

A cluster randomized trial of the impact of an intimate partner violence and HIV prevention intervention on emotional, physical and sexual abuse, sexual risk (SHARE) and HIV incidence in Rakai, Uganda

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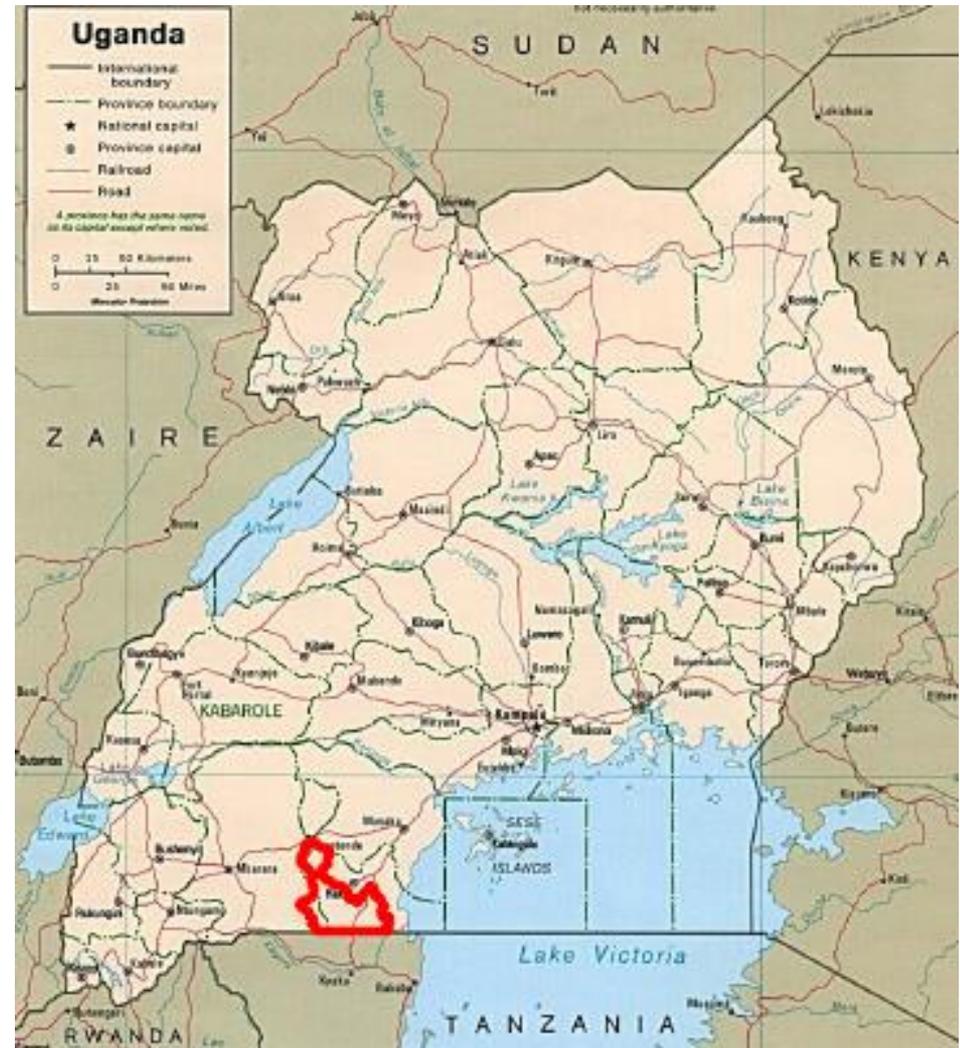
Background

The relationship between IPV and HIV

- IPV is a cause & consequence of HIV infection
 - ▣ **Direct mechanisms**
 - Rape
 - ▣ **Indirect mechanisms**
 - High HIV risk among IPV victims and perpetrators
 - Limited capacity to self-protect
- Several IPV/HIV prevention intervention studies have been conducted but none has successfully reduced both IPV and HIV infection

