

## The Democratic Republic of the Congo: quantifying the crisis

While engaged in relief efforts in the war-ravaged Democratic Republic of the Congo, the World Health Organization is also focusing efforts on data collection and analysis of the rapidly changing situation as a basis for future humanitarian support. Fiona Fleck reports.

Since the end of August 2008, renewed fighting in North Kivu, a province in the north-eastern quadrant of the Democratic Republic of the Congo (DRC), has displaced at least 250 000 people. It has also made an already difficult situation worse for more than a million people living without clean water, food or access to health care.

Even before the latest hostilities, health facilities in the country's 26 provinces were strained to the limit. The DRC's health system has suffered for many years from a lack of investment, but has been further degraded by deliberate direct attacks from the various belligerent factions.

"The long-running war that is still going on has left the country without proper health care to address the health needs of these populations," says Dr Omar Khatib of the Unit of Emergency and Humanitarian Action at WHO's Regional Office for Africa.

The World Health Organization (WHO) has been actively engaged in providing technical and logistic support, while nongovernmental organizations (NGO) and other partners – known collectively as the Health Cluster – have been delivering medi-

cines and supplies, cleaning up sites for the internally displaced and promoting individual and collective hygiene to reduce the risks of diseases such as cholera, measles and respiratory infections. Meanwhile WHO has undertaken a concerted effort to quantify and analyse exactly what is happening in the country – a painstaking task which is an essential part of any coherent response to a crisis.

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*Dr Matthieu Kamwa*

"We are working in a vast insecure area, where health systems are under extreme stress, communities are scattered, isolated and moving, and roads are poorly maintained," says Dr Matthieu Kamwa, WHO's Representative in DRC. "People's health needs stem from



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In a village located in eastern DRC, a health worker vaccinates children against measles.

lack of security, food, water, sanitation and health care. Our challenge is to define how many people are at risk and exactly where they are in North and South Kivu."

The major health concern is a cholera epidemic in North Kivu that by 10 December 2008 had affected 10 332 persons and resulted in 201 deaths. According to a WHO field team evaluation in the cholera treatment centre, 80% of patients in this province are displaced persons. "We know that communicable diseases and lack of health care will be the major killers, but what we don't know in enough detail is how big the problems are in each specific location," Kamwa says.

Dr Xavier de Radiguès, of the WHO-hosted partnership the Health and Nutrition Tracking Service, adds that most of the recent cholera cases occur in people "in transit areas in these camps, where the newcomers are housed sometimes as many as 400 in one large tent."

De Radiguès notes that while latrines have been set up, they are often dirty and poorly maintained. Meanwhile, staff running the camps are under tremendous pressure and faced with a constant stream of new arrivals. "The transit areas are a ticking time bomb in terms of health," de Radiguès says. "We have seen most cholera cases there, but there is a high risk of cholera spilling over into the general population."

Other waterborne diseases, such as shigella/dysentery, are also a major concern. "The population is weak and malnourished, especially children aged under five years," says Kamwa. This makes them easy prey for malaria, which continues to be the main cause



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Nurse Jean-Pierre Balume (centre) in discussion with patient Ndirihira Batengesho (left) and Dr Jean Marc Mambidi of WHO (right) at the cholera treatment centre in Goma Provincial Hospital, DRC.

of death of children in the country. Deaths from malaria and measles are believed to have increased in the last few months of intensified conflict.

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Other threats to the health of people who have been displaced have more to do with the horrors of war. Injuries due to violence, particularly an increase in gunshot wounds, have been reported by hospitals working with Médecins Sans Frontières (MSF). Reports of sexual violence are fewer than in recent years, but de Radiguès suspects this reflects victims being afraid to come forward, or simply lacking access to health centres where such reports can be made.

Accurately evaluating these various threats and stresses to the well-being of the local and itinerant populations – whether from war, disease or failures in



WHO/Chris Black

Internally displaced people gather at a water point in Kibati II camp, where they are told the importance of drinking purified water in the fight against cholera.

food supply – is a central concern for WHO. In addition, North Kivu, unlike many other provinces, has a good laboratory for the analysis of biological samples, and this has been vital in the rapid identification of the main health problems.

WHO officials agree that it is vital to gather health and nutrition information to ascertain what type of health care is needed, which medicines and vaccines to use, how many resources are needed from donors and how others can help. But this is not always an easy task. Partners – including NGOs the International Rescue Committee and MSF – believe that the situation is still too insecure to carry out a survey of the internally displaced in DRC. Early this year, however, WHO and its partners are planning a survey of a cross-section of more than 30 000 refugees, who have fled into neighbouring Uganda where the situation is less fraught. This would be a retrospective mortality survey, in which NGOs and other partners already operating there ask families how many people died to estimate crude mortality and under-five mortality rates due to the recent upheaval and intensified conflict.

WHO has also supported the information gathering efforts of

district health authorities in North Kivu province by updating an early warning system that had been set up in the country by the Ministry of Health with the support of various NGOs including Epicentre, which was created by MSF, and CEMUBAC (Centre Scientifique et Médical de l'Université Libre de Bruxelles pour ses activités de Coopération). “The new software application, which was developed by the WHO-hosted Health and Nutrition Tracking Service, allows district health centres to enter the data and analyse them instantly. The new system is automated, quick and very convenient,” de Radiguès says. He is hopeful that this system can be introduced in other provinces, but is well aware of the challenges of establishing such a system in DRC provinces that do not have a functional early warning system.

“To gather health information, you need a ‘denominator’, in this case the size of the population,” de Radiguès explains. “You cannot assess the size of a health problem if you can’t find the proportion of people affected by it.” In the meantime, WHO and its partners in DRC have to rely for the most part on qualitative data to get a sense of the tragedy unfolding there. ■



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Laboratory technician Jules Cizungu checks a sample for cholera at the provincial laboratory in Goma, North Kivu province, DRC.