



# ***Indashyikirwa* programme to reduce intimate partner violence in Rwanda:**

## **Report of findings from a cluster randomized control trial**

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## Abbreviations

|          |   |
|----------|---|
| ACASI    | Audio Computer-Assisted Self-Interviewing                               |
| AUDIT-C  | Alcohol Use Disorder Identification Test – Consumption questions        |
| CA       | Community Activist  |
| CES-D 10 | Center for Epidemiological Studies Depression scale, 10 item short form |
| CI       | Confidence Interval   |
| CONSORT  | Consolidated Standards of Reporting Trials                              |
| cRCT     | Community Randomized Controlled Trial                                   |
| DFID     | Department for International Development                                |
| GBV      | Gender-Based Violence   |
| GEE      | Generalized Estimating Equations  |
| IPV      | Intimate Partner Violence   |
| JoT      | Journeys of Transformation  |
| LMICs    | Lower- and middle-income countries                                      |
| LSHTM    | London School of Hygiene and Tropical Medicine                          |
| MCS      | Multi Country Study on Domestic Violence and Women's Health             |
| NCC      | National Commission for Children  |
| MIGEPROF | Ministry of Gender and Family Promotion                                 |
| OR       | Odds ratio (aOR, adjusted odds ratio)                                   |
| PTSD     | Post traumatic stress disorder  |
| RDHS     | Rwandan Demographic and Health Survey                                   |
| RWAMREC  | Rwandan Men's Resource Centre   |
| RWN      | Rwanda Women's Network  |
| SA MRC   | South African Medical Research Council                                  |
| STI      | Sexually Transmitted Infection  |
| VSLA     | Village Savings and Loan Association                                    |
| WHO      | World Health Organization   |
| WSF      | Women's Safe Space Facilitator  |





## EXECUTIVE SUMMARY

### Introduction

Intimate partner violence (IPV), which includes physical and sexual violence, economic abuse and emotional aggression within intimate relationships, is the most common form of violence against women globally. IPV can lead to a wide range of negative health consequences including depression, anxiety, suicidal ideation, post-traumatic stress disorder, drug and alcohol abuse, serious injuries, and death. The *Indashyikirwa* programme in Rwanda sought to reduce experience of IPV among women and perpetration of IPV among men, and also to shift beliefs and social norms that sustain IPV in communities and couples. The programme also strove to support equitable, non-violent relationships, and ensure more supportive and empowering responses to survivors of IPV seeking assistance. The impact evaluation of *Indashyikirwa* assessed whether and how the programme met these objectives and sought to inform the global best practices in IPV prevention by generating evidence through a rigorous community randomized controlled trial (cRCT).

### Methods

The quantitative impact evaluation of *Indashyikirwa* took the form of a cRCT with randomization at sector level and two separate evaluation components: (1) a cohort of control and intervention couples interviewed at baseline, 12 months, and 24 months, and (2) a pair of cross-sectional community surveys with control and intervention communities implemented at the beginning of the programme and 24 months later. This quantitative impact evaluation was accompanied by in-depth process evaluation and qualitative research with beneficiaries and programme staff.

### Results

#### *Couples' Cohort*

The results from the couples' cohort were extremely positive. Women who participated in the *Indashyikirwa* couples' curriculum, compared to women in the control group, reported a significant reduction in experience of physical and/or sexual IPV at both the interim 12 month point and the final 24 month outcome measure. Men who participated in the couples' curriculum also reported significantly reduced perpetration of physical and/or sexual IPV compared to men in the control group, at both the interim 12 month assessment and with a significant intervention effect sustained at 24 months.

Female participants in the couples' training also reported reduced experience of any physical violence, any forced sex or sexual coercion, any economic abuse, and any emotional aggression at both the 12-month interim assessment and the final 24 month evaluation. Among male participants in the couples' training, there was a significant reduction in perpetration of physical IPV at the interim assessment and a reduction in perpetration of sexual IPV at both the 12 month interim and the 24 month final assessment.

Both women and men from the intervention groups reported improved relationship quality, better communication, and improved conflict management at the 12- and 24 month assessments relative to the control group. Both female and male intervention participants, relative to the control group, reported significant reductions in the number of reasons endorsed to justify wife beating. Women and men who participated in the couples' curriculum also reported improvements in their mental health with significant reductions in depression symptoms at both time points compared to participants in the control group.



The couples' training participants compared to control participants also reported marked improvements in household economic development, with increased cash income and improved food security. They were also more likely to report being "good" or "excellent" health. Couples' programme participants with children in the home reduced their endorsement of physical discipline in raising children compared to the control arm, and also reported a significantly reduced frequency versus control of smacking or beating children in the home. All of these benefits of *Indashyikirwa* versus the control were present at both 12 month interim and 24 month final assessments.

### *Community Surveys & Process Evaluation*

While *Indashyikirwa* showed multiple significant benefits for the participants in the Couples' Curriculum relative to the control couples, there were no measurable differences in IPV between intervention and control communities detected in the community surveys. Similarly, the community surveys were unable to observe differences in intervention versus control communities on acceptability of wife beating, actions to support victims, sources of information on IPV, or help seeking strategies among women recently experiencing IPV. This means that, overall, the impact evaluation was unable to detect a diffusion effect on levels of violence or statistically significant changes in social norms in the broader population of the villages where *Indashyikirwa* was implemented compared to control villages.

However, the Women's Safe Spaces component of the community intervention did have a positive impact. Women's Safe Spaces developed an excellent reputation in the communities with 69% of women and 71% of men reporting that they were aware of the service, and among those who were aware, 93% of women and 96% of men were willing to recommend it to others. Moreover, 72% of women and 74% of men who attended activities or sought services at the women's spaces did so more than once.

Qualitative process evaluation data helped unpack possible reasons for the lack of statistically detectable change at the community level, including limited time for the activism component, especially materials that emphasized behavior changes, potentially limited diffusion, and measurement limitations. The multifaceted qualitative process evaluation that ran in parallel with the survey research found that both programme beneficiaries and frontline staff reported significant community level changes due to the activism components of *Indashyikirwa*, including more gender equitable social norms, reduced IPV, and more empowering responses to IPV survivors, including those by Community Activists, Women's Safe Space facilitators and Opinion Leaders.

### **Lessons Learned**

The research generated important lessons for the *Indashyikirwa* programme, and as well as broader lessons for what works to prevent violence against women and girls. These include the importance of having adequate time for programme development and adaptation. The one-year inception phase of *Indashyikirwa* was critical to design a strong programme, including relevant and appropriate curricula and activism activities. However, the adaptation and roll out of the Community Activism component would have benefitted from additional time.

The findings also underscore the benefits of an approach that combines critical reflection, healthy relationships, positive alternatives to IPV and skills building. They highlight the utility of the "4 types of power"



as a frame for broaching the subject of violence and encouraging power sharing in relationships. *Indashyikirwa*'s emphasis on skills building around communication and conflict resolution, together with opportunities to practice new skills through take home activities, appeared critical to successful behaviour change among couples. The programme's focus on the links between and overlapping consequences of all forms of IPV (physical, sexual, economic, and emotional), and the legal protections in Rwanda against various forms of IPV, also proved important. Both men and women in couples highly valued the opportunity to work together on their relationship, and the joint sessions promoted mutual accountability to the learning the material in the curriculum. In this way, working with men and women at the same time may be less risky and more effective for women who are currently in relationships with men than working with women alone to support their empowerment.

The community-based approach of *Indashyikirwa* heavily emphasized skill development and behaviour change, as well as the goal of wider social norms change. It appeared critical that *Indashyikirwa* supported couples not only to develop skills for their own relationships, but also to take action in their communities, including finding more empowering ways to respond to GBV survivors and safely intervening in conflict. The qualitative data highlights the value of the multiple programme curricula as a platform for activism, especially in rural environments where it is more challenging for staff to regularly monitor and support activists. Community Activists and Women's Safe Space facilitators were extremely dedicated to their activism efforts because of how they had personally benefitted from the curricula, and could draw on each other for support after building rapport through the group training.

## Conclusion

Through demonstrating the significant and multifaceted benefits of *Indashyikirwa*'s couples training curriculum, this study offers critical lessons for IPV prevention in Rwanda and throughout the world. The findings speak to the value of both couples' groups and the community-based strategies as pathways to violence reduction. Although this study did not demonstrate statistically significant diffusion of impact at the community level, it provided important data regarding the time and intensity of exposure that is likely to be required to achieve community-level reductions in violence, and offers important lessons for donors and programme developers about the necessity of allocating additional time and resources to achieve community-wide imapct. Promisingly, the endline community survey underscored the value an popularity of the Women's Safe Spaces. In addition, the qualitative research and process evaluation provided substantial evidence that positive changes were beginning to occur at a community level, including the emergence of more equitable attitudes, greater understanding of IPV and more support for survivors of domestic violence. Looking at all components of the evidence collectively, the data support a trajectory of positive change in communities, which complements the unquestionably strong and wide-ranging benefits demonstrated for direct beneficiaries of the Couples' Curriculum.



