Transfers, behavior change communication, and intimate partner violence:

Post-program evidence from rural Bangladesh

Shalini Roy
Melissa Hidrobo
John Hoddinott
Akhter Ahmed

September 20, 2017

Funding provided by SVRI and World Bank Group

Motivation

- Intimate partner violence (IPV) is the most pervasive form of violence globally: 1 in 3 women affected in her lifetime (Devries et al 2013)
  - South Asia among the highest in the world: 41% prevalence
- Economic costs range from 1-3% of GDP (e.g., García-Moreno et al. 2015)
  - Women's physical and mental health (e.g., Ellsberg et al. 2008)
  - Intergenerational: poorer child development / nutrition / health, greater likelihood of children entering into abusive relationships (e.g., Aizer 2010; Pollak 2004)
- Recent lit shows cash transfer programs in developing countries can reduce IPV (Angelucci 2008; Bobonis et al 2013; Hidrobo et al 2016; Haushofer and Shapiro 2013; Perova and Vakis 2013)
  - Nearly all target women; have conditionalities (e.g., trainings); are in Latin America
  - ↓ physical violence 5–11 percentage points – although some subgroups found at risk for increase in violence
- Promising given ~1 billion transfer beneficiaries in developing world (DFID 2011)
  - Globally relevant and scalable platform for reducing IPV?

Knowledge gaps

1. **What happens to IPV after transfer programs end?**
   - Most programs do not continue indefinitely

2. **What role do complementary activities play, and do they shape post-program effects on IPV?**
   - For mechanisms, existing studies focus on receipt of transfer income
     - Women's threat point: Ability to leave relationship
     - Poverty-related stress: Trigger for men's violence
   - Complementary group-based activities could matter too (Brody & Vojtkova, 2016)
     - Self-esteem, social capital → women's outlet to leave (Stets 1991)
     - Social capital → detection/"social control" of men's violence (Van Wyk et al. 2003)

3. **Do existing findings generalize globally?**
   - Patriarchal norms and female seclusion prevail in rural Bangladesh (more so than Latin America)

What we do

- Investigate what happens to IPV after social transfers end
- Disentangle effects of transfers from effects of other accompanying features
- Study Bangladesh (South Asia), where IPV is high and norms are conservative

Study setting: Transfer Modality Research Initiative (TMRI)

- Two cluster randomized controlled trials – one in North, one in South – designed by IFPRI and WFP-Bangladesh

- Across the 2 zones, 5000 very poor rural households with a child age 0-23 months randomly assigned to one of five intervention arms

  1. Control: No intervention [North & South]
  2. Cash: 1500 Taka monthly (about $18) [North & South]
  3. Food: Rice, lentils, fortified oil – worth 1500 Taka monthly [North & South]
  4. Cash & Food: 750 Taka + half the food ration monthly [North & South]
  5. Cash & Nutrition BCC (behavior change communication) [North]
     – OR –
     Food & Nutrition BCC [South]

- Transfers and/or BCC targeted to mothers of the child 0-23 months

TMRI Nutrition BCC

- Core component: Weekly group meeting of 9-15 mothers with a trained community nutrition worker – with some combined sessions for other household members
  - Curriculum: basic nutrition, control and prevention of micronutrient deficiencies, IYCF practices, healthcare, maternal nutrition, hygiene
  - Question and answer, discussions, role playing, songs
- Bi-monthly home visits by community nutrition workers: observe household level practice and encourage adoption of positive behaviors
- Monthly meetings with influential community leaders: discuss the messages they were conveying to mothers.

