Preparing for the next natural disaster — need for a WHO coordinating centre

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This month is the first anniversary of the 7.6 Richter earthquake which struck Pakistan on 8 October 2005. The medical community's response to this tragedy was overwhelming. In the hardest hit areas — Bagh, Balakot, Mansehra and Muzaffarabad — there were no hospitals, clinics or trauma centers within 80 km. Initial estimates suggested a death toll of 70 000 with over 150 000 injured.

In the first 48 hours, 22 medical aid camps were established by local relief organizations in collaboration with the Pakistani Armed Forces in Balakot. Within 72 hours, physicians, surgeons, and nurses began pouring into other affected areas. Medical personnel of Pakistani origin working in Europe, the Middle East and the United States were among the first to arrive, followed by hundreds of doctors from Canada, across Europe, Malaysia, Turkey and the United States. In the first month, more than 1700 doctors from 23 countries came to the affected areas, either as self-motivated individuals or as part of an organized relief mission. We had no shortage of doctors or medical supplies in the affected areas; lack of coordination was our main problem. People did not know where to go and what to do.

A year later, medical relief efforts remain uncoordinated. Many people brought medications and surgical supplies that were never used. There were 165 doctors available at the PIMA field hospital, Bagh, in the last week of October 2005. They all came by themselves without any coordination. In August 2006, we visited medical facilities in Balakot, Bagh, Mansehra and Muzaffarabad. There are nine active medical facilities in these areas with a combined outpatient turnover of about 3200 patients per day. These facilities still are run by volunteer doctors on two-week rotations. We saw large warehouses full of medications, injections and supplies — worth millions of dollars — that are probably never going to be used.

It is gratifying to be reminded that the world is full of doctors who are driven to help people in need. Many doctors made great efforts to travel quickly to the quake-affected areas; only to be hampered by improper coordination and logistics. Most medical camps in Pakistan were equipped for trauma management and worked efficiently for the first week. After that, respiratory tract infections, diarrhoea and tetanus were the predominant complaints, for which personnel were not prepared. Cultural constraints were also problematic. Large numbers of sick women refused to be seen or examined by a male physician; proper assignment of female physicians could have made a substantial difference.

Over two dozen articles have provided a well rounded situation analysis of the earthquake in Pakistan,[1–5] but it is crucial to ask how can we do better next time. We suggest that WHO should establish a coordinating centre for natural disasters, and maintain a global database of volunteer health professionals. Such a centre would act when a disaster strikes, assign teams, and establish a local coordinating centre in the affected area to work in collaboration with local relief authorities, government agencies and medical associations. A natural disaster medical response team with containers of medical, surgical supplies and equipment should be deployed within 24 hours to disaster area. WHO should identify collaborating relief agencies, professional medical organizations, institutions and individuals in each country and hook them up with a coordinating centre.

Approach to medical relief could be usefully planned in three phases: acute (1–7 days; limited to trauma management); sub-acute (1–6 weeks; focused on prevention of infections, diarrhoea and general medical care); and a rehabilitation phase (6 weeks–6 months). Each phase has separate requirements in terms of medical personnel, supplies and medications. We saw orthopaedic and trauma surgeons reporting to affected areas in Pakistan after 6–8 weeks had elapsed and people's needs had changed from trauma to primary care problems. In the acute phase, perhaps we could manage without female physicians, but for the second and third phases female physicians are a must, especially in countries where women may not accept male doctors.

There are currently 635 patients enrolled in the Mansehra rehabilitation facility alone who are in need of artificial limbs. As there is only one orthotic laboratory in the area, it is going to take months — perhaps a year — to meet that demand. This is an example of phase three requirements that cannot be met by the thousands of injection vials and surgical supplies sitting in warehouses. Such unused equipment and medications need to be channelled back to base stations. There is much to learn from the disaster experience in Pakistan that could help us prepare for when disaster strikes next. ■

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