Introduction to study

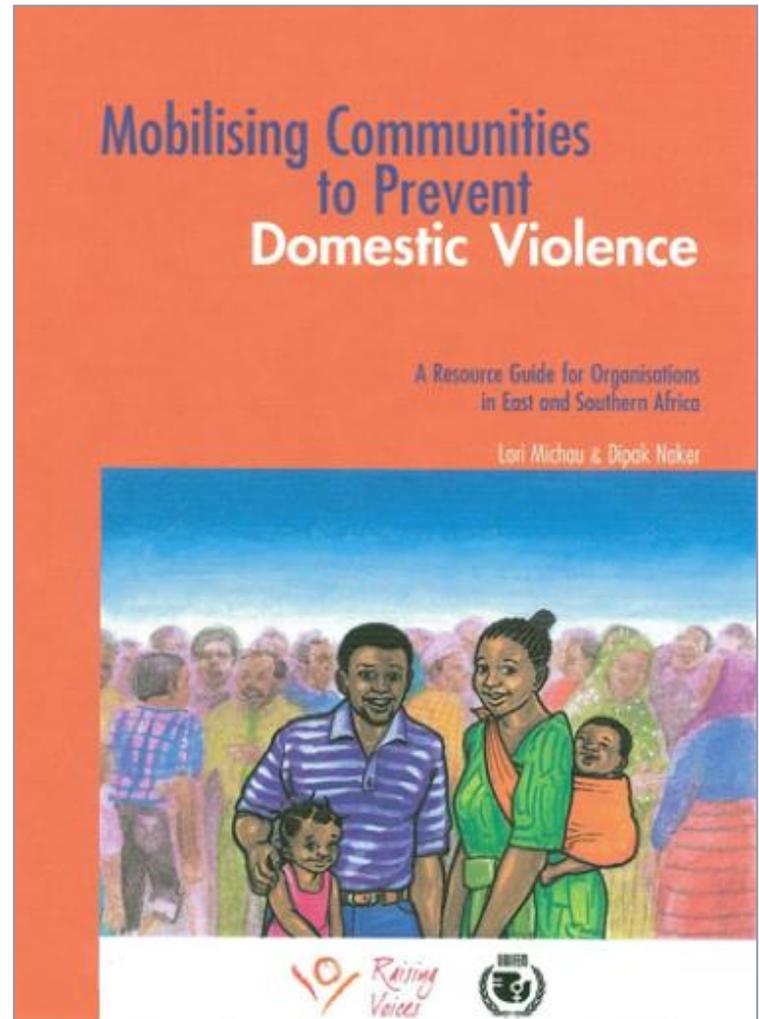
We conducted a CRT between 2005-2009 in **Rakai, Uganda** to evaluate the impact of an IPV prevention intervention (the Safe Homes and Respect for Everyone (SHARE) Project) on IPV and HIV incidence.



IPV prevention strategies

IPV prevention

- SHARE adapted methodologies from Raising Voices and Stepping Stones
- Transtheoretical Model of Behavior Change (“Stages of Change”)
- Organized in 5 consecutive phases that involved multiple IPV prevention strategies (advocacy, capacity building, community activism, learning materials, and special events.



Community-based IPV prevention



STRATEGY	ACTIVITIES
<i>Advocacy</i>	Workplace dialogues, local group seminars, dialogues with opinion and local leaders.
<i>Capacity building</i>	Staff development workshops, training of resource persons and volunteers, seminars, community based workshops on IPV, human rights and women's rights.
<i>Community activism</i>	Work with community volunteers and drama groups, booklet clubs, IPV prevention action groups, door-to-door awareness activities, films.
<i>Learning materials</i>	Development and adaptation of booklets, brochures, posters, story cards, and other educational materials.
<i>Special events</i>	Local fairs, public marches and campaigns, poster exhibitions, seminars and collaboration meetings.

IPV and HIV prevention strategies

Enhanced HIV counseling and testing and linkage to care

- RHSP's Health Education and Community Mobilizer trained to incorporate messages about IPV into HIV work.
- HCT and ART counselors trained to screen for, handle and refer cases of IPV.
- Volunteer “counseling aides” (n=12) selected and trained.
- Tools for addressing IPV & HIV
 - ▣ Safe HIV disclosure;
 - ▣ Risk reduction counseling for women in violent relationships.



