

The time to recommend antenatal HIV screening for all pregnant women has arrived

A small number of Australian babies continue to acquire HIV infection unnecessarily

The World Health Organization estimates that each year worldwide about 700 000 children are infected with HIV.¹ Most of these infections occur through mother-to-child transmission in resource-poor settings, predominantly in Africa and Asia. Mother-to-child transmission rates of 30% continue to occur, despite the fact that this form of transmission is almost entirely preventable with antiretroviral therapy and formula feeding. The barriers to implementation of prevention strategies include restricted access to antenatal testing, cost and limited availability of antiretroviral therapy, poor workforce resources, and political obstacles, such as have occurred in South Africa.²

The outlook for babies born to HIV-positive mothers in high-income settings has improved dramatically. Most pregnant women with HIV infection in Western Europe or North America can expect an infection risk for their infant of less than 2%.^{3,4}

This ability to interrupt perinatal transmission of HIV is, of course, only possible if the mother's status is known. From 1998 to 2002, 103 pregnant Australian women were aware of their HIV-positive status. None of their infants was infected. During the same period, HIV was diagnosed in eight of the 15 infants born to mothers who became aware of their status only after giving birth.⁵ Overall, almost half the women in Australia with HIV infection known to have completed a pregnancy were unaware of their status before the birth of their baby.⁶ With this ignorance, no interventions can be offered.

Despite the ready availability of prevention strategies, it appears that a small number of Australian babies continue to acquire HIV infection unnecessarily. The solution to this calamity is to prevent HIV infection in women and, when it does occur, to identify it before or during pregnancy. Unfortunately, national policies on antenatal screening are flawed. The Australian National Council on AIDS and Related Diseases recommends that "[pregnant] women found to be at higher risk of HIV . . . should be encouraged to undergo HIV antibody screening", but does not explain the term "higher".⁷ HIV antibody testing is now recommended for all pregnant women in the Northern Territory, New South Wales and Queensland, but the national guidelines continue to be followed in South Australia, Western Australia and Victoria. However, the facts show that existing practice fails to identify a number of preventable cases of mother-to-child transmission.⁸

The policy of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists is that HIV testing of pregnant women is the standard of care.⁹ Between 1995 and 1999, surveys indicated that rates of antenatal testing in Australia increased from 20%¹⁰ to 33%,¹¹ and a recent survey suggests that the rate continues to increase slowly.¹²

Routine testing has been opposed on several grounds. There are quite reasonable concerns that routine testing might result in a degree of coercion and the conduct of testing without proper pre- and post-test counselling. Clearly, any recommendation to offer

testing to all pregnant women would need to be accompanied by systematic strengthening of counselling and consent procedures. However, the strongest argument against routine antenatal testing has been that, given the low prevalence of diagnosed HIV infection in women, it is unlikely to be cost-effective. Our recent report challenges this position.¹³

We evaluated the cost-effectiveness of universal antenatal testing. We assumed that society would pay \$39 000 per life-year gained, about twice the national average per-capita income. This value has been shown to result in efficient resource allocation.¹⁴ This is less than the cost per life-year gained for other screening programs currently under way in Australia, and is the valuation of a life-year gain used implicitly by the Australian Pharmaceutical Benefits Advisory Committee.¹⁵ The costs of universal testing — about \$1.8 million — are offset by economic benefits for a prevalence of undiagnosed HIV of 0.0044%, or 1 in 23 000. The true prevalence is unknown, but available data suggest it is of this order. The major costs taken into account in our model were the training and time required for counselling about testing, and the pathology costs. The major benefit is that a young life might be extended by 60 or 70 healthy years.

Many women in Australia with HIV infection were born overseas and are less likely to have comprehensive health insurance than those born here. Their access to antenatal care is thus limited. It is possible that women with undiagnosed HIV infection are currently over-represented among those missing the testing currently being done. If there were to be a uniform national approach to HIV testing, then education of the public, providers and clinic populations could be expected to improve the consent process.

In the United States and Europe, anonymous HIV serological surveys among women giving birth in the 1980s gave way to recommendations for routine testing. Such surveillance of women giving birth has been seen as politically difficult in Australia.¹⁶ Given that concerns about cost-effectiveness have largely been resolved, the time has now come for public health and political courage to make it national policy that HIV testing be recommended for all women receiving antenatal care.

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