

genomics revolution also accrue to developing countries and that ethical, legal and social implications are taken into account," said Dr Tikki Pang, Director of WHO's Research Policy and Cooperation department.

A resolution on genomics and world health adopted during the Fifty-seventh World Health Assembly, 17–22 May 2004, called upon WHO Member States to facilitate greater collaboration among the private sector, the scientific community, civil society, and other relevant stakeholders, particularly within the United Nations, in order to mobilize "more resources for genomics research targeted at the health needs of developing countries." ■

Luisa Massarani, *Rio de Janeiro*

Rwandan genocide survivors in need of HIV treatment

Thousands of women who were sexually assaulted and infected with HIV during the 1994 genocide in Rwanda do not have access to treatment, said the Survivors' Fund (SURF), a UK-based non-profit organization which launched a campaign on 20 April calling for the provision of affordable antiretroviral treatment for women infected with HIV during the conflict which claimed at least 800 000 lives.

"These women were left impoverished after their husbands, fathers and brothers were murdered," said Mary Kayetisi Bluitt, Director of SURF, a non-profit group based in London, aiming to address the needs of women and children who survived the Rwandan massacre. "They are still suffering from trauma and have few resources, and only a handful can afford the anti-retroviral drugs that could improve and prolong their lives," said Bluitt, who lost 50 members of her family during the massacres.

"It [the genocide] is still claiming victims who contracted HIV as a result of sexual violence," said Colette Delhot, Regional Adviser for Gender and Women's Health at WHO's Regional Office for Africa in Brazzaville, Congo. No one knows precisely how many women became infected during the assault, which was marked by a rash of gang rapes.

Only one organization, the Rwandan Association of Genocide Widows (AVEGA-AGAHOZO), based in the

Remera area of Kigala, has published survey results. The non-profit group, which consists of 25 000 widows, estimates two-thirds of its members are now HIV-positive as a result of being raped during the 1994 conflict. "There is little doubt the numbers are actually higher, however, because many women hesitate to come forward. They ask themselves, 'Why should I get tested and find out I carry the disease? I can't get treatment anyway,'" said Bluitt. The group also estimates that of five million women living in Rwanda, half are widows who lost their families during the 1994 conflict.

According to non-profit groups like the Rwandan Association of Genocide Widows (AVEGA-AGAHOZO) and SURE, international groups and charities working in Rwanda have failed to devote sufficient attention to the genocide widows.

Delhot agrees that the Rwandan women deserve special treatment. "These women lost everything because of the genocide and are struggling to survive. We have to fight to get them access to basic health care. It is a human rights and war reparations issue, not just a health issue," she said.

The UK's Department for International Development announced in mid-April a donation of GBP 200 000 towards the cost of providing antiretroviral treatment for witnesses of the genocide suffering from AIDS.

The International Criminal Tribunal for Rwanda, currently under way in Arusha, United Republic of Tanzania, is prosecuting some five dozen cases against the alleged ringleaders of the slaughter, which targeted the country's minority Tutsis and politically moderate Hutus. The 100 day-long assault, executed by Hutu extremists in April 2004, followed the death of Rwanda's Hutu President Juvenal Habyarimana after his aeroplane was hit by a missile. ■

Judith Mandelbaum-Schmid, *Zurich*

New international convention allows use of DDT for malaria control

Malaria-endemic countries can continue using dichlorodiphenyltrichloroethane (DDT) to help control malaria due to an exemption clause in a convention banning the controversial substance. The Stockholm Convention on Persis-

tent Organic Pollutants which came into force on 17 May, following its ratification by 50 states, outlawed the use of 12 industrial chemicals — dubbed the "Dirty Dozen," — including DDT.

The exemption clause allows malaria-endemic nations to use DDT strictly for indoor residual wall spraying (IRS): a measure which contributed to slashing the number of malaria cases in South Africa from 64 622 in 2000 to 8016 last year.

"Malaria is now at its lowest level in ten years," said Rajendra Maharaj, a specialist scientist working with South Africa's national malaria control programme. "We attribute that to DDT."

Under pressure from environmentalists, South Africa suspended DDT for IRS in 1996 after five decades of use and switched to another class of insecticide known as pyrethroids. But the 1999–2000 malaria epidemic in KwaZulu-Natal and neighbouring provinces prompted the government to revert to DDT for prevention and to introduce artemisinin-based combination therapy for treatment.

Other African nations, such as Eritrea, Ethiopia and Swaziland have continually used DDT for IRS in certain areas. China and India — the main supplier of the insecticide — are two other countries currently using DDT focally. Some other countries in eastern and southern Africa are considering the introduction of DDT as part of their malaria control operations in epidemic-prone areas. The United Nations Environment Programme estimates that about 25 countries will use DDT under exemptions from the DDT pesticide ban.

Recognizing the role of DDT in disease vector control, WHO helped lobby for the exemption provisions during negotiations on the content of the Stockholm convention in 2000. Allan Schapira of WHO's Roll Back Malaria department said that IRS is often more rapidly effective in controlling epidemics than insecticide-treated bed nets. However, "insecticide-treated bednets remain the recommended method in settings of intense, ongoing transmission where it is at least as effective and usually much more acceptable by the populations," said Schapira.

