



Together to End Violence Against Women

Preliminary results of a cluster randomized control trial



Human Subjects Protection Ethical Review

- This study was approved by:
 - National Institute of Medical Research
 - Boston University Institutional Review Board

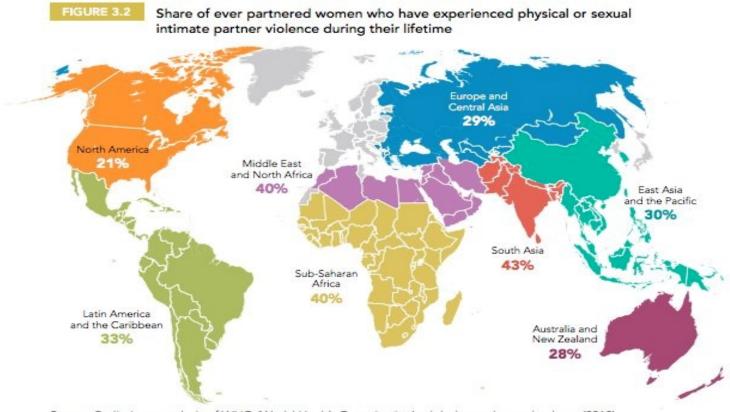
PRESENTATION OUTLINE

- Context
- Rationale
- Aims of the study
- Study design
- Intervention Descriptions
- Preliminary baseline and endline results
 - Quantitative
 - Qualitative



CONTEXT: IPV

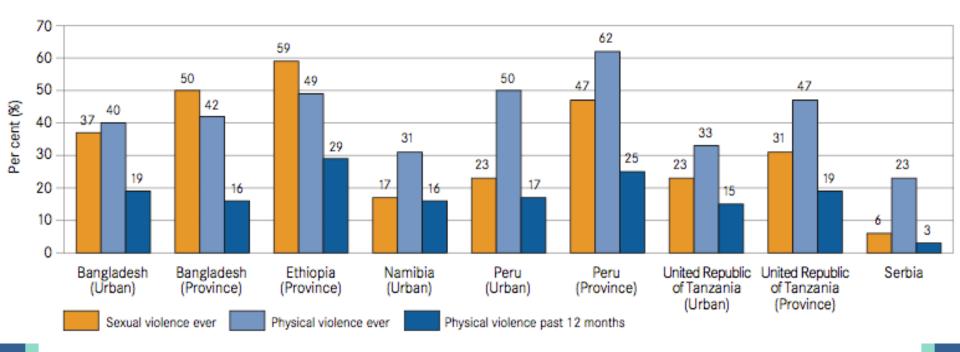
Intimate partner violence (IPV) is a global health challenge



Source: Preliminary analysis of WHO (World Health Organization), global prevalence database (2013) using World Bank regions.²⁴

Note: Areas shaded in grey are not calculated or do not have relevant data.

Percentage of ever-partnered women reporting physical and/or sexual IPV by type and when the violence took place, WHO multi-country study (3)



Garcia-Moreno C et al. WHO multi-country study on women's health and domestic violence against women: initial results on prevalence, health outcomes and women's responses. Geneva: World Health Organization, 2005.

CONTEXT: IPV

Tolerance of IPV by both men and women is pervasive in Tanzania (DHS 2010).

 NATIONAL
 ARUSHA

 54%
 38%
 49%
 59%

 Women
 Men
 Women
 Men

agree that a husband is justified in hitting or beating his wife for at least one reason

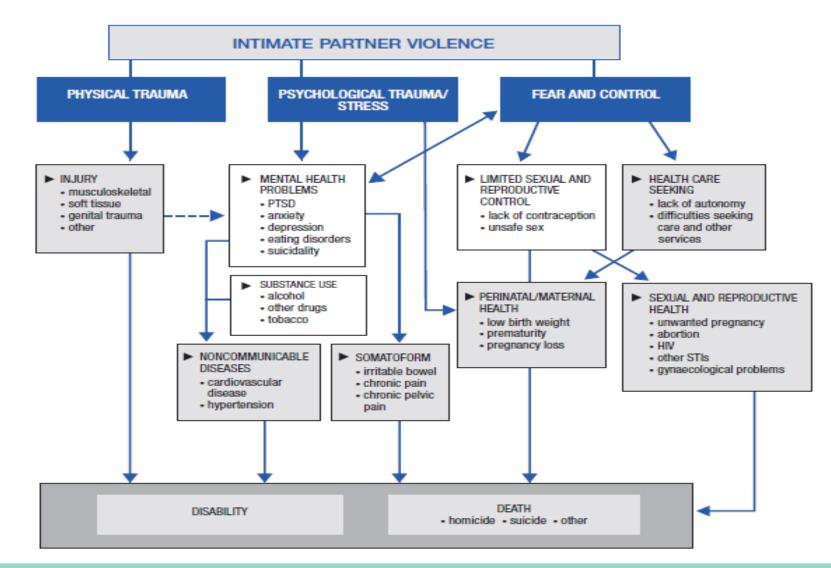
CONTEXT: IPV

Women's experience of IPV is high in Tanzania.

44%

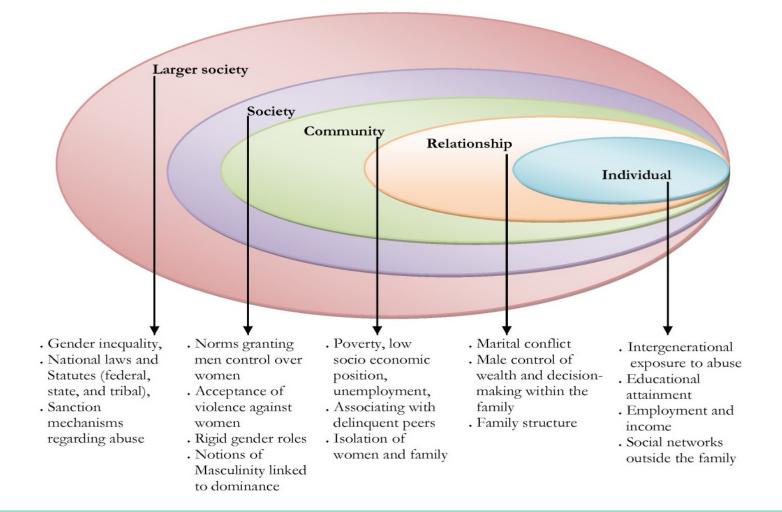
of ever-married women experienced physical and/or sexual violence from partners (DHS 2010)

