Getting the numbers right

Dr Ties Boerma earned his MD in 1982 and his PhD in biodemography in 1996 in his native country, the Netherlands. He has been developing health information systems in low- and middle-income countries for 20 years. He started his international career with UNICEF in 1984. In 1989, he joined the Demographic and Health Surveys in the United States. In 1998, he became Director of the MEASURE Evaluation project. He joined WHO in 2002.

The inability to generate reliable information needed to make decisions based on evidence is a major obstacle to public health in many developing countries. When Ties Boerma became Director of WHO’s Department of Measurement and Health Information Systems in 2004, his brief was to enhance the availability, quality and use of health data. This year WHO launched the Health Metrics Network to help countries strengthen their health information systems.

Q: Why do countries need reliable health information?
A: For WHO, knowledge and evidence should be the basis of decision-making, the importance of timely, relevant quality information on health is crucial. We need information to make decisions about resource allocation, policymaking, better planning and particularly to reduce inequities in health between countries, within countries and between populations.

Q: What are health information systems?
A. There are two pillars. One is information related to provision of services: service statistics, disease surveillance and acute disease surveillance. For example: for polio, measles, etc. This includes information on human resources: where facilities are located and on budgets. The other pillar is population-based information, starting with a census which can also collect health information. This also includes vital registration. Everyone has a right to be registered with a probable cause of death, either medically certified or reached by some other method, such as verbal autopsy. Another big part of population health information is household surveys.

Q: What is health information?
A: WHO has always worked with health information systems. In the 1980s this was largely focused on disease surveillance and clinical information. In the 1990s, the focus shifted to population health information, for example the World Health Survey and global burden of disease work which uses data and modelling to determine the biggest public health problems. What’s new is that we look at health information as a whole package. Today each country should take a strategic look at what kind of information it needs.

Q: What recent developments have spurred improvements in health information?
A. The Millennium Development Goals (MDGs) have created a unity on the international level around a specific number of goals and drawn attention to the limitations of currently available data and harmonized investments in generating data on these goals. In low-income countries where the Global Fund [to Fight AIDS, Tuberculosis and Malaria] is coming in with millions of dollars, about 5–7% of this can be invested in health information. The data has become important for accountability. Take the Global Alliance for Vaccines and Immunization (GAVI) which wants good data on immunization. Take the US President’s emergency plan on HIV/AIDS. These are all external pressures on countries to come up with more and better data.

Q: How reliable are the figures countries provide?
A. It differs by sources. Household surveys conducted as part of high quality survey programmes such as the Demographic and Health Surveys are in line with international standards and practices and in the majority of cases these produce reliable data. But we do not blindly trust the routine health information systems data, for example, on the number of immunizations. WHO has developed different ways to check data quality.

Q: Do countries accept this is important?
A. At the moment there is a very favourable climate to building health information systems. Countries are struggling with multiple demands for data, especially from the global initiatives. They don’t have the health information systems in place, it’s fragmented and there is a lot of duplication.

Q: Which developing countries provide reliable data for policymaking?
A. Thailand is a good example where there has been a culture of trying to produce good data and also use them for decision-making. We have good examples at district level in Tanzania, as part of the Tanzania Essential Health Interventions Project (TEHIP), where they looked at the burden of disease due to five or six major conditions and compared that with where the district was putting its money.
Q: Why is there so little reliable data on malaria, yet it's such a big killer?
A: The first step is to have a good measurement tool. With HIV you have an antibody test. Tuberculosis is harder. You can estimate the burden of disease indirectly through tuberculin surveys or from prevalence surveys or notification rates. Malaria is harder again because you don't have a good measurement tool. You can't simply estimate prevalence or incidence by asking somebody did they have malaria, often they don't know if they had it. Diagnostic tests have improved — but not enough — and it is equally difficult to establish if someone has died of malaria.

Q: How is WHO helping countries to improve their health system information?
A: Working through Health Metrics Network with a broad strategy of addressing the whole array of health system, clinical and population health information is currently a priority for WHO. We also focus on weak areas such as vital statistics systems with causes of death and the basic information on health systems. Many low- and middle-income countries don't have information on distribution of services across districts and the density of facilities but also the availability of key interventions such as Caesarian section, antiretroviral treatment or human resources. We are working with Uganda, Kenya, Rwanda, Zambia and Tanzania to develop and implement a basic subnational health system monitoring system based on a WHO software package called Health Mapper.

This tool generates maps and summary statistics on service availability, perhaps on a quarterly or six-monthly basis.

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**New report focuses on health in a “borderless world”**

WHO welcomed the first Global Health Watch report that stresses the importance of making health care accessible to people in need in a “borderless world”, but said the report fails to address WHO's role in preventing global outbreaks of disease.

Global Health Watch 2005–2006, published on 20 July, was compiled by campaigners from three nongovernmental groups: Medact in London, the People's Health Movement in Bangalore and the Global Equity Gauge Alliance in Durban. The report covers selected issues, including the shortage of health workers in countries with a high disease burden, health-care systems and gene technology.

Billing itself as “the alternative World Health Report” as a challenge to WHO’s flagship report, Global Health Watch 2005–2006 charges that WHO's influence has declined while its central messages — particularly on access to health care for all — are a core part of WHO's values. She said that WHO Director-General Dr Lee Jong-wook had "continuously stressed the importance of equity and social justice."

She said that WHO not only supported “vertical” or single-disease programmes — which the report criticizes as damaging to fledgling health systems — but also encouraged countries and donors to take a more “horizontal” approach to build and reinforce health systems and primary health care. Both approaches were necessary, McNab said.

McNab said that an important part of WHO’s work was to minimize the risk that disease poses to people’s lives and health: “In a globalized world where more people than ever are crossing borders, WHO’s Member States have made clear that detecting outbreaks of old and new diseases and controlling them is vital to global health security.”

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**Recent news from WHO**

- The number of people receiving combination antiretroviral therapy for HIV/AIDS in developing countries more than doubled from 400,000 in December 2003 to about one million in June 2005, WHO and UNAIDS said on 29 June. According to a new report released by the two organizations, access to HIV treatment continues to fall short of growing need. Overall progress is unlikely to be fast enough to reach the target of treating three million people in developing countries by the end of 2005. The agencies said they would continue to work with all partners towards universal access to treatment — a goal also pledged by the G8 leaders at a summit in Gleneagles, Scotland, on 8 July.
- At a conference in Kuala Lumpur, Malaysia, on 4–6 July, international animal and human health experts drew up an emergency plan to reduce the risk of the H5N1 avian influenza virus spreading from poultry to humans. Representatives from WHO, the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health appealed to the international community to donate funds for the plan. The plan calls on countries to encourage poultry farmers to adopt safer farming practices. It recommends segregating species, including chickens, ducks and pigs, and a stop to intermingling between these animals and humans. It calls for adequate compensation and/or rewards to encourage farmers to report suspected avian influenza in their flocks and apply control measures. The plan also calls for the vaccination of poultry against avian influenza virus in high-risk areas.
- The Codex Alimentarius Commission met on 4–9 July, with representatives from more than 100 countries present, to adopt new or revised food safety and quality standards to safeguard consumers’ health worldwide. This year the Commission adopted new guidelines on vitamin and mineral supplements, and a new code of practice to minimize and contain antimicrobial resistance.
- On 12 July the Ministry of Health in Indonesia reported the country’s first laboratory-confirmed H5N1-positive human case of avian influenza. The man in question died on 7 July.

For more about these and other WHO news items please see: http://www.who.int/mediacentre/events/2005/en/index.html