

## Thailand's unsung heroes

The success of primary health care programmes in Thailand over the past three decades can be attributed not only to medical advances but to the role of community health volunteers. Buddhist monks and their temples have been strongly involved in health promotion and education, particularly in remote, rural communities.

It's 06:30 and the grounds of the Wat Kae Nok temple are already full of people of all ages, exercising not only for their spiritual needs but also for a physical work out.

Every morning and evening, the large shaded grounds of the temple in Thailand's Nonthaburi province are reserved for health promotion activities. The young do aerobics while most of the elderly practise Tai Chi with long sticks to energize mind and body before going back to their usual duties.

Suparat Chanakit, a 57-year-old woman, is among them. She and her family usually come to exercise at the temple since it is walking distance from her home. If time allows, she practises meditation at the weekends.

"Last year I still had to sit in a wheelchair when going out with my family. But look at me now. I feel much better and stronger when coming here to exercise and meditate at the temple. It keeps me away from illness and medication," says Chanakit, who had been using a wheelchair due to a heart condition and a problem with her legs.

Wat Kae Nok is among hundreds of Buddhist temples nationwide participating in Thailand's Health Promotion Temple project. This campaign was initiated in 2003 by the Public Health Ministry as part of the Healthy Thailand agenda aimed at highlighting the importance of physical and mental well-being of the population. It currently covers over 800 temples.

Temples are regarded as an ideal place to run health promotion activities since the majority of Thais are Buddhists and since temples and monks have such a strong influence on the Thai people and their way of life.

Buddhist temples have traditionally been centres for community activities, including education, health care and cultural events. Thirty years ago, when primary health care had just started in Thailand, Buddhist monks – dubbed



People exercise body and spirit through Tai Chi at Wat Kae Nok. The temple is among hundreds participating in Thailand's Health Promotion Temple project.

Vinai Dittajohn/OnAsia.com/WHO

the "bare-headed doctors" – were trained in diverse community health-care techniques.

One such technique was to advise communities on how to use over-the-counter drugs. For example, monks showed farmers the correct medicines to take for anaemia and taught people living in remote areas about the dangers of buying sets of unnamed tablets known as "ya-chood" that were sold illegally, but which were highly popular.

The involvement of monks in primary health care was seen as a way of restoring their original community function, after successive governments had dominated such community activities for decades. More than 200 000 monks and some 30 000 temples across the country became an integral part of the so-called Folk Doctor movement in the 1980s.

But due to a shift to urban lifestyles that embraced Western medicine and conventional health systems during the 1990s, the monks and their temples played a less important role in health-care services and treatment, according to Pra Sopit Kittithada, abbot of Wat

Chalermprakiat, another temple in Nonthaburi province.

"Access to medical health care is better than before. It is understandable why people go to see doctors and get free treatment at hospitals instead of relying on traditional herbal medicine provided by monks and folk doctors," the abbot says. "That's why [we] monks had to review our role and see if there was some other thing we could do to help the community."

Sopit Kittithada believes that the Health Promotion Temple campaign is important because it promotes well-being and helps to revive the role of religion in the community.

In 2001, the temple received donations of five million Thai baht (US\$ 147 000) to build a community clinic to give some 2000 community residents access to basic health care. Retired doctors and nurses volunteered to work at the primary care unit, which is now under the supervision of the Public Health Ministry.

During the past three decades, medical services were the focus of public health. That emphasis recently started

to shift to health promotion and disease prevention, and the monks saw an opportunity to do something for the community.

The importance of communities was firmly placed on the international health agenda in the Declaration of Alma-Ata in September 1978. The idea was to achieve universal health care or health for all by the year 2000 and primary health care was indicated as a key strategy.

Primary health care was defined as the first level of contact that individuals have with the national health system, from which they could be referred to further levels of specialization. It was envisaged as essential health care based on sound scientific evidence and community participation.

Thanks to Thailand's shift towards health promotion and disease prevention, monks and temples are adjusting their roles and communities are being encouraged to get involved.