Figure 1. Pathways and health effects on intimate partner violence



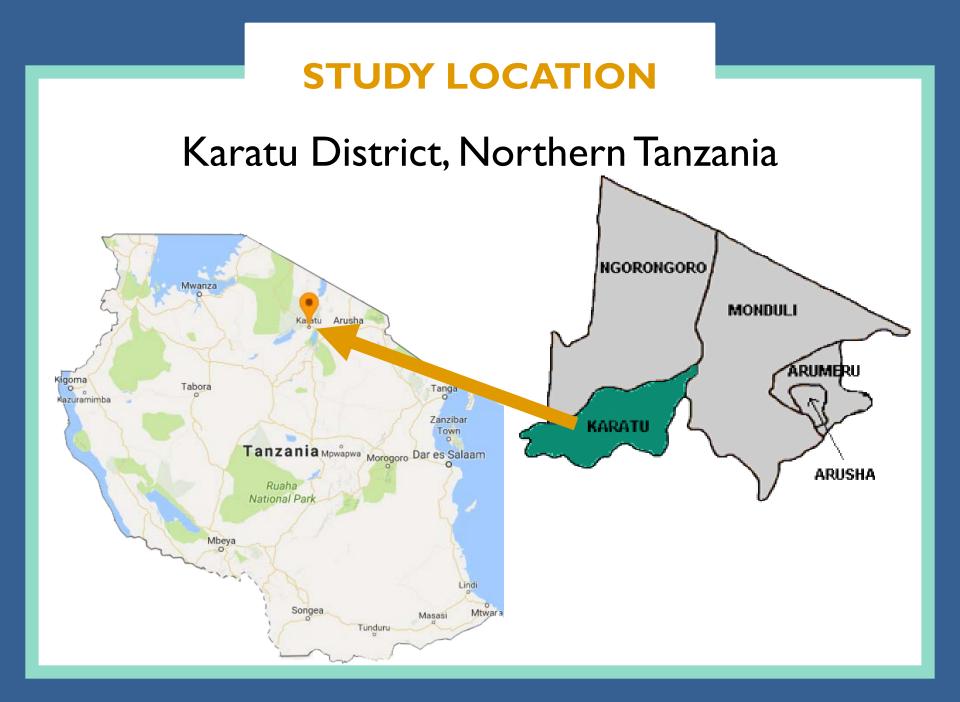
Source: World Health Organization, London School of Hygiene and Tropical Medicine (LSHTM), and the South African Medical Research Council (2013).

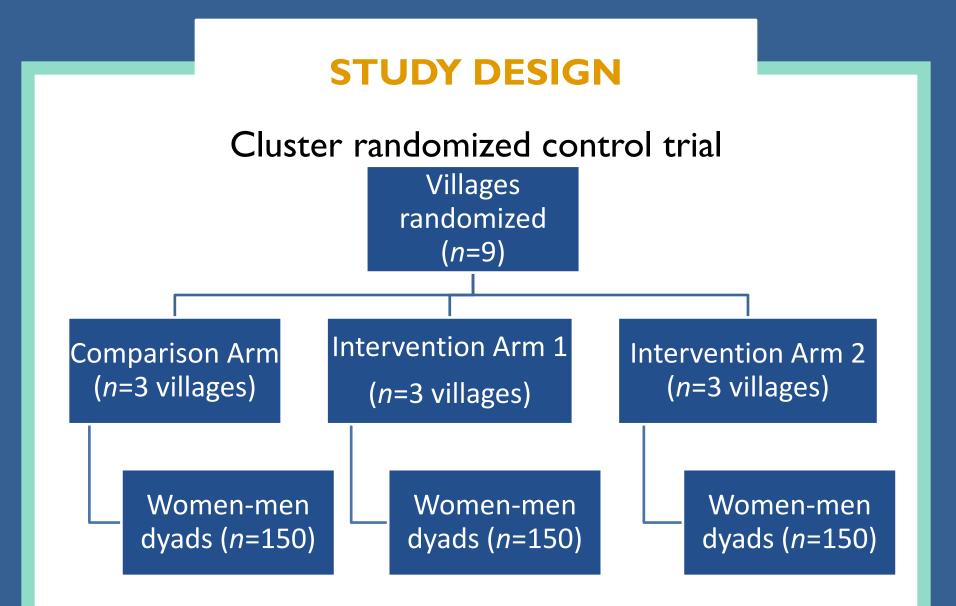
Multilevel determinants of IPV



STUDY AIMS

- Aims:
 - To test the feasibility, acceptability and proof of concept of two interventions (interpersonal and community levels) compared to a comparison group.
 - To contribute to a better understanding of the attitudes, behaviors and social factors related to intimate partner violence in Karatu District.
- Primary Outcomes: men's attitudes regarding gender equity and IPV





Timing of Baseline, Intervention Implementation and Endline

- Baseline: July 2015
- Interventions: August 2015-March 2016
- Endline: End April/May 2016

STUDY DESIGN: SAMPLE

Sample Selection and Recruitment:

- Total sample: 450 women and 450 men (n=900)
 - 150 women and 150 men from each village
- Participants: recruited through WEI/Bantwana's list of LIMCA members (=604 women)
- ~75% (= 450/ 604) of all women members participating in LIMCA.
- Sample size informed entirely by budgetary and logistical considerations

STUDY DESIGN

Comparison Arm:

- Women participated in savings groups (LIMCA)
 - Received training on business skills, literacy, and preventing IPV and HIV

INTERVENTION: LIMCA



STUDY DESIGN

Intervention Arm 1:

- Women participated in LIMCA groups, and
- Male partners participated in <u>male peer group</u> workshops on gender norms, IPV, and HIV prevention issues
 - Conducted in a series of workshops for a total of 24 hours over the intervention period

INTERVENTION I: MALE PEER GROUPS



Photo Credit: Nelson Holmes

STUDY DESIGN

Intervention Arm 2:

- Women participated in LIMCA groups,
- Male partners participated in male peer groups, and
- Community leaders participated in <u>community</u> <u>dialogues</u>
 - Village leaders were trained to facilitate dialogues and develop action plans on gender and IPV
 - Village leaders organized community dialogues and events focused on gender and IPV

INTERVENTION 2: COMMUNITY DIALOGUES



STUDY DESIGN: MIXED METHODS

- Data collection at baseline and endline through survey questionnaire administered to men and women:
 - Socio-demographic characteristics
 - Men's and women's health behavior characteristics (condom use; alcohol/drug use; multiple sex partners)
 - Men's experience of childhood trauma (Childhood Trauma Scale: 13-52).
 - Men's attitudes on justification of IPV;
 - Men's and women's attitudes on gender norms (GEM scale: 17-68);
 - Men's and women's experience of IPV by type (WHO Multicountry Study)
- Key informant interviews with community leaders
- Open-ended questions on endline survey.

