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A WHO official counts mosquitoes and fleas to estimate disease risk in a Rwandan refugee camp.

WHO needs change

The World Health Organization needs major reform to regain its leadership as a convener and provider of scientific and technical knowledge, says Barry R. Bloom.

The World Health Organization (WHO) - the United Nations agency created to be the "directing and coordinating authority on international health work" — is increasingly being marginalized and underfunded.

A slow and inadequate response to the recent cholera epidemic in Haiti and the months to years the agency takes to fund projects or approve drugs and vaccines are among the reasons why the WHO has come under attack in recent years for being "ineffective, bureaucratic and political... and for lacking modern scientific and technical expertise"2.

Yet with an explosion of players now involved in global health — from governments and private companies to foundations and non-governmental organizations (NGOs) — the world urgently needs an organization that can convene the best expertise and provide a centralized resource for health-related knowledge.

The WHO must reinvent itself as this resource. It must re-establish the trust of the international community by improving the transparency of its governance and financing, and by speeding up its responsiveness to countries' needs.

The WHO has had some towering achievements since it was created in 1948, most notably the Smallpox Eradication Programme. Launched in 1959, this

◇ NATURE.COM For more on the WHO see: go.nature.com/cdalim

wiped out the disease from the planet by 1977. That success led, in 1974, to the **Expanded Programme** for Immunization, which now saves about preventable diseases such as measles. Today, the agency has many important, and often unseen, functions¹ — perhaps the most crucial of which is to establish the International Health Regulations. These regulate travel and transport, and as stated in its constitution, give the WHO unique supranational authority "to take all necessary action to ... prevent the international spread of disease". Yet the WHO is operating in an increasingly complex and fragmented world of global health. Fifty years ago, the main international players were the WHO, the United Nations Children's Fund (UNICEF), a couple of foundations and the overseas development agencies of some rich countries. Now, thousands

of organizations fund global health (see 'Plethora of players'). As an example, 196 agencies have solicited funds to address the current cholera epidemic in Haiti, each with their own particular stance on how to deal with it³. The entire system is fraught with gaps, redundancies, inefficiencies and enormous burdens on developing countries to sort through the funding maze and be accountable to each player.

Within this maze, the WHO itself is a fragmented organization with a cumbersome governance. The formal governing body is the World Health Assembly, which consists of 193 ministers of health of the member countries. Ministers have a turnover time of around two to three years, which, combined with only once-yearly meetings of the assembly, makes addressing emergencies or long-term problems almost impossible. All member states fall into one of six 'regions', such as the African or South-East Asian regions, each of which is governed by a regional director with great autonomy (the regional offices receive about 75% of the WHO's budget). Regional directors are elected by the countries in the region, and are not appointed by or formally responsible to the WHO's director-general, so some of the agency's activities are uncoordinated and not based on the best scientific evidence.

SLOW TO ACT

Many people who have dealings with the WHO are struck by its bureaucracy — for instance, the number of organizational levels from which countries requesting technical assistance must obtain approval, and the glacial time it takes to get projects funded. The WHO's Green Light Committee, for instance, is supposed to help countries gain access to high-quality drugs to treat people with multidrug-resistant tuberculosis. It often takes six months for a country's request to be approved, and another year before the first drugs arrive. Meanwhile, thousands of patients are transmitting the disease or dying every day.



Golden years: an immunization programme launched in 1974 was a huge success.

Politicization is also a major problem. The WHO has an executive board consisting of individuals serving in their personal capacity, which was created to prevent countries lobbying for control and to raise the agency's agenda above the level of politics. Sadly, the board — mainly medical doctors appointed by member-country representatives of the World Health Assembly — has itself become highly politicized in regard to major decisions, such as the election of the WHO's leadership. Votes are held in secret and the board is not publicly accountable for many of its decisions. Countries exert huge political and suspected financial pressures on board members to support or oppose certain candidates applying for top positions.

Most worrying of all, the WHO has increasingly failed to demonstrate leadership on the scientific and technical front. In October last year, three days after it was announced that the disease outbreak in Haiti was cholera, the people of the worst-affected region rioted because they believed that the infection had been introduced by Nepalese United Nations peacekeepers. Despite considerable media coverage, WHO headquarters remained silent⁴. When the complete DNA sequences of two Haitian strains were obtained by US university and biotech company researchers, the findings had direct implications for the management of the disease. The Haitian

bacterium turned out to be a South Asian strain that produces a surge. ... that made by most cholera strains⁵, making that made by most cholera strains⁵, making the WHO should have taken the lead in seeking the source of the Haitian strain, and in ensuring that existing vaccines were made available.

For many countries, the main contributors to disease burden (years of healthy life lost due to premature mortality and disability) are now chronic diseases, including diabetes and cardiovascular or neuropsychiatric conditions, not communicable ones such as cholera⁶. Yet the WHO still has far more expertise in dealing with the latter. In 2008 and 2009, noncommunicable diseases received less than half the funding for communicable diseases; the WHO, with the help of its donors, needs to redress this imbalance.

All these failings have fostered considerable distrust in the donor community most clearly reflected in donor spending. The WHO budget has two components. The regular budget comprises mandatory contributions by member states (adjusted according to each country's gross domestic product), which in the 2008-2009 biennial budget was less than US\$1 billion of the total \$3.9 billion. Extrabudgetary funds are voluntary contributions by countries or foundations to support specifically targeted programmes. Here, the donors set the priorities (which in itself reflects donors' lack of faith in the agency's ability to prioritize and allocate resources effectively).

In the past few years, the WHO's biennial budget has fallen by about 10%, and the organization is facing a fiscal crisis⁷. This decline is particularly striking given that the amount of money invested annually in all global health-related activities by donors, including governments and foundations, is estimated to have risen from \$5.6 billion in 1990 to \$26.8 billion in 2010 (ref. 8).

