

AIDS briefs

Increase in deaths among children and teenagers with HIV expected

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A growing epidemic among child and adolescent survivors of mother-to-child HIV transmission in southern Africa is emerging, highlighting the failure to recognise its development and address the clinical needs of this population, research published recently in *AIDS* shows.

Although there is a high risk of death in the first year of life for infants infected perinatally, children may live with asymptomatic HIV infection for long periods, undiagnosed.

According to the authors of the study over one-third of untreated HIV-infected children are slow progressors, with a median life expectancy of 16 years of age, whereas fast progressors die within a year.

Deaths in South Africa among untreated HIV-infected children identified as slow progressors will increase from 7 000 a year in 2008 to 23 000 a year by 2030, the authors project. Provision of treatment to prevent mother-to-child transmission, they estimate, could reduce the death rate in South Africa to 8 700 a year by 2030 and in Zimbabwe to 2 800 a year by 2014.

While some progress has been made to address the gap that persists in sub-Saharan Africa between those in need of antiretroviral treatment and those who receive it, the authors point out that numbers and outcomes of HIV-infected children and adolescents (defined by the World Health Organization as those between 10 and 19 years of age) remain uncertain.

Most population-based HIV prevalence surveys have excluded children aged 5 - 15. However, recent surveys in Botswana, South Africa, Zimbabwe and Swaziland have included them, and have detected increasing numbers of HIV-infected children seeking care in this region. Despite the rising numbers, the authors note that few HIV-related services are available to older children and adolescents.

To estimate the future HIV burden among older children in two southern African countries, South Africa and Zimbabwe, illustrative of different stages of severe HIV

epidemics, the authors modelled population data, HIV prevalence, mother-to-child transmission and child survival data.

Since there are no cohort studies of more than 5 years' duration of children infected by their mothers, the authors chose to combine available data with a meta-analysis of 38 studies in developed countries that determined survival as a function of age. The resulting data were used to determine the proportion of fast and slow progressors in the population, after adjustment. To confirm the strength of the data the authors compared their predictions to available epidemiological data.

The authors predict HIV prevalence among 10-year-olds in South Africa will increase from 2.1% in 2008 to 3.3% in 2020, while in Zimbabwe a decrease from 3.2% in 2008 to 1.6% in 2020 is anticipated.

The difference in predicted outcomes, say the authors, is explained by the different stages of the epidemic in South Africa and Zimbabwe. South Africa's epidemic is approximately 10 years behind Zimbabwe, where adult prevalence peaked in the late 1990s and has since declined.

The authors suggest that recent recognition of the scale of the epidemic is explained in part by its slow and persistent nature in contrast to the immediacy of infant deaths.

It is unknown why some children die within a relatively short time after infection and others do not. The authors suggest this is due perhaps to changes in the immune system making those infected after birth, through breastfeeding rather than during pregnancy or delivery, more likely to be slow progressors.

The numbers of older (child) survivors increases for 10 - 20 years after having peaked in adults, explaining the current high numbers. This also implies that even with scale-up of PMTCT the current cohort of infected children will continue to grow.

The authors note limitations of the study due to the lack of reliable age-specific cohort data from southern Africa on which to base projections, underscoring the need for better monitoring and more complete data in this population.

The authors stress that this population is poorly served by routine testing and care

services largely due to the underestimation of the extent and nature of adolescents living with HIV in Africa.

They conclude: 'While awaiting more precise projections there is an urgent need to develop and rapidly implement policies and programmes aimed at providing early diagnosis, treatment and care including secondary prevention services to the expanding numbers of children and adolescents who are growing up with HIV.'

Ferrand RA, *et al.* AIDS among older children and adolescents in Southern Africa: projecting the time course and magnitude of the epidemic. *AIDS* 2009, 23: 2039-2046.

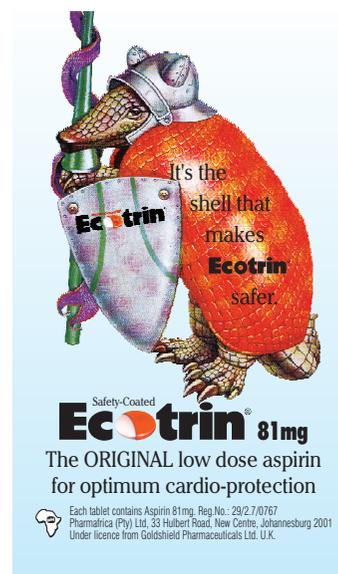
Article courtesy of www.aidsmap.com

Rate of HIV among pregnant women still high

The rate of HIV infection among pregnant women in South Africa has remained stubbornly high at around 29% for the third year running, according to government figures released on 5 October.

The 2008 National Antenatal HIV and Syphilis Prevalence Survey - based on blood samples from 34 000 pregnant women who attended antenatal clinics in 52 health districts - measured HIV prevalence at 29.3%, compared with 29.4% in 2007 and 29.0% in 2006.

Prevalence among women aged 15 - 24 declined slightly from 22.1% in 2007 to 21.7% in 2008, but the infection rate among



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women in the 30 - 34 age group rose from 39.6% in 2007 to 40.4% in 2008.

Age was found to be the most important risk factor, with women of 22 years or older significantly more likely to be HIV-infected. In this age group, race was the next most important factor, with 37.6% of black women infected, compared with 6.8% of white, Asian and coloured women.

'Prevalence among women aged 25 years and above has stabilised at high and

unacceptable levels,' Health Minister Aaron Motsoaledi said at the launch of the survey.

He refused to comment on the success or failure of interventions aimed at combatting South Africa's HIV/AIDS epidemic, noting only that the survey was 'a useful tool' for observing trends, providing feedback to health workers, and increasing the commitment to an accelerated response.

The figures revealed wide variations between the country's nine provinces: as in previous years, KwaZulu-Natal recorded

the highest prevalence (38.7%) and Western Cape the lowest (16.1%); at district level the disparities were even greater – in some the infection rate was as high as 45%, in others as low as 5%.

The survey authors strongly recommended that the health department conduct more in-depth epidemiological surveys to investigate the causes of these wide disparities.

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These specialist clinics based in the public sector provide a full range of clinical assessment and management services, including assistance with compensation, for any occupational disease. If needed, there is access by referral to other specialist services in the public sector, including internal medicine, dermatology, pulmonology, orthopaedics, and laboratory and radiological services. Consultations are by appointment.

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