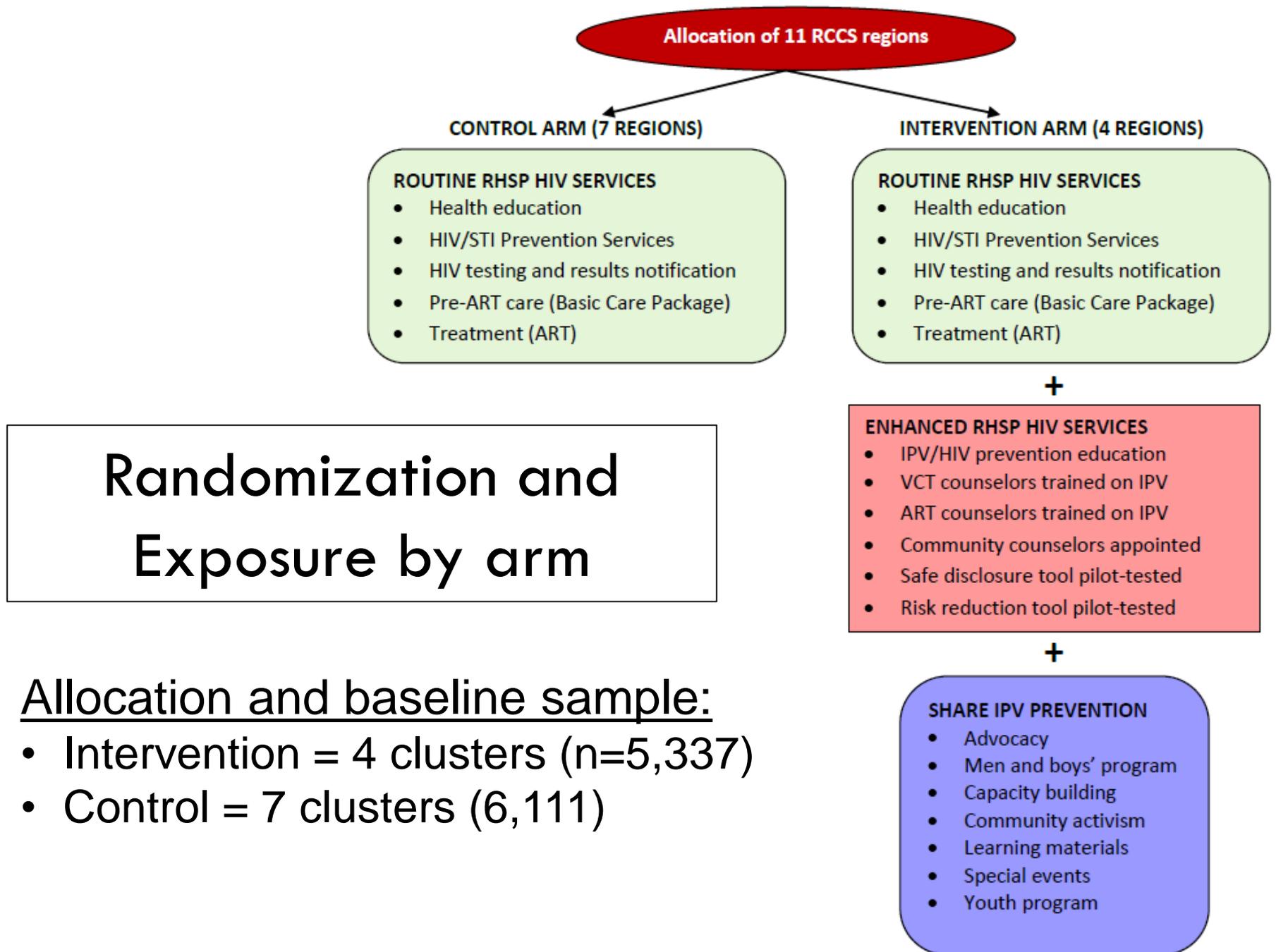
Methods: Data

Parent study: Rakai Community Cohort Study (RCCS)

- ▣ 50 communities organized in 11 study regions
- ▣ All consenting adults aged 15-49 years
- ▣ Annual surveys and biological samples

Data from 3 rounds of RCCS:

- ▣ Baseline (16 months: *Feb 2005–Jun 2006*)
- ▣ Follow-up 1 (19 months: *Aug 2006–Apr 2008*)
- ▣ Follow-up 2 (18 months: *Jun 2008–Nov 2009*)



Data analysis: IPV & risk behaviors

□ **Measures**

- **IPV:** Emotional, physical and sexual IPV
- **Risk behaviors:** spousal rape, total/extra-marital partners, alcohol use at sex, condom use, disclosure of HIV status
- “Modified” Poisson regression models used to estimate prevalence risk ratios (PRRs)
- Adjusted models controlled for baseline IPV measure of interest and covariates correlated with the violence outcomes and/or found to differ (at $p < 0.05$ level) between trial arms at baseline

Data analysis: HIV incidence

- HIV incidence/100 py assessed by cumulatively over 3 rounds
- Poisson regression models fitted to estimate IRRs of HIV acquisition
- Univariate and multivariate analysis to estimate the IRR in intervention vs. control communities over 4.5 year period.