Dr Amorn Nondasuta, Chairman of the Committee on the Promotion and Development of Health Security Responsibility of Local Administrations, is in charge of the primary health care programme in Thailand. He says the idea that communities should get involved in health care was perhaps the greatest achievement of the health for all campaign, not least because the stated goal of universal access to health care by the year 2000 was not attained.

"Although we cannot achieve all the goals of the health for all declaration, we have been successful in our strategy of creating health volunteers to restore the original community function and in developing it further based on different backgrounds and culture. As a result, the primary health care system today is deeply rooted in local communities," Nondasuta says.

Volunteers receive incentives for their unpaid work such as free medical care for their families. They receive training on basic medical care skills and once they understand these concepts they can work well as health communicators, taking care of their own families and their neighbours.

Trained volunteers have made their contribution to achieving health for all in a variety of ways. For example, they promoted the use of water-sealed latrines to improve sanitation. As a result, such latrines have become common in villages across the country.

Volunteers were also instrumental in the dramatic decline of protein-



A trained community volunteer instructs a group of women on how to detect breast cancer. Thailand has more than 800 000 volunteer health workers.

Vivian Dittajohn/OnAsia.com/WHO

calorie malnutrition in preschool children in the past 20 years. Thanks in part to their efforts, the problem has become insignificant, says Nondasuta.

The provision of essential drugs is another key component of primary health care in Thailand. The Public Health Ministry allocates a budget for drugs to local communities to ensure that stockpiles are available when needed and to introduce those communities to the basics of financial management of health services. The communities are responsible for managing how their drug funds are spent.

Thailand has also initiated a system under which primary health care staff working in communities may refer patients for specialist medical care in large well equipped hospitals.

Policy-makers included the community drug fund and the specialist referral system in the universal health-care scheme, which has provided free medical treatment for the majority of Thailand's 64 million people since January 2001.

But the work of volunteers is one element of the primary health care system that makes Thailand stand apart. At present there are more than 800 000 health volunteers working to promote primary health care for different communities across the country. They have played a crucial role in controlling many communicable diseases such as HIV/AIDS and newly emerging diseases for example severe acute respiratory syndrome (SARS) and avian flu.

Thailand's strong communications network of health volunteers helped to reduce the number of new HIV/AIDS

cases from 100 000 in 1995 to 13 936 in 2007 according to the country's Ministry of Public Health. Thailand has not reported a human case of avian influenza for nearly two years.

Volunteer participation has become such a mainstay of community involvement in Thailand that it has been incorporated into development strategies of both governmental and nongovernmental organizations. It was incorporated into 2001 national health legislation and into the recent reform of the country's national health system.

To implement the Healthy Thailand agenda, Nondasuta believes it is essential to extend the concept of volunteerism to cover every family and says that a focus on younger generations and utilization of mass media, especially community radio, will help promote health education in the community.

"Children and youth should be encouraged to run health programmes for their communities as they are key factors that lead to behavioural change. The ultimate aim is to achieve an active role of the people in nurturing and safeguarding their own health," he says.

Training and spiritual guidance are also necessary to keep them with the system, he adds.

"The road to health development in our country may not always be rosy. There are ups and downs to be expected. But with faith in what we're doing, we can overcome obstacles and look forward to sustainable health-care development in the long run," Nondasuta says. ■

Apiradee Treerutkuarkul, *Bangkok*

## The *Bulletin* turns 60: the early years

This year the World Health Organization (WHO) marks its 60th anniversary. Brigit Ramsingh takes a look at the origins of the *Bulletin*, WHO's flagship periodical. This is the first article in a series about the history of our journal.

History, at least as it relates to international organizations, is often made in anonymous meeting rooms that look a bit the same all over the world. Indeed, the conception of the *Bulletin of the World Health Organization* was as ordinary as its subsequent achievements as a scientific journal are remarkable.

Over the past 60 years, the *Bulletin* has become synonymous with WHO but in 1946 it was merely one item on the agenda of meetings of the Interim Commission, which was charged with establishing a new United Nations international health agency.

The commission met over the period 1946–48, once in New York and several times in Geneva.

When the *Bulletin* appeared in January 1948, the Interim Commission had high hopes for the new publication. "There would seem to be no reason why the *Bulletin* should not ultimately take its place among leading medical journals of the world," the Interim Commission said, in its supplementary report to the First World Health Assembly of June to July 1948.

