

THIS WEEK

'Ten times more' AIDS cases in Africa

THE World Health Organization is convinced that many countries in East and Central Africa have reported only about a tenth of the cases of AIDS that they have experienced since the epidemic began. A statistical model produced by the WHO suggests that a hypothetical East African country with a population of 16.1 million would have had more than 24 000 cases of AIDS by 1987. But no African country has reported more than 5000 cases.

The model was presented last week to the Third International Conference on AIDS and Associated Cancers in Africa, held in Arusha, Tanzania. James Chin of the WHO told *New Scientist* that about a dozen countries in Central and East Africa have a similar pattern of HIV infection.

Responding to some surprise in the audience at the size of the estimated shortfall in the official figures, Chin said that managers of national AIDS programmes in some African countries had "come up with similar figures for what they feel might be out there".

The WHO has been saying for some time that the numbers of cases of AIDS reported by developing countries do not reflect accurately the numbers of cases that have occurred. Zaire, for example, has not reported since June 1987, when it said that it had only 335 cases of AIDS. Chin told *New Scientist*: "When Jonathan Mann [now director of the WHO's Global Programme on AIDS] worked in Zaire for three to four years, he saw personally more

cases than Zaire has reported." The model suggests that Zaire, with a population of more than 36 million, should have had more than 50 000 cases.

Up to 1985, recognition and acceptance

figures would rise to 1.05 million and 107 500 respectively. In 1991 alone, about 60 000 new cases of AIDS are likely to appear. (All these figures apply only to cases of adults with AIDS.)

Lwanga foresees a need to examine regularly the assumptions made in the model, and to adjust it as new data on the numbers infected become available. Despite the shortcomings, Lwanga concluded: "This is better than planning in a total void."

Data on the spread of the virus in Africa are in short supply although, as some presentations at the conference showed, the picture is becoming clearer. Uganda, which has set up a surveillance system for AIDS, reported 4723 cases up to the end of May 1988. Although this is more than any other African country has reported, it does not necessarily mean that Uganda has the most cases.

In the Mwanza region of Tanzania, south of Lake Victoria, a survey showed that 4.5 per cent of blood donors and 6 per cent of pregnant women are infected with HIV. In another survey of more than 200 barmaids in Dar es Salaam, the percentage who were infected with the virus rose from 29 per cent in 1986 to more than 38 per cent this year.

Although reports such as these are still politically sensitive, the fact that they were discussed openly at the conference marks a change in attitude for many African countries. The atmosphere was relaxed enough for the *Tanzanian Daily News* to report that "in some countries in Central and East Africa, an average of 18 per cent of healthy blood donors and pregnant mothers are infected".

As Lars Kallings, from the National Bacteriological Laboratory in Sweden, who chaired a recent international conference on AIDS in Stockholm earlier this year, said in the closing session of the conference: "In some regions there is a frightening prevalence of HIV infection in the adult population. In some areas up to one-third of the adult population are infected." He asked: "Are we prepared for this? Why is there not a bigger sense of urgency? Is it because we are feeling helpless?" There is at least one hopeful aspect, he said. Children aged five to 15 years old are spared from infection.

Kallings said that combating the problem would mean changing priorities, "decisions that would have to be taken at the highest national level". Such changes would mean upgrading health and education services, as well as improving the situation of women. "In only a couple of years," he said, "I'm afraid that it will be a frightening body count... But there are already examples that the body count can change behaviour." □

Sharon Kingman, Arusha



P. M. Surungi (right), president of the Medical Association of Tanzania, greets Ahmed Salim, deputy prime minister of Tanzania, at Arusha

of the disease was a problem in some countries. Formal reporting was virtually nonexistent till 1986, said Chin. Even now, reporting is incomplete and inaccurate because surveillance is rudimentary. Many doctors are confused about the diagnosis of AIDS, and wonder whether laboratory confirmation of HIV infection is necessary. Some people with AIDS never see a doctor at all; some of those who do may die of infections such as tuberculosis and malaria without it ever becoming clear that they have AIDS.

The factor of 10 applies only to cumulative totals—the numbers of cases since the epidemic began. Current reports in many countries are probably out by no more than a factor of four, Chin said.

A description of the model, developed by Steve Lwanga, also from WHO, and Chin, appears on p 28. To predict the future, the researchers reviewed two extreme scenarios. Lwanga told the conference that even if all new infection ceases at the end of 1988, by the end of 1991, there would have been 608 000 HIV-positive people in the hypothetical country since the epidemic began. If, however, the incidence of HIV infection continues to rise by 25 per cent per annum from 1986 onwards, then by the end of 1991 there would be nearly 1.8 million HIV-positive people. There would be nearly 73 000 new cases of AIDS that year. The cumulative total of AIDS cases by the end of that year would be about 126 000.

Chin and Lwanga believe that the rate of increase of infection may be starting to slow. In this case, the model predicts that by the end of 1988, the hypothetical African country will have about 713 000 HIV-positive people and will have encountered 41 300 cases of AIDS. By 1991, these