Title:

Engaging Male Partners of HIV-Negative Pregnant Women in HIV Testing Using Oral HIV Self-Test

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BACKGROUND

- Women are at risk of acquiring HIV throughout the perinatal period from their male partners
- HIV testing uptake among the male partners remains low; thus, the couple is often unaware of the male partner's HIV status
- The antenatal setting, with nearly universal uptake of HIV testing for women, can also serve as a way of reaching male partners but the optimal way to engage the male partners is unknown
- We sought to evaluate the effect of providing passive partner notification (PN) slip + oral HIV self-test (HIVST) kits to pregnant women for their male partner

METHODS

- A two-arm un-blinded randomized trial of HIV negative pregnant women who were attending antenatal care for the first time at Bwaila Hospital in Lilongwe, Malawi from October 2019 to August 2021
- Women were randomized 1:1 to receive PN (standard of care [SOC]) or PN + 1 HIVST kit for partner testing at home (intervention) [Period 1 – Before guidelines change]
- The implementation of this study coincided with a roll out of HIVST for partners of high risk pregnant women as a SOC in January 2020
- From March 2021, women were randomized 1:1 to receive PN + 1 HIVST kit for partner testing at home (SOC) or PN + 2 HIVST kits for couple testing at home (intervention) [Period 2 – After guidelines change]
- Primary outcome was the proportion of male partners who reported to clinic for confirmatory HIV testing within 30 days of enrollment
- Two-sample test of proportions was used to compare differences in proportions of male partners who reported to clinic
- We used Log-rank test to compare time to return to clinic between arms.
- Log-binomial regression was used to assess factors associated with male partners' return to clinic

Including HIVST as part of passive partner notification did not improve clinic-based HIV testing among male partners of pregnant women.

RESULTS

- 200 pregnant women were enrolled (100 each arm) ; 191 (96%) were married
- Overall , all 70 (35%) male partners who reported to clinic tested negative at home
- The proportions of males who reported to clinic were similar between intervention and SOC arm, proportion difference: -0.06; 95% CI: -0.19, 0.07
- Having at least secondary education for women (adjusted risk ratio =1.73; 95% CI:1.18, 2.53) was associated with male partners reporting to clinic

Table 1. Number and proportion of male partners who reported to clinic

		Expected Number of male partners	Number of males partners who reported to clinic	Proportion of male partners who reported to clinic (95% CI)	Proportion difference (95% CI)	P_value
Overall	Intervention	100	32	0.32 (0.23, 0.41)	-0.06 (-0.19, 0.07)	0.374
	SOC	100	38	0.38 (0.28, 0.48)		
Period 1 – Before guidelines change	Partner notification slip + 1 HIVST kit	21	10	0.48 (0.26, 0.69)	0.03 (-0.28, 0.33)	0.867
	Partner notification slip only	20	9	0.45 (0.23, 0.67)		
Period 2 – After guidelines change	Partner notification slip + 2 HIVST kits	79	22	0.28 (0.18, 0.38)	-0.08 (-0.23, 0.06)	0.256
	Partner notification slip + 1 HIVST kit	80	29	0.36 (0.26, 0.48)		

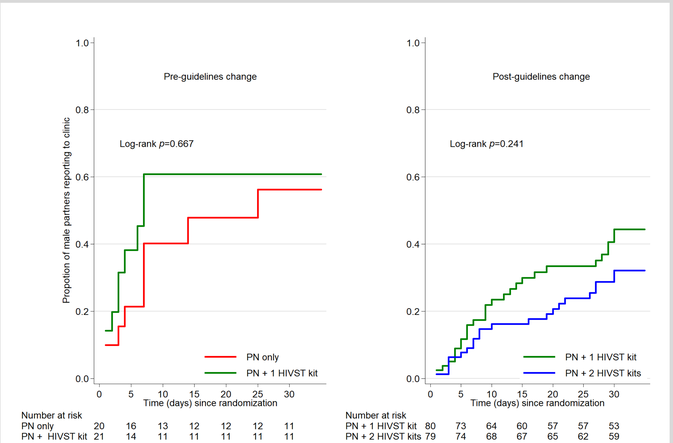


Figure 1. Time taken for male partners of pregnant women to report to clinic after randomization

CONCLUSIONS

- Regardless of the intervention, less than half of expected male partners reported to clinic for HIV testing
- The proportions of males who reported to clinic were similar between intervention and SOC arms
- Time to return to clinic did not differ between the intervention and SOC arms
- Male partners for women with at least secondary education were more likely to report to clinic than those for women with no formal or primary education only
- To ensure that men know their HIV status, innovative approaches are needed to reach and engage them in HIV testing

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