## ***Indashyikirwa* programme to reduce intimate partner violence in Rwanda: Report of findings from a cluster randomized control trial**

### **Introduction**

Intimate partner violence (IPV), which includes physical and sexual violence, as well as economic abuse and psychological or emotional aggression within intimate relationships (Buzawa & Buzawa, 2013), is the most common form of violence against women globally (Devries et al., 2013). IPV can lead to a wide range of negative health consequences including depression, anxiety, suicide ideation (Ellsberg et al., 2008), posttraumatic stress disorder (Goodwin, Chandler, & Meisel, 2003), drug and alcohol abuse (Devries et al., 2013), serious injuries, and death. Being a victim of IPV or sexual violence can make women more likely to engage in risky sexual behaviours, including having multiple and concurrent partners, engaging in unprotected sex, sex in conjunction with substance use, and transactional sex, thus exacerbating their risk of acquiring sexually transmitted infections (STIs) including HIV (Abramsky et al., 2012; Dunkle & Decker 2013). IPV can also be associated with increased STI and HIV acquisition among women because men who abuse their partners are also more likely to have outside partners, pay for sex, have a concurrent STI and/or be HIV+ (Silverman et al., 2008; Dunkle et al., 2006; Heise and McGrory, 2016). Other studies have demonstrated how IPV can constrain women's ability to find employment and lead to higher levels of absenteeism and job turnover, lower earnings, and more limited occupational mobility (Goodwin, Chandler, & Meisel, 2003; Swanberg, Logan, & Macke, 2005).

Given the high prevalence and multiple severe consequences of IPV, there is emerging international interest in preventing such violence. However, robust evaluations of interventions to prevent IPV are relatively rare, particularly in low and middle-income countries (Heise, 2011). The majority of evidence assessing effectiveness of such programs comes from high-income countries, especially the United States, and therefore have limited relevance to other economic and cultural settings. Moreover, the evaluations of IPV prevention programs that have taken place in low and middle-income countries (LMICs) are heavily skewed towards a small number of countries with strong research capabilities including India, Bangladesh, South Africa, Brazil and other Latin American countries (Heise, 2011). Rigorous trials of community-based IPV interventions are particularly scarce, given the challenges of evaluating complex interventions designed to catalyse widespread social change and shift harmful social norms (Heise, 2011; Abramsky et al., 2012).

The project described here was designed to address to this gap and inform best practice in IPV prevention in Rwanda by conducting a community randomized controlled trial (cRCT) of *Indashyikirwa: Agents of Change*. *Indashyikirwa* is a multi-component IPV prevention programme funded by DFID Rwanda and implemented by CARE International in Rwanda, the Rwanda Women's Network (RWN) and the Rwanda Men's Resource Centre (RWAMREC) between August 2014 and August 2018. The programme and its evaluation covered 7 districts in the Eastern, Northern and Western provinces of Rwanda, in predominantly rural, widely dispersed communities. In total, the intervention was implemented in 14 sectors, with 14 additional control sectors receiving CARE's standard village savings and loan association (VSLA) programming as a comparison. There were four main components to *Indashyikirwa*:

1. A 5-month participatory training course with couples (Couples' Curriculum);
2. Community Activist training and supported Community Activism with a subset of individuals who completed the Couples' Curriculum;



3. Direct support to survivors of IPV and to other women in the intervention sectors through the Women's Safe Spaces; and
4. Training and engagement of Opinion Leaders.

Overall, the programme sought to reduce experience of IPV among women and perpetration of IPV among men, as well as shifting beliefs and social norms that sustain IPV. The programme also strove to support equitable, non-violent relationships, and ensure more supportive and empowering responses to survivors of IPV.

This study is highly relevant for Rwanda, given the government's significant political will to prevent and respond to IPV. In 2008, the Rwandan government adopted the Prevention and Punishment of Gender-Based Violence Law, which covers all forms of violence and includes a minimum penalty of 6 months in prison (Umubyeyi et al., 2014). Sexual abuse or rape leading to terminal illness or death can lead to life imprisonment, according to article 16 of the GBV law. As of 2012, the Rwandan penal code also criminalized rape within marriage, which can result in imprisonment and fines, according to article 191 and 194 of the penal code. The Rwandan government has supported the development of various initiatives to tackle gender-based violence (GBV) and IPV including prevention clubs in schools and universities; prevention committees at the village level; parents' evening forums to raise awareness, identify, and assist victims of violence; and GBV desks at the Ministry of Defence and National Police (Sleigh & Kimonyo, 2010). In 2009, the Rwanda National Police and Ministry of Health launched the One Stop Centres, which offer free medical care, psychosocial support, and legal services to victims of IPV and child abuse, and emergency accommodation for a few days (Umubyeyi et al., 2016).

Nonetheless, IPV is a persistent phenomenon in Rwanda, as in many other settings. According to the 2014/2015 Rwanda Demographic and Health Survey (RDHS), an estimated 20.7% of women aged 15 to 49 in the general population experienced physical or sexual violence by any husband/male partner in the past 12 months while 40% of ever married women experienced some form of emotional, physical, and/or sexual violence by an intimate partner within their lifetime (NISR, 2016). Women's acceptance of IPV can prevent them from disclosing abuse or seeking formal or informal support (Mannell et al., 2016; Rani, Bonu, & Diop-Sidibe, 2004; Umubyeyi et al. 2014). Other identified barriers to Rwandan women reporting IPV are fear of retaliation from their partner, humiliation, shame, and financial dependency on their partner (Kubai & Ahlberg, 2013; Mannell et al., 2016; Umubyeyi et al., 2016). Moreover, evidence suggests IPV can be rationalized and sustained by a variety of gender norms and expectations (Heise, 2011). Some identified norms underlying IPV in Rwanda include men's perceptions that marriage grants them unconstrained sexual access to their wives, the belief that IPV is a private matter, and the notion that wives should silently endure IPV unless their life is threatened (Umubyeyi et al., 2014; Uwineza & Pearson, 2009). The rigidity of the male headship and provider role in Rwanda can also perpetuate unequal gender relations, partner conflict and/or violence (Stern, Heise & McLean, 2017). As a result, there have been calls in Rwanda for more awareness-raising events and community level dialogues (Uwineza & Pearson, 2009), as well as other efforts to make violence unacceptable and address other harmful social norms.

*Indashyikirwa* is a community-based initiative, built on global evidence around best practices to prevent IPV. The *Indashyikirwa* Couples' Curriculum drew on *Journeys of Transformation (JoT)*— a 17-session participatory curriculum implemented by CARE Rwanda, RWAMREC and Promundo to foster men's support of their partners who were participating in CARE's village savings and loan associations (VSLA). A case-controlled evaluation found that the *JoT* curriculum reduced household-level poverty and had a positive impact on



partners' collaboration around household and care work, family relations, and decision-making (Slegh et al., 2013). *Indashyikirwa* also drew heavily from *SASA!*, a community mobilization programme implemented by CEDOVIP (Center for Domestic Violence Prevention) and Raising Voices in Kampala, Uganda. A randomized control trial of *SASA!* found significant shifts in acceptance of IPV, and a 52% reduction in past-year reports of physical IPV among women (Abramsky et al., 2012; Kyegombe et al., 2014). *Indashyikirwa* also incorporated critical innovations, including working explicitly with married or cohabitating couples, and integrating response for IPV survivors (through establishing the Women's Safe Spaces) into a broader IPV prevention programme.

This rigorous mixed-methods community randomized controlled trial described here allowed us to evaluate the effectiveness of the *Indashyikirwa* programme. These findings are not only beneficial for Rwanda but are highly relevant to the global evidence base around IPV prevention and response.

### **The *Indashyikirwa* Programme**

The *Indashyikirwa* programme is composed of four interlocking components, the Couples' Curriculum, Activist Training and Community Activism, Opinion Leader Training, and Women's Safe Spaces. Each is described in more detail below.

#### **Couples' Curriculum**

The Couples' Curriculum was designed to support equitable non-violent relationships and ran over 21 weekly sessions from November 2015 to May 2016. To be eligible for enrolment in the curriculum, couples had to be married or living together for at least six months, and at least one partner had to be an active CARE VSLA member. In this way, the programme built upon its prior experience with implementing *JoT* through VSLAs as well as promising global evidence suggesting the importance of linking economic empowerment with gender transformative programming (Fulu et al., 2014). The Couples' Curriculum incorporated the *SASA!* programme's emphasis on positive and negative types and uses of power, critical personal reflection and moving incrementally from knowledge, attitudes, skills and actions (Abramsky et al., 2014; Kyegombe et al., 2014). However, it also worked explicitly to address emerging evidence about the triggers of IPV and the importance of skills-building to create positive alternatives to violence. The curriculum explored three major triggers of IPV as identified through the What Works to Prevent Violence against Women evidence review (Heise, 2011). These included disagreements about money, jealousy, and men's alcohol abuse. The curriculum situated these potential conflict areas within gender inequality as the root cause of power imbalances within relationships, and supported skills building to manage these triggers for healthy, equitable relationships. RWAMREC staff (one male and one female facilitator) facilitated the curriculum with fifteen couples per group. In total, eight hundred and forty adult male-female couples completed the curriculum.

