

Malaria... Tuberculosis... HIV/AIDS

Infectious diseases continue to kill millions despite modern medicine

Malaria has infected human beings for at least 50,000 years and may have been present since the dawn of the species.

The oldest human remains showing signs of tuberculosis date back 9,000 years.

HIV/AIDS became widespread only in the latter years of the 20th century and the first pandemic of severe acute respiratory syndrome (SARS) surfaced as late as 2002.

Between them, however, major infectious diseases have been responsible for the deaths of probably hundreds of millions of people. Even as medical science advances in the new millennium and some diseases appear to have been eradicated, new strains and new diseases make their appearance.

The United States National Intelligence Council has said that 25–33% of the estimated 54 million deaths worldwide in 1998 were caused by infectious disease. Twenty known diseases, including tuberculosis and malaria have reemerged or spread geographically since the 1970s and at least 30 previously unknown disease agents including HIV and Ebola have been identified since 1973.

Developed nations have not escaped the impact. The number of infectious disease-related deaths in the United States nearly



Mosquito nets save lives (Photo: Hiromi Nagakura/JICA)

doubled to some 170,000 since 1980 and the intelligence council said these diseases presented not only a health threat but also a global security issue in the next 20 years.

Developing Nations Vulnerable

But developing countries, particularly those in sub-Saharan Africa, have carried the brunt of the impact. Some 30 million people

have already died from HIV/AIDS worldwide in recent decades. In Zimbabwe recent surveys showed at least one in every seven persons are already stricken and there is a new infection every three minutes. The life expectancy of young women, a group particularly vulnerable to the disease, has sunk to 34, the world's lowest. As the collapse of Zimbabwe society accelerated in recent years, those figures may well be

far worse.

"People are dying of AIDS before they can starve to death," one doctor was quoted recently as saying.

The situation in neighboring Zambia is only slightly better. First discovered there as late as 1984, the virus now infects one in every seven persons and sometimes one in four in urban areas and life expectancy has fallen to 42.

Malaria is equally deadly. Anywhere between one and three million people die from malaria each year, 90% of them again in sub-Saharan Africa.

For tuberculosis probably one in every three persons throughout the world have been infected by some kind of TB with 1.6 million persons dying each year, 80% of them in Asian and African countries.

Many of the reasons for the disparity between rich and poor nations are obvious. Widespread poverty, poor water and malnutrition breed disease. There are few medical facilities to treat patients in poorer countries. Even easily cured diseases such as malaria fester and spread because millions of people cannot afford treatment, even if it is available.

The toll from disease has a distorting effect on entire nations, stunting social and economic growth. In Zimbabwe and Zambia, for

instance, many of the victims are professionals, the very people needed to ensure progress.

New Threat

The development of modern, rapid global transport is a new threat, allowing diseases such as SARS to jump countries and continents within a matter of days. Japanese experts

United Nations' Millennium Development Goals (MDGs) for 2015 is to "combat HIV/AIDS, malaria and other diseases."

On the ground, JICA uses a variety of different approaches to tackle the crisis. Developing countries all need better medical facilities, often at the village level, and more highly trained doctors, nurses and medical administrators and

Raising the overall standard of living and medical care for other potential problems is equally effective.

In Zambia, for instance, JICA has helped recruit groups of volunteer health workers who receive training but little, if any, financial rewards for their work. So why do they do it? "Because I want to help my community," says one mother with a young child

sponsoring monthly visits to the mothers' door steps to encourage family planning and child care.

Japanese experts have helped prepare health guidelines and instruction manuals. Drainage ditches and clean toilets have been built to improve hygienic standards. And in anticipation of the moment when foreign assistance is no longer available, small income-generating projects have been started which will self-finance health care in the future.

If malaria, tuberculosis and HIV/AIDS are considered the 'Big Three' of infectious diseases, there are a myriad of other lurking killers. JICA has been involved for many years in South and Central America in trying to combat chagas, a disease spread by blood-sucking *triatomine* insects which kill as many as 50,000 mainly poor, rural people each year. The economic and health costs to the region have been estimated at more than \$8 billion.

Santos Raymunda Ohajaca, a housewife with two children, who lives in the Honduran village of Carrizalon has seen meaningful progress in the fight against chagas. "A few years ago many of our children were listless. They had no energy. Parents were fatalistic. They accepted some of their children might die. But kids are much healthier now," she said.

It is hoped to reach a major milestone next year: the goal of eliminating the further spread and infection of this once deadly infectious disease.



Tuberculosis research in Cambodia

believe the threat of infectious disease is global and can only be met by a truly international response.

In 2000 Tokyo committed \$5.8 billion for a five-year period to combat infectious disease. The Global Fund to Fight Aids, Tuberculosis and Malaria (Global Fund) was established with Japan as a major contributor and it contributed additional sizeable amounts in subsequent conferences. One of the

even volunteer groups who can go to individual homes when patients cannot reach a center.

Prevention is better than cure and some programs emphasize monitoring and early warning programs to spot likely problems.

Pills may be too expensive and unwieldy to give to millions of malaria sufferers but cheaply produced antimosquito nets are proving to be an effective deterrent.

of her own. "If we don't do this work, no one else will."

Volunteer Workers

The volunteers visit crowded slum areas such as George in the capital, Lusaka, and rural villages dispensing practical advice on malaria, TB and AIDS. In cooperation with Health Ministry and local officials it was decided to "bring care to the community" by