Promoting HIV Testing by Men in Uganda: Aligning Preferences and Policy

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Abstract
Background: Men in sub-Saharan Africa are less likely than women to test for HIV. The gap in male testing coverage leads to increased morbidity and mortality for HIV-positive men compared to HIV-positive women and to missed opportunities to prevent transmission. One approach that has demonstrated potential to increase male testing is community-based testing.
Objective: The objective of this dissertation was to provide evidence-based guidance to optimize the delivery of community-based HIV testing to promote uptake by men in sub-Saharan Africa.
Methods: I administered a discrete choice experiment (DCE) to a random sample of 203 adult male residents of rural Uganda. The DCE elicited stated preferences for attributes of community-based testing that can be modified to promote testing. I used a random parameters logit model to estimate preferences and simulate uptake under alternative service delivery models. I estimated additional random utility models and conducted covariate analyses to investigate preference heterogeneity. I incorporated predictions of testing uptake into a decision analytic model to evaluate the cost-effectiveness of alternative service delivery models to increase HIV testing and diagnosis.
Key Findings: Participants stated strong preferences for access to antiretroviral therapy (ART) at the time of testing. The predicted uptake of testing under alternative service delivery models increased 26–44 percentage points when immediate access to ART for HIV-positive persons was provided. Incentives of US $0.85 also influenced participants' choices and increased the predicted testing uptake 6–12 percentage points. It was unclear whether preference heterogeneity could be attributed to participants' characteristics. The most cost-effective service delivery models to increase HIV testing were not necessarily most cost-effective at increasing diagnosis. Changes of only a few percentage points in the probability that men who access a given service delivery model would test positive greatly increased the likelihood that the service delivery model was cost-effective at increasing diagnosis.
Conclusion: The stated preference methods used in this dissertation reveal opportunities to improve community-based HIV testing to encourage uptake by men. Further research is warranted to corroborate the external validity of stated preferences to predict revealed preferences and to determine how community-based service delivery models can effectively reach undiagnosed HIV-positive men.

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