#### **Activist Traing and Community Activism with Couples**

Social norms theory highlights the need to diffuse ideas through organized strategies in order to effect change at a community level. CARE and RWAMREC's previous experience implementing the *JoT* curriculum demonstrated that programme participants were eager to engage and support others in their communities. Building on this foundation, *Indashyikirwa* integrated a Community Activism component based on the *SASA!*



model of community mobilization. A subset of four hundred and twenty individuals who completed the couples' curriculum were offered training and then supported to carry out community-based activism for the remaining duration of the programme (up to two years). RWAMREC staff offered Community Activists (CAs) an initial ten-day training in activism skills and then coordinated monthly meetings to offer ongoing support to CAs. RWAMREC staff also offered a series of refresher trainings to CAs around the use of SASA!-adapted activism activities and materials. Criteria to qualify as a CA included completiong of the Couples' Curriculum and an expressed commitment and availability to conduct at least three activism activities per month. More individuals and couples completing the Couples' Curriculum expressed interest in becoming CAs than the project budget could accommodate. As a result, RWAMREC staff encouraged Cas, who were trained as individuals, to involve their spouses in their activism activities and also coordinated occasional meetings with couples who completed the curriculum but were not formally selected as activists. In 2017, RWAMREC staff offered a ten-day Activist Training to an additional eighty partners of CAs who had shown ongoing dedication to the programme, in order to widen the available pool of CAs. Throughout the activism component, RWAMREC staff hosted monthly meetings with CAs to discuss activism activities completed, reflect on successes, and address challenges. RWAMREC staff also conducted regular observations of CAs during activism activities and provided constructive feedback.

### **Training and Engagement of Opinion Leaders**

To ensure an enabling environment for community change, RWN trained approximately forty Opinion Leaders per intervention sector at the beginning of the programme using a two-week curriculum that was also developed for *Indashyikirwa*. RWN identified a diversity of leaders through a process of stakeholder mapping, and participants included local government officials, service providers and religious leaders. The training included a condensed version of the core content from the Couples' Curriculum around gender, power and IPV, and had a dedicated session to encourage Opinion Leaders to identify their own use of 'power over' in their work and relationships, and to consider mobilizing positive power and taking actions in their communities to encourage collective organizing ('power to') to address violence. Throughout the intervention, RWN staff hosted quarterly meetings with trained Opinion Leaders, where they would collectively identify opportunities to support the Community Activist efforts and promote more effective IPV prevention and response on the part of the Opinion Leaders. RWN also offered refresher trainings once a year to re-motivate Opinion Leaders as well as engaging newly-elected local government leaders after elections were held in mid-2016.

### **Women's Safe Spaces**

As many of the programme areas had limited access to or awareness of health, legal, social and counselling services, it was necessary to have dedicated Women's Safe Spaces for survivors of IPV as part of the programme model. Fourteen Women's Safe Spaces, one per sector, were established, building off RWN's experience implementing the Polyclinic of Hope spaces since 1997. These were designed to address the health, psychosocial, shelter and socio-economic needs of survivors of GBV. At each Women's Safe Space, twenty-two facilitators were recruited from the surrounding intervention communities to offer dedicated support to women and men that report IPV in their relationship, educate women about their rights, and refer or accompany individuals who wish to report abuse or seek health or social services. The Women's Safe Space facilitators (WSF) completed a two-week training at the beginning of the programme, facilitated by RWN staff. This included a condensed version of the core content from the Couples' Curriculum around power, gender



and IPV, and dedicated modules on the role of WSFs, participatory facilitation skills, communication skills for providing support, foundations of advocacy and reporting skills. The WSFs received ongoing support and refresher trainings from RWN staff throughout the programme, including how to facilitate participatory dialogues with the support of SASA! adapted communication materials.

## **Methods for the Impact Evaluation**

The impact evaluation took the form of a community randomized controlled trial with randomization at sector level and two separate evaluation components: (1) a cohort of couples interviewed at baseline, 12 months, and 24 months, and (2) a pair of cross-sectional community surveys implemented near the beginning of the programme and again 24 months later.

**(1) Couples Cohort:** In the intervention sectors, all couples who enrolled in the *Indashyikirwa* Couples' Curriculum ( $N = 840$  couples) were invited to participate in the impact evaluation, although participation in the impact evaluation was not required for access to the programme. In control sectors, couples with at least one partner actively participating in CARE's VSLA programme were invited to participate in the control cohort, and a random sample of potential volunteers in each community were selected (targeted enrolment  $N = 840$  couples).

**(2) Community Surveys:** The community survey consisted of a random sample of adult partnered women and adult partnered men from households in villages from the intervention and control clusters ( $N=1400$  women and 1400 men, with 50 men and 50 women surveyed per study sector). Community surveys were conducted before community-level activities commenced and repeated 24 months post-later.

## **Selection of Study Sites and Randomization**

The *Indashyikirwa* intervention was built on the infrastructure of CARE's community-based VSLA groups. We therefore needed to identify sectors with a high density of VSLAs to support the introduction of the *Indashyikirwa* programme. Prior to the involvement of the What Works evaluation team, the programme partners chose 7 districts for implementation, spread across Eastern, Northern and Western provinces. These were chosen based on examination of the RDHS 2010 data to identify areas with high rates of IPV, in combination with a strong presence of CARE's VSLA programme. Southern Province was excluded because CARE and RWAMREC already had a violence prevention project with couples operating in Southern Province.

To identify potential sectors for programme implementation, we began with an existing, office-based roster of VSLAs in the pre-designated districts. From this roster, we identified sectors with a potentially viable concentration of VSLAs. Personnel contracted by CARE Rwanda then went to each identified sector and verified in person that the listed VSLAs existed and were still active. They also identified new VSLAs started by members of the community. For each identified VSLA, they noted the GPS coordinates of the meeting location. We then used these mapped coordinates to identify sectors with a sufficient concentration of VSLAs to support implementation of two distinct Couples' Curriculum training groups within the sector. In most cases, potential sites comprised 2-3 adjacent villages with multiple VSLAs operating per village. Sectors identified as having adequate recruitment potential were reviewed with programme partners to ensure that each identified sector could be equally viable as either an intervention or control area. An independent statistician then randomized the sectors, with stratification by district. The final number of sectors per district ranged from 2 to 6.



## **Selection of Participants for the Impact Evaluation**

### **Couples Cohort**

While the recruitment process necessarily varied between intervention and control sectors, eligibility criteria were identical between arms and the recruitment process was handled in parallel as much as possible. RWAMREC staff handled recruitment of potential intervention participants in the intervention sectors, while recruitment for control participants was handled by Laterite Ltd fieldworkers. In each case, two cells per sector were selected for recruitment based on having a high density of CARE VSLAs.

In both cases, the eligibility criteria for couples to enrol were as follows:

- At least one member of the couple must be an active VSLA member
- They must live together and be married to their current partner for at least 6 months prior to enrolment
- Both partners should be between 18 and 49 years old (the upper limit was set to ensure the programme targeted those most at risk, as IPV often decreases at older ages)
- Have no current plans to move out of the cluster in the next 2.5 years
- Be willing and able to give informed consent for participation in research
- Be willing to give contact information of 3 friends, neighbours, or family members who could be used to contact the participant over the next 2.5 years

In each intervention cell (2 per sector), RWAMREC invited all VSLA members to a community meeting where they announced the forthcoming programme and invited potentially eligible couples to put themselves forward for participation. Participants were then selected by public lottery from among those who volunteered. Participation in the impact evaluation was not mandatory for individuals to enrol in the couples training, but all participants who signed up for the trainings were invited to participate in the impact evaluations.

In the control communities, field staff from Laterite Ltd handled the recruitment in a similar way. They invited all VSLA members in the two identified cells to a community meeting to describe the research and invited eligible couples to volunteer to participate in a series of 3 interviews over a period of 24 months. Where the number of volunteers exceeded the number of couples needed, a random lottery was again conducted to select participants.

All informed consent and data collection activities were handled by field staff from Laterite Ltd. For the baseline round of data collection, all potential participants identified during recruitment were invited to attend appointments at a convenient central location, with separate data collection locations for women and men. Gender-matched staff then took each potential participant through an informed consent process in Kinyarwanda. For the 12-month and 24 month follow up round of data collection, field staff phoned ahead to verify participants' current locations and set up appointments for interviews.

### **Community Surveys**

Community Surveys were implemented in the same cells as the Couples Cohort for both intervention and control. This was done to maximize the possibility of detecting a community diffusion effect in the intervention arm and to ensure a parallel sampling process for the control. One cell per sector was used for the women's community survey and the other for the men's community survey. Which cell was used for women and which for men was randomly determined within each sector. We conducted separate interviews of men and women in order to maximize participant privacy and safety. As community members were not



necessarily going to have long term contact with the couples training or VSLA programme, we wanted to minimize any potential fallout from others, especially a woman's husband or male partner, coming to know that she was asked questions about family violence. The WHO ethical guidelines for conducting prevalence surveys on violence suggest interviewing only men or only women within a single community in order to maximize participant safety (WHO, 2001).