STUDY DESIGN: IPV MEASURES

- <u>Physical violence</u> against an intimate partner in last three months, twelve months, ever in the relationship and during pregnancy
 - Slapped a partner or thrown something at her that could hurt her
 - Pushed or shoved a partner
 - Hit a partner with a fist or with something else that could hurt her
 - Kicked, dragged, beaten, choked or burned a partner
 - Threatened to use or actually used a gun, knife or other weapon against a partner

- <u>Sexual violence</u> against an intimate partner in last three months, twelve months, ever in the relationship and during pregnancy
 - Forced a partner to have sexual intercourse when she did not want to
 - Forced a partner to do something sexual that she found degrading or humiliating

Adopted from studies by: South African Medical Research Council and World Health Organization

STUDY DESIGN: IPV MEASURES

- <u>Emotional violence</u> against an intimate partner in last three months, twelve months, ever in the relationship and during pregnancy
 - Insulted a partner or deliberately made her feel bad about herself
 - Belittled or humiliated a partner in front of other people
 - Done things to scare or intimidate a partner on purpose
 - Threatened to hurt a partner
 - Hurt people your partner cares about as a way of hurting her, or damaged things that are important to her

- Economic violence against an intimate partner in last three months, twelve months, ever in the relationship and during pregnancy
 - Prohibited a partner from getting a job, going to work, trading or earning money
 - Taken a partner's earnings against her will
 - Thrown a partner out of her house
 - Kept money from a partner's earnings for alcohol, tobacco or other things knowing that a partner was finding it hard to afford household expenses





Baseline Results Full Sample

Table 1: Socio-Demographic Characteristics of Men and Women in the Comparison Group and Intervention Groups 1 and 2, n=450couples, Tanzania, 2015.

	Men	Women
	(n=450)	(<i>n</i> =450)
	Mean/Prop	Mean/Prop
Mean age in years	40.7	36.0
Mean age at first marriage	25.5	21.2
Mean # biological children		3.6
Ever attended school (%)	92%	90.7%
Highest level of schooling (%)		
Primary	81.4%	89.1%
Secondary	18.3%	10.9%

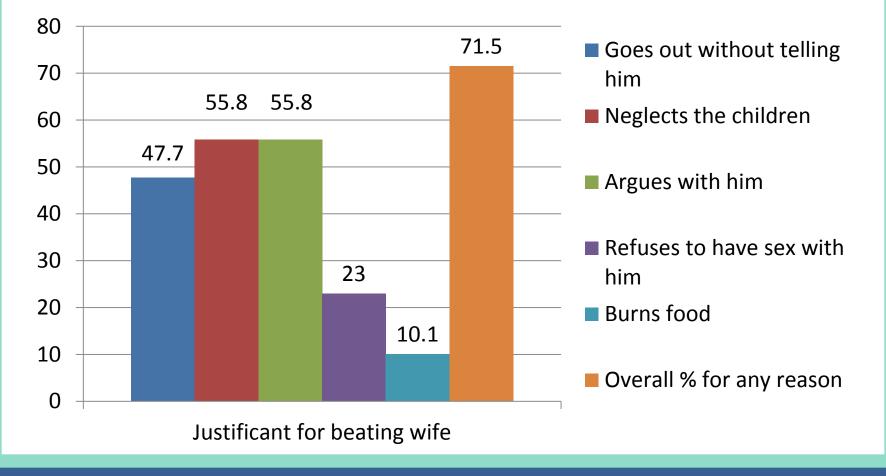
Table 2: Percent Men and Women Reporting Specific HealthBehavior Characteristics, n=450 couples, Tanzania, 2015.

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	Men	Women
	(n=450)	(<i>n</i> =450)
	%	%
Condom use by Male Partner		
Sometimes	27.9%	22.3%
Always	0.5%	2.9%
≥2 sexual partners in last year	28.2%	10.8%
Alcohol use		
Occasionally	23.8%	6.2%
Every day	4.0%	4.2%
Drug use		
Occasionally	1.1%	
Every day	0.4%	
Tested for HIV (% Yes)	74.1%	75.4%
HIV positive status	1.6%	8.4%

GENDER ATTITUDES

- In some cases women had greater gender inequitable attitudes than men
 - Ex.There are times when a woman deserves to be beaten – 36% of women vs. 17% of men agreed
 - Ex.A woman should tolerate violence in order to keep her family together – 76.2% of women vs. 33.9% of men agreed
- Yet, women were much more likely than men to say people should be treated the same whether women or men
 - 72% of women vs. 26% of men

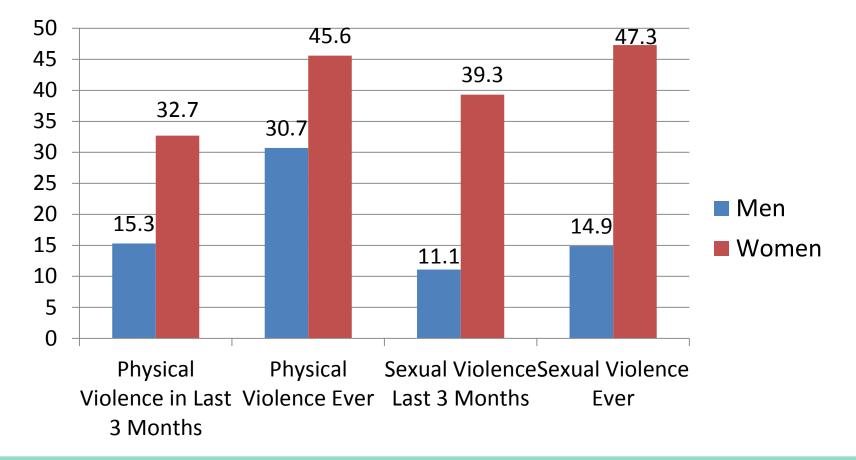
Percent of men who agree with the following justifications for beating wife; Tanzania 2015 (n=450)



