Antiretroviral therapy associated with increase in pregnancy in sub-Saharan Africa

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In *PLoS Medicine* this week a study conducted in a multi-country HIV treatment program in sub-Saharan Africa has found that pregnancy rates increase in HIV-infected women after they start antiretroviral therapy (ART).

In sub-Saharan Africa childbirth plays an important role in spreading HIV from mother to child. By the end of 2007 there were almost 3 million HIV-infected people receiving antiretroviral care in poor countries. ART reduces, but does not remove, the chances of a mother passing HIV to her child during birth. In this study Landon Myer of the University of Cape Town, South Africa, and colleagues analyzed data from the Mother-to-Child Transmission-Plus initiative (MTCT-Plus) to see how ART impacted on pregnancy rates amongst HIV-infected woman.

In seven African countries the MTCT-Plus initiative offers family-centred treatment, including check-ups, blood tests, counselling and ART when appropriate. Over a four year period, the researchers found that nearly a third of the women starting antiretroviral therapy experienced a pregnancy. The researchers found that the chance of pregnancy increased over time in women who had started to receive ART, whilst pregnancy rates remained low and constant in women who were not yet receiving ART. As expected, other factors, such as age, lower educational status, and less reliable forms of contraception also affected pregnancy rates.

The study cannot explain why women receiving ART are more likely to become pregnant - the authors offer behavioural explanations, such as the fact that women receiving ART are more likely to feel motivated to have children as their health improves. The authors acknowledge limitations of their study, including the fact that they were relying on women self-reporting pregnancy which may mean that some pregnancies were not detected. The results of this study indicate that HIV treatment programs have "an important opportunity to address women's fertility intentions and to shape their services to address the needs of women and their families over time."

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More information: Myer L, Carter RJ, Katyal M, Toro P, El-Sadr WM, et al. (2010) Impact of Antiretroviral Therapy on Incidence of Pregnancy among HIV-Infected Women in Sub-Saharan Africa: A Cohort Study. PLoS Med 7(2): e1000229. doi:10.1371/journal.pmed.1000229