To help control field costs, the community surveys were implemented in only two contiguous villages within each cell. Because we were most interested in assessing potential community diffusion, site identification began by assessing where participants in the couples training or VSLA control group resided. We then purposively selected 2 adjacent villages with the highest concentrations of cohort participants to create geographic clusters for the purposes of data collection. We interviewed 50 adult women or men (25 per village) in each selected area.

Selection of participants was largely identical in intervention and control areas, and all sampling and recruitment were handled by Laterite Ltd in collaboration with *umudugudu* leaders. The relevant *umudugudu* leaders were provided with all relevant documentation and authorizations, and asked to review *umudugudu* registers to identify potentially eligible participants who were likely to meet the following criteria:

- Either male or female depending on the area selected
- Married to or living with current partner for at least 6 months
- Between 18 and 49 years old
- Not directly engaged with *Indashyikirwa* as a Couples Cohort participant, Community Activist, Opinion Leader, or Women's Safe Space facilitator
- Willing and able to give informed consent for participation in research

The community surveys were repeat, cross sectional surveys, so no effort was made to track participants over time. However, participants who were interviewed in the first community survey were eligible to be re-interviewed at endline if they were again randomly selected.

To ensure that we would be able to meet recruitment targets, we sampled 35 people from each *umudugudu* register, including 25 initially sampled respondents and 10 potential replacements should anyone on the initial list be ineligible, unwilling, or unavailable. Field staff then contacted each sampled individual directly to confirm eligibility and willingness and schedule appointments for interviews.

### **Data collection**

By default, all interviews for both the couples' cohort and the community surveys were conducted in Kinyarwanda via ACASI (audio-enhanced computer self-interviewing), a well-established method for allowing populations with limited literacy to self-complete survey instruments. Each participant was provided a handheld digital device (in this case, an iPod touch) which presented questions and potential answer choices on screen while a gender-matched voice read the questions and answer choices aloud to the participant. Participants could then answer by touching the screen. Options to skip or refuse questions were also available.

ACASI generally improves disclosure of potentially sensitive personal data by eliminating the need to verbally disclose sensitive information to another person and providing absolute personal privacy via the use of small screen and headphones. For all interviews, gender-matched interview staff stayed close at hand to assist participants who required clarifications or technical assistance. Participants who were not sufficiently literate to make use of the technology or who for any reason preferred an in-person interview were interviewed face to face by a gender-matched enumerator.



Ethical approval to undertake the study was obtained from the Rwandan National Ethics Committee (RNEC) (REF: 340/RNEC/2015). Secondary approval was also obtained from the South Africa Medical Research Council (REF: EC033-10/2015). A required research visa was also obtained from the National Institute of Statistics Rwanda (REF:0738/2015/10/ NISR). Field staff reviewed a written consent document with each participant and provided an opportunity to ask questions before requesting signature. Potential participants unable to read in Kinyarwanda could ask enumerator or a trusted person of their choice to read the document to them. All potential participants were informed of their guaranteed confidentiality and that no identifying information would be used in presentation of the data.

To compensate for travel, each participant was offered a stipend of RWF 2000 for each interview. Because of the sensitive nature of the data being collected, field teams were accompanied by a female counsellor with expertise in responding to violence and trauma. During the time that the field staff were in the cluster, participants who found any of the questions upsetting or who simply desired support could meet or speak by phone privately with the counsellor. She provided onsite support and follow-up referrals to local services as requested and appropriate. The counsellor also provided regular debriefing sessions for fieldwork staff to minimize the impact of stress and secondary trauma on their work.

### **Measures**

The following tables describe the outcome measures and covariates collected for participants in the couples' cohort and the community surveys.

***Table 1A: Outcome measures assessed for Couples' Cohort participants and included in this analysis***

| <b>Construct</b>   | <b>Women?</b> | <b>Men?</b>  | <b>How assessed</b>   |
|--|---------------|--------------|---|
| <b>Primary outcome: IPV</b>  |               |              |   |
| Physical and/or sexual intimate partner violence, What Works definition, past 12 months  | Experience    | Perpetration | Adapted WHO violence against women instrument; 5 items on physical IPV, 3 items on sexual IPV, covering past 12 months. Answer choices: never, once, a few times, many times. Coded as "yes" per What Works definition is any answer > once and/or multiple items endorsed. |
| <b>Secondary outcomes</b>  |               |              |   |
| <i>Violence related measures</i>   |               |              |   |
| New episodes of physical and/or sexual IPV in past 12 months among women who <u>did report</u> physical and/or sexual IPV from current partner in past 12 months at baseline | Experience    | Perpetration | Any item endorsed more than once or multiple acts of physical and/or sexual violence-endorsed, among women who reported IPV at baseline in the last 12 months, according to the What Works definition.  |
| New episodes of physical and/or sexual IPV in past 12 months among   | Experience    | Perpetration | Any item endorsed more than once or multiple acts of physical and/or sexual violence-endorsed, among women who did not report   |



|  |                |                          |   |
|--|----------------|--------------------------|---|
| women who <b>did not</b> report IPV with current partner in past 12 months at baseline |                |                          | IPV at baseline in the last 12 months, according to the What Works definition.  |
| Any physical IPV   | Experience     | Perpetration             | An affirmative response on any of the 5 physical IPV items  |
| Any forced or coerced sex with main partners (sexual IPV)                              | Experience     | Perpetration             | An affirmative response on any of the 3 sexual IPV items  |
| Economic abuse with main partner   | Experience     | Perpetration             | 3 items, WHO violence against women tools, coded yes for any "once" or higher   |
| Emotional aggression with main partne  | Experience     | n/a                      | 4 items, WHO violence against women tools, coded yes for any "once" or higher   |
| Children in household witnessing IPV   | Yes            | Midline and Endline only | Single item on frequency of children witnessing violence against mother; evaluated for participants who reported children in the household and any physical or sexual IPV |
| Help seeking among survivors of IPV  | Survivors only | n/a                      | 2 items in baseline (ever, past year); 1 item at follow-up (past year)  |
| <i>Relationship quality</i>  |                |                          |   |
| Level of conflict in intimate partnership (Score: 0-24)                                | Yes            | Yes                      | 8 items on potential conflict areas   |
| Quality of conflict management strategies (6-24)                                       | Yes            | Yes                      | 6 items   |
| Couple communication: max score for range of topics and frequency                      | Yes            | Yes                      | 5 items; due to lack of variance, coded as yes for achieving the maximum possible score of 20   |
| Perception of trust, care, and respect in relationship with main partner: max score    | Yes            | Yes                      | 4 items, due to lack of variance, coded as yes for achieving the maximum possible score of 14   |
| <i>Health related</i>  |                |                          |   |
| Depressive symptoms  | Yes            | Yes                      | CES-D 10 (Center for Epidemiological Studies – Depression 10 item short form) (Andresen et al., 1994); raw symptom score coded as possible depression if $\geq 12$        |
| <i>Beliefs and community engagement</i>  |                |                          |   |
| Acceptability of wife beating (0-5)  | Yes            | Yes                      | 5 items as per DHS; coded as 1 point for each "Agree" or "Strongly Agree"   |
| Self-efficacy for community engagement   | Yes            | n/a                      | 2 items (scored 0-6)  |
| Advising neighbours on relationships, past year  | n/a            | Yes                      | Single item   |
| Participating in action to prevent IPV   | Yes            | Yes                      | Single item   |
| <i>Exploratory outcome measures</i>  |                |                          |   |
| <i>Economic outcomes</i>   |                |                          |   |



|   |     |     |                             |
|---|-----|-----|-----------------------------|
| Any income, past month                          | Yes | Yes | Single item                 |
| Household debt payments, past month             | Yes | Yes | Single item                 |
| Hunger score                                    | Yes | Yes | 2 items, range 2-8          |
| Food security                                   | Yes | Yes | score of <4 on hunger score |
| <i>Health-related outcomes</i>                  |     |     |                             |
| Self-rated health                               | Yes | Yes | Single item                 |
| <i>Children</i>                                 |     |     |                             |
| Support physical punishment of children         | Yes | Yes | Single item                 |
| Uses smacking or beating to discipline children | Yes | Yes | Single item                 |