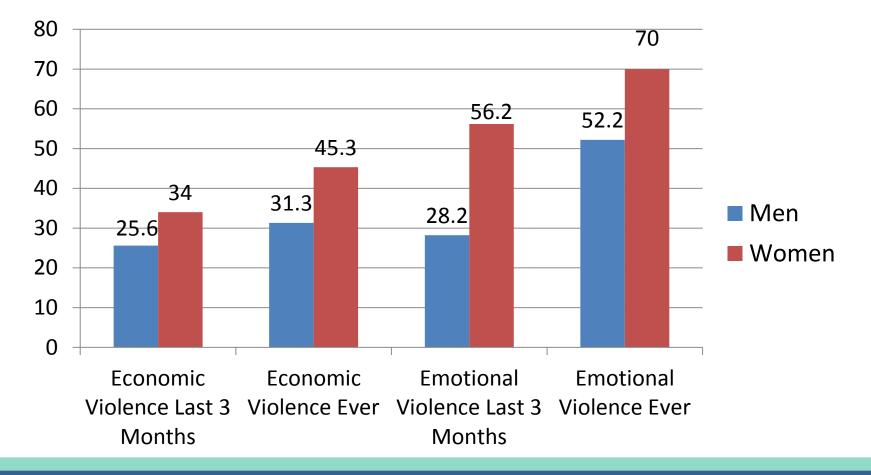
Men's experience of Childhood Trauma

- 56% I saw or heard my mother being beaten by her husband or boyfriend
- 85% I was beaten at home with a belt or stick or whip or something that was hard
- 33% One or both of my parents were too drunk or drugged to take care of me
- 26% I was beaten so hard at home it left a mark or bruise:

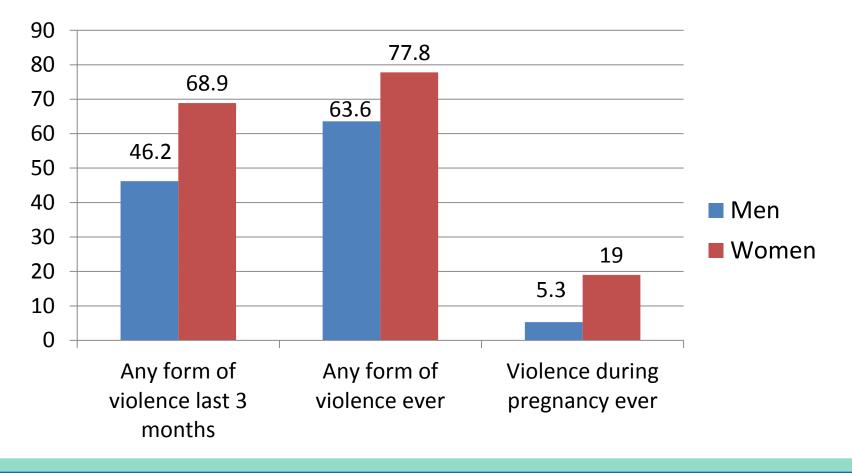
Men and women self-report of physical and sexual violence, Tanzania 2015 (n=450 couples)



Men and women self-report of economic and emotional violence, Tanzania 2015 (*n*=450 couples)



Men and women self-report of any form of violence and violence during pregnancy. Tanzania 2015 (*n*=450 couples)



Multivariate Logistic Regression: Correlates of Violence in the <u>last 3 months</u>

- Correlates of Physical Violence
 - Men's experience of childhood trauma
 - Gender Inequitable Attitudes
 - Alcohol use
 - No or low levels of education (women)
- Correlates of Sexual Violence
 - Young age (men and women)
 - Men's multiple sex partners
 - Alcohol use
 - Food shortages (women)

Multivariate Logistic Regression: Correlates of Violence in <u>the last 3 months</u>

Economic Violence

- Young age
- Men's experience of childhood trauma
- Gender Inequitable Attitudes
- Alcohol use
- Food shortages (women)

Emotional Violence

- Young age
- Higher education in men
- Men's experience of childhood trauma
- Alcohol use
- Food shortages (women)

- Any Form of Violence
 - Men's experience of childhood trauma
 - Gender Inequitable Attitudes
 - Multiple sex partners
 - Alcohol use

BASELINE FINDINGS

- Gender inequitable attitudes are high among women as well as men
- Many men experienced childhood trauma
- IPV is common in Karatu District. Overall rates of ever experiencing physical violence similar to 2011 DHS
- IPV appears to be fairly consistent over time (ever, 12 months and last 3 months)
- Women report significantly higher rates of all types of IPV than men
- Men's and women's reporting of IPV is significantly associated with young age and men's multiple sex partners, childhood trauma, and alcohol/drug use





Endline Results

ENDLINE RESULTS

Survey Attrition (Loss to Follow-Up) among men and women across study arms, Tanzania 2015-2016. Overall: ~20%

	Comparison Group	Intervention Group 1	Intervention Group 2
Attrition rate: Men	24.7	13.3	18.7
Attrition rate: Women	18.0	10.7	20.0

ENDLINE RESULTS

Men's Level of Participation in Peer Groups by Study Arm

Exposure to the intervention	Intervention Arm 1 (n=150)	Intervention Arm 2 (n=150)
Average hours of training attended	19	20
% men who attended 24 hours of training	21	19
% men who attended ≥ 18 hours	73	74
% men who attended ≥ 12 hours	96	89
% men who attended ≥ 6 hours	99	90
% men who did not attend trainings	<1	6

Gender Equitable Men (GEM) Scale Results

We found no significant changes in gender inequitable attitudes in men or women between baseline and endline. Table 9: Mixed-effects Logistic Regression Estimates of Average Intervention Effects on Men's Attitudes on Violence against Women, Gender Norms and Relations, and Experience of Violence Perpetration, Tanzania, 2015-2016.

