

South Africa: Saving children's lives by scaling up early infant diagnosis

SOUTH Africa has the highest AIDS burden in the world, with an estimated 5.5 million people living with HIV, around a quarter of a million children younger than 15 are HIV-positive (as of 2005). As many as 64,000 newborns contract HIV each year through mother-to-child transmission. About half of HIV-positive infants who do not receive treatment die before their second birthday, making AIDS the biggest killer of children – accounting for half of under-five deaths in South African hospitals.

The high mortality rate stems partly from the fact that access has been limited for pregnant women seeking services for prevention of mother-to-child transmission (PMTCT), and for children who need paediatric AIDS care and treatment.

In 2005, only 30 per cent of pregnant women who were infected with HIV received single-dose nevirapine, 26 per cent of HIV-exposed infants received cotrimoxazole prophylaxis, and 18 per cent of eligible children received antiretroviral therapy. One of the major challenges has been that children's HIV status was rarely diagnosed at the ideal age, four to six weeks after birth. Subsequently, most infected babies were not given antiretroviral therapy, despite the increasing availability of life-

prolonging medicines through the Operational Plan for Comprehensive HIV and AIDS Care, Management and Treatment for South Africa.

The Government of South Africa identified children's access to care and treatment for AIDS as a priority in its national response. As early as April 2004, it recommended early diagnosis of infection in infants born to women who were infected with HIV, using the preferred virological method for diagnosing HIV in infants at six weeks of age called 'DNA PCR'. Prior to this, the test was not widely available in the public sector and National Health Laboratory Services capacity was limited to fewer than 60,000 tests per year – despite the estimated annual required capacity of at least 400,000 DNA PCR tests.

Action: In 2004, the National Department of Health initiated a programme to expand DNA PCR testing capacity in three laboratories in three provinces: Gauteng, KwaZulu-Natal and Western Cape. As one of the most rural provinces challenged by long distances between health facilities, KwaZulu-Natal introduced dried blood spot technology, with support from UNICEF, to facilitate specimen transportation between health facilities and the laboratory.

By 2005, the three laboratories were able to perform more than 5,000 tests per month. In 2005, National Health Laboratory Services began to expand testing capacity.

By the end of 2006, the national services had established eight DNA PCR laboratories with capacity to perform more than 300,000 tests per year.

Impact: From 2004 to 2006, the number of DNA PCR tests performed increased from less than 20,000 to more than 140,000 per year – contributing to a remarkable boost in access to paediatric antiretroviral therapy. The number of eligible children receiving treatment increased from fewer than 3,000 in 2004 to 25,000 by September 2006 and 32,000 by December 2007. This has contributed to saving the lives of hundreds of young children who would have died without these medicines.

AIDS remains the primary challenge to child survival in South Africa. To achieve MDG 4 will first require accelerated scaling up of PMTCT services to prevent as many new infections as possible and reduce the demand for care and treatment. In addition, it will require scaling up access to early infant diagnosis, care and treatment for those who are infected despite PMTCT. Through the 'HIV and AIDS and STI National Strategic Plan 2007–2011', the Government and people of South Africa have committed to achieving universal access to PMTCT, care and treatment services for children by 2011.

See References, page 50.