**Table 1B: Socio-demographic and personal history descriptors of Couples' Cohort participants assessed as potential covariates**

| <b>Construct</b>   | <b>Women?</b> | <b>Men?</b>  | <b>How assessed</b>   |
|--|---------------|--------------|---|
| <b>Socio-demographics</b>                                    |               |              |   |
| Age  | Yes           | Yes          | Asked by enumerator, verified against ID when possible  |
| Education  | Yes           | Yes          | Baseline only, single question  |
| Relationship status  | Yes           | Yes          | Single item at baseline, 3 items at follow up to cover partner death or change in relationship  |
| Polygamy   | Yes           | Yes          | Single item for women, 2 for men  |
| Perceived partner infidelity                                 | Yes           | n/a          | Single item   |
| VSLA Membership  | Yes           | Yes          | Single item   |
| Religion   | Yes           | Yes          | Single item, baseline only  |
| Household assets   | Yes           | Yes          | 7 items, weighted score constructed using inverse frequency weights from baseline assessment  |
| Relative earning of husband/wife                             | Yes           | Yes          | Single item   |
| Partner's alcohol use  | Yes           | n/a          | 2 items   |
| Personal drinking  | n/a           | Yes          | Single item screen for past year drinking, 3 items Alcohol Use Disorder Identification Test (AUDIT-C)(Bush et al., 1998; Bradley et al., 2003). Assessed for men at all time points; added for women at midline and endline only. |
| Lifetime sexual partners                                     | Yes           | Yes          | 1 item, baseline only   |
| Past year sexual partners                                    | Yes           | Yes          | 1 item, baseline only   |
| <b>Prior experience of violence</b>                          |               |              |   |
| Experience of physical or sexual IPV with a previous partner | Experience    | Perpetration | 1 screening item each for physical and sexual abuse by previous partner   |
| Age and experience at first sex                              | Yes           | Yes          | Baseline only, 2 items  |



|                                       |     |     |   |
|---------------------------------------|-----|-----|---|
| Sexual violence before age 15         | Yes | n/a | Baseline only, 2 items, only asked of women   |
| Non-partner sexual violence after 15  | Yes | n/a | 2 items at baseline (ever and past year), single item at 12 and 24 months (past year only), only asked of women |
| Beaten often or very often as a child | n/a | Yes | Single item, baseline only, only asked men based on the literature suggesting most important for later IPV risk |
| Witnessed abuse of mother             | n/a | Yes | Single item, baseline only, only asked men based on the literature suggesting most important for later IPV risk |

The above measures for the couples' cohort represent a compromise between the full list of potentially helpful measures and the limitations on survey length imposed by desire to respect participants' time. They also reflect the limitations inherent in the use of the ACASI method for data collection, as this method reads all potential responses to each question aloud. Initial testing with field staff revealed a survey that could take took significantly longer than an hour to complete. Therefore, we had to eliminate some questions we might otherwise have asked, including: asking men about their perpetration of emotional and economic abuse; asking men about their own experience of IPV; and asking women at baseline about their potential abuse of alcohol. Given that we could not afford the space to ask men about both victimization and perpetration, we chose to prioritize the latter because it would yield couple level data and allow us to compare men's and women's reports of violence within the same relationship. We did however include an overall question to women on whether they ever initiated violence in the first instance, against their partner (not analysed here as it was not a registered trial outcome). Finally, we originally did not ask women about alcohol misuse at baseline because the partners suggested this was a question that could be eliminated. Field experience and qualitative interviews, however, later suggested that drinking by women was at times an issue within relationships, so we added questions on women's drinking at mid line and end line after other items that spoke to demographics and childhood experiences that we had asked at baseline could be safely deleted as they did not need to be re-asked. Similarly, we added questions to screen for PTSD (post-traumatic stress disorder) type symptoms to midline and endlineon a request from community partners.

Measures for the community surveys (detailed below) varied less between baseline and endline. Changes for the endline survey involved eliminating measures that had proven not to yield useful data at baseline, and adding a few items on topics such as sources of conflict that were based on findings from the qualitative research and experience of the partners. We also added items to assess experience of intervention components such as the Women's Safe Spaces. All baseline-endline comparisons for the community surveys used only items that were identical between data collection waves.



**Table 2A: Outcome measures assessed for community survey participants and included in this analysis**

| <b>Construct</b>   | <b>Women?</b>  | <b>Men?</b>  | <b>How assessed</b>  |
|--|----------------|--------------|--|
| <b>Primary outcome measures</b>  |                |              |  |
| Physical or sexual intimate partner violence, What Works definition, past 12 months  | Experience     | Perpetration | Adapted WHO violence against women tools; 5 items on physical IPV, 3 items on sexual IPV, covering past 12 months. Answer choices: never, once, a few times, many times. Coded as "yes" per What Works definition is any answer > once or multiple items endorsed. |
| <b>Secondary and exploratory outcome measures</b>  |                |              |  |
| <i>Violence related</i>  |                |              |  |
| New episodes of physical and/or sexual IPV in past 12 months among women who had experienced IPV from current partner at baseline      | Experience     | Perpetration | Any item endorsed more than once or multiple acts of physical and/or sexual violence-endorsed, among women who reported IPV at baseline in the last 12 months, according to the What Works definition.   |
| New episodes of physical and/or sexual IPV in past 12 months among women who have not experienced IPV from current partner at baseline |                |              | Any item endorsed more than once or multiple acts of physical and/or sexual violence-endorsed, among women who did not report IPV at baseline in the last 12 months, according to the What Works definition.   |
| Any physical IPV   | Experience     | Perpetration | An affirmative response on any of the 5 physical IPV items   |
| Any sexual IPV   | Experience     | Perpetration | An affirmative response on any of the 3 sexual IPV items   |
| Economic abuse with main partner, past 12 months   | Experience     | Perpetration | 3 items, WHO violence against women tools, coded yes for any "once" or higher  |
| Emotional aggression   | Experience     | n/a          | 3 items, WHO violence against women tools, coded yes for any "once" or higher  |
| Acceptability of wife beating (0-5)  | Yes            | Yes          | 5 items as per DHS; coded as 1 point for each "Agree" or "Strongly Agree"  |
| Children witnessing IPV  | Yes            | n/a          | Single item on frequency of children witnessing violence against mother  |
| Help seeking among survivors of IPV  | Survivors only | n/a          | 2 items baseline (ever, past year); 1 items at follow-up (past year)   |



**Table 1B: Socio-demographic and personal history descriptors assessed for community survey participants and included in this analysis**

| <b>Construct</b>  | <b>Women?</b> | <b>Men?</b>  | <b>How assessed</b>   |
|---|---------------|--------------|---|
| <b>Socio demographics</b>   |               |              |   |
| Age   | yes           | Yes          | Asked by enumerator, verified against ID when possible  |
| Education   | yes           | Yes          | Single item   |
| Married or living together  | yes           | Yes          | Single item   |
| Polygamy  | yes           | Yes          | Single item for women, 2 for men  |
| Number of children in household   | yes           | Yes          | Single item   |
| Income  | yes           | Yes          | Single item   |
| Household debt payments, past month                                     | yes           | Yes          | Single item   |
| Household assets  | yes           | Yes          | Land ownership, home ownership, access to radio, electricity, bicycle, cellphone  |
| Relative earning of husband/wife  | yes           | Yes          | Single item   |
| Hunger score  | yes           | Yes          | 2 items, range 2-8  |
| Alcohol use   | Yes           | Yes          | Single item screen for past year drinking, 3 items Alcohol Use Disorder Identification Test (AUDIT-C).                    |
| VSLA Membership   | yes           | Yes          | Single item   |
| <b>Prior experience of violence</b>                                     |               |              |   |
| Experience of physical or sexual IPV with a previous partner            | Experience    | Perpetration | 1 screen item each for physical and sexual  |
| Age and experience at first sex   | yes           | Yes          | Baseline only, 2 items, used to assess forced first sex   |
| Beaten often or very often as a child                                   | n/a           | Yes          | Single item, baseline only, men only based on the importance of this as a risk factor for men                             |
| Witnessed abuse of mother   | n/a           | Yes          | Single item, baseline only, men only based on the importance of this as a risk factor for men                             |
| <b>Actions towards IPV</b>  | yes           | Yes          | 4 items and summative score   |
| <b>Questions about Women's Spaces for intervention communities only</b> | Yes           | Yes          | 1 screening question about awareness of women's spaces and 4 detailed follow-ups, asked of intervention participants only |



## Data Analysis

### Data Analysis for the Couples Cohort

All participants were used in the data analysis, excluding only those lost to follow-up (those with only baseline measurements). We checked if there was any differential loss to follow-up by study arm assignment or baseline demographic characteristics and included these as covariates in outcome models. All tests took into account the complex sampling nature of the data, treating sectors as cluster and districts as sampling strata in computation of standard errors.

To evaluate the impact of the intervention at the 24 month follow-up, we performed an intention-to-treat (ITT) analysis using generalized linear mixed effects modelling (multilevel model for change) with Gaussian link function to compare mean scores at end-line for all continuous outcome outcomes and a Poisson link function for count data (Singer JD & Willett, 2003). For the binary outcomes, we used generalized linear mixed effects model with a logit link function to compare the effect of the intervention between the 2 study arms. The fixed effects terms in all models included study arm, data collection wave, and an interaction term for study arm and data collection wave. The district in which data were collected was also treated as a fixed effect to account for possible geographic variation in impact. Sector (the unit of randomization) was added in as the random effects term. The Kenward-Roger method was used to calculate denominator degrees of freedom in order to account for the small sample bias due to small number of clusters in each study arm (Kenward MG & Roger, 1997). The effect of the intervention was assessed at 12 and 24 months (end-line) using linear combinations of the fixed effect terms in the model (study arm, sex and data collection wave). The 12 month findings are considered as interim and the effect at 24 months is considered the final effect. We compared women from the control arm with women from the intervention arm, and men from control arm with men from the intervention arm.

Stata 15.1 was utilized for all data analysis and all comparisons were done at 5% significance level.

### Data Analysis for the Repeated Cross-Sectional Community Surveys

All participants were used in the data analysis. Prior to testing the outcomes, we performed descriptive analyses of the sample at baseline and endline, comparing intervention and control communities. All tests took into account the complex sampling nature of the data, treating sectors as cluster and districts as sampling strata in computation of standard errors.

