

Rapid surveillance of AIDS mortality in South Africa

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Background

Despite the fact that about 85% of deaths are registered in South Africa (Dorrington, Moultrie and Timaeus 2004), the cause of deaths statistics cannot be relied upon to provide an accurate picture of AIDS mortality due to misclassification of HIV as a cause of mortality. This fact plus the fact that release of these data was delayed for a number of years at the start of the epidemic, lead to the establishment of a “rapid mortality surveillance” project to monitor the basic details of deaths registered in South Africa.

Methods

A database of deaths of people who are on the population register has been compiled based on monthly reports from the Department of Home Affairs. The cause of these deaths is recorded as natural and unnatural only. However, the increase in the number of deaths, the pattern by age and the fact that the increase occurred in the natural causes, provide a useful measure of the state of the epidemic. The age distribution of the deaths of adult males and females (15 years and older) for the period 2000 – 2006, was compared with the ASSA2003 model (<http://www.assa.org.za/information/AIDS/AIDSmodel/>), as well as data from Statistics South Africa (compiler of ICD10 code mortality data).

Results

The numbers of deaths on the Population Register increased through to 2004, after which the growth appears to have stagnated. The increase is particularly marked for young adult ages and differs for men and women. Comparison with data from Statistics South Africa, show the same age pattern of deaths, suggesting that no significant biases are introduced by rapid surveillance. Comparison with estimates from the ASSA2003 model confirms the pattern by age but indicates lower numbers of deaths being observed than projected by the model in the most recent years.

Conclusions

The Population Register database provides rapid information regarding the changing age pattern in deaths in South Africa. It suggests that the impact of AIDS differs by gender. The deaths on the Population Register between 2000 and 2004 show a continuous rise in the number of adult deaths and a rapidly changing age profile and a possible slow down in the rate of increase, which might reflect better survival on treatment than is currently being assumed in the ASSA model.