Secondary distribution of HIV self-tests to promote HIV testing among male partners of young women: subgroup analysis from a randomized trial

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Conflict of interest…..

• None
1.8 Billion (UNFPA, 2014)
Adolescents (10-24) in the world; ~50% 15-24 yrs

83% of 2.1 Million (UNICEF, 2014)
Adolescents living with HIV are in Sub-Saharan Africa (SSA), the most affected region globally

HIV #1 killer (allintoendaid, 2015)
HIV is #1 cause of adolescent death in SSA (#2 Globally)

100 Million (PEPFAR, 2017)
Today, there are 100 million more 15-24 year olds than at the beginning of the epidemic

- The UN Political Declaration on Ending AIDS aims to reduce new infections in AGYW to \( \approx 100,000 \) by 2020
Every day, more than 1,000 adolescent girls and young women (AGYW) are infected with HIV.

Adolescent girls and young women are majority of new HIV infections among adolescents in SSA.

In SSA, women acquire HIV 5 to 7 years earlier than men.
• Age-disparate sexual relationships are believed to be a contributing factor in the high risk of HIV among young women

• Interventions that promote HIV testing among male partners of young women are essential for reducing HIV risk.

• Given compelling evidence on the acceptability of HIV self-testing, we assessed whether provision of multiple self-tests to young women in Kenya can result in higher male partner testing.
Methods (1/2)

• Data analyzed from a subgroup of young women (18-24 years) in a randomized-controlled trial (RCT) in Kisumu, Kenya.

• The trial enrolled women seeking antenatal and postpartum care in 3 government clinics.

• Women were randomly assigned to 2 groups:

  **HIVST group:**
  Women were given 2 oral fluid based HIV self-tests to take home and offer to their partners to test alone or they test as a couple.

  **Comparison group:**
  Women given referral vouchers that invited their partner to obtain HIV testing at HTS clinics, alone or as a couple.
Methods (2/2)

• Women in the HIVST group received a demo of how to use self-tests and given pictorial instructions on how to conduct the test.

• Follow-up interviews were conducted at 3 months to assess whether partner and couples testing occurred.

• Participants were given a help-line to call in case of questions or social harm.

• The primary outcome was partner testing, and secondary outcomes were couples testing and intimate partner violence.
Statistical analyses

• Analyses were limited to participants aged 18-24 years
  • Of 599 enrolled, 367 were aged 18-24 years

• 20 participants (5.4%) lost-to-follow-up and excluded from analyses
  • 12 LTFUP from comparison group, 8 LTFUP from HIVST group
  • Final analysis sample includes 347 participants

• Logistic regression analyses used to determine effect of the intervention on primary and secondary outcomes
Results

• 599 women enrolled in the trial
  • 367 (61.2%) were aged 18-24 years.
  • 179 and 188 were randomized to the HIVST and comparison groups, respectively.

• Follow-up interviews were completed by 347 (94.5%) of the women.

• Participants reported “Yes” to at least one of the 7 GBV questions in our follow-up survey; however, none was related to HIVST
### Baseline characteristics of participants (1/2)

<table>
<thead>
<tr>
<th></th>
<th>Comparison group</th>
<th>HIVST group</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. participants with follow-up data</td>
<td>176</td>
<td>171</td>
</tr>
<tr>
<td>Age (years), mean (SD)</td>
<td>21.4 (1.7)</td>
<td>21.3 (1.9)</td>
</tr>
<tr>
<td>Highest education completed, N (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than primary</td>
<td>19 (10.8)</td>
<td>19 (11.1)</td>
</tr>
<tr>
<td>Primary</td>
<td>76 (43.2)</td>
<td>74 (43.3)</td>
</tr>
<tr>
<td>Secondary</td>
<td>48 (27.3)</td>
<td>36 (21.1)</td>
</tr>
<tr>
<td>Post-secondary</td>
<td>33 (18.8)</td>
<td>40 (23.4)</td>
</tr>
<tr>
<td>Married, N (%)</td>
<td>152 (86.4)</td>
<td>152 (88.9)</td>
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</tbody>
</table>
### Baseline characteristics of participants (2/2)