Analysis of the main outcome measures was by intention to treat using multilevel modelling. We used multilevel, mixed-effects logistic regression to test for differences in binary outcome measures between the treatment and control groups over time. Multilevel mixed effects linear regression was used to compare mean scores for the continuous outcome measures between the groups across the two waves of data collection. The fixed effects terms included study arm, data collection wave, and an interaction term for study arm and data collection wave. The district in which data were collected was also treated as a fixed effect and sector (the unit of randomization) was added in as the random effects term. All models included age, education, and asset ownership as covariates. Models for IPV outcomes (physical, sexual, emotional, economic violence) included additional covariates. For women, all models testing for IPV outcomes controlled for experience of physical or sexual IPV with a previous partner, first sexual experience before the age of fifteen and forced first sexual experience. Prior perpetration of physical or sexual IPV, witnessing abuse of mother, and experience of severe physical punishment in childhood were included as covariates for all models with IPV related outcomes



among male participants.

Stata 15.1 was utilized for all data analysis and all comparisons were done at 5% significance level.

### **Qualitative Research and Process Evaluation**

In addition to the quantitative components, the team conducted extensive qualitative research to assess the impact of the programme and processes of change. This work has been detailed elsewhere (Stern et al., 2018) but the activities are summarized here for reference as the qualitative research findings are an essential resource for interpreting and contextualizing the numerical results. With the exception of the interviews with RWAMREC and RWN staff, all qualitative evaluation research took place in one sector per province. The sectors for the qualitative research were purposefully selected to represent a diversity of environments including rural and peri-urban locations.

***Table 3: Summary of qualitative impact evaluation research interviews***

| Participants   | Number Interviewed  | Timing  | Recruitment Criteria  | Summary of Interview Questions  |
|--|---|---|---|---|
| <b>Baseline Interviews (Couples, Opinion Leaders, Community Activists) and Round One Interviews (Women's Space Facilitators, Women's Space Attendees, RWN/RWAMREC Staff)</b> |   |   |   |   |
| Couples who completed curriculum (partners interviewed separately)   | <b>30</b> = 15 men and 15 women (5 men and 5 women per intervention province) | November 2015 (after enrolling but before participating in couples' curriculum)     | Diversity of informally and formally married couples recruited by RWAMREC staff, to represent primary distinction among couples enrolled in curriculum  | Couples' expectations of programme, experiences of conflict and IPV, communication skills and joint decision-making |
| Opinion Leaders  | <b>9</b> = 3 Opinion Leaders per intervention province                        | November 2015 (after enrolling but before participating in Opinion Leader Training) | Diversity purposefully recruited by RWN staff including government leaders, members of GBV committees or National Women's Council and religious leaders | Expectations of programme, experiences around IPV prevention and response   |
| Women's Safe Space Facilitators  | <b>3</b> = 1 Women's Safe Space facilitator per intervention province         | May 2016 (after completing programme training and beginning role as facilitators)   | 1 facilitator per Women's Safe Space recruited by RWN staff   | Motivations to be facilitators and their impressions of the programme training                                      |
| Women's Safe Space Attendees   | <b>6</b> = Female Women's Safe Space attendees (2 per intervention province)  | September 2016  | 2 attendees per Women's Safe Space recruited by RWN staff   | Why they visit the Women's Safe Spaces, and the difference the spaces make in their lives                           |
| Community Activists  | <b>12</b> = 6 male and 6 female   | November 2016 (after  | Activists who had not participated in couples'  | Impressions of the activism training, what  |



|  |  |   |  |  |
|--|--|---|--|--|
|  | activists (2 men and 2 women per intervention province)  | completing activism training and beginning activist activities)   | qualitative interviews, recruited by RWAMREC staff   | motivated them to continue as activists, what they had been doing recently as activists, and whether they had faced any challenges                             |
| RWAMREC and RWN Staff  | <b>15 = 9</b><br>RWAMREC staff and 6 RWN staff across intervention sectors   | May 2016 (after delivering the couples, Opinion Leaders and women's space facilitators curriculum)            | Diversity of field officers and field supervisors across various intervention sectors and districts  | Successes and lessons learned from leading Opinion Leader and women's space facilitator training (RWN staff), and from the Couples' Curriculum (RWAMREC staff) |
| <b>Midline Interviews (Couples, Opinion Leaders) and Round Two Interviews (Women's Space Facilitators, Women's Space Attendees, RWN/RWAMREC Staff)</b> |  |   |  |  |
| Couples who competed curriculum (partners interviewed separately)  | <b>28 = 14</b> men and 14 women (as one couple lost to follow up)  | May 2016 (immediately after completing couples' curriculum)   | Same sub-set as baseline   | Whether and how involvement with <i>Indashyikirwa</i> has impacted their relationship  |
| Opinion Leaders  | <b>9 = 6</b> Opinion Leaders (as 3 lost to follow up or replaced in local elections) and 3 added to replace those lost to follow up              | November 2016 (one-year baseline) for same sub-set as baseline and June 2017 for 3 additional Opinion Leaders | Same sub-set as baseline for 6 Opinion Leaders and 3 Opinion Leaders were added to sample after having been actively engaged in programme and completed programme refresher training | Impressions of <i>Indashyikirwa</i> training and whether involvement in the programme has influenced actions related to IPV prevention and response            |
| Women's Safe Space Facilitators  | <b>3 = 1</b> Women's Safe Space facilitator per intervention province  | June 2017   | 1 facilitator per Women's Safe Space selected (different from those interviewed at Round 1)  | Perceived impact of the Women's Safe Spaces and the support they receive as facilitators   |
| Women's Safe Space Attendees   | <b>8 = 6</b> female Women's Safe Space attendees (2 per province) and 2 male Women's Safe Space attendees (1 in Western, 1 in Northern Province) | June 2017   | 2 female attendees per Women's Safe Space selected (different from those interviewed at Round 1) and 2 male attendees recruited by RWN staff   | Impressions of the Women's Safe Spaces, differences they have made for individuals and in communities, how men are engaged in the Women's Safe Spaces          |
| RWAMREC and RWN Staff  | <b>14 = 8</b><br>RWAMREC staff and 6 RWN staff   | May 2017  | Diversity of field officers and field supervisors across various intervention sectors and districts  | Successes and challenges in engaging Opinion Leader and supporting the Women's Safe Spaces (RWN staff), and from training Community                            |



|   |   |                                    |  |  |
|---|---|------------------------------------|--|--|
|   |   |                                    |  | Activists and supporting Community Activism with trained couples (RWAMREC staff)   |
| <b><u>Endline Interviews (Couples, Opinion Leaders, Community Activists) and Round 3 Interviews (Women's Space Facilitators, Women's Space Attendees)</u></b> |   |                                    |  |  |
| Both Partners of Trained Couples  | <b>28</b> = 14 men and 14 women (5 men and 5 women in Eastern and Western Province, 4 men and 4 women in Northern Province) | May 2017 (one-year midline)        | Same sub-set as baseline   | Whether and how involvement with <i>Indashyikirwa</i> has continued to impact their relationships including if any reversals or difficulties have occurred                         |
| Opinion Leaders   | <b>8</b> Opinion Leaders (1 lost to follow up)  | May 2018 (one-year post endline)   | Same sub-set as baseline   | Impressions of Opinion Leader engagement and whether involvement in programme has influenced actions for IPV prevention and response   |
| Women's Safe Space Facilitators   | <b>3</b> = 1 Women's Safe Space facilitator per intervention province   | May 2018                           | 1 facilitator per Women's Safe Space selected (different from those interviewed at Round 1 and 2) recruited by RWN staff | Perceived impact of the Women's Safe Spaces and the support they receive as facilitators   |
| Women's Safe Space Attendees  | <b>4</b> = 1 female Women's Safe Space attendee in Western and Northern Province, 2 female attendees in Eastern Province    | May 2018                           | 4 female attendees selected (different from those interviewed at Round 1 and 2) recruited by RWN staff                   | Impressions of the Women's Safe Spaces, differences they have made for individuals and in communities  |
| Community Activists   | <b>12</b> = 6 male and 6 female Community Activists (2 men and 2 women per intervention province)                           | May 2018 (18 months post baseline) | Same sub-set as baseline   | Impressions of ongoing activism training and support received, what they had been doing recently as activists, perceived impact of activism, and whether they faced any challenges |

### Couples Cohort

#### Enrolment and baseline socio-demographic measures

In total, 1,660 women (828 intervention and 832 control) were successfully recruited and enrolled in the impact evaluation at baseline, representing 98.8% of the target of 1,680. Overall, 19 out of 28 sectors had the maximum 60 possible women enrolled, with a range of 54-59 women enrolled in the remaining sectors. Among men, 1,651 participants (821 intervention and 830 control) were successfully recruited and enrolled in the impact evaluation, representing 98.3% of the target of 1,680. Overall, 12 out of 28 sectors had the maximum 60 possible men enrolled, with a range of 53-59 men enrolled in the remaining sectors. The enrolled participants comprised 1,645 couples (821 intervention and 824 control) with 15 women (7 intervention, 8 control; 0.9% of female participants) and 6 men (0.4% of male participants, all control) whose partners did not participate in the impact evaluation.