To regain its standing in global health, the WHO needs to win back donor trust by focusing on those areas where it has

PLETHORA OF PLAYERS

Thousands of organizations now fund global health.

Multilateral donors Bilateral donors **NGOs** Private philanthropy 23 OECD Development Global Fund to Fight AIDS, Tuberculosis and Malaria; Firms (including foreign World Bank International NGOs Foundations such as Assistance Committee (such as Oxfam, Gates, Ford. direct investment. (DAC) donors including International Monetary Global Alliance for Save the Children) Wellcome Trust the European Commission responsibility) Fund Vaccines and National NGOs in Immunization; and others Households (remittances Bilateral development **UN Development** and other private transfers) Commercial banks donor countries Global Environment Facility (loans, export credits, banks and agencies Programme National NGOs in financial guarantees) Other OECD countries Regional development Fast Track Initiative developing countries (non-DAC) Private investors (portfolio banks and agencies Roll Back Malaria UNITAID* and equity investments) Emerging donors (such as Others (such as Islamic Partnership China, India, Brazil) Development Bank) Stop TB

Bilateral donors are agencies of nations that give funds directly to developing-country governments. Multilateral donors are organizations that pool funds from donors and distribute them to many projects in developing countries Regional development banks lend to governments for local development projects. OECD, Organisation for Economic Co-operation and Development. *UNITAID is a drug-purchase agency funded by several governments.



The WHO has been criticized as unduly bureaucratic and politicized.

an advantage over other foundations, companies and NGOs.

In a remarkably forthright analysis, WHO Director-General Margaret Chan stated last year that "in today's crowded landscape of public health, leadership is not mandated. It must be earned. And it must be earned through strategic and selective engagement. WHO can no longer aim to direct and coordinate all the activities and policies in multiple sectors that influence public health today."

A PRESCRIPTION FOR CHANGE

Absolutely, the WHO should focus on the things it can do best. It does not have the budget to be a funding agency like the World Bank or the Global Fund to Fight AIDS, Tuberculosis and Malaria. And it does not have enough 'on the ground' staff to be an implementing agency like UNICEF. Instead, it should aim to be the paramount knowledge organization in global health — gathering up the best technical, scientific and practical information and making it accessible to all countries.

Currently, numerous agencies, countries and individuals collect information, for instance on disease burdens, the economics of different interventions and how to monitor and implement particular health programmes. But with the WHO title still carrying significant weight, especially in developing countries, the agency is best placed to provide forums for experts, scientists and health officials worldwide to interact and agree on best practices. The international flu conference held in Washington DC in 2009, and last year's Global Symposium on Health Systems Research in Montreux, Switzerland, offer valuable models. The WHO should make the results of such exchanges — as well as the data gathered by the health ministries of individual countries and other agencies available in a central online repository.

Moreover, although the WHO is not

a research institution, it must influence the priorities for research and innovation carried out by academic institutions and industry — in part, to ensure that the concerns of developing countries are addressed. Sadly, research activities at the WHO are dwindling. For the first time in half a century, the Advisory Committee for Health Research failed to meet this year.

Instead of whittling down its advisory effort, the WHO should be persuading the international community to increase its regular budget so that it can recruit the world's experts in science, technology, health care and health-care economics to evaluate current practices and anticipate possible future needs, such as emerging resistance to antibiotics.

The WHO is also in a stronger position than any other agency to simplify and harmonize the fragmented world of global health. Thousands of donors are now funding projects to address individual diseases. The WHO should foster the integration of health activities, particularly at the local and district level, to ensure patients aren't siloed into single-disease categories but treated according to whatever complex array of symptoms they display. Mexico recently implemented a programme for mothers and children involving 13 interventions — from immunizations and height, weight and nutritional assessments for children, to breast-cancer and cervical screening for mothers. This is exactly the kind of approach the WHO should be promoting. Its recently launched Alliance for Health Policy and Systems Research initiative, to develop integrated health systems, is an important move in this direction.

Similarly, a few simple steps could transform the tangled web of approval and reporting requirements for countries seeking assistance. For example, the WHO should bring together health ministers and financial experts from developing countries with donors to establish and harmonize common reporting and accountability standards.

To achieve all this, the agency must make three changes to regain the trust of the scientific and donor communities.

First, the WHO should be more inclusive. The agency has had difficulties in creating trusting relationships with civil-society organizations and with industry, particularly the pharmaceutical industry and the private sector. The pharmaceutical industry, for instance, resents the WHO's essential medicines list, a register of minimum medicine needs for every health-care system, as this stresses the usefulness of inexpensive, offpatent drugs. Yet civil society, NGOs and pharmaceutical organizations are influential actors in global health. They should either have a role in the governance of the WHO (for example, by being rotating members of the executive board) or be more effectively engaged as stakeholders.

Second, the WHO should be more transparent, especially in relation to where funds are spent in the regions. For the executive board that represents the public interest, secret ballots must be abolished and recommendations about leadership and priority-setting made as open and publicly accountable as they are in the UN Security Council.

Finally, the WHO should introduce an external review process. The World Bank has strong internal and external review mechanisms; the Global Fund and the Global Alliance for Vaccines and Immunization both have extensive external review procedures. Not so the WHO. Such a process must engage not just the governing boards but the widest number of stakeholders in a serious review of expectations, performance, priorities and opportunities.

The planet still needs an effective World Health Organization — if a very different one from that created 63 years ago. Organizational transformation is difficult, but just a few key changes could help the WHO to become a farsighted leader, not a lagger, in global health. ■

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