

Letter from Nepal

POST-EARTHQUAKE NEPAL: ACUTE-ON-CHRONIC PROBLEMS

It has been over 8 months since the 7.8-magnitude earthquake devastated Nepal, resulting in almost 9000 deaths, over 23 000 injured and over 2 million displaced people. With the breakdown in sanitation post-earthquake, the summer and the monsoon rains could potentially have unleashed many infectious diseases in this hilly terrain.

Fortunately, Nepal has so far not witnessed any widespread outbreak of disease and active surveillance for diseases is going to be critical. The winter months faced the problems of countering cold and hypothermia especially in the far-flung high altitude earthquake-ravaged villages. But thousands of orthopaedic injuries brought on by the earthquake were a good example of acute-on-chronic health problems in Nepal.

Rampant infectious diseases which pre-date the earthquake such as tuberculosis, typhoid, typhus, brucellosis, etc. make Nepal a place for helping and studying people with these ailments. Widespread non-communicable diseases such as diabetes, myocardial infarction and renal failure are vying with infectious diseases to cause untold harm and suffering. With focus on the acute health problems caused by the earthquake, many chronic health issues are generally neglected.

The earthquake attracted worldwide attention to Nepal and over US\$ 4 billion has been pledged to help Nepal 'build back better'. These funds should help the government in implementing universal health coverage in keeping with the UN's emerging Sustainable Development Goals, so that patients can deal with the acute problems along with chronic diseases.

One of the biggest health problems in Nepal is in dealing with catastrophic illnesses (defined as severe illnesses requiring prolonged hospitalization and recovery) since there is hardly any provision of health insurance. This problem has been exacerbated by heart-wrenching poverty induced by the earthquake.

I relate below the story of a patient in our hospital who had a successful outcome despite a devastating illness. Unfortunately, most patients with such illnesses are not so lucky in our part of the world.

Fifty-year-old Krishna (name changed) was a busy taxi-driver who started complaining about a feeling of fullness for 3 weeks. A proper history was taken and, on examination, it was obvious he had a massive spleen. Eventually, with a bone marrow biopsy and histological studies, we established that he had chronic myeloid leukaemia (CML). That was the easy part.

Imatinib, the stunningly effective drug in the treatment of CML, costs about US\$ 30 000 per year, and there is no way Krishna could have afforded this. Fortunately, Novartis, a Swiss drug company working together with the Max Foundation, provides this drug pro bono to poor, eligible patients with CML in Nepal when the patients register with a recognized programme. Krishna was started on this drug, and we observed him make a miraculous recovery; and he went back to driving his taxi.

Unlike many other cancer drugs that kill cells indiscriminately in the human body, imatinib targets specific cells and genes. The target in this case is the Philadelphia chromosome, which characterizes and helps diagnose CML. The activity of this

chromosome is detrimental to the body and triggers among other things the growth of a massive spleen as in Krishna's case.

Unfortunately, as often happens with drug therapy, resistance to this 'game changer' drug developed in Krishna after 3 years of treatment. Incredibly again, because free nilotinib, the drug used to treat CML patients who are imatinib-resistant, was also available through the same generous group that supplies imatinib to our hospital programme, Krishna, fortunately, once again recovered with this new drug treatment and went back to driving his taxi.

This is an unusual example of a very expensive drug used to treat a dangerous illness in a poor setting with a successful outcome. Clearly, the availability of these kinds of drugs and a positive outcome of available treatment in many other more common, catastrophic illnesses in the general population in Nepal are few and far between.

In almost all of South Asia (population 1.7 billion), where Nepal is only a tiny country with about 30 million population, many new, effective and modern treatments for chronic diseases (e.g. angioplasty for coronary artery disease, dialysis for renal failure) are widely available.

The growth of well-appointed hospitals in this part of the world has witnessed medical tourism that is flourishing in many parts of South Asia. However, the majority of people in this subcontinent will not be able to access dialysis or angioplasty treatments. This brings into sharp focus the question of equity. For example, in Nepal you have to be financially well-off, or politically well-connected to be able to pay up without incurring a massive debt when your family has to deal with life-threatening diseases such as renal failure, malignancy or coronary artery disease. Otherwise it is the old story of borrowing money, selling off your land, cattle or jewellery (if you possess them) to pay for the hospital fees.

Almost every day in our practice in Nepal, we encounter families that continue to suffer and be emotionally torn between financial survival and seeking debt to pay the bills for a loved one with a treatable, catastrophic illness. Indeed, at least in terms of treating patients with CML that enrol in our programme, we are very grateful to the donors of imatinib and nilotinib for sparing our patient this heart-wrenching financial decision.

Ideally, the entire population in Nepal should be covered by a universal health insurance package with financing from a combination of public, employer and private sources; and political will is crucial. The large amount of money received by the Nepal government after the earthquake to 'build back better' could be used to implement universal health coverage especially in the earthquake-ravaged districts so that the most affected population who are clearly the most vulnerable are looked after first.

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