# The Role of Partner Violence in Women's Ability to Distribute and Use HIV Self-Tests with Male Partners in Kenya


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**Presented by Elisabeth Schaffer**


## Background

- Rates of testing among men and couples remain low in sub-Saharan Africa.
- Providing women who access health services with multiple self-tests for secondary distribution to their male partners is a novel strategy to facilitate partner and couples self-testing.
- Two recent studies in Kenya have shown that HIV-negative women are willing and able to distribute self-tests to their male partners (Masters et al. *PLoS Med* 2016; Thirumurthy et al. *Lancet HIV* 2016).
- Whether intimate partner violence (IPV) limits distribution of self-tests to male partners is a concern that needs to be addressed.

## Objective

- To examine the association between history of IPV and the likelihood that women distribute and use HIV self-tests with their sexual partners

## Methods

### Study setting

- Kisumu county in western Kenya (Figure 1)
- Participants enrolled at antenatal and postpartum clinics (ANC/PPC)

### Inclusion criteria

- HIV-uninfected
- Age 18-39 years
- Has a primary sexual partner

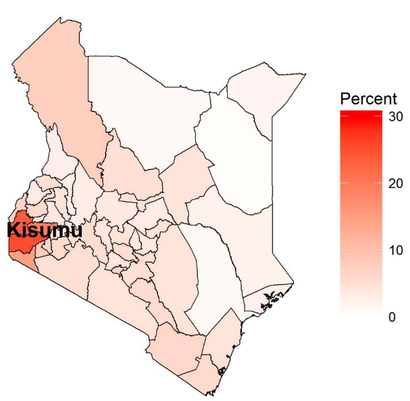
### Exclusion criterion

- Thought IPV would result from offering a self-test to her primary partner

### Intervention and procedures

- Participants given 3 OraQuick Rapid HIV Tests
- Participants educated on how to use self-tests and provided with written and pictorial instructions
- Participants encouraged to distribute self-tests to partners, others in their social networks at own discretion
- Follow-up interviews conducted at 1, 2, and 3 months

**Figure 1: HIV prevalence by county in Kenya**




### Statistical analyses

- We analyzed secondary data from a cohort study in Kenya that provided women HIV self-tests for own use and distribution in their networks.
- Using multinomial logistic regression, we assessed whether self-test distribution to partners within 3 months was associated with the history of physical or sexual violence in the 12 months prior to enrollment.
- The likelihood of partner and of couples self-testing was compared to the likelihood that a partner did not test according to history of IPV.
- The likelihood of partner self-testing was also compared to the likelihood that couples self-testing occurred according to history of IPV, whether the partner responded with a neutral or negative reaction to the offer of a self test, and whether it was not easy to encourage the partner to test.
- Participants' demographic characteristics, perceived risk of HIV, and partner testing history were included as covariates.

### Variables

- Our primary outcome had three classifications indicating whether:
  - Partner self-testing did not occur
  - Partner self-testing occurred but couples self-testing did not
  - Couples self-testing occurred
- History of IPV was assessed at enrollment as an affirmative response to one or both of the following:
  - "In the past 12 months, has your partner pushed, grabbed, slapped, choked, hit or kicked you?"
  - "In the past 12 months, has your partner forced you to have sex when you did not want to?"

## Results

- A total of 176 women were enrolled (61 ANC, 117 PPC).
- 162 (92%) provided complete follow-up information.
- About half of participants were aged 18-24 years and most had attained at least some secondary education (Table 1).
- The majority of participants were married (91%) and reported that their primary partner tested for HIV in the 12 months prior to enrollment (70%).
- A history of IPV was reported by 21% of participants at enrollment.