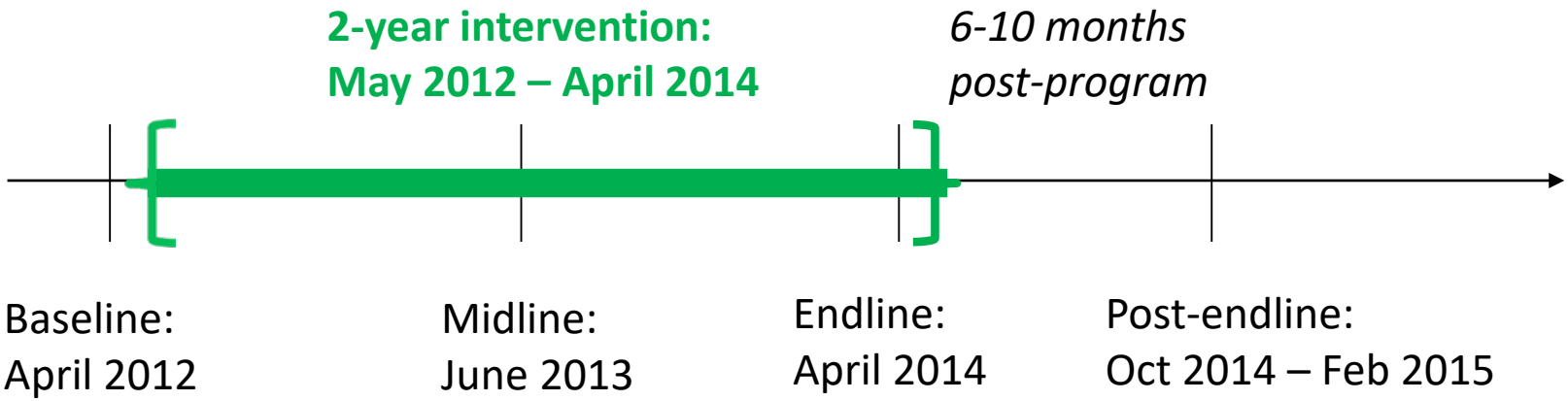
-- No explicit focus on violence/gender

-- But interactive exercises covered negotiating conflict within household re purchase/consumption of non-traditional foods for children

TMRI Nutrition BCC

Photo credit: Aminul Khandaker, IFPRI-Dhaka

“Post-endline” data collection on IPV



- “Post-endline” data collected on subset of overall sample:
  - North: 1) Cash, 2) Cash+BCC, 3) Control
  - South: 1) Food, 2) Food+BCC, 3) Control
- Focused on
  - ECD of baseline index child (0-23m at baseline, ~30-53m at endline)
  - IPV experienced by mother of baseline index child

Post-endline IPV questions

- WHO indicators of emotional/physical IPV
  - Emotional violence:
    - Insulted you or made you feel bad about yourself?
    - Belittled or humiliated you in front of other people?
    - Done things to scare or intimidate you on purpose (e.g. by the way he looked at you, by yelling and smashing things)?
    - Threatened to hurt you or some one you care about?
  - Physical violence:
    - Slapped you or thrown something at you that could hurt you
    - Pushed you or shoved you or pulled your hair?
    - Hit you with his fist or with something else that could hurt you?
    - Kicked you, dragged you or beat you up?
    - Choked or burnt you on purpose?
    - Threatened to use or actually used a gun, knife or other weapon against you?

  -- Ever occurred in last 6 months; frequency (once, a few times, many times)

Estimation approach

- Pool the two RCTs – North and South (Bourey et al. 2015)
  - Transfers: Cash in North / Food in South
  - Transfers+BCC: Cash+BCC in North / Food+BCC in South
  - Control: Control in North / Control in South

- Exploit randomization and longitudinal data to assess
  - Impacts on IPV 6-10 months after program end (single-difference)
  - How these impacts differ for Transfers only vs. Transfers+BCC
  - Plausible mechanisms for impacts

Estimation sample is balanced at baseline across Transfer, Transfer+BCC, and Control arms

	N	Means			P-value of diff.		
		Transfer	Transfer +BCC	Control	Transfer - Control	Transfer+ BCC - Control	Transfer - Transfer+ BCC
Respondent's age	2,514	27.34	27.14	27.42	0.80	0.44	0.58
Respondent is household head	2,514	0.08	0.08	0.07	0.45	0.57	0.85
Respondent is spouse of head	2,514	0.80	0.79	0.83	0.20	0.12	0.74
Respondent is daughter-in-law	2,514	0.10	0.11	0.10	0.96	0.39	0.42
Respondent can read and write	2,514	0.53	0.57	0.56	0.31	0.80	0.21
Respondent's education (yrs)	2,514	3.07	3.25	3.39	0.13	0.54	0.39
Respondent lives with mother-in-law	2,508	0.26	0.28	0.28	0.51	0.94	0.48
Respondent lives with father-in-law	2,508	0.16	0.18	0.18	0.34	0.95	0.33
Number of children 0-5 yrs of respondent	2,500	1.38	1.36	1.37	0.84	0.71	0.59
Number of children 6-15 yrs of respondent	2,500	0.99	0.93	0.97	0.78	0.52	0.37
Household size	2,514	5.12	5.05	5.13	0.88	0.39	0.49
Husband's age	2,242	34.30	33.64	34.10	0.67	0.37	0.20
Husband can read and write	2,514	0.33	0.34	0.34	0.72	0.79	0.52
Husband's education (yrs)	2,242	1.99	2.26	2.09	0.60	0.42	0.18

Core result: 6-10m after program ends, *only* Transfer+BCC significantly reduces physical violence (not Transfer only)

