Prioritizing PrEP for High-Risk Kenyans Likely Spells Success

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A pre-exposure prophylaxis rollout in Kenya would be the most effective if PrEP is prioritized for those at highest risk for infection, aidsmap reports. Publishing their findings in the journal AIDS, researchers developed a mathematical model projecting the effects of various factors on a theoretical PrEP rollout in the Nyanza province of Kenya, which has an estimated HIV prevalence of 14 percent, or 370,000 HIV-positive individuals in an adult population of 2.65 million.

The model predicted the effects of a $20 million per year PrEP program started in 2015 and brought to full capacity by 2020. The model assumed the annual cost of providing PrEP would be $250 per person and that individuals would stay on PrEP for five years.

A base-case model, in which half of those on PrEP adhere at a rate of 60 percent and the other at 20 percent, translated to nearly 25,000 prevented HIV cases between 2015 and 2025, or 3,400 per year after 2020, at a cost of $6,000 per averted infection.

The researchers then determined the expected effects of: shifts in adherence rates; targeting, or failing to target, those at highest risk for HIV; changes in the cost of the intervention; the introduction of long-acting versions of PrEP; and changes in efficiency.

The model suggests that how well the intervention were prioritized for high-risk individuals would have the most significant bearing on PrEP's success. Good prioritization translated to 9,000 annual prevented HIV cases at a cost of only $2,060 per averted infection. Poor prioritization would translate to a cost per averted infection of $36,360 and no more than about 200 prevented cases per year.

Projected effects of the other factors were deemed more minimal.

To read the aidsmap article, click here.

To read the study abstract, click here.