	п	Interve Group Compa	1 <i>vs</i> .		Interver Groug vs. Comp		
		OR/β	SE	p	OR/β	SE	р
Husband is Justified to Beat or Hit H	lis Wife i	f She:					
Goes out without telling him?	363	0.88	0.25		0.94	0.27	
Neglects the children?	364	0.67	0.20		0.78	0.24	
Argues with him?	363	0.45	0.12	**	0.50	0.21	!
Refuses to have sex with him?	362	0.65	0.23		0.53	0.21	
Burns food?	363	0.55	0.28		0.37	0.23	
Any one of five situations?	362	0.63	0.19		0.72	0.22	
Intimate Partner Violence Perpetration	o n:	·	•		•		
Physical violence	365	0.94	0.48		0.59	0.32	
Sexual violence	365	0.59	0.33		0.63	0.34	
Emotional violence	365	0.85	0.26		0.75	0.23	
Economic abuse	365	1.93	0.64	*	1.93	0.66	*
Any one form of violence	365	0.93	0.25		0.87	0.24	

Notes: *** $p \le .001$; ** $p \le .01$; * $p \le .05$; ! $p \le .10$. All models are adjusted for men's school attendance, women's HIV positive status and household assets.

Table 10: Mixed-effects Logistic Regression Estimates of Average Intervention Effects on Women's Attitudes on Gender Norms and Relations, and Experience of Violence in Last Three Months, *n*=377, Tanzania, 2015-2016.

	Interve 1 <i>vs</i> . C	ntion G Compari	-	Intervention Group 2 <i>vs</i> . Comparison				
Intimate Partner Violence	OR/β	SE	p	OR/β	SE	p		
Physical violence	0.81	0.24		0.65	0.20			
Sexual violence	0.73	0.27		0.85	0.31			
Emotional violence	0.69	0.18		0.59	0.16	*		
Economic abuse	0.71	0.20		0.99	0.27			
Any one form of violence	0.54	0.17	*	0.66	0.21			

Notes: *** $p \le .001$; ** $p \le .01$; * $p \le .05$; ! $p \le .10$. All models are adjusted for men's school attendance, women's HIV positive status and household assets.





Qualitative Results

Women Freer to Participate in LIMCA

- "He does not hinder or prohibit participation in groups."
- "His behavior has changed because my husband no longer beats me or insults me and he permits/allows me to perform activities that help me earn money."
- "His perspective has changed a lot because he now allows me to take part in micro finance groups and to do activities that earn money."

Women Report Reduced Violence

- "Our relationship has changed because there is more love and there is no act of violence that he does on me now."
- "Abuse has reduced because education mostly targeted men."
- "My partner has changed a bit because he has reduced beating me which is different from before."
- "Most men changed after the discussions we had and realized their wives are not to be abused or harassed."
- "The education that they got has helped them change because those to whom they used to do acts of abuse they have stopped completely."

Men Report Change in Attitudes and Violent Behavior

- "Violence or abuse on women is not right/good and has not benefit or meaning."
- "I have understood that without harassment and abuse many people would have progressed."
- "Abuse is not right and has reduced after the discussions."

Women Report that Men are Helping with Household Chores

- "His habits have changed because he helps me with a lot of things, particularly basic household needs."
- "There are a lot of changes, for instance many men right now do household activities."
- "He helps with the household activities; for example, bringing grass for the cows."

QUALITATIVE RESULTS

Men Report Helping with Household Chores

- "I got the understanding that all household duties are for both me and my wife."
- "I now get involved in activities that before I thought were only for my wife - for instance fetching water, looking for firewood, and sometimes cooking."
- "My wife now does some of the chores that were thought to be mine only as a father."
- "I have been performing some of the duties of my wife, for example cooking, and washing clothes as one of the ways of working together to fulfill the family/household duties equally."
- "I got to know that all the responsibilities at home are to be shared and not to place them all upon my partner."

Women Report Positive Changes in Communication

- "My husband's view has changed because he likes to listen to my advice in planning/improving for our family."
- "His perspective has changed because in the past/previously he would not involve in me in making decisions, but now he involves me in business deals and family decisions."
- "Our relationship has changed because previously he would not listen to me, and would not take my advice but now he listens to me and we advise each other about planning/improving matters about our family."

Men Report Positive Changes in Communication and Including Women in Decision-Making

- "She agrees on sitting down together and discussing on family matters."
- "I have learned not involving my family in my decisions, meaning my wife and children, is wrong."
- "We have been doing things together equally and in agreement."
- "Truly there is visible change because I and my partner we share the same ideas that are effective and have contributed to us starting to construct a house of corrugated sheet iron."

Women See Positive Changes in Their Relationships

- "Our relationship is now really good, and we listen to each other in everything that relates to our family."
- "Our relationship has changed because we are now closer than we were before."
- "Truly my relationship with my husband for now has changed, for love has increased and there is joy in the house."

Men See Positive Changes in Their Relationships

- "Small disputes have decreased a lot. We sit down together and advise each other. There is more cooperation in the house."
- "I have increased my love towards my wife, and I will try to listen to her for advice without ignoring her, which is different from the past."
- "We have been loving each other more because we involve each other in our issues and make decisions together."
- "I respect her and whatever she advises me I listen to her. Joy in the family/home has increased."

SUMMARY

- Directions of associations as hypothesized
- Justification of wife beating: Men in Intervention Groups I and 2 have lower odds of justifying use of IPV than in Comparison Group
- IPV perpetration: Men in Intervention Groups 1 and 2 have lower odds of perpetrating IPV compared to men in the Comparison Group
- IPV experience: Women in the Intervention Groups report lower levels of violence than women in the Comparison Group
- No change in attitudes on gender norms and relations as measured by the GEM scale

QUALITATIVE RESULTS: SUMMARY

- Improved communication
- Greater equity in household decision-making
- Men helping with household chores
- Positive change in relationships
- Reduced violence

STUDY LIMITATIONS

- Too small a sample size to measure full effect
- Too short to measure a sustained effect
- Possible social desirability bias in men's and women's responses at endline
- Possibility that men influenced the responses of women at endline
- No resources to test the effectiveness of responses to IPV
- Lack of resources to follow-up and support community action plans