Within the first 10 years, the new journal had firmly established itself as an authoritative source of international medical and public health information. Its stated goal was "to advance the work of the organization by bringing to the knowledge of medical and public-health workers articles of international significance on subjects within the scope of WHO's interests and activities."

Sixty years later, the *Bulletin* has taken its place among the world's leading health journals. In 2006, the journal achieved an impact factor of five, placing it fifth in the ISI Web of Knowledge's category of the most cited public, environmental and occupational health journals.

The *Bulletin of the World Health Organization* was originally conceived as a monthly periodical. In as much as WHO evolved from *l'Office international d'hygiène publique* (OIHP), which was established in 1907, and from the League of Nations set up in

1919, the new journal's form and content were largely based on elements of two predecessors: the *Bulletin mensuel de l'Office international d'hygiène publique* and the *Bulletin of the League of Nations Health Organization*.

At the First World Health Assembly, the Interim Commission envisaged that the new journal – the first two issues of which had already appeared – would benefit from "ready access to experts of all countries" working at WHO and that its subject matter would be "concerned with health problems ... of prime importance."

Although publication of the first issue actually predates WHO by a few months, the *Bulletin* also turns 60 this year. And, just like WHO itself, the *Bulletin* has undergone various transformations. The history of the *Bulletin* is as multifaceted as the organization itself: it has roots in older pre-WHO publications, has expanded its scope and content, and subsumed other journals to reach a wider audience.

The *Bulletin* you read today is the result of a 60-year evolution from the "principal scientific organ of the WHO" to the "international journal of public health".

The Interim Commission called for the *Bulletin* to be developed as a "substantial publication of the highest standard". With its scope "as broad as that of WHO itself", the journal should become "a vehicle for significant studies, from whatever source, on all subjects which are of relevance to the international approach to health problems – not excluding the study and discussion of international health work as a subject in itself".

The editorial service of the new health organization was small, however, with only about 35 staff for all editorial, translation and publishing activities. They were responsible for all the inherited and new WHO publications, including: the *Official Records*, the *International Digest of Health Legislation*, the *Chronicle of the WHO*, the *Weekly Epidemiological Record*, the *Epidemic and Vital Statistics Report*.

The first issue of the *Bulletin* was edited by Dr Joseph Fabre, and, although it was scheduled to appear in 1947, it was published in January 1948. Number 1, volume 1 of the *Bulletin* included articles on the burning issues of the day: biological standardization, immunity reaction to the smallpox vaccine, and tuberculosis and malaria in Greece.

Fabre then handed over editorial responsibility for the journal to WHO's chief medical editor during the Interim Commission, Dr Norman Howard-Jones, who brought out the second issue later in 1948.



The Interim Commission, which was charged with establishing the United Nations health agency that eventually became WHO, discussed the possibility of publishing a journal to promote its work several times at meetings from 1946 to 1948.

WHO

Howard-Jones was appointed director of the Division of Editorial and Reference Services in September 1948 and continued to edit the *Bulletin* with his team during the early years, but neither his name nor that of Fabre appeared in the journal. Indeed, the editor's name did not appear on the masthead until the journal was relaunched as the *Bulletin of the World Health Organization: the international journal of public health* under its editor-in-chief Richard Feachum in 1999.

The plan had been for the *Bulletin* to appear quarterly in 1947, to report on the work of the Interim Commission, and then, in 1948, to switch to a monthly publication rhythm as the *Bulletin of the WHO*, like the OIHP's *Bulletin mensuel*. But during the early years the *Bulletin* did not appear as frequently as planned. The first volume contained only two issues and the journal's production was "virtually suspended" due to "other commitments", according to a report to the Interim Commission. These circumstances also led Fabre to date the first issue 1947/1948 without specifying the month.