<table>
<thead>
<tr>
<th></th>
<th>Comparison group</th>
<th>HIVST group</th>
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</thead>
<tbody>
<tr>
<td><strong>Age at first intercourse (years), mean (SD)</strong></td>
<td>17.2 (2.3)</td>
<td>17.3 (2.0)</td>
</tr>
<tr>
<td><strong>Number of partners in lifetime, mean (SD)</strong></td>
<td>2.4 (1.5)</td>
<td>2.7 (3.9)</td>
</tr>
<tr>
<td><strong>Number of times tested in past 12 mths., mean (SD)</strong></td>
<td>2.9 (1.5)</td>
<td>3.0 (1.5)</td>
</tr>
<tr>
<td><strong>Partner has ever tested, N (%)</strong></td>
<td>134 (76.1)</td>
<td>128 (74.9)</td>
</tr>
<tr>
<td><strong>Partner has tested in past 12 mths., N (%)</strong></td>
<td>114 (64.8)</td>
<td>98 (57.3)</td>
</tr>
<tr>
<td><strong>Ever heard of HIV self-test, N (%)</strong></td>
<td>22 (12.5)</td>
<td>21 (12.3)</td>
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</table>
## Primary and secondary outcomes

<table>
<thead>
<tr>
<th></th>
<th>Comparison group</th>
<th>HIVST group</th>
<th>Odds Ratio (95% CI)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary outcome</strong></td>
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<tr>
<td>Male partner HIV testing, N (%)</td>
<td>98 (55.7)</td>
<td>158 (92.4)</td>
<td>9.7 (5.1-18.3)</td>
<td>&lt;0.01</td>
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<tr>
<td><strong>Secondary outcomes</strong></td>
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<tr>
<td>Discussed HIV testing with partner</td>
<td>173 (98.3)</td>
<td>162 (94.7)</td>
<td>0.31 (0.08-1.17)</td>
<td>0.09</td>
</tr>
<tr>
<td>Couples testing for HIV</td>
<td>67 (38.1)</td>
<td>133 (77.8)</td>
<td>5.7 (3.6-9.1)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Aware of partner's HIV test result</td>
<td>96 (54.6)</td>
<td>157 (91.8)</td>
<td>9.3 (5.0-17.4)</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

Male partner testing uptake was 92.4% in the HIVST group and 55.7% in the comparison group (odds ratio 9.7, 95% CI 5.1-18.3); the proportion of partners tested was \(\approx 36.7\%\) higher in the HIVST group.

Couples testing was significantly more likely in the HIVST group than the comparison group (77.8% vs. 38.1%, odds ratio 5.7, 95% CI 3.6-9.1); the proportion of couples testing was \(\approx 39.7\%\) higher in the HIVST group.

Disclosure of partner status was 91.8% in the HIVST group and 54.6% in the comparison group (odds ratio 9.3, 95% CI 5.0-17.4); the proportion of disclosure was \(\approx 37.2\%\) higher in the HIVST group.
Conclusions

• Provision of multiple HIV self-tests to young women was very effective in increasing male partner and couples testing.

• There was no IPV related to distribution or use of HIVST by partners.

• The findings suggest that HIVST can play a prominent role in facilitating testing among male partners of AGYW.

• As countries begin to scale-up HIVST, further investigation of secondary distribution interventions among young women is warranted.
The future of reaching partners of AGYW with HIV testing is HIVST
Acknowledgements

• Participants in the study and study staff
• Ministry of Health at county and sub-county levels
• Bill and Melinda Gates Foundation
• International Institute of Impact Evaluation (3ie)
• University of North Carolina at Chapel Hill & University of Pennsylvania

Thank you!