Summary Points

- Despite the sample size of this pilot study, male peer groups appear to reduce IPV in this context
 Question: sustainability of the results over time?
- Additional research with sufficient power/sample size is needed to definitively document effects of male peer groups and community dialogues in IPV prevention *and* response

Recommended Additional Research

- Determinants of women's tolerance of violence
- Exploration of household economic decision-making and economic violence
- Women's experience of childhood trauma
- Women's perpetration of IPV
- Mental health consequences of IPV: anxiety, depression, PTSD on men and women
- Economic costs of IPV
- Medium and long-term sustainability of intervention effects
- Effectiveness of response as well as prevention efforts

RESEARCH & PROGRAM TEAMS

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Questions and Comments

Table 1: Summary statistics of baseline characteristics in women, men and households across study arms, n = 365 couples, Tanzania, 2015-2016. Comparison Intervention Intervention Group (n=113)Group 1 Group 2 Þ (n = 130)(n = 122)SD Mean SD Mean Mean SD Women's characteristics: 35.18 9.65 38.87 10.93 34.98 10.32 Current age (in years) ** 3.97 3.13 Age of first marriage (in years) 21.29 3.37 21.56 21.17 % Woman was previously married (Ref: no) 30.97 0.46 15.38 13.93 0.35 0.36 *** % Husband has >1 wife (Ref: Husband has 1 wife) 14.16 0.35 14.62 0.35 8.20 0.28 % Respondent is 1st/only wife (Ref: 2nd/3rd wife) 0.40 82.30 0.38 83.08 0.38 80.33 % Marriage involved dowry/bride price (Ref: no) 53.98 0.50 60.00 0.49 54.92 0.50 % Ever attended school (Ref: no) 88.46 92.92 0.26 0.32 91.80 0.28 % Highest level of schooling (Ref: Primary or none) Secondary 76.99 42.28 78.46 41.27 77.05 42.23 35.61 Higher 13.27 34.08 9.23 29.06 14.75 38.05 0.49 30.77 0.34 0.47 % Reads a newspaper or magazine (Ref: never) 0.46 % Listens to the radio (Ref: never) 54.87 0.50 62.31 0.49 0.66 0.47 %Watches television (Ref: never) 0.48 18.46 0.47 35.40 0.39 0.31 ** % Heard of, seen or participated in campaigns or activities about IPV prevention in community or workplace (Ref: no) 58.46 0.49 0.47 68.14 0.47 0.69 92.04 96.92 0.22 % Number of sexual partners in last year ≤1 (Ref: ≥2) 0.27 0.17 0.95 % Alcohol non-use (Ref: daily, weekly or monthly use) 84.96 0.36 89.23 0.31 0.92 0.28 % Tested for HIV (Ref: havent been tested for HIV/ unknown or missing/refused to answer) 73.45 0.44 72.31 0.45 0.66 0.48 % HIV Positive (Ref: HIV Negative/HIV status unknown/ refused to disclose status) 8.85 0.29 3.85 0.19 0.01 0.09

Table 1: Summary statistics of baseline characteristics in women, men and households across study arms, n=365 couples, Tanzania, 2015-2016 (cont.).

2013-2010 (conc.).							
Men's characteristics:							
Current age (in years)	40.25	11.73	43.45	12.20	40.95	10.95	*
Age of first marriage (in years)	24.87	4.70	25.04	5.15	26.84	5.28	*
% Ever attended school (Ref: no)	91.15	0.29	86.92	0.34	98.36	0.13	**
% Highest level of schooling (Ref: Primary or none)							
Secondary	74.34	43.87	71.54	45.30	77.05	42.23	
Higher	16.81	37.57	15.38	36.22	20.49	40.53	
%Earned money in last 12 months (Ref: no)	96.46	0.19	96.92	0.17	96.72	0.18	
% Reads a newspaper or magazine (Ref: never)	65.49	1.12	51.54	1.24	66.12	0.01	
% Listens to the radio (Ref: never)	88.50	0.32	83.08	0.38	91.80	0.28	
% Watches television (Ref: never)	81.42	0.39	79.23	0.41	83.61	0.37	
Childhood trauma (Ref: no)	18.73	3.47	18.89	3.69	19.43	3.57	
% Condom non-use (Ref: condom use)	71.68	0.45	77.69	0.42	72.13	0.45	
% Multiple sexual partners (Ref: one sexual partner)	34.51	0.48	21.54	0.41	26.23	0.44	
% Alcohol or drug use (Ref: no)	32.74	0.47	24.62	0.43	28.69	0.45	
% Heard of, seen or participated in campaigns or activities about							
IPV prevention in community or workplace (Ref: no)	80.53	0.40	83.08	0.38	86.07	0.35	
% Tested for HIV (Ref: havent been tested for HIV/ unknown or							
missing/refused to answer)	76.11	0.43	66.15	0.48	71.31	0.45	
% HIV Positive (Ref: HIV Negative; HIV status unknown; refused to							
answer)	6.19	0.24	2.31	0.15	3.28	0.18	
Household (HH) characteristics:							
Number of biological children	4.28	5.24	4.63	2.73	3.85	2.94	
Number of male children	1.71	1.54	2.34	1.44	1.85	1.49	***
Number of female children	1.64	1.38	2.12	1.60	1.67	1.40	**
% HH with food shortages of 3-12 months in a year (Ref: never)	46.90	0.50	48.46	0.50	40.98	0.49	
% HH members go without food because of lack of money (Ref: never)	21.24	0.41	28.46	0.45	20.49	0.41	
% Difficult to find money for treatment or medicine (Ref: easy)	72.57	0.45	69.23	0.46	68.03	0.47	
% Saves intermittently or never (Ref: saves daily, weekly or monthly)	49.56	0.50	46.92	0.50	48.36	0.50	
% Belongs to bottom 25 th wealth quintile	27.43	0.45	29.23	0.46	19.67	0.40	*
% Belongs to 50th wealth quintile	12.39	0.33	37.69	0.49	24.59	0.43	***
% Belongs to 75 th wealth quintile	23.01	0.42	26.15	0.44	28.69	0.45	
% Belongs to top 25 th wealth quintile	37.17	0.49	6.92	0.25	27.05	0.45	***
Notes: $***p \le .001$; $**p \le .01$; $*p \le .05$.							

