Abstract

In this paper, I study the effect of subjective beliefs about HIV infection on fertility decisions in a context of high HIV prevalence and evaluate the impact of different policy interventions, such as HIV testing programs and prevention of mother-to-child transmission, on fertility and child mortality. I develop dynamic discrete-choice life-cycle fertility model in which expectations about the life horizon and child survival depend on a perceived HIV infection hazard process, which is allowed to differ from the actual hazard.

In the model, women form and update beliefs about their HIV status and about their own and their children’s survival in future periods. Women also update their beliefs when their HIV status is revealed by an HIV test. Model parameters are estimated by maximum likelihood with longitudinal data from the Malawi Diffusion and Ideation Change Project, which contain family rosters, information on HIV testing, and measures of subjective beliefs about own HIV status. The model successfully fits the fertility patterns in the data, as well as the distribution of reported beliefs about own HIV status. I use the model to evaluate the effect of HIV on fertility by simulating behavior in an environment without HIV. Results show that the presence of HIV reduces the average number of births a woman has during her life-cycle by 0.15. I also find that HIV testing can reduce fertility of infected women, leading to a reduction of child mortality and orphanhood. (JEL codes: O15, I10, J13).

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"How Subjective Beliefs about HIV Infection Affect Life-Cycle Fertility: Evidence from Rural Malawi"

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