The socio-demographic characteristics of the women at baseline are described in Table 4, while the characteristics of the men are described in Table 5. In both cases, the only significant difference between study arms at enrolment was that both women and men in the control arm were more likely to report that both spouses belonged to a VSLA. Among women, 35.3% of intervention vs 47.6% of control participants reported that both spouses were VSLA members ( $p = .02$ ); whereas among men, the difference was 46.7% intervention vs 57.4% control ( $p=.04$ ). This likely reflects higher interest in participation among households in control communities with stronger ties to the VSLA programme. Based on consultations with VSLA programme staff, the discrepancy between women's and men's reports of who participates in the VSLAs is thought to reflect gender-based differences in perceptions of whether VSLA membership is an individual or household characteristic.

**Table 4: Baseline sociodemographic characteristics of female participants in the couples' cohort, comparing intervention and control participants**

|                           | Control      |                  | Intervention |                  | <b>p-value</b> |
|---------------------------|--------------|------------------|--------------|------------------|----------------|
|                           | <b>N=832</b> | <b>N=828</b>     | <b>N</b>     | <b>% or mean</b> |                |
| <b>Variable</b>           | <b>N</b>     | <b>% or mean</b> | <b>N</b>     | <b>% or mean</b> |                |
| <b>Age of respondents</b> |              |                  |              |                  |                |
| Mean age                  |              | 32.5             |              | 32.9             | 0.45           |
| <=25yrs                   | 142          | 17.10%           | 123          | 14.90%           | 0.45           |
| 26-30yrs                  | 203          | 24.40%           | 191          | 23.10%           |                |
| 31-35yrs                  | 221          | 26.60%           | 237          | 28.60%           |                |
| 36-40yrs                  | 169          | 20.30%           | 159          | 19.20%           |                |
| >=40yrs                   | 97           | 11.70%           | 118          | 14.30%           |                |
| <b>Education</b>          |              |                  |              |                  |                |
| No school                 | 151          | 18.40%           | 137          | 16.80%           | 0.67           |
| Primary (complete)        | 548          | 66.80%           | 567          | 69.70%           |                |
| Secondary (complete)      | 95           | 11.60%           | 81           | 10.00%           |                |
| Other schooling           | 26           | 3.20%            | 29           | 3.60%            |                |



| <b>Relationship status</b>                                 |     |            |     |            |             |
|--|-----|------------|-----|------------|-------------|
| Married  | 523 | 62.90%     | 573 | 69.20%     | 0.15        |
| Living as if married                                       | 309 | 37.10%     | 255 | 30.80%     |             |
| Husband has other wives                                    | 97  | 11.70%     | 88  | 10.60%     | 0.6         |
| Partner definitely or probably has sex with other partners | 236 | 28.40%     | 269 | 32.50%     | 0.17        |
| <b>VSLA Membership</b>                                     |     |            |     |            |             |
| Wife   | 302 | 36.30%     | 409 | 49.40%     | <b>0.02</b> |
| Husband  | 134 | 16.10%     | 127 | 15.30%     |             |
| Both   | 396 | 47.60%     | 292 | 35.30%     |             |
| <b>Religion</b>  |     |            |     |            |             |
| Catholic   | 303 | 36.50%     | 340 | 41.10%     | 0.52        |
| Protestant   | 262 | 31.50%     | 207 | 25.00%     |             |
| Adventist  | 118 | 14.20%     | 132 | 16.00%     |             |
| Muslim   | 14  | 1.70%      | 7   | 0.90%      |             |
| Other/No religion  | 134 | 16.10%     | 141 | 17.10%     |             |
| <b>Household assets</b>                                    |     |            |     |            |             |
| Bicycle  | 269 | 32.70%     | 273 | 33.30%     | 0.93        |
| Cellphone  | 657 | 79.70%     | 668 | 81.50%     | 0.57        |
| Radio  | 541 | 65.70%     | 535 | 65.20%     | 0.92        |
| Electricity  | 151 | 18.30%     | 180 | 22.00%     | 0.49        |
| HH has livestock   | 486 | 58.40%     | 477 | 57.60%     | 0.84        |
| HH owns land   | 534 | 64.20%     | 521 | 62.90%     | 0.75        |
| HH owns home   | 713 | 85.70%     | 721 | 87.10%     | 0.44        |
| Weighted assets score (range 0-15.2)                       |     | 6.90 (.31) |     | 7.09 (.29) | 0.65        |
| <b>Who earns more</b>                                      |     |            |     |            |             |
| Husband more   | 377 | 45.40%     | 363 | 43.80%     | 0.58        |
| About the same   | 57  | 6.90%      | 71  | 8.60%      |             |
| Wife more  | 71  | 8.50%      | 81  | 9.80%      |             |
| Do all work together                                       | 326 | 39.20%     | 313 | 37.80%     |             |
| <b>Partner's Alcohol Use</b>                               |     |            |     |            |             |
| Does partner drink alcohol?                                |     |            |     |            |             |
| No   | 232 | 27.90%     | 213 | 25.70%     | 0.61        |
| Yes  | 535 | 64.30%     | 536 | 64.70%     |             |
| Don't know   | 65  | 7.80%      | 79  | 9.50%      |             |
| Has seen partner drunk (past 12m)                          | 354 | 42.60%     | 388 | 47.00%     | 0.18        |



| <b>Woman's previous experience of violence</b>         |     |        |     |        |      |
|--|-----|--------|-----|--------|------|
| Experienced physical or sexual IPV with a past partner | 97  | 11.70% | 118 | 14.40% | 0.21 |
| Experience at first sex                                |     |        |     |        |      |
| Willing  | 496 | 59.60% | 470 | 56.80% | 0.66 |
| Persuaded  | 134 | 16.10% | 149 | 18.00% |      |
| Forced   | 202 | 24.30% | 208 | 25.20% |      |
| Forced sex by non-partner (age >= 15)                  | 133 | 16.10% | 138 | 16.70% | 0.77 |
| Forced sex by non-partner (age <15)                    | 89  | 10.70% | 80  | 9.70%  | 0.51 |
| Unwanted sexual touching (age <15)                     | 208 | 25.10% | 213 | 25.70% | 0.82 |
| Any prior sexual violence*                             | 404 | 48.80% | 406 | 49.10% | 0.94 |
| <b>Sexual history</b>                                  |     |        |     |        |      |
| Lifetime sex partners                                  |     |        |     |        |      |
| 1  | 656 | 78.90% | 653 | 79.10% | 0.52 |
| 2  | 122 | 14.70% | 104 | 12.60% |      |
| 3 or more  | 54  | 6.50%  | 69  | 8.40%  |      |
| Number of sex partners in past 12 months               |     |        |     |        |      |
| 1  | 807 | 97.00% | 789 | 95.60% | 0.28 |
| 2 or more  | 25  | 3.00%  | 36  | 4.40%  |      |

\* forced first sex, forced sex at any age, unwanted sexual touch at age <15

**Table 5: Baseline sociodemographic characteristics of male participants in the couples' cohort, comparing intervention and control participants**

| Variable             | Control |        | Intervention |           | p-value |
|----------------------|---------|--------|--------------|-----------|---------|
|                      | N       | N=832  | N            | % or mean |         |
| Mean age             |         | 35.4   |              | 35.7      | 0.55    |
| <=25yrs              | 68      | 8.20%  | 55           | 6.70%     | 0.82    |
| 26-30yrs             | 161     | 19.40% | 153          | 18.60%    |         |
| 31-35yrs             | 218     | 26.30% | 228          | 27.80%    |         |
| 36-40yrs             | 159     | 19.20% | 157          | 19.10%    |         |
| >=40yrs              | 224     | 27.00% | 228          | 27.80%    |         |
| <b>Education</b>     |         |        |              |           |         |
| No school            | 121     | 14.80% | 144          | 17.70%    | 0.41    |
| Primary (complete)   | 552     | 67.30% | 536          | 65.90%    |         |
| Secondary (complete) | 95      | 11.60% | 83           | 10.20%    |         |
| Other schooling      | 52      | 6.30%  | 50           | 6.20%     |         |



