Letters to the Editor

Epidemiology of AIDS—statistical analyses

SIR—With reference to the study by Engen and Iverson published in the March issue of the journal (41: 55, 1987), I feel that there is an underlying assumption which must be challenged. That is whether data that have been obtained from a population of haemophiliacs can reasonably be applied to another population, one which would contain a large number of male homosexuals. AIDS sufferers who are also male homosexuals have been found to have a history, in general, of a lot of episodes of illness due to gonorrhoea, syphilis, herpes, hepatitis B, cytomegalovirus, and other infectious illness. Most of these conditions would have been treated with large amounts of antibiotics. Other factors in the gay lifestyle would surely contribute to illness (eg, overusage of drugs, especially that of 'poppers', etc). Thus I suggest that the course of the disease known as AIDS would be of a shorter and more severe character than in other healthier populations.

It may be that healthy people are better able to mount a defence against the disease than is commonly supposed. Curran *et al* quote two studies in which health care workers were exposed parenterally to blood from AIDS sufferers, or patients who were HIV positive, and of whom *none* even became seropositive. I understand that there are haemophiliacs who, it is thought, must have been exposed to the virus but who have still not gone on to develop fully blown AIDS after several years from exposure.

ROBERT TURNER

The authors reply as follows:

In his comment on our article Turner challenges the use of reported cases of AIDS among HIV infected homosexuals in estimating the number of persons infected with HIV among non-haemophilic blood recipients. It is well known that antigen or mitogen stimulation of HIV infected T-cells results in a release of virus which can infect more cells. This might very well increase the risk for developing AIDS, although it has not been documented. However, if homosexuals are at increased risk of developing AIDS compared with blood recipients, the consequence is that our estimates of the number of persons infected with HIV by blood transfusion in the US should be considered as minimum figures.

It is important to emphasise that our estimates of the relative increase in the number of persons infected with HIV by blood transfusion is independent of the assumption described above. Thus our estimates

indicate a doubling time for HIV infections in the US of 8.2 months from 1979 to 1984.

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Oral contraceptive use and breast and ovarian cancer mortality in Switzerland

SIR—Despite considerable research, there is still controversy over the potential long term influence of oral contraceptive use on female hormone related neoplasms.^{1,2} Data on prevalence of oral contraceptive use and breast and female genital tract neoplasms in various countries may provide useful, though indirect, information.

We have therefore considered patterns of oral contraceptive use in the Swiss National Health Survey SOMIPOPS, conducted in 1980 on a randomly selected sample of 4,255 women representative of the whole Swiss population aged 20 or over.³ Overall, 24.8% of women aged 20 to 44 were current oral contraceptive users, the proportions of users being 39.9% from 20 to 24 years, 23.9% from 25 to 34, 15.7% from 35 to 44, and 4.5% from 45 to 64 years. These estimates are compatible with sales data, which indicate that oral contraceptive use has been common among Swiss women since the early 1970s.

An age/period/cohort model⁴ applied to Swiss cancer death certification over the period 1951–84 indicated that the cohort effect (expressed in the figure in terms of relative risk against its weighted average set to unity) showed no clear trend for either neoplasm up

Cohort effect in mortality from breast and ovarian cancer. Death certification in Switzerland, 1951–84, the population aged 25–74.