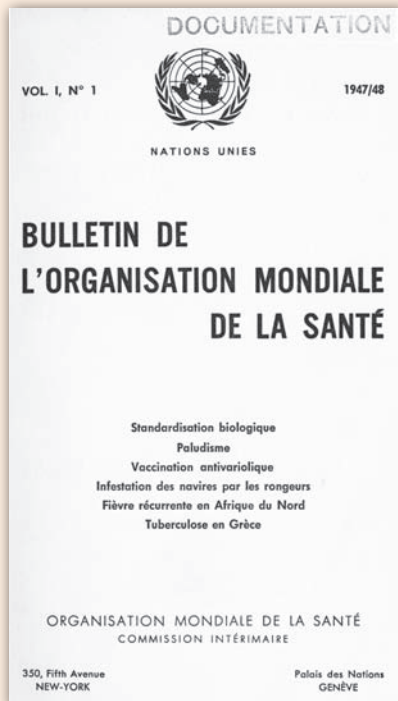
However, this did not impede the monitoring and coverage of impor-



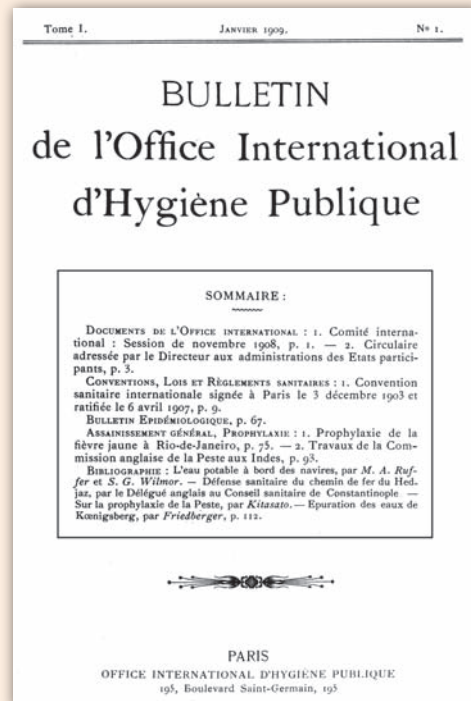
The Interim Commission met in Geneva in 1946. From left are Professor A Stampar, a consultant to the commission and Dr Brock Chisholm, first Director-General of WHO.

tant public health events as WHO responded to crises such as the cholera epidemic in Egypt, which started in September 1947. This event was reported in the second issue of the *Bulletin's* first volume by Dr Aly Tewfik

Shousha Pasha, the first chairman of the WHO Executive Board. His account remains an important historical document of the first emergency the new agency faced. ■



Volume 1, issue 1 of the *Bulletin of the World Health Organization* 1947/1948.



The *Bulletin mensuel de l'Office international d'hygiène publique* was one of the predecessors of the *Bulletin of the World Health Organization*.

Source: WHO Archives

## Health-care provision meets microcredit finance in Argentina

Microcredit loans have transformed the lives of impoverished people in many countries by allowing them to start businesses. But increasingly microcredit banks are realizing that providing some kind of health coverage in tandem with the loans is essential if they want to fulfil their mission to improve lives.

Just north-east of the city of Salta, Argentina, Yolanda Alderete works from her cinderblock home making items such as baskets, chests and mirror frames out of recycled paper to earn a living. She is one of thousands of people in Argentina who do not qualify for a conventional bank loan.

But Alderete is a client of Banco Mundial de la Mujer, Women's World Bank – Argentina (BMM). BMM disburses loans from 500 pesos (about US\$ 160) to help people lift themselves out of poverty by starting a business.

The bank currently has 5000 accounts and has already had 50 000 loans reimbursed. "Some clients take up to 30 loans, one after the other," says Silvia Nicolea, president of BMM in Argentina.

The bank is the only credit option for many people.

"Our clients have no place in the formal system," says Nicolea, referring to Argentina's commercial banking system. "To have access to private banking, people need to be registered and pay taxes. Our clients constitute part of the informal economy. Most have recently moved from rural to urban areas and practise manual trades."

Alderete is typical of BMM's clients. She works six days a week, making and selling products at markets or in the streets around Salta city. Three of her seven children help with the business, as does her husband.

"I learned this skill at a community centre seven years ago. My work comes from the heart," says Alderete. The loan from BMM has allowed her to turn a hobby into a business that supports her family.