	Men's Report of IPV	Women's Report of IPV	P
	%	%	
Physical violence in last 3 months	15.33	32.67	***
Physical violence ever	30.67	45.56	***
Physical violence during pregnancy	0.67	8.10	***
Sexual violence in last 3 months	11.11	39.33	***
Sexual violence ever	14.89	47.33	***
Sexual violence during pregnancy	2.96	4.92	NS
Economic violence in last 3 months	25.56	34.00	**
Economic violence ever	31.33	45.33	***
Economic violence during pregnancy	2.23	13.42	***
Emotional violence in last 3 months	28.22	56.22	***
Emotional violence ever	52.22	70.00	***
Any form of violence in last 3 months	46.22	68.89	***
Any one form of violence ever	63.56	77.78	***
Any form of violence during pregnancy	5.33	18.89	***

Concordant and Discordant IPV Reporting

Table: Couples' agreement on IPV reports, *n*=450 couples, Tanzania, 2015.

		Men's reports of:										
		Perpetration	No perpetration									
	Violence	V	×									
Women's reports of:	No violence	×	\checkmark									
Notes: √=Concordar	Notes: v=Concordant reporting; ×=Discordant reporting.											

Table: Couples' agreement on IPV reports.				
	Cordordant Reporting	Discordant Reporting	Карра	Þ
Physical violence in last 3 months (yes = 1)	64	36	0.06	t
Physical violence in last 12 months (yes=1)	64	36	0.18	****
Physical violence ever (yes=1)	58	42	0.13	***
Physical violence during pregnancy	92	8	0.05	*
Sexual violence in last 3 months (yes = 1)	60	40	0.04	
Sexual violence in last 12 months ($yes=1$)	59	41	0.06	†
Sexualviolence ever (yes=1)	53	47	0.02	
Sexual violence during pregnancy	93	7	0.08	*
Emotional violence in last 3 months (yes=1)	52	48	0.09	*
Emotional violence in last 12 months (yes=1)	55	45	0.14	××××
Emotional violence ever ($yes=1$)	56	44	0.10	**
Economic violence in last 3 months (yes=1)	61	39	0.07	†
Economic violence in last 12 months (yes=1)	61	39	0.12	**
Economic violence ever $(yes=1)$	60	40	0.17	***
Economic violence during pregnancy	86	14	0.05	†
Notes: $***p \le .001$; $**p \le .01$; $*p \le .05$; $p \le .10$.	•	· · · · · ·		· ·

Table 12: Multiple logistic regression analysis showing socio-demographic factors associated with men's IPV in last three months, n=450 couples, Tanzania, 2015

	Ph	ysical	violence	<u>)</u>		Sexual violence								
Men's reports of violence			Women's reports of men's violence				.	s of	Women's reports of men's violence					
OR	(s.e.)	Þ	OR	(s.e.)	p	OR	(s.e.)	Þ	OR	(s.e.)	p			
1.00	(0.03)		0.99	(0.01)		1.00	(0.04)		0.97	(0.01)	**			
0.98	(0.02)		1.00	(0.01)		0.95	(0.02)	*	1.01	(0.01)				
1.00	(0.59)		0.36	(0.10)	***	0.98	(0.39)		0.66	(0.20)				
1.07	(0.58)		0.88	(0.22)		0.91	(0.49)		1.30	(0.43)				
0.66	(0.13)	*	0.87	(0.23)		1.12	(0.33)		1.65	(0.45)	†			
0.70	(0.17)		0.69	(0.20)		0.88	(0.19)		0.69	(0.16)	†			
	OR 1.00 0.98 1.00 1.07 0.66	Men's reports violence OR (s.e.) 1.00 (0.03) 0.98 (0.02) 1.00 (0.59) 1.07 (0.58) 0.66 (0.13)	Men's reports of violence OR (s.e.) p 1.00 (0.03)	Men's reports of violence Wom of me OR (s.e.) p OR 1.00 (0.03) 0.99 0.98 (0.02) 1.00 1.00 (0.59) 0.36 1.07 (0.58) 0.88 0.66 (0.13) * 0.87	violence of men's viole OR (s.e.) p OR (s.e.) 1.00 (0.03) 0.99 (0.01) 0.98 (0.02) 1.00 (0.01) 1.00 (0.59) 0.36 (0.10) 1.07 (0.58) 0.88 (0.22) 0.66 (0.13) * 0.87 (0.23)	Men's reports of violence Women's reports of men's violence OR (s.e.) p OR (s.e.) p 1.00 (0.03) 0.99 (0.01) p 0.98 (0.02) 1.00 (0.01) p 1.00 (0.59) 0.36 (0.10) *** 1.07 (0.58) 0.88 (0.22) p 0.66 (0.13) * 0.87 (0.23)	Men's reports of violence Women's reports of men's violence Men's volence OR (s.e.) p OR (s.e.) p OR 1.00 (0.03) 0.99 (0.01) 1.00 0.98 (0.02) 1.00 (0.01) 0.95 1.00 (0.59) 0.36 (0.10) *** 0.98 1.07 (0.58) 0.88 (0.22) 0.91 0.91 0.66 (0.13) * 0.87 (0.23) 1.12	Men's reports of violence Women's reports of men's violence Men's reports violence OR (s.e.) p OR (s.e.) p OR (s.e.) 1.00 (0.03) 0.99 (0.01) 1.00 (0.04) 0.98 (0.02) 1.00 (0.01) 0.95 (0.02) 1.00 (0.59) 0.36 (0.10) *** 0.98 (0.39) 1.07 (0.58) 0.88 (0.22) 0.91 (0.49) 0.66 (0.13) * 0.87 (0.23) 1.12 (0.33)	Men's reports of violence Women's reports of men's violence Men's reports of violence OR (s.e.) p OR (s.e.) p OR (s.e.) p 1.00 (0.03) 0.99 (0.01) 1.00 (0.04) 0.98 (0.02) 1.00 (0.01) 0.95 (0.02) $*$ 1.00 (0.59) 0.36 (0.10) $***$ 0.98 (0.39) $*$ 1.07 (0.58) 0.88 (0.22) 0.91 (0.49) $*$ 0.66 (0.13) $*$ 0.87 (0.23) 1.12 (0.33) $*$	Men's reports of violence Women's reports of men's violence Men's reports of violence Wom of men's reports of men's violence Men's reports of men's reports of violence Wom of men's men's reports of men's reporte of men's reports of men's reports of men's reports of men's r	Men's reports of violence Women's reports of men's violence Men's reports of violence Women's reports of men's violence Women's reports of men's violence OR (s.e.) p Q			

Notes: *** $p \le .001$; ** $p \le .01$; * $p \le .05$; $p \le 0.10$. Robust standard errors are in parentheses. Standard errors are adjusted for clustering of data at village level.

