WORLD HEALTH ORGANIZATION

FIFTY-SIXTH WORLD HEALTH ASSEMBLY A56/9
Provisional agenda item 14.1 14 April 2003

Tropical diseases, including Pan African tsetse and trypanosomiasis eradication campaign

Report by the Secretariat

1. As requested by the Executive Board at its 109th session in January 2002,[1] an item entitled Pan African Tsetse and Trypanosomiasis Eradication Campaign was included on the provisional agenda of the Fifty-fifth World Health Assembly. Time constraints prevented consideration of the item, which was deferred for consideration by the Fifty-sixth World Health Assembly.

AFRICAN TRYPANOSOMIASIS

2. Human African trypanosomiasis is a centuries-old parasitic disease that ravaged sub-Saharan Africa in waves of epidemics for at least 200 years. A significant decline in the disease burden resulted in part from responses of Member States and joint undertakings by various international organizations, including FAO, WHO, IAEA and the Organization of African Unity. By the mid-1960s, human trypanosomiasis had been virtually eliminated from the African continent. Since then, however, the number of cases has resurged dramatically, in part because of neglect, political instability and armed conflicts, which have hampered the establishment and maintenance of control initiatives. The consequences of this neglect are now considerable. Today, trypanosomiasis is a daily threat to more than 60 million men, women and children in 36 countries in sub-Saharan Africa, 22 of which are among the least developed countries in the world. However, disease surveillance currently covers only three to four million of these people and the number of cases notified annually (45 000 in 1999) does not reflect the real number of people thought to be infected: an estimated 300 000-500 000. Of these, fewer than 10% receive proper treatment. The disease is highly focal, taking its heaviest toll on impoverished populations in remote rural areas. Disease prevalence in local village populations in some endemic areas approaches 80%.

3. The disease is caused by the protozoal parasites *Trypanosoma brucei gambiense* in west and central Africa and *Trypanosoma brucei rhodesiense* in east and southern Africa, transmitted through the bite of tsetse flies. In infected people, the trypanosomes multiply in the blood and lymph glands, later crossing the blood-brain barrier to invade the central nervous system where they provoke major neurological disorders. Tsetse flies also transmit trypanosomes to livestock, notably domestic cattle, and cause more than three million livestock deaths each year, depriving impoverished families of milk, meat, draught power and fertilizer. African trypanosomiasis is thus a disease of the poor that adds to poverty.

[1] See document EB109/2002/REC/2, summary record of the tenth meeting, section 3.

4. Both detection of infection and subsequent patient care require well-trained staff, sophisticated technical resources, drugs and well-equipped health centres, which are beyond the reach of the most heavily affected areas. Three drugs (pentamidine, melarsoprol and eflornithine) can be used to treat trypanosomiasis successfully, but access to them is limited and treatment courses are long, difficult and not without side-effects, some of them serious. Without treatment, the disease is invariably fatal.

5. Over the decades, various efforts have been made to tackle the disease in human beings and domestic livestock. The International Scientific Council for Trypanosomiasis Research and Control was established in 1949 to promote research on and control of human and animal trypanosomiases. WHO has a seat on the committee of the Council. In 1983, the Thirty-sixth World Health Assembly adopted resolution WHA36.31 requesting WHO, *inter alia*, to strengthen support for control of human trypanosomiasis.

6. Several recent developments indicate that endemic countries in Africa in particular and the international community in general are now committed to renewed and accelerated efforts to combat human trypanosomiasis. The Programme against African Trypanosomiasis was established in 1995 as a joint project of WHO, FAO, IAEA and the Organization of African Unity Interafrican Bureau for Animal Resources to support Member States in trypanosomiasis-endemic areas to reinforce surveillance and control of human and animal trypanosomiases. These efforts were reinforced in a resolution (WHA50.36) adopted by the Fiftieth World Health Assembly in 1997. The Programme is launching an online geographical information system with access to country-specific data. This tool is already guiding the selection of priority areas for population screening and tsetse control.

7. In the advanced stage of human trypanosomiasis, recent years have seen treatment-failure rates higher than 20%, creating an emergency situation. Relapse after treatment is another problem, as are growing rates of resistance to existing drugs. In response to this crisis, WHO set up a network in 1999 to tackle treatment failure and drug resistance. The network is supported by working groups on drug availability and distribution and on sentinel surveillance for treatment failure and resistance, and a research group that seeks ways to improve the monitoring of drug resistance and find better drugs. Given the years needed to develop new drugs, the use of combinations of existing drugs, which has proved effective in leprosy and tuberculosis control, is being explored.

8. The Pan African Trypanosomiasis and Tsetse Eradication Campaign was established in Lomé during the Organization of African Unity summit of Heads of State and Government in July 2000. Its main role is to promote at the highest political level control of trypanosomiasis. The Campaign represents a strong, pan-African commitment to the fight against the disease.

9. In 2001, FAO adopted a resolution[1] requesting support for African Member States and the Pan African Trypanosomiasis and Tsetse Eradication Campaign in efforts to combat effectively human and animal trypanosomiases and their vectors. The same year, IAEA adopted a resolution[2] welcoming the Plan of Action of the Organization of African Unity for the eradication of tsetse flies from Africa, and calling upon Member States to provide technical, financial and material support to African States in their efforts to eradicate tsetse flies.

[1] Food and Agriculture Organization of the United Nations, Thirty-first session, resolution 4/2001, 12 November 2001.

[2] International Atomic Energy Agency General Conference, Forty-fifth session, resolution GC(45)/RES/12, 21 September 2001.

10. At the technical level, the Campaign is mainly involved in preparing large vector-control activities with the aim of creating tsetse-free areas. Within the general framework of control of all trypanosomiases, WHO is responsible for research on and surveillance and control of human trypanosomiasis. Reducing the human reservoir of trypanosomes in parallel with the reduction and eventual elimination of the vector is critical, but cannot be done without strengthening disease surveillance, providing treatment and developing new drugs to replace those that are becoming less effective through development of resistance in the trypanosome. Significant partnerships between WHO and partners, including the private sector, support these goals. All technical partners have reached consensus on a common strategy for control.

11. In terms of access to drugs, the most significant development occurred in May 2001 when Aventis Pharma announced a donation of US$ 25 million to support a five-year control programme. The agreement includes the production and donation of pentamidine, melarsoprol and eflornithine, the three drugs most urgently needed to treat the different stages and forms of the disease. The Aventis Pharma partnership also includes provision of funds to support teams of health workers for diagnosis and monitoring in remote areas, to renovate treatment centres, and to advance the search for more effective and safer drugs in collaboration with the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases. As part of a corporate commitment to support this initiative, other pharmaceutical companies have agreed to fund the cost of supplying bulk material for the production of 60 000 vials of eflornithine and to donate suramin, potentially a fourth drug for treatment.

12. Building on these recent positive developments, WHO is facilitating the formation of a global alliance to support and strengthen existing efforts to build a sustainable programme to reduce the human morbidity and mortality associated with trypanosomiasis and to create conditions for the elimination of the disease. In so doing, it capitalizes on the momentum begun by the Pan African Trypanosomiasis and Tsetse Eradication Campaign, which issued a strong call to African countries and the international community to combat the disease. The Campaign's plan of action, which has been endorsed at a meeting of more than 250 scientists, including experts from 33 endemic countries, specifically acknowledges that the greatest impact on the disease will be seen when reductions in human and animal reservoirs of trypanosomes are paralleled by reductions in vector populations.

ACTION BY THE HEALTH ASSEMBLY

13. The Health Assembly is invited to note the report.

= = =