The loans from BMM have been critical to her business, but without the health-care coverage the bank provides she would have risked having to default on the loan to pay medical bills if she or a member of her family had become ill.

"Argentina's public health system has all but collapsed," says Nicolea. "People who do not have social security

or health coverage with BMM pay US\$ 50–150 per month for prepaid medical services. Most of our clients cannot afford this amount because they earn around US\$ 500 per month."

To the bank, providing health-care coverage has become as important as the business of lending money to improve lives.

BMM acted to take care of the health of clients like Alderete in March 2006, by signing agreements with two health-care companies: MEDICOS in Salta province and SER-CEGIN in the province of Jujuy. Since then, BMM clients in these provinces automatically gain access to health care services through a card that comes free with the loan.

Through a system of affiliated doctors, the card gives clients and their

extended families access to a host of health care services such as gynaecology, paediatrics, dental services, ophthalmology, cardiology and general medicine. However, it does not cover them if they need hospital care.

The bank pays the health-care companies US\$ 1.70 monthly for each client. "This means that people only pay a third of the cost of a visit to the doctor," says Nicolea. The full cost of a visit to the doctor is US\$ 6.

“Providing health-care coverage has become as important as the business of lending money to improve lives.”

"If one is not healthy, one cannot work," says Dr Jorge Gronda, the director of SER-CEGIN, citing the pragmatic reasons for assuring clients' access to health care. "I am absolutely convinced



Kai Lashley

Yolanda Alderete was able to set up a business weaving baskets thanks to a microcredit loan from Banco Mundial de la Mujer (Women's World Bank) in Argentina. The agreement with the bank also entitles her to health-care services.



The Banco Mundial de la Mujer (Women's World Bank) disburses loans to help people lift themselves out of poverty.

that we cannot think of any type of development without health care.”

The health-care model SER-CEGIN exemplifies is built on the same principal as that of BMM: an enterprise that seeks to help low-income people through its service. The key to success is in that service: reaching a large number of people generates the income (and profit) for SER-CEGIN, and the profit allows for expansion.

“While profits are generated, the main aim is not to maximize financial returns for shareholders but to expand the social venture and effectively reach more people in need,” says Gronda.

As this collaboration is quite new, long-term studies of its effectiveness

have not been carried out. BMM has however conducted a preliminary survey among its clients about the service provided by SER-CEGIN and MEDICOS. Of the 611 people who responded, 76% felt that access to the service was vital.

Ways in which to expand this programme country-wide are being analysed by a team from SER-CEGIN, the Inter-American Development Bank and the University of Wisconsin in the United States of America. The concept involves creating health franchises, using groups of affiliated doctors throughout Argentina, based on the SER-CEGIN and MEDICOS models, which target the poorest in society.

Franchising as a model to provide health care to poor people is not limited to Argentina. In Kenya, HealthStore clinics use the franchise model to provide health care in villages and urban slums. While doing so, they generate enough revenue to pay the owners and staff a competitive annual salary. Health worker-owners are subject to franchise controls to assure quality and affordability, and also receive business support in the form of microcredit loans.

Another example is Jamii Bora, a microfinance institution in Kenya, which in 2001 began offering health care to its clients. Some years ago, many of Jamii Bora's clients were falling behind on their loan payments. When workers visited these clients, they found an overwhelming majority of them were using their money to pay the health costs of a sick family member rather than to repay the loan. This inspired the microfinance institution to begin to provide health care to its clients.

Increasingly, proponents of microcredit finance are seeing that poverty alleviation cannot be achieved by financial assistance alone; that it is only one way of addressing poverty in the world.

Together, BMM, MEDICOS and SER-CEGIN are helping those on the margins of society in Argentina to pull themselves out of poverty – through access to health care and microcredit loans. ■

Kai Lashley, *Salta*

## Bulletin theme issue: health financing for universal coverage

This theme issue of the *Bulletin* will address health financing – the most important determinant of whether people can obtain needed care. The policy objective of universal coverage in health care is endorsed by all WHO's Member States, and this issue will be the first to examine how health financing policies contribute to this goal. We welcome papers for all sections of the *Bulletin* that focus on either the macroeconomic environment of health financing, alternative ways of organizing health financing systems including revenue collection and pooling sub-functions, the allocation of financial resources for health and purchasing, and/or the resultant degree of equity and solidarity in health financing.

