

THE DURBAN DECLARATION

In July 2000, seventeen years after the discovery of the human immunodeficiency virus (HIV), thousands of individuals from around the world gathered in Durban, South Africa, to attend the XIIIth International AIDS Conference. Approximately 34 million people worldwide are estimated to be living with HIV or AIDS, 24 million of them in sub-Saharan Africa.¹ Last year alone, 2.6 million people worldwide died of AIDS, the highest yearly death rate since the start of the epidemic. If current trends continue then southern and South-East Asia, South America and regions of the former Soviet Union will bear a very heavy burden in the next two decades.

Like many other diseases (e.g. tuberculosis, malaria) that cause illness and death in underprivileged and impoverished communities, AIDS spreads by infection. HIV-1, which is responsible for the AIDS pandemic, is a retrovirus closely related to a simian immunodeficiency virus (SIV) infecting chimpanzees. HIV-2, which is prevalent in West Africa and has spread to Europe and India, is almost indistinguishable from an SIV infecting sooty mangabey monkeys. HIV first arose as a zoonosis² – an infection transmitted from animals to humans – although it now spreads among humans through sexual contact, from mother to infant and via contaminated blood.

An animal source for a new epidemic is not peculiar to HIV. The plague came from rodents. Both influenza and the new Nipah virus epidemic in South-East Asia reached humans via pigs, while variant Creutzfeldt-Jakob disease in the UK came from 'mad cows'. Once HIV became established in humans, it followed human habits and movements. Like other viruses, HIV recognises no social, political or geographical boundaries.

The scientific evidence that AIDS is caused by HIV-1 or HIV-2 is overwhelming.^{3,7} The data providing proof that HIV is the cause of AIDS fulfil exactly the same criteria as for other viral diseases such as polio, measles and smallpox:

- All patients with AIDS, regardless of where they live, are infected with HIV.^{3,7}
- Most patients with HIV infection show signs of AIDS within 5 - 10 years.^{6,7} HIV infection is identified in blood by detecting antibodies or gene sequences. These tests are as reliable as any used for detecting other virus infections.
- All children who develop AIDS are born to HIV-infected mothers. The higher the viral burden in the mother the greater the risk of the child becoming infected.⁸
- Persons who received HIV-infected blood developed HIV/AIDS, whereas those who received untainted or screened blood did not.⁶
- In the laboratory HIV infects the exact type of white blood cell (CD4+ lymphocytes) that becomes depleted in persons with AIDS. Drugs which block HIV replication in the test tube delay progression to AIDS when given to patients. Treatment can greatly reduce AIDS mortality.⁹
- Chimpanzees experimentally infected with HIV-1 have developed AIDS. Monkeys inoculated with cloned SIV DNA become infected and develop AIDS.¹⁰

Further compelling data are available.^{4,5} For all these reasons it is our considered conclusion that HIV causes AIDS. It is therefore most unfortunate that some people continue to doubt the cause of AIDS. This position will cost lives.

In different regions of the world HIV/AIDS can show altered patterns of spread and symptoms. In Africa, for example, HIV-infected persons are 11 times more likely to die within 5 years,⁷ and over 100 times more likely than uninfected persons to develop Kaposi's sarcoma, a cancer caused by yet another virus.¹¹

As with any other chronic infection, various co-factors play a role in determining the risk of disease. Persons who are malnourished, who already suffer other infections or who are older, tend to be more susceptible to the rapid development of AIDS following HIV infection. However, none of these factors weaken the scientific evidence that HIV is the sole cause of AIDS.

In this global emergency, prevention of HIV infection must be our greatest worldwide public health priority. The knowledge and tools to prevent infection are available. The sexual spread of HIV can be stopped by monogamy, by abstinence or by using condoms. Blood transmission can be prevented by screening blood products. Mother-to-child transmission can be reduced by 50% or more by short courses of antiviral drugs and other measures.^{12,13}

Limited resources and the crushing burden of poverty in many parts of the world constitute formidable challenges to the control of HIV infection. People already infected with HIV can be helped using treatment with life-saving drugs. But their high cost puts these treatments out of reach for most people. It is crucially important to develop new antiviral drugs that are easier to take, have fewer side-effects and are far less expensive, so that millions more can benefit from them.

There are many ways of communicating the crucial information on HIV/AIDS, and what works best in one country may not necessarily be appropriate in another. However to tackle the disease, everyone must first understand that HIV is the enemy. Research, not myths, will lead to the development of more effective and cheaper treatments, and hopefully a vaccine.

There is no end in sight to the AIDS pandemic, but by working together to prevent HIV infection we have the power to reverse the tide of the epidemic. Science will one day triumph over AIDS, just as it did over smallpox, and curbing the spread of HIV will be the first major step. Until then, reason, solidarity, political will and courage must be our partners.

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