Frequent HIV Testing and Marriage and Pregnancy Decisions in Malawi

Sector(s): Gender, Health

Sample: 1,505 women

Target group: Rural population Women and girls Adults

Outcome of interest: HIV/AIDS Sexual and reproductive health Age of marriage Women's/girls' decision-making Age of childbearing Fertility/pregnancy Health outcomes

Intervention type: Information Health care delivery

Data: Download from DSDR

Research Papers: Adverse Selection in the Marriage Market: HIV Testing and Marriage in Rural Mal...

Choosing a partner who engages in safe sexual behaviors is a concern worldwide, and especially in contexts with high prevalence of HIV/AIDS. In Malawi, researchers conducted a randomized evaluation to test the impact of offering frequent HIV testing on rates of marriage and pregnancy. Offering high-frequency, opt-out HIV testing to young women and their partners changed beliefs of partner's sexual safety, accelerated marriage, and increased the probability of pregnancy. These results suggest that frequent testing gave participants the information necessary to identify sexually safe partners, while offering a single-test HIV test did not have any impacts.

Policy issue

Choosing a partner who engages in safe sexual behaviors is a concern worldwide, and even more important in contexts with high prevalence of HIV/AIDS. In HIV-endemic contexts, testing for HIV regularly may suggest that partners are safe, but can also suggest that the test seeker has been involved in risky sexual behavior. As a result, people may choose to delay marriage at a higher rate in these contexts, as it takes time to discover if a prospective partner is safe given that HIV status and risky behaviors are hard to perceive. Can providing regular HIV testing allow potential partners to better identify sexual partners and change marriage and pregnancy timing?

Context of the evaluation

In Malawi, HIV prevalence was 10.6 percent in 2010 and considered a public health priority. HIV risk is thus a common consideration when choosing a partner or determining a partner's safety for individuals seeking marriage. In this setting, individuals typically choose when and whom to marry, as polygamy and marriage payments are uncommon.

In the Balaka District, where this intervention takes place, HIV testing was low in 2009 despite risk of contraction. Fourteen percent of women without children had tested in the last four months and 35 percent reported ever being tested. Individuals noted potential barriers to testing such as cost, time spent seeking care, and stigma. In an adjacent district, patients spent 7.1 hours per visit seeking HIV care, on average. As a result, policymakers started offering provider-led HIV testing and counseling in 2005. Healthcare providers offered optional HIV testing when patients attended routine healthcare appointments. At the time of the study, 89 percent of mothers reported being tested at antenatal clinics that offered HIV testing.

The incidence of first marriage and first birth in Malawi roughly followed the peak of HIV prevalence, which was 14 percent in 1998, and subsequent decline to 10.6 percent in 2010, pointing to a positive relationship between the decision to get married at a

younger age and HIV incidence. Prior to the study, 42 percent of participants were married and 71 percent of pregnancies in the study sample happened within marriage. Similarly, 85 percent of unmarried participants qualified as sexually safe when asked about engagement in risky sexual behavior. The estimated HIV prevalence among participants ranged between 7 percent for those determined sexually safe and 23 percent for those determined unsafe. Physical appearance was also considered a relevant observable aspect for women looking for a partner in this setting. Prior to the intervention, 45 percent of participants were considered of average physical attractiveness, while 45 percent were reported to be more attractive than average.



A couple holds a baby outside a health clinic.

Photo credit: Images of Empowerment, CC BY-NC 4.0

Details of the intervention

Researchers conducted a randomized evaluation to test the impact of offering high-frequency HIV testing on marriage and pregnancy in Balaka, Malawi. The evaluation was part of the Tsogolo La Thanzi (TLT) Panel Study, which surveyed 1,505 women aged 15 to 25 eight times over 28 months. Participants were assigned to one of three groups:

1. *Multiple-test group* (500 participants): Surveyors offered a free HIV test following all eight waves of surveys to participants in this group.
2. *Single-test group* (498 participants): Surveyors offered a free HIV test after both survey wave four and eight to participants in this group.
3. *Comparison group* (507 participants): Surveyors offered a free HIV test after survey wave eight to participants in this group.

Enumerators also encouraged participants to invite their partners to join the study, allowing researchers to observe if those in the intervention group would identify partners based on their willingness to engage and test themselves.

The intervention aimed to reduce the inconvenience and stigma of HIV testing by offering an opt-out approach. After completing the survey for the dataset, surveyors offered HIV tests that provided results within 30 minutes. To ensure confidentiality, enumerators delivered test results verbally and in private. However, other individuals could indirectly notice the testing behavior and results, such as through inferring visit duration. If a participant tested positive, surveyors stopped testing and delivered antiretroviral medication, suggesting subsequent HIV testing indirectly showed HIV status in prior waves.

Surveyors collected participant HIV data over eight rounds of surveys, which occurred every four months from 2009 to 2011 at the TLT clinic. Participants received US$3 upon completing each survey. Researchers measured socioeconomic and demographic factors, such as HIV/AIDS perceptions, pregnancy biomarkers and marital status.

Results and policy lessons

Offering high-frequency, opt-out HIV testing to young women and their partners changed beliefs of partner's sexual safety, accelerated marriage, and increased the probability of pregnancy. These results suggest that frequent testing gave participants the information necessary to identify sexually safe partners, while offering a single-test HIV test did not have any impacts.

Frequency of HIV testing: Receiving high-frequency HIV testing increased the probability of testing for HIV within four months by 40 percentage points relative to the comparison group average of 30 percent (a 133 percent increase). Similarly, participants' partners were 15 percentage points more likely to test for HIV within four months relative to the comparison group average of 30 percent (an 83 percent increase). Researchers suggest that high-frequency HIV testing decreased the individual costs associated with testing.

Beliefs about partners HIV risk: Women in the intervention group were more likely to perceive their partners were HIV-negative if they were consistently tested. On the other hand, women were more likely to perceive greater HIV risk if their partners tested zero times or once.

Marriage and pregnancy: Receiving frequent HIV tests increased the probability of marriage among unmarried participants by 7.2 percentage points relative to the comparison group average of 16 percent (a 45 percent increase). There were no impacts for women married before the intervention, suggesting the intervention did not prompt divorce. Receiving frequent HIV tests also increased the probability of pregnancy among unmarried participants by 3.5 percentage points relative to the comparison group average of 10 percent (a 35 percent increase).

Greater impacts for sexually safe women: High-frequency HIV testing increased the likelihood of marriage by 7.1 percentage points among sexually safe, previously unmarried women relative to the comparison group average of 14 percent (a 51 percent increase). Similarly, there was an increase in pregnancy by 3.9 percentage points relative to the comparison group average of 9 percent (a 43 percent increase) among the same group. Researchers suggest that frequent HIV testing allowed participants to better identify safe partners, which led to accelerated marriage and improvements in quality of matches.

Greater impacts for physically attractive women: Among sexually safe, unmarried women, frequent HIV testing increased the probability of marriage by 11 percentage points (a 92 percent increase) and increased the probability of pregnancy by 5.1 percentage points (a 64 percent increase) for attractive women. Researchers suggest that participants valued physical appearance when choosing a partner.

Availability of regular HIV testing: Offering a single HIV test did not impact marriage or pregnancy, suggesting that single-testing revealed less information about potential partners compared to frequent testing, which allowed individuals to better identify partners.

Researchers note that these results should be taken with caution, as there may be unintended consequences from early marriage and pregnancy. Early marriage may prevent adolescents from continuing their education, and early pregnancy is associated with health risks for mother and child.