Post-endline impact on prevalence of IPV in preceding 6 months

	Base Specification			Extended controls		
	Any	Emotional	Physical	Any	Emotional	Physical
Transfer	0.01	0.03	0.01	0.01	0.03	0.00
	(0.04)	(0.04)	(0.02)	(0.04)	(0.04)	(0.02)
Transfer + BCC	-0.04	-0.02	-0.07	-0.04	-0.02	-0.06
	(0.04)	(0.04)	(0.02)***	(0.04)	(0.04)	(0.03)**
N	2,514	2,514	2,514	2,228	2,228	2,228
Mean of Control	0.66	0.62	0.26	0.67	0.63	0.27
P: Transfer=Transfer+BCC	0.12	0.21	0.00	0.12	0.17	0.02

Result robust to considering frequency of violence instead (2 alternate constructions)

Post-endline impact on frequency of IPV in preceding 6 months

	"Additive" frequency scale			"Max" frequency scale		
	Any (0-30)	Emotional (0-12)	Physical (0-18)	Any (0-3)	Emotional (0-3)	Physical (0-3)
Transfer	0.10	0.18	-0.07	0.05	0.07	-0.01
	(0.36)	(0.27)	(0.15)	(0.10)	(0.11)	(0.05)
Transfer + BCC	-0.45	-0.04	-0.41	-0.09	-0.06	-0.13
	(0.34)	(0.25)	(0.13)***	(0.10)	(0.10)	(0.05)***
N	2,228	2,228	2,228	2,228	2,228	2,228
Mean of Control	3.76	2.67	1.09	1.45	1.37	0.45
P: Transfer=Transfer+BCC	0.12	0.43	0.01	0.15	0.19	0.01

Result robust to considering individual IPV indicators

Post-endline impact on individual IPV indicators in preceding 6 months

		Mean of Control	Impact of Transfer	Impact of Transfer +BCC	P: Transfer = Transfer+BCC
Emotional	insulted in last 6 months	0.35	-0.01	-0.02	0.67
			(0.04)	(0.04)	
	belittled or humiliated in last 6 months	0.23	0.02	0.02	0.99
			(0.04)	(0.04)	
	done things to scare/intimidate in last 6 months	0.55	0.01	-0.02	0.39
			(0.04)	(0.04)	
	threatened to hurt in last 6 months	0.14	0.02	-0.01	0.29
			(0.03)	(0.03)	
Physical	slapped or thrown something in last 6 months	0.26	-0.00	-0.06	0.02
			(0.02)	(0.03)**	
	pushed or shoved in last 6 months	0.13	-0.01	-0.03	0.22
			(0.02)	(0.02)*	
	hit with fist/something else in last 6 months	0.12	-0.02	-0.05	0.05
			(0.02)	(0.02)***	
	kicked or dragged in last 6 months	0.10	-0.01	-0.04	0.04
			(0.01)	(0.01)***	
	choked or burnt in last 6 months	0.03	-0.01	-0.02	0.11
			(0.01)	(0.01)**	
	threatened to use weapon in last 6 months	0.02	-0.01	-0.02	0.11
			(0.01)	(0.01)**	

Result robust to disaggregating North RCT and South RCT (as are all results presented)

Post-endline impact on prevalence of IPV indicators in preceding 6 months

	NORTH			SOUTH		
	Any	Emotional	Physical	Any	Emotional	Physical
Cash	-0.01	0.00	0.00			
	(0.05)	(0.05)	(0.04)			
Cash + BCC	-0.02	0.01	-0.07			
	(0.05)	(0.05)	(0.04)*			
Food				0.04	0.06	0.00
				(0.06)	(0.06)	(0.03)
Food + BCC				-0.07	-0.05	-0.06
				(0.05)	(0.06)	(0.03)*
Mean of control	0.66	0.62	0.30	0.65	0.61	0.23

Mechanisms

- We find suggestive evidence for three complementary mechanisms, with sustained effects of Transfers+BCC (more so than Transfers only) on

1. Women's threat point
   - Economic resources: ↑ self-reported "control" over money, participation in work
   - Agency: ↑ internal locus of control, self-confidence
   - Social capital [Quotes] (Hoddinott et al, 2017a & 2017b)

2. Men's "cost" of violence
   - Women's social capital → greater detection/social control of physical violence [Quotes]

3. Household's poverty-related stress and frustration
   - ↑ in household wealth at endline (consumption per capita, assets), likely to be sustained (Ahmed et al, 2016)
   - Sustained reductions in poverty → reduced conflict, triggers for violence [Quote]

[next]

Mechanisms: Social capital

Process Evaluation quotes:

