The prevalence of HIV infection amongst women in South Africa has never been worse. 55% of HIV infected adults in Africa are women while the prevalence of the disease has risen to a staggering 40% amongst pregnant women in southern Africa. It is estimated that of the 1900 children who become infected daily in Africa, 95% of these acquire the infection from their mother.

These statistics are made even more worthy of despair when you consider the huge success enjoyed by industrialised nations where measures to prevent HIV transmission from mother to child have resulted in a transmission rate of less than 2%. This begs the questions, why are we not enjoying the same success within our own borders and what does it take to achieve it?

Rodney Cowlin is a Director of Aid for AIDS, the HIV/AIDS disease manager at the forefront of tackling the ravages of this disease in South Africa. He says with 11 years' experience in this highly specialised field, Aid for AIDS has a deep understanding of the issues around this matter. "The first thing to understand is how transmission of the virus occurs from mother to child and what the results thereof are." says Cowlin. "Transmission can occur during pregnancy, labour and delivery, or breastfeeding. Without treatment, around 15-30% of babies born to HIV positive women will become infected with HIV during pregnancy and delivery. A further 5-20% will become infected through breastfeeding. It's been established that mother-to-child transmission of HIV is directly related to the mother's viral load and that as the mother's viral load increases, so does the risk of HIV transmission to the unborn child. Treatment protocols for these instances are far more developed and sophisticated than ever before and in countries which have implemented them on a wide scale, mother-to-child-transmission has all but been eliminated.

There requires to be a combined and comprehensive approach to managing the situation. While the right treatment regimens are essential, they can sometimes be the easiest part of the solution to influence. Far more difficult an issue to tackle is that of getting around the stigma that surrounds this disease. Ideally what you need is a willing population of women who understand the benefits of knowing their status and are able to overcome the fear of intense stigmatisation. The path to that nirvana starts with effective education regarding safer sex, matters relating to best practice in terms of pregnancy and birth for those mothers who are HIV positive and for those who are not, how to avoid becoming infected in the future. Voluntary counselling and testing, if properly done, provides a safe, confidential platform to educate, test and provide meaningful follow up for those testing positive. The next critical component is access to appropriate treatment in the form of antiretroviral therapy. The safest delivery practice must then be established for each individual case. When a mother is HIV positive a caesarean section may be done to protect the baby from direct contact with her blood and other bodily fluids. However, there is a need to weigh the risk of HIV transmission against the risk of harm due to the intervention.

Another aspect that needs to be closely managed is that of which form of feeding to adopt after an HIV positive mother has delivered her baby. A number of studies have shown that the protective benefit of antiretroviral drugs is diminished when babies continue to be exposed to HIV through breastfeeding. Mothers with HIV are

advised not to breastfeed whenever the use of breast milk substitutes (formula) is acceptable, feasible, affordable, sustainable and safe. However if they live in an area where safe water is not available then the risk of life-threatening conditions from formula feeding may be higher than the risk from breastfeeding. An HIV positive mother should be counselled on the risks and benefits of different infant feeding options and should be helped to select the most suitable option for her situation.

There's no question that widespread implementation of these strategies will help stem the course of the HIV/AIDS epidemic in South Africa and will prevent HIV infections in hundreds of thousands of children.