Baseline characteristics

	Women (n=6,702)					Men (n= 4,746)				
	Control		Intervention		p-value	Control		Intervention		p-value
	n	%	n	%		N	%	n	%	
n=3,544 (52.88%)										
n=3,158 (47.12%)										
n=2,567 (54.09%)										
n=2,179 (45.91%)										
PAST YEAR IPV										
Emotional	878	24.8	772	24.5	0.75	771	30.4	626	28.8	0.22
Physical	653	18.4	523	16.6	0.05	316	12.3	242	11.1	0.20
Sexual	580	16.4	415	13.3	0.01	147	5.8	92	4.3	0.02
RISK BEHAVIORS										
Past year intimate partner rape	500	14.1	357	11.5	0.00	101	4.0	58	2.7	0.02
>1 sexual partners in past year	214	6.0	157	5.0	0.06	1,208	47.1	914	42.0	0.00
Alcohol with sex (past year)	887	25.0	821	26.0	0.35	943	38.6	876	40.4	0.20
Number non-marital sex partners in past year										
None	2,516	82.0	2,268	83.9	0.06	1,378	53.7	1,280	58.7	0.00
1	483	15.7	392	14.5		800	31.2	608	27.9	
≥2	69	2.3	42	1.6		389	15.2	291	13.4	
Condom use in past year										
Yes, always	316	8.9	274	8.7	0.73	398	15.5	378	17.4	0.09
None or inconsistent	3,228	91.1	2,884	91.3		2,169	84.5	1,801	82.7	
Partner's disclosure of HIV status (past year)	669	18.9	481	15.2	0.00	544	21.5	365	16.8	0.00
Self-disclosure of HIV status to partner (past year)	949	26.8	764	24.2	0.02	647	25.5	411	18.9	0.00
HIV PREVALENCE										
HIV prevalence	14.1%		12.1%		0.00	11.3%		9.2%		0.03

Results: Impact on IPV at final FUP

Women

Type of IPV	PRR	(95% CI)	<u>aPRR</u>	(95% CI)
Emotional IPV	0.89	(0.78-1.02)	0.90	(0.79-1.03)
Physical IPV	0.74	(0.63-0.86)	0.80	(0.68-0.93)
Sexual IPV	0.75	(0.62-0.90)	0.82	(0.69-0.99)

Men

Type of IPV	PRR	(95% CI)	<u>aPRR</u>	(95% CI)
Emotional IPV	1.02	(0.88-1.18)	1.00	(0.89-1.18)
Physical IPV	1.00	(0.77-1.28)	1.02	(0.80-1.31)
Sexual IPV	0.72	(0.46-1.12)	0.81	(0.53-1.24)

Adjusted for baseline age, education, marital status, experience of IPV victimization (women) or perpetration (men) (according to type), and # of non-marital sex partners.

Results: Impact on spousal rape, risk factors and HIV incidence

SHARE was associated with:

- Reduced spousal rape ($aPRR=0.80$; 95% CI: 0.66-0.97)
- Increased HIV results disclosure in all categories
- Reduced HIV incidence:
 - In population ($aIRR=0.64$; 95% CI: 0.43-0.95, $P=0.028$)
 - Among men ($aIRR=0.63$, 95% CI: 0.39-0.99, $P=0.049$)
 - Among women ($aIRR=0.69$; 95% CI: 0.45-1.06, $P=0.088$)
- SHARE was not associated with changes in number of partners, alcohol use surrounding sex, or condom use.

Conclusions and Implications

- SHARE reduced women's experiences of IPV and overall HIV incidence, possibly by reduction of rape and increased disclosure of HIV results.
- HIV prevention programs should integrate IPV prevention into existing protocols.
- SHARE approach could be effective for IPV prevention in other settings in Uganda and region
- More comprehensive research needed to understand how trauma/physiology related to forced sex might increase risk for HIV infection.

Addressing gaps in SHARE Intervention findings – Funded by WB & SVRI, 2016

- **Design evidence-based intervention to engage boys & men in programming to address VAW and girls in Rakai**
 - ▣ Reduce men's perpetration of violence
 - ▣ Lead to transformation of gender & masculinity social norms
 - ▣ Mixed methods approach to triangulate new qualitative & existing RCCS and SHARE intervention data
 - Build on lessons learnt, complement existing research & implement multiple violence prevention strategies
 - ▣ Designed to address multiple risk factors & ecological levels to maximize efforts of VAW prevention
 - ▣ Tailored, integrated and comprehensive framework for men & boys involvement in IPV prevention

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