1. Improved status or social capital due to BCC

*"Dipali said the **BCC training boosted their family status within the community**. The neighbors regularly come over to hear what the family learned in the latest training session; it has facilitated a position for them within the Hindu community."*

-- Food+BCC recipient

2. Improved status or social capital due to economic resources:

*'Mina feels that after she started receiving the transfer money, **people in the village were more willing to interact with her**. "People respect me now. In the past, when I tried to socialize with them, they were not too friendly. They acted as if they were worried I might ask them for a loan."*

*"**You must at least take some biscuits, if nothing else, for the family you are going to visit**, but we could not even afford to do that. That's why we would not visit anyone."'*

-- Cash recipient

*"It is **embarrassing to visit someone empty-handed**. But now I can go to someone's house when invited."*

-- Food recipient

[back]

Mechanisms: Men's social cost of violence

Other evidence :

Ahmed (2005) re group-based microcredit intervention in Bangladesh:

"Greater visibility of women in the public domain relating to participation in BRAC activities, and changing familial and societal attitude vis-à-vis their activities, may make it **less possible for husbands to get away with violence without incurring social scorn**."

Brody and Vojtkova (2016) re review of eight qualitative studies of self-help groups (SHG) in South Asia:

"In all eights studies, women described how **SHG members put social pressure on men to stop beating wives** and would show up in groups to support women who had been beaten."

[back]

Mechanism: Poverty-related stress

Process Evaluation quote:

"Laisu feels that their improved economic status has led to better relations between her and Shahidul. ***Previously, if she asked Shahidul to buy some food when there was none in the house, he would become angry and hit her****. Now, she says, he is generally quite pleasant and does not fight with her anymore."*

-- Food+Cash recipient

[back]

Conclusions, implications, next steps

- 6-10 months post-program, women in Transfers+BCC experience significant ↓ in prevalence of physical violence relative to control group (6-7 percentage points, or 22% reduction)
  - Transfers only group shows no significant reduction 6-10 months post-program
  - No evidence of IPV increases relative to control in either treatment
  - Robust to alternate specifications
- Suggestive evidence that Transfers and Transfers+BCC may both have reduced IPV during the program, but Transfers group reverted *(not shown)*
- To our knowledge, the first evidence of transfer program's impacts on IPV persisting beyond program end
- Suggestive evidence for Transfers+BCC effect occurring through sustained (1) improvements in women's threat points, (2) increases in men's "cost" of violence, (3) reductions in household poverty-related stress

Conclusions, implications, next steps

- Implications
  - Transfer programs *can* cause sustained reductions in IPV
  - May require additional program activities leading to sustained improvements in women's status in household and community
  - Additional activities may differ by context – in rural Bangladesh, we find that being recent target beneficiary of food or cash is insufficient, but +BCC achieves this
  - Even if project objectives focus on households/children rather than women specifically, nutrition-sensitive social protection programming could have "unintended" benefit of post-program reductions in IPV

- Future research needed to understand whether results generalize to
  - Time greater than 6-10 months since end of transfers
  - Shorter program exposure (indication that effects had not yet emerged at midline)
  - Programs challenging gender norms (vs. transfers "to" women but "for" HH/child)
  - Other sociocultural/geographic contexts or target groups

Thank you

s.roy@cgiar.org

Appendix

Mechanisms: Women's threat point

1. Economic resources:
   a) Women's "control over money": Increased by Transfer+BCC at endline and post-endline; significant difference with Transfer by post-endline

Impact of treatment arms on women's control over money across survey rounds (probit, marginal effects)

	Endline	Post-endline
Transfer	0.04	0.04
	(0.03)	(0.03)
Transfer + BCC	0.08	0.10
	(0.03)***	(0.03)***
N	2,228	2,228
Mean of Control	0.71	0.38
Strata Indicator	X	X
Extended Controls	X	X
P-value: Transfer=Transfer+BCC	0.17	0.04

[back]

Mechanisms: Women's threat point

1. Economic resources:

   b) Women's participation in work: Increased by Transfer+BCC at endline and post-endline; significant difference with Transfer in both rounds

Impact of treatment arms on probability that woman works or does business that brings in cash, food, or assets, across survey rounds (probit, marginal effects)

	Endline	Post-endline
Transfer	0.02	0.00
	(0.02)	(0.02)
Transfer + BCC	0.09	0.05
	(0.02)***	(0.02)**
N	2,228	2,228
Mean of Control	0.82	0.81
P-value: Transfer=Transfer+BCC	0.00	0.03

[back]

Mechanisms: Women's threat point

2. Agency:

   a) Women's locus of control: Increased by Transfer+BCC at endline; significant difference with Transfer

