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What Can Be Done Against the Further Spread of AIDS?

AIDS has been largely underestimated in the past. From now available data, the following conclusions can be drawn:

1. The modes of transmission of AIDS are the same as in hepatitis B (sexual, blood-parenteral, perinatal), and the efficacy of transmission seems to be similar. Without preventive measures the prevalence of AIDS may in the future reach the prevalence of hepatitis B (80–95% in most developing countries and still 5–15% in most industrialized countries). This may even be an underestimate because, in contrast to hepatitis B, most infected persons will be a source of infection for life.
2. The large majority of infected persons will develop the disease and die, if no effective therapy can be found. According to a conservative estimate of the U.S. Public Health Service, a cumulative number of 270,000 AIDS cases can be predicted for the U.S.A. in 1991, with 74,000 newly diagnosed cases and 54,000 cases dying in this year.
3. The number of diseased persons gives no reliable information on how fast the infection spreads in the population and what population groups are already affected. Only systematic serological investigations will tell the truth. Within two years after infection probably less than 1% develop disease, and most infected persons become ill more than five years later. Seroepidemiological data suggest that in developed countries more than half of all hemophiliacs and between 10 und 30% (in some areas above 50%) of all homosexuals and drug addicts are infected.
4. A vaccine will not be available in the coming years, and some researchers doubt whether it will be possible at all, because of the high mutability of the virus.

This creates a desperate situation for developing countries. Lack of money, suboptimal organization of the public health service, and the low education level of the population will hinder the prevention of the further spread of AIDS. In central Africa 5–20% of the population are already infected. Within a few years a universal prevalence of AIDS can be expected. Without a major scientific breakthrough, the majority of the population in this area, but possibly also in Middle and South America, will die from AIDS before the turn of the century.

In the U.S.A. further spread of AIDS can be expected, too. In spite of extensive information campaigns and a successful volunteer case reporting system, new infections still occur in risk groups such as homosexuals. Furthermore, AIDS has left the risk groups and is spreading in the general population mainly by heterosexual contact, as has been shown by the Belle-Glade-epidemic in Florida. In the second half of 1986 about 4% of all reported new cases were heterosexually transmitted, in contrast to only 1% in the years before. Therefore, even complete control of AIDS in the risk groups (which is not possible on a volunteer base) will not prevent the continuous spread in the population.

In Europe the situation is still not as bad as in the U.S.A. Because of its later introduction, AIDS has not spread so widely. For example, in the Federal Republic of Germany only 100,000–200,000 persons, mainly belonging to the risk groups, are assumed to be infected. The main problem in controlling the disease is the fact that the majority of persons transmitting the disease do not know that they are infected and infectious.

In contrast to the U.S.A., an obligatory serological screening of the adult population could be performed at regular intervals, because inhabitants are registered at the place of residence. There should be no discussion about the fact that mass screening, in combination with registration of infected persons and with legal restrictions (obligatory information of the sexual partner, obligatory use of condoms), is at the present time the most effective measure to control the further spread of AIDS. Such a strategy has the following advantages:

- a) It will give the first solid data on the prevalence and incidence of AIDS in different population groups. These data are urgently needed by the public health service in deciding what control measures are necessary, and to check the efficacy of control measures.
- b) Virtually all sources of infection, even outside the risk groups, will be identified. The informing of infected persons about the requirements necessary to prevent further spread of the disease is then possible.
- c) Persons still spreading the disease by not following the requirements regularly can be identified after the next serological screening by questioning newly infected persons. Further spread from these persons can be prevented by legal action.
- d) There is no discrimination of certain risk groups if the total population is screened.
- e) In contrast to the screening of risk groups, the participants in such a universal screening program can be well controlled.
- f) In the long run, screening programs will be much cheaper than the treatment of preventable infections. For 1991 the treatment costs of AIDS are estimated to be 8 billion dollars in the U.S.A.

It is now up to the politicians to decide above what margin of preventable deaths the proposed measures, which are associated with some limitations of personal rights, are justified. Homosexuals especially should protest against the discrimination associated with the delayed application of effective preventive measures, because this population group has to pay most of the toll. Another question is whether the general population will accept these measures. We should be aware of the fact that a society which is not able to enforce necessary decisions will not survive.

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