# HOPE, a pivotal program to Nepal's future in emergency medicine

## Case Study

March 2014

**Kathmandu, Nepal** – A long line of buildings constructed from brick and cement encircles a small courtyard. The courtyard bustles with people moving from building to building. These people are patients, students, professors and doctors, receiving care, learning or teaching at the Institute of Medicine at Tribhuvan Teaching Hospital.

The Tribhuvan Teaching Hospital was constructed in 1984 with the support of Japan International Cooperation Agency (JICA). With a capacity of 444 beds, the hospital is the largest in Nepal and sets the standards for which other hospitals in the country aim to achieve. One man in particular, Dr. Pradeep Vaidya, Professor in the Department of Surgery and Director of the Department of Information and Technology at the Institute of Medicine, has set out to improve emergency medicine in Nepal.



Boasting 444 beds the Tribhuvan Teaching Hospital is the largest hospital in Nepal. It greatly improved its emergency plan in 2004 as a result of the HOPE training.



#### Hospital Preparedness in Emergencies (HOPE) project prepares hospitals for mass casualty incidents

During a disaster, healthcare centers can often become incapacitated due to infrastructural damage and overwhelmed facilities. The HOPE training course consists of 26 interactive lectures and seven exercises, targeted at medical professionals, designed to handle emergencies involving mass casualties.

HOPE graduates are able to design facility-specific plans to maximize their ability to manage emergency situations. The course includes but is not limited to instruction in hospital emergency incident command systems, hospital disaster planning, hospital evacuation, and management of the deceased.





As a master trainer for HOPE, Dr. Pradeep Vaidya is trying to push for HOPE to become a requirement for officials Ministry of Health and Population.

Dr. Pradeep is a Master Trainer for the Hospital Preparedness in Emergency (HOPE) project under the Program for Enhancement of Emergency Response (PEER). PEER is a regional capacity building program initiated in 1998 by USAID's Office of U.S. Foreign Disaster Assistance (OFDA) to strengthen disaster response capacities of vulnerable countries in Asia. Over the past nine years, Dr. Pradeep has trained medical professionals in Nepal and other PEER countries.

# Practical applications of HOPE in Nepal

Although there have been relatively few natural hazards in Nepal in the past few years, there has been no shortage of mass casualty incidents. There are over 100 major motor vehicle accidents reported every day in Kathmandu. Thousands more minor accidents are not reported. As busses are the main form of transportation employed in Nepal, bus accidents pose a common issue for local Nepalese emergency medical capabilities.

"Just last week we had a large bus accident and about 36 people were brought to the hospital," Dr. Pradeep recounts.

"I think that the lessons learned through the HOPE program have been very important in efficiently dealing with these incidents. Medical responders are able to quickly set up a triage system whereby casualties are classified by the severity of their injuries," he states.

Triage allows for the efficient use of

medical facilities through the prioritization of care for casualties. Medical responders use red, yellow and green ribbons to denote the severity of injuries. Red indicates the highest level of severity whereas green denotes the lowest level of severity.

## Several hospitals now have a disaster plan

In Nepal, the implementation of the HOPE program has been pivotal in the development of emergency planning in hospitals. According to Dr. Pradeep, before HOPE implementation in 2004, only two hospitals – including Tribhuvan Teaching Hospital – had emergency plans. The disaster management plans were comparatively poor and not well developed. Since 2004, approximately two HOPE courses have been conducted each year and eleven hospitals now have a disaster plan. Furthermore, there is no shortage of hospitals that would like to participate in a HOPE course.

"I will be conducting a HOPE basic training course next week. Most hospitals have requested for a HOPE training in Nepal and I am unable to keep up with all the requests. The only limitation is financial – given the funding, I would definitely expand the scope of HOPE's activities," Dr. Pradeep states.

Despite financial limitations for HOPE implementation, once a hospital receives HOPE training, it requires only minimal cost on part of the hospital to stay prepared.

"Cost is minimum, but return is high. In general, if hospitals know how to plan for an emergency situation and use their existing resources effectively, emergency situations can be handled efficiently," Dr. Pradeep comments.

The importance of non-structural measures to tackle emergency planning in hospitals is often overlooked. Non-structural measures such as increasing the basic knowledge of disaster planning is often more effective than costly structural measures. This is because in a mass casualty incident, institutional capacities are often tested. Priority shifts from being able to provide individual patients with the best care available, to being able to provide care for the



Although the Tribhuvan Teaching Hospital has n from bus accidents. Busses are the predominar

largest amount of patients with existing resources. This often requires quick and creative thinking on part of health care providers.

## Reaching beyond the implications of HOPE

HOPE emphasizes the efficient allocation



ot had to deal with any mass casualty incidents resulting from natural hazards, it has had to deal with a number of incidents resulting It form of transportation in Nepal, where thousands of road accidents occur daily.

of resources to patients during a mass casualty incident in individual hospitals. However, Dr. Pradeep aims to take this lesson to the national scale. Apart from trying to push the HOPE course to be a requirement for the officials of the Ministry of Health and Population, he has advised the government to have a Health Emergency Operation Center. The center,

to be located in the ministry, will have the responsibility of preventing duplication of efforts.

"In Nepal, there are so many intergovernmental and nongovernmental organizations working in the field of health and medicine. However, there are very few updates on their activities. The Health

Emergency Operation Center would prevent duplication of work and allow for the efficient allocation of resources."

The Health Emergency Operation Center is currently in development, although with very modest resources. The building will consist of two shipping containers modified into an office.





#### **Asian Disaster Preparedness Center**

SM Tower, 24th Floor 979/69 Paholyothin Road, Samsen Nai Phayathai, Bangkok 10400 Thailand Tel: +66 2 298 0682-92 Fax: +66 2 298 0012 E-mail: adpc@adpc.net







