

A Household Food Voucher Increases Consent to Home-Based HIV Testing in Rural KwaZulu-Natal

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Introduction: Importance of HIV Testing

- HIV testing plays a central role in the control of the HIV epidemic, however testing rates remain low in many contexts
- HIV treatment-as-prevention will require increases in the frequency and coverage of testing, and new waves of testing will need to reach populations who have not previously tested
- Home-based HIV testing is one potentially promising approach for raising overall testing rates
- Home-based testing can reach vulnerable populations that are otherwise hard to contact, may encourage individuals to test earlier than less convenient alternatives, and offers potential linkage to interventions aimed at including family members

Motivation: Increasing Participation in Home-Based Testing

- HIV testing rates during home visits are commonly low, particularly in areas with high HIV prevalence
- Growing literature on conditional cash transfers (CCT) in HIV research and testing
- Gifts, or unconditional cash transfers (UCT), may have more desirable characteristics than CCTs
- There is little existing evidence on how to increase participation rates in home-based testing

Advantages of Gifts over Conditional Cash Transfers

- Gifts are less intrusive on decision making because they do not mandate a particular course of action
- CCTs may lead to crowding-out of intrinsic motivation with extrinsic motivation
- CCTs can be an undue inducement if the amount offered is too high
- CCTs can imply a hierarchical relationship with program implementers, gifts reflect more reciprocal relationships
- Gift are likely to be easier to implement and have lower transaction costs because they do not require monitoring of outcomes

Our Contribution

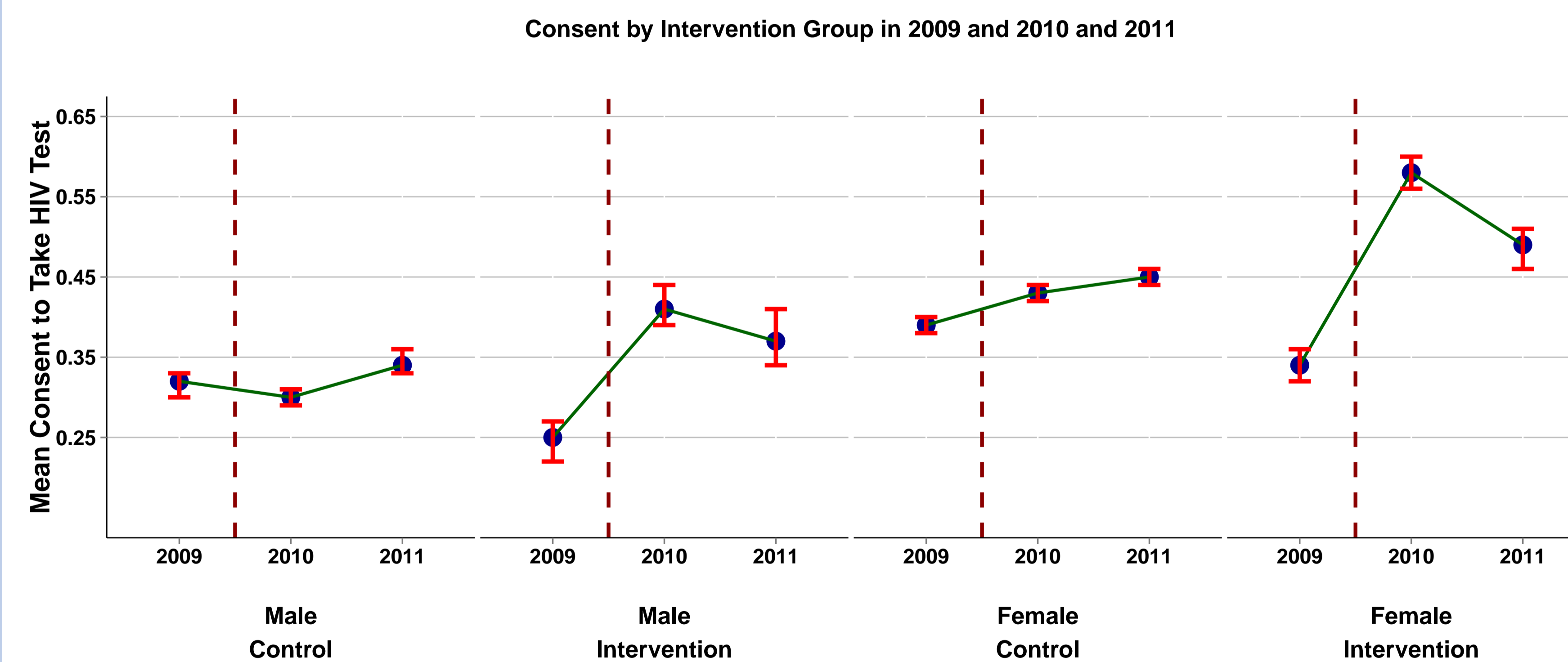
- We evaluate the effect of a gift (a food voucher for families, worth US\$ 5) on consent rates for home-based HIV testing in a HIV Surveillance Cohort
- Our approach corrects for unobserved confounding using a quasi-experimental difference-in-differences design where we match surveillance participants to themselves in the previous year
- We establish whether the effect of the voucher persisted in 2011 when the intervention was removed