Impact of treatment arms on perceived control over own life, endline (OLS)

	Internal locus of control (first factor)	Self-ranking on 9-step ladder of having rights	Self-ranking on 9-step ladder of ability to change life	Perceive success/failure as own responsibility vs. destiny
Transfer	0.04	0.30	0.27	-0.04
	(0.07)	(0.11)***	(0.12)**	(0.03)
Transfer + BCC	0.19	0.38	0.26	-0.01
	(0.07)***	(0.11)***	(0.12)**	(0.03)
R^2	0.02	0.03	0.03	0.01
N	2,228	2,228	2,228	2,228
Mean of Control	-0.06	2.52	2.78	0.36
P-value: Transfer=Transfer+BCC	0.02	0.48	0.97	0.31

[back]

Mechanisms: Women's threat point

2. Agency:

   b) Women's confidence in spending money and speaking up in public (consistent with evidence on self-help groups – Sanjal 2015, Brody 2017): Increased significantly more by Transfer+BCC than Transfer at endline

Impact of treatment arms on confidence, endline (probit, marginal effects)

	Gained confidence in spending money as a result of program	Gained confidence in speaking up in public as a result of program
Transfer+BCC vs. Transfer	0.06	0.07
	(0.03)**	(0.03)**
N	1,483	1,483
Mean of transfer	0.68	0.66

[back]

Mechanisms: Men's "cost" of violence

Quantitative evidence – inconclusive:

Gain in status (HH/community) or social capital: >60% of Transfer and Transfer+BCC gain respect/status in HH/community at endline; no significant difference at endline, though possible difference after endline?

Impact of treatment arms on confidence and respect, endline (probit, marginal effects)

	Gained respect/status in household as a result of program	Gained respect in community as a result of program
Transfer+BCC vs. Transfer	0.03	0.04
	(0.03)	(0.03)
N	1,483	1,483
Mean of transfer	0.69	0.64

[back]

Mechanisms: Household's poverty-related stress

- At endline, Transfer+BCC causes greater increases in HH food security / resources (likely sustained, given other evidence)

Impact of treatment arms on household resources, endline, pooled North and South (OLS)

	Mean of control	Impact of transfer	Impact of transfer +BCC	P-value: Transfer=Transfer+BCC
Per capita daily caloric intake	1,886.50	46.01 (25.29)*	227.93 (27.48)***	0.00
Monthly food expenditure per capita (nominal)	1,066.03	158.17 (32.88)***	373.66 (30.11)***	0.00
Monthly total expenditure per capita (nominal)	1,695.50	214.51 (47.17)***	425.82 (45.03)***	0.00
Total assets & cash in hand (nominal)	24,192.91	3,701.18 (1,689.10)**	8,985.27 (2,075.11)***	0.01
Savings (nominal)	6,095.24	4,628.35 (1,229.31)***	7,615.58 (1,380.59)***	0.03

[back]

Suggestive evidence of IPV decrease in Transfer *and* Transfer+BCC during intervention

- Since we do not have WHO IPV indicators at endline, cannot show if Transfers also had impacts *during* program – but suggestive evidence
  - Descriptive question at endline suggests Transfer+BCC *and* Transfer experienced less physical abuse by endline [click]
  - Questions at endline and post-endline suggest similar improvements in relationships between Transfer+BCC and Transfer at endline, but greater improvements for Transfers+BCC by post-endline
  - Midterm process evaluation quote (collected Oct-Dec 2012) suggests reductions due to less poverty-related stress:

"Laisu feels that their improved economic status has led to better relations between her and Shahidul. Previously, if she asked Shahidul to buy some food when there was none in the house, he would become angry and hit her. Now, she says, he is generally quite pleasant and does not fight with her anymore."

-- Food+Cash recipient

Suggestive evidence of IPV decrease in Transfer *and* Transfer+BCC during intervention

- At endline, 95% of Transfer and 96% of Transfer+BCC report never experiencing physical abuse or decreased frequency since May 2012

Reported change in frequency of physical abuse since May 2012, endline

	Means		P-value of diff. (Wald test)
	Transfer	Transfer +BCC	
Never experienced or decreased frequency of physical abuse	0.95	0.96	0.37
Never experienced physical abuse	0.71	0.79	0.01
Decreased frequency of physical abuse	0.24	0.17	0.01
Increased frequency of physical abuse	0.01	0.00	0.17
Same frequency of physical abuse	0.04	0.04	0.74

[back]

Robustness

- Social desirability bias? Possible, but likely not driving results
  - No impacts on emotional violence
  - BCC was not focused on physical IPV, unlikely to cause social desirability bias on only that