Junaid M. Seedat, Managing Director of the international non-profit organization, Massive Effort Campaign, which campaigns to raise awareness of developing country diseases, said WHO

should be more active in promoting DDT for IRS rather than relying on insecticide-treated bed nets alone as a preventative tool.

However, Dr Kabir Cham, Senior Adviser with WHO's Malaria Policy and Strategy Team, said that insecticide-treated bed nets and IRS each have their specific roles in malaria control. "DDT is one of 12 insecticides approved by WHO for IRS, and like all of them it has certain advantages and disadvantages, which should be analysed in the local context to make the best choice," said Cham.

In 1935 DDT was discovered to be a highly effective insecticide which led to its widespread use as a general pesticide in agriculture. Its use for disease control began during the Second World War and became the main product used in global efforts, supported by WHO, to eradicate malaria in the 1950s and 1960s. According to WHO's booklet, "Frequently asked questions on DDT use for disease vector control," this campaign resulted in a significant reduction in malaria transmission in many parts of the world and was probably instrumental in eradicating the disease from Europe and North America.

However, following widespread concern over the environmental and health risks posed by the chemical's persistence in the environment long after its initial application, DDT was banned in the US in 1972 and later in other countries. According to WHO, although there is no direct link between DDT and any negative human health effect, there is growing evidence that it may disrupt reproductive and endocrine function.

The WHO booklet "Frequently Asked questions on DDT use for disease vector control," is available at: <http://mosquito.who.int/docs/FAQonDDT.pdf> ■

Clare Kapp, *Johannesburg*

In brief

Young motherhood biggest killer of girls in developing world

Pregnancy and childbirth are the leading causes of death among girls and young women aged 15 to 19 in the developing world, according to a new

report released by the US-based non-profit organization, Save the Children.

The *State of the World's Mothers 2004*, released on 4 May, argues that providing girls with better educational opportunities and access to improved health care is key to preventing pregnancy in teenage women.

"For too many young girls around the world, motherhood is a disabling tragedy, or worse yet, a death sentence," said Mary Beth Powers, the group's reproductive health adviser.

Around 70 000 teenagers die annually because of complications from pregnancy and childbirth, according to Powers. The girls who do survive often struggle to overcome poor health, education and poverty, she added.

The prospects for the children of these young mothers are little better. According to the report, the offspring of teenaged mothers are 50% more likely to die than those born to older women. An estimated 1 million infants born to teenaged mothers die before their first birthday.

The report is available at: http://www.savethechildren.org/mothers/report_2004/index.asp ■

"Kill or Cure?": BBC broadcasts series on developing-country diseases

"Malaria" was the first subject of a new BBC television documentary series about the diseases which take a heavy toll on populations in developing countries but have been traditionally neglected by the pharmaceutical industry because of lack of profit potential. The first programme in the series was aired worldwide on 14 May on BBC World — a network with an audience reach of approximately 250 million viewers.

The programme on "Malaria" is to be followed by "Kalar Azar" (leishmaniasis) from 21 May, "Lymphatic Filariasis," from 28 May, "TB" (tuberculosis) from 4 June, "Hep B," from 11 June, "Diarhoea" from 18 June, "Bilharzia" from 25 June and "Polio" from 2 July.

"For too long these diseases have been ignored," says Professor David Molyneux of the Liverpool School of Tropical Hygiene. "The BBC is to be praised for running a series that vividly portrays the reality of life for tens of millions of people around the world."

Malaria — time to ACT

Lack of funding, political will and long lead times were cited as some of the major barriers to the implementation of artemisinin combination therapy (ACT) for malaria treatment during an international conference, held at Columbia University, US, 29–30 April.

The International Symposium on Malaria, cosponsored by WHO, UNICEF, Médecins Sans Frontières and Columbia University's Mailman School of Public Health, brought together technical experts, policy-makers, economists, service providers, pharmaceutical and diagnostics manufacturers, and donors to find ways to overcome remaining barriers to the implementation of ACT for effective malaria treatment.

"Urgent solutions need to be found to support changes in national protocols in endemic countries, to fund effective treatment and to ramp up the production of ACTs," said meeting organizers in a joint statement.

The call to action follows the increasing resistance exhibited by malarial parasites to conventional antimalarial drugs. Despite evidence which suggests that drugs derived from *Artemisia* plants hold enormous potential for combating the global malaria epidemic, progress in getting these new drugs to patients has been slow. (See related article, "WHO refutes malaria malpractice allegations": *Bulletin* 2004;82:237.) ■

India bans smoking

India, home to 250 million smokers, has banned smoking in public places as well as the advertising of all tobacco products and the sale of tobacco to minors.

Like Ireland's recent ban, its Indian counterpart, instituted on 1 May, applies to enclosed areas such as restaurants, offices, airports and buses. India, the world's second largest tobacco consumer after China, accounted for one-fifth of the 4 million deaths resulting from tobacco-related illnesses in 2000. ■