Descriptive Statistics for the Africa Centre 2010 HIV Surveillance Cohort

2010 HIV Surveillance Cohort HIV Testing				
	Women		Men	
	N	%	N	%
Consented to Test for HIV	5,466	45	2,067	32
Declined to Test for HIV	6,594	55	4,351	68
Total	12,060	100	6,418	100

2010 HIV Surveillance Cohort Gift Voucher Receipt				
	Women		Men	
	N	%	N	%
Household Did Not Receive Gift Voucher	9,926	82	5,212	81
Household Received Gift Voucher	2,134	18	1,206	19
Total	12,060	100	6,418	100

Participation in Testing is Higher After Receiving Gift Voucher (Intervention Group)



The intervention group is defined as being a member of a household which received the gift voucher in 2010, while the control group is defined as being a member of a household which did not receive the voucher in 2010. The intervention occurred in 2010 only (shown by the red line), and did not persist in 2011. Mean consent to test is the number of residents in each group who consented to take a HIV test, divided by the number of residents who were eligible for participation and were successfully contacted by the surveillance surveyors in each group.

Key References:

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Africa Centre 2010 HIV Surveillance Cohort Data

- 18,478 men and women participated in the 2009 and 2010 population-based HIV surveillance carried out by the Wellcome Trust Africa Centre for Health and Population Studies in rural KwaZulu-Natal, South Africa
- Africa Centre has carried out home-based HIV testing among residents of one of the poorest regions of South Africa, which is 434 km² and includes both an urban township and peri-urban settlements, since 2003
- These HIV survey data have been widely used to describe evolution of the HIV epidemic and its impact
- Rates of refusal to test for HIV are high in this community, as are both HIV prevalence (24% in 2010) and ART coverage

Gift Voucher Intervention

- Families whose members were contacted for consent to participate in HIV testing in the final 10 weeks of the 2010 HIV surveillance (out of the 40 week-long survey) were provided with the gift
- The gift was given at first contact with the family, was not conditional on consent, and was given to the head of the family (if present)
- It was presented as a “thank you” to the community members for their continued participation in the Africa Centre surveillance activities following the ten-year anniversary of the Africa Centre

Difference-in-Differences Results

Outcome: Probability Individual Consented to Test for HIV			
Variables	Risk Difference All	Risk Difference Men	Risk Difference Women
Family Received Gift Voucher	0.29 (.23 - .35)	0.29 (.20 - .38)	0.30 (.20 - .38)
Observations	18,478	6,418	12,060

95% Confidence Intervals in Parentheses (Adjusted for Family Level Clustering)
All Models Adjusted for Covariates

Conclusions

- Gift increased HIV testing consent by 29 percentage points for individuals in families which received the voucher
- We find effect of the gift persisted in 2011, even though gift was not presented after 2010
- Cost-effective, each additional HIV test was obtained for approximately US\$ 7
- Unconditional gifts increase participation in home-based HIV testing, provide good value for money, are culturally appropriate in the context of community based interactions with longitudinal surveillance, and could even result in sustained improvements in testing rates even after the intervention is removed