Manuscripts should be submitted to <http://submit.bwho.org> by 15 March 2008, respecting the Guidelines for contributors, accompanied by a cover letter mentioning this call for papers.

The *Bulletin's* guidelines for contributors and information on how to submit your manuscript can be found at: [http://www.who.int/bulletin/contributors/info\\_contributors/en/index.html](http://www.who.int/bulletin/contributors/info_contributors/en/index.html)

## An interview with Mahmuder Rahman

### Bangladesh's arsenic agony



Courtesy of Mahmuder Rahman

Prof. Mahmuder Rahman

Professor Mahmuder Rahman obtained his medical degree from Dhaka University in Bangladesh and is a member of the Royal College of Physicians (United Kingdom). He was a full professor and consultant physician at Dhaka National Medical College and Hospital until 2003. Apart from his clinical and academic work, he has contributed extensively to formulating policy for affordable health services, and is actively involved in developing integrated health delivery services such as Dhaka Community Hospital, which is a self-financing hospital dedicated to providing health care for people on low incomes. Rahman was actively involved in developing the "Arsenicosis" National Case Detection and Case Management Protocols. He has published more than 15 papers on Bangladesh's arsenic problem. As a member of Bangladesh's National Expert Committee on Arsenic, he took a leading role in formulating the National Arsenic Mitigation Policy and Action Plan.

The need for safe and clean water is the topic of this month's commemorative issue of the *Bulletin*, to mark 60 years of the World Health Organization (WHO). In this interview, Professor Mahmuder Rahman says that 12 years after the scale of the arsenic poisoning disaster in Bangladesh was first revealed, millions of people are still drinking contaminated water. He expresses his frustration at the lack of progress on a long-term solution and his fears for the future.

*Q: How many people are still drinking arsenic-contaminated water in Bangladesh?*

A: The Government of Bangladesh estimates that 30 million people are drinking water that contains more than 50 micrograms per litre of arsenic. However, up to 70 million people are drinking water that contains more than 10 micrograms per litre of arsenic, which is the provisional WHO guideline value. After a quick field survey in 2001, the government estimated that 40–50% of the estimated 10 million tube wells were contaminated with arsenic. In some villages that figure was as high as 80–100%. Now there is the problem that some tube wells that were not originally poisoned are becoming so.

*Q: Why did it take so long for the full extent of this disaster to be revealed?*

A: International and national agencies were very shy about addressing the issue when it was reported to them in 1993. They did not respond until the Dhaka Community Hospital called a confer-

ence in 1997. Then the media came and they started waking up.

*Q: If it is widely known in Bangladesh that many of the tube wells are contaminated, why are people still drinking the water?*

A: When it was established that a well was contaminated, it was painted red and people were asked not to drink from it, but it was not sealed. After time, and because there were no alternative sources of water, people started to drink the water again. Arsenic is colourless and odourless and gives no acute symptoms such as fever or pain, so people, especially children, continue drinking it.

*Q: Why has no alternative clean, safe water supply been found so many years after the scale of the disaster was discovered?*

A: After seven years of lobbying, followed by national and international conferences, hundreds of publications in the print media plus extensive coverage on television and radio, government and international agencies

started to respond to this massive human health problem. The Government of Bangladesh responded with the Arsenic Mitigation Action Policy Plan prepared by a committee composed of Bangladeshi experts in 2003. Yet no real effort has been made to find alternative safe water sources to address this major problem on a mid- and long-term basis. We have seen hundreds of learned consultants from various international agencies visiting Bangladesh but with very little understanding of the geography, culture and patterns of water use. They even fail to consider the total water resources of the country. Instead, everyone debates what the answer is, whether it is surface water, dug wells, tube wells or rain water. But then there is opposition to all these proposals and the argument goes on. Most of these experts come with the preconceived idea that dug wells and surface water are totally polluted with bacteria, but they forget that with simple and affordable technology these water supplies can be made safe and can play a major part in mitigation of this major problem.