**Table 1. Characteristics of female participants**

| | N (%) |
|---|---|
| **No. of participants who completed follow-up[1]** | 162 |
| **Age (years)** | |
| 18-24 | 83 (51) |
| ≥25 | 79 (49) |
| **Highest level of education attained** | |
| Primary | 47 (29) |
| Some secondary | 66 (41) |
| Secondary or higher | 48 (30) |
| **Married** | 148 (91) |
| **Had any living children at the time of enrollment** | 126 (78) |
| **Experienced IPV in past 12 mo.** | 34 (21) |
| **Perceived risk of HIV** | |
| No or low risk | 105 (65) |
| Moderate or high risk | 28 (17) |
| Unknown risk | 28 (17) |
| **Partner tested for HIV in past 12 mo.** | 113 (70) |

**Partner and couples self-testing were significantly less likely to occur if a woman reported a history of recent intimate partner violence.**

**Table 3. Unadjusted and adjusted[1] odds ratios (OR) and 95% confidence intervals (CI) for characteristics associated with outcomes of secondary distribution intervention.**

| | Partner self-testing occurred | | Couples self-testing occurred | |
|---|---|---|---|---|
| Variable | Unadjusted OR (95% CI) | Adjusted OR (95% CI) | Unadjusted OR (95% CI) | Adjusted OR (95% CI) |
| **History of IPV** | | | | |
| Did not experience IPV in past 12 mo. | 1.00 | 1.00 | 1.00 | 1.00 |
| Experienced IPV in past 12 mo. | **0.21** (0.06 - 0.70)** | **0.10*** (0.02 - 0.46)** | **0.32** (0.11 - 0.92)** | **0.13*** (0.03 - 0.54)** |
| **Perceived risk of HIV** | | | | |
| No or low risk | 1.00 | 1.00 | 1.00 | 1.00 |
| Moderate or high risk | **0.17** (0.04 - 0.68)** | 0.25 (0.05 - 1.23) | 0.35 (0.11 - 1.08) | 0.46 (0.12 - 1.77) |
| Unknown risk | 1.46 (0.28 - 7.71) | 4.10 (0.47 - 35.58) | 1.07 (0.21 - 5.50) | 2.74 (0.34 - 22.28) |
| **Partner tested for HIV in past 12 mo.** | | | | |
| No | 1.00 | 1.00 | 1.00 | 1.00 |
| Yes | 1.59 (0.35 - 7.27) | 1.42 (0.20 - 10.12) | 2.20 (0.51 - 9.53) | 2.51 (0.41 - 15.33) |
| Don't know | 0.94 (0.17 - 5.25) | 0.44 (0.06 - 3.49) | 0.93 (0.18 - 4.90) | 0.62 (0.09 - 4.16) |
| **Observations** | - | 160 | - | 160 |

[1] The likelihood of partner and couples self-testing is compared to the likelihood that the partner did not self-test; ** p < 0.01, *** p<0.001. Demographic characteristics included in adjusted analyses were the participant's age, marital status, highest level of education attained, and whether she had any living children at the time of enrollment.

### History of IPV and likelihood of partner versus couples self-testing

- Among participants whose partner self-tested, history of IPV was not significantly associated with whether partner versus couples self-testing occurred.
- However, couples self-testing was less likely to occur if the partner responded with a neutral or negative reaction to the offer of a self-test (OR 0.37, 95% CI 0.15 - 0.91; aOR 0.32, 95% CI 0.12 - 0.87) or if it was not easy for the participant to encourage her partner to self-test (OR 0.31, 95% CI 0.11 - 0.83; aOR 0.26, 95% CI 0.09 - 0.76).

### Self-test distribution & use with primary partners

- High rates of partner and couples self-testing were achieved in 3 months (Table 2).
- Couples self-testing occurred for 89 participants (55%) and 55 participants (34%) reported partner self-testing occurred.
- 18 participants (11%) reported that their partner did not self-test.

**Table 2. Self-test distribution and use with primary partners**

| | N (%) |
|---|---|
| No. of participants who completed follow-up[1] | 162 |
| Partner did not self-test | 18 (11) |
| Partner self-testing occurred but couples self-testing did not | 55 (34) |
| Couples self-testing occurred | 89 (55) |

[1]Excludes two participants who were missing data on distribution of self-tests to their primary partners.

## Conclusions

- Results suggest that within the context of an intervention in which women received multiple oral fluid-based self-tests for distribution in their social networks, a history of IPV had a significant influence on the likelihood that women distributed and used self-tests with their male partners.
- Although secondary distribution of HIV self-tests offers important health benefits for women, men, and couples, it is unlikely these benefits can be fully realized in relationships where IPV occurs.
- Despite the high prevalence of IPV among participants, the results also reveal that the secondary distribution intervention effectively promoted male partner and couples self-testing.
- Further investigation of secondary distribution interventions and additional strategies to promote testing among men and couples is warranted.


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