Table 13: Multiple logistic regression analysis showing socio-demographic factors associated with men's and women's reporting of IPV in last three months, n=450 couples, Tanzania, 2015

		Emoti	ona	al viole	ence		Economic violence						Any form of violence					
	Mer	n's repor	ts	W	'omen's		Mer	's repoi	rts	W	'omen's		Men	's report	ts of	Women's		
	of	violence	e		reports of men's violence		of	of violence			reports of men's violence			violence	:	reports of men's violence		
	OR	(s.e.)	Þ	OR	(s.e.)	p	OR	(s.e.)	Þ	OR	(s.e.)	p	OR	(s.e.)	p	OR	(s.e.)	ţ
Age (years)																		
Women	1.00	(0.02)		0.99	(0.01)		1.02	(0.02)		1.00	(0.03)		1.02	(0.02)		0.98	(0.02)	
Men	0.97	(0.01)	*	0.98	(0.01)		0.96	(0.02)	*	0.98	(0.02)		0.96	(0.01)	***	0.99	(0.02)	
Secondary or higher level of schooling (ref: no or primary education)				_														
Women	0.57	(0.25)		0.74	(0.29)		1.29	(0.27)		0.76	(0.25)		0.83	(0.30)		0.55	(0.23)	
Men	1.80	(0.56)	†	0.85	(0.20)		0.81	(0.35)		0.75	(0.22)		1.35	(0.46)		0.74	(0.21)	
Women is 1st wife (ref: 2nd or higher)	0.86	(0.23)		1.00	(0.34)		0.82	(0.15)		0.71	(0.18)		0.93	(0.18)		0.98	(0.34)	
Household experienced no food shortages in last 12 months (ref: yes)	1.06	(0.37)		0.59	(0.13)	*	0.81	(0.27)		0.51	(0.14)	*	0.97	(0.24)		0.74	(0.16)	

village level.

Table: Multiple logistic regression analysis showing factors associated with men's IPV perpetration in last three months, n=450 couples, Tanzania, 2015.

·	1	Men's		Women's				
	repo	rts of I	PV	reports of				
				men's IPV				
	OR	(s.e.)	p	OR	(s.e.)	p		
Panel 1: Physical	riolen	ice						
Men's inequitable gender attitudes	1.03	(0.03)		1.05	(0.02)	*		
Men's traumatic childhood	1.10	(0.05)	*	1.08	(0.03)	**		
Men's condom non-use (yes=1)	0.55	(0.16)	*	0.92	(0.18)			
Men's multiple sexual partners (yes=1)	1.19	(0.25)		0.90	(0.28)			
Men's alcohol or drug use (yes=1)	2.01	(0.73)	*	1.65	(0.29)	**		
Panel 2: Sexual vi	olend	e						
Men's inequitable gender attitudes	1.00	(0.02)		1.02	(0.02)			
Men's traumatic childhood	1.11	(0.07)		1.02	(0.03)			
Men's condom non-use (yes=1)	0.77	(0.44)		1.07	(0.27)			
Men's multiple sexual partners (yes=1)	3.06	(0.79)	***	0.90	(0.27)			
Men's alcohol or drug use (yes=1)	1.56	(0.23)	***	0.86	(0.13)			
Notes: *** $p \le .001$; ** $p \le .01$; * $p \le .05$. All	mod	els are	e ad	justeo	d for			
men's and women's highest level of sch	oolin	g atte	nde	d and	l age.			
Standard errors are adjusted for cluster	ing of	f data :	at vi	llage	level.			

Table (cont.): Multiple logistic regression analysis showing factors associated with men's IPV perpetration in last three months, n=450 couples, Tanzania, 2015.

couples, 1 anzama, 2015.								
	I	Men's		W	omen'	s		
	repo	rts of I	PV	reports of				
-				men's IPV				
	OR	(s.e.)	P	OR	(s.e.)	P		
Panel 3: Emotional	viole	nce						
Men's inequitable gender attitudes	1.02	(0.01)		1.01	(0.03)			
Men's traumatic childhood	1.18	(0.06)	**	1.05	(0.03)			
Men's condom non-use (yes=1)	0.56	(0.11)	*	0.89	(0.21)			
Men's multiple sexual partners (yes=1)	1.14	(0.22)		0.79	(0.14)			
Men's alcohol or drug use (yes=1)	2.77	(0.48)	***	1.62	(0.24)	***		
Panel 4: Economic	viole	nce						
Men's inequitable gender attitudes	1.06	(0.02)	***	1.01	(0.02)			
Men's traumatic childhood	1.12	(0.04)	***	1.04	(0.04)			
Men's condom non-use (yes=1)	0.54	(0.13)	*	0.95	(0.24)			
Men's multiple sexual partners (yes=1)	1.29	(0.29)		1.01	(0.29)			
Men's alcohol or drug use (yes=1)	2.20	(0.57)	*	1.44	(0.24)	*		
Panel 5: Any form o	f viol	ence						
Men's inequitable gender attitudes	1.05	(0.02)	**	1.01	(0.02)			
Men's traumatic childhood	1.16	(0.05)	***	1.06	(0.03)			
Men's condom non-use (yes=1)	0.50	(0.14)	*	0.83	(0.22)			
Men's multiple sexual partners (yes=1)	1.63	(0.20)	***	0.68	(0.15)			
Men's alcohol or drug use (yes=1)	2.56	(0.62)	***	1.20	(0.30)			
Notes: $***p \le .001$; $**p \le .01$; $*p \le .05$. All	mod	els are	e ad	justeo	1 for			
men's and women's highest level of sch								
Standard errors are adjusted for cluster		<u> </u>			-			
· · · · · · · · · · · · · · · · · · ·	<u> </u>			<u> </u>				

IPV Attitudinal Changes=f(Hours [25%; 50%; 75%] of Treatment received)