*Q: What needs to be done?*

A: Rivers and canals are in abundance in Bangladesh, which receives 2000 millimetres of rain a year. There are regions of this world with a fourth of this rain. There are a lot of options, but some agencies have their own agenda and they do not want to follow our government-approved water policy, which is the use of a combination of treated surface water, rainwater and dug wells that reach water that is generally eight to 12 metres deep. Conventional dug wells are small in diameter, about one metre, but we have designed wells of around four metres called *idera* that are capable of supplying up to 80 families. They are safe and quite popular. However, we must not be dependent on groundwater. We do not want to risk bringing up other toxic material of which we have very little knowledge, such as boron. It's only arsenic today, but we do not know what will come next.

*Q: What about technological solutions such as filters?*

A: There are some water filters available but they are short-term solutions; they cannot be permanent solutions.

No one in their right mind would suggest taking poisoned water and purifying it for drinking when there are other more important sources of water available. We need a long-term solution. Bangladesh is a developing country. We do not have the luxury of piecemeal solutions because if we only solve a piece of the problem, it will rebound on us on a much bigger scale.

*Q: What is your main concern in the future?*

A: Recent studies show that a large amount of groundwater is going to the fields for irrigation. It has been found that rice stalks that are used for cook-

ing can have a higher concentration of arsenic than contaminated drinking-water. People then breathe the fumes while they are cooking. Agencies are only monitoring arsenic in drinking-water but we need a proper evaluation of the risk from topsoil contamination. No international and national agencies are very serious about this, but arsenic in the food-chain has the potential to cause more serious problems in the future than arsenic in drinking-water.

*Q: Do you have a clear picture of how many people are suffering from arsenic-related disease?*

A: There are a lot of cases, but no

proper prevalence study has been done. There is an urgent need for research. We still don't know exactly how many people are suffering from cancer, skin lesions or gangrene. Arsenic can cause low birth weight, and many physical and neurological deficiencies. The Bangladeshi who is drinking water with 50 micrograms per litre of arsenic and has poor nutrition may have worse health than a well-nourished person drinking the same water. This is a point that bothers us very much. Moreover, agencies or donors are not taking responsibility for patient management or arranging for research on the long-term ill effects of arsenic. ■

### Recent news from WHO

- On 6 December, WHO launched a major initiative called "make medicines child size" to increase children's access to safe and effective medicines. HIV/AIDS, malaria, tuberculosis, pneumonia and diarrhoeal diseases account for over 50% of under-five mortality.
- In her message for World Aids Day on 1 December, WHO Director-General Dr Margaret Chan called on the world not to forget Africa or women. In all regions, the proportion of women living with HIV is growing. In sub-Saharan Africa, the most afflicted area, it approaches 61%, the highest in the world.
- Measles deaths in Africa fell by 91% between 2000 and 2006, from an estimated 396 000 to 36 000, reaching the United Nations 2010 goal to cut measles deaths by 90% four years early. The announcement on 29 November was made by the founding partners of the Measles Initiative: the American Red Cross, The United Nations Children's Fund (UNICEF), the United Nations Foundation, the United States Centers for Disease Control and Prevention (CDC) and WHO.
- The Ministry of Health in Uganda confirmed an outbreak of Ebola haemorrhagic fever in Bundibugyo district. On 7 December, 93 suspected cases, including 22 deaths, were reported.
- The United Kingdom contributed £2 million (US\$ 4 061 878) on 22 November to support the US\$ 10 billion WHO global pandemic influenza action plan to increase vaccine supply.
- WHO's Director-General announced a second round of changes in 2007 to the structure of the Organization, on 21 November. The Health Technology and Pharmaceuticals cluster of departments will be merged into the Health Systems and Services cluster in recognition of the fact that "access to safe, effective, affordable medicines and other technologies is a fundamental component of an effective health system". The Health Technology and Pharmaceuticals cluster includes the departments of Essential Health Technologies, Medicines Policy and Standards and the department of Technical Cooperation for Essential Drugs and Traditional Medicine.

For more about these and other WHO news items please see: <http://www.who.int/mediacentre>