bhargava (Gurgaon).

We are also thankful to Uttarakhand State Disaster Management Cell, Prof. Uday Mohan and Mr Sanjay Jhaldiyal for all the logistic support provided to us. We are also thankful to State Medical Officers (CMOs, CMS & Dy. CMOs), CMOs from Survey of India and officials from various NGOs for their active participation.