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News Release

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Pneumonia risk far higher for HIV-positive children, study shows

HIV-positive children in developing countries are six times more likely to die from pneumonia than children without the virus, research suggests.

The first global study into pneumonia deaths in children with HIV has found that, in one year, pneumonia affected 1.4 million children and led to a further 88,000 deaths.

Researchers recommend that child pneumonia deaths could be dramatically reduced with improvements in early testing for HIV in infants, antiretroviral therapy (ART) for pregnant women and young children and vaccination.

The greatest number of HIV cases occurred in Sub-Saharan countries. In Swaziland, Lesotho and Zimbabwe, up to 20 per cent of all pneumonia cases and 60 per cent of all pneumonia deaths occurred in HIV-positive children.

Globally, there are 3.2 million HIV-positive children under 14 years of age, almost 90 per cent of whom live in sub-Saharan Africa.

The study examined HIV and pneumonia cases in under-fives in 133 developing countries in Africa and South East Asia in 2010.

Although pneumonia is a leading cause of death and illness in young children world-wide, this is the first global and country-level estimate of the pneumonia burden in HIV-positive children.

Pneumonia is strongly linked to poverty, poor living conditions, inadequate health services, malnutrition and HIV infection. Africa and South East Asia are the worst affected regions, where pneumonia is a leading cause of death in children.

Previous studies in South Africa have shown that the introduction of antiretroviral therapy can benefit HIV-infected children under two. It led to a 42 per cent reduction in pneumococcal pneumonia, which can infect the upper respiratory tract and spread to the blood, lungs, middle ear or nervous system.

The study, published in *The Lancet Infectious Diseases*, was funded by the World Health Organization.

Ranked among the top universities in the world

Dr Harish Nair, of the University of Edinburgh's Centre for Population Health Sciences, who led the study, said: "Pneumonia management in HIV infected children requires an integrated approach from national governments and international agencies.

"Pneumonia and HIV case diagnosis needs to be strengthened at primary care level and antiretroviral therapy scaled up rapidly in pregnant women and young children.

"Revised guidelines by the World Health Organisation for childhood pneumonia management must be fully implemented if substantial falls in pneumonia morbidity and mortality are to be achieved in badly affected countries."

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