| <b>Relationship status</b>   |     |        |     |        |             |
|--|-----|--------|-----|--------|-------------|
| Married  | 530 | 63.90% | 565 | 68.80% | 0.29        |
| Living as if married   | 300 | 36.10% | 256 | 31.20% |             |
|  |     |        |     |        |             |
| Man has other wives  | 45  | 5.40%  | 48  | 5.90%  | 0.75        |
|  |     |        |     |        |             |
| <b>VSLA Membership</b>   |     |        |     |        |             |
| Wife   | 198 | 23.90% | 288 | 35.10% | <b>0.04</b> |
| Husband  | 155 | 18.70% | 150 | 18.30% |             |
| Both   | 477 | 57.50% | 383 | 46.70% |             |
|  |     |        |     |        |             |
| <b>Religion</b>  |     |        |     |        |             |
| Catholic   | 333 | 40.10% | 378 | 46.00% | 0.54        |
| Protestant   | 223 | 26.90% | 172 | 21.00% |             |
| Adventist  | 116 | 14.00% | 131 | 16.00% |             |
| Muslim   | 14  | 1.70%  | 8   | 1.00%  |             |
| Other/No religion  | 144 | 17.40% | 132 | 16.10% |             |
|  |     |        |     |        |             |
| <b>Household assets</b>  |     |        |     |        |             |
| Bicycle  | 270 | 32.50% | 273 | 33.30% | 0.92        |
| Cellphone  | 662 | 79.80% | 668 | 81.50% | 0.58        |
| Radio  | 545 | 65.70% | 535 | 65.20% | 0.91        |
| Electricity  | 153 | 18.40% | 180 | 22.00% | 0.5         |
| HH has livestock   | 484 | 58.50% | 487 | 59.50% | 0.79        |
| HH owns land   | 559 | 67.40% | 560 | 68.20% | 0.84        |
| HH owns home   | 737 | 88.90% | 735 | 89.60% | 0.65        |
| Weighted assets score (range: 0-15.05)                                       |     | 6.88   |     | 7.12   | 0.58        |
|  |     |        |     |        |             |
| <b>Who earns more</b>  |     |        |     |        |             |
| Husband more   | 232 | 28.00% | 205 | 25.00% | 0.66        |
| About the same   | 70  | 8.40%  | 63  | 7.70%  |             |
| Wife more  | 69  | 8.30%  | 77  | 9.40%  |             |
| Do all work together   | 458 | 55.30% | 475 | 57.90% |             |
|  |     |        |     |        |             |
| <b>Alcohol Use (past 12 months)</b>  |     |        |     |        |             |
| None   | 469 | 56.50% | 437 | 53.30% |             |
| Some drinking  | 249 | 30.00% | 249 | 30.40% |             |
| Problematic drinking (AUDIT-C > 4)   | 112 | 13.50% | 134 | 16.30% |             |
|  |     |        |     |        |             |
| AUDIT-C Score (mean)   |     | 1.36   |     | 1.45   | 0.57        |
| <i>AUDIT-C Score assigned as zero for men who did not drink in past year</i> |     |        |     |        |             |



| <b>Man's previous perpetration or experience of violence</b> |  |     |        |     |        |
|--|--|-----|--------|-----|--------|
| Physical or sexual IPV with a past partner                   |  | 91  | 11.00% | 113 | 13.80% |
|  |  |     |        |     | 0.17   |
| Experience at first sex                                      |  |     |        |     |        |
| Willing  |  | 693 | 83.60% | 665 | 81.40% |
| Persuaded  |  | 97  | 11.70% | 118 | 14.40% |
| Forced   |  | 39  | 4.70%  | 34  | 4.20%  |
| Witnessed mother being beaten by father or another man       |  | 356 | 42.90% | 365 | 44.60% |
| Beaten often or very often as a child                        |  | 236 | 28.40% | 230 | 28.10% |
|  |  |     |        |     | 0.61   |
|  |  |     |        |     | 0.9    |
|  |  |     |        |     |        |
|  |  |     |        |     |        |
|  |  |     |        |     |        |
| <b>Sexual history</b>  |  |     |        |     |        |
| Lifetime sex partners  |  |     |        |     |        |
| 1  |  | 393 | 47.40% | 400 | 48.90% |
| 2  |  | 191 | 23.00% | 185 | 22.60% |
| 3 or more  |  | 245 | 29.60% | 233 | 28.50% |
|  |  |     |        |     |        |
| Number of sex partners in past 12 months                     |  |     |        |     |        |
| 1  |  | 725 | 87.90% | 715 | 88.50% |
| 2 or more  |  | 100 | 12.10% | 93  | 11.50% |

### Cohort retention

Overall cohort retention is illustrated in Table 6. At 12 months, overall retention of women was 99.0%, (N= 1,643) with slightly more intervention than control participants interviewed (99.6% vs 98.3%, p=.004). At 24 months, 97.4% of women were retained (N=1,617), again with slightly higher retention in the intervention than control arm (98.4% vs 96.4%, p=.007). Among men, overall retention at 12 months was 96.7%, (N= 1,96) with no significant difference between study arms. At 24 months, 93.0% of men were retained (N=1,536), again with no difference between study arms.

**Table 6: Couples Cohort CONSORT Data**

| Women                            |   |         | Men                                    |   |         |
|----------------------------------|---|---------|--|---|---------|
| Intervention                     | Control                                     | p-value | Intervention                           | Control                                 | p-value |
| <b>Baseline</b>                  |   |         |  |   |         |
| 828                              | 832   |         | 821                                    | 830                                     |         |
| <b>12 months</b>                 |   |         |  |   |         |
| 825 (99.6%)                      | 818 (98.3%)                                 | .004    | 793 (96.6%)                            | 803 (96.7%)                             | .85     |
| <i>3 lost</i>                    | <i>14 lost</i>                              |         | <i>28 lost</i>                         | <i>27 lost</i>                          |         |
| <i>1 refused</i>                 | <i>2 passed away</i>                        |         | <i>4 passed away</i>                   | <i>2 passed away</i>                    |         |
| <i>2 moved out of study area</i> | <i>7 outside study follow-up area</i>       |         | <i>1 refused</i>                       | <i>12 outside study follow-up area</i>  |         |
|                                  | <i>3 unavailable (2 in jail, 1 unknown)</i> |         | <i>10 outside study follow-up area</i> | <i>6 unavailable (4 in jail, 2 ill)</i> |         |



|  |  |      |  |   |     |
|--|--|------|--|---|-----|
|  | 2 untraceable  |      | 9 unavailable (5 in jail, 2 ill, 1 unknown)<br>1 impersonator<br>4 untraceable   | 1 impersonator<br>6 untraceable   |     |
| <b>24 months</b>   |  |      |  |   |     |
| 815 (98.4%)  | 802 (96.4%)  | .007 | 763 (92.9%)  | 773 (93.1%)   | .81 |
| 2 recovered<br><br>(1 agreed, 1 moved back)  | 3 recovered<br><br>(1 moved back, 2 successfully traced)                                     |      | 14 recovered<br><br>(1 not fake at end; 6 moved back, 2 out of jail, 1 became available, 1 no longer ill, 3 successfully traced) | 11 recovered<br><br>(1 not fake at end, 5 moved back, 2 out of jail, 3 successfully traced)   |     |
| 12 lost<br><br>2 passed away, 6 outside follow-up area, 2 unavailable (1 ill, 1 unknown) 2 untraceable | 19 lost<br><br>1 passed away<br>1 refused<br>16 moved out of follow-up area<br>1 untraceable |      | 44 lost<br><br>1 passed away<br>32 moved out of follow-up area<br>10 unavailable (2 ill, 6 in jail, 2 unknown)<br>1 untraceable  | 41 Lost<br><br>2 passed away,<br>4 refused<br>4 unavailable (3 jail, 1 unknown)<br>29 moved outside follow-up area<br>2 untraceable |     |

Tables 7 and 8 describe baseline demographic characteristics associated with loss to follow-up among women and men, respectively. Participants were considered lost to follow-up if they did not participate in the post 24 month interview (endline). The 30 participants (5 women, 25 men) who missed the 12 month interview but were successfully re-interviewed at 24 months, were considered to have been retained. Among women, those lost to follow-up had lower household assets scores at baseline and were more likely to have reported experiences of physical or sexual intimate partner violence with a previous partner (20.9% vs 12.8%, p=.05). Among men, those lost to follow-up were more likely to have been living together as married vs. married legally at baseline (p = .003), had lower baseline scores on household assets (p=.02), and were more likely to report being beaten often or very often as a child (p=.02).

**Table 7: Female couples' cohort participants comparing baseline characteristics of those retained to those lost to follow-up**

|                           | Retained |           | Lost |           |      |  |
|---------------------------|----------|-----------|------|-----------|------|--|
|                           | N=1617   |           | N=43 |           |      |  |
|                           | N        | % or mean | N    | % or mean |      |  |
| <b>Age of respondents</b> |          |           |      |           |      |  |
| Mean age                  |          | 32.7      |      | 31.6      | 0.18 |  |
| <=25yrs                   | 256      | 15.80%    | 9    | 20.90%    | 0.67 |  |
| 26-30yrs                  | 384      | 23.80%    | 10   | 23.30%    |      |  |
| 31-35yrs                  | 447      | 27.60%    | 11   | 25.60%    |      |  |
| 36-40yrs                  | 318      | 19.70%    | 10   | 23.30%    |      |  |
| >=40yrs                   | 212      | 13.10%    | 3    | 7.00%     |      |  |



|  |      |           |    |           |              |
|--|------|-----------|----|-----------|--------------|
|  |      |           |    |           |              |
| <b>Education</b>   |      |           |    |           |              |
| No school  | 281  | 17.60%    | 7  | 17.10%    | 0.36         |
| Primary (complete)   | 1090 | 68.40%    | 25 | 61.00%    |              |
| Secondary (complete)                                       | 168  | 10.60%    | 8  | 19.50%    |              |
| Other schooling  | 54   | 3.40%     | 1  | 2.40%     |              |
|  |      |           |    |           |              |
| <b>Relationship status</b>                                 |      |           |    |           |              |
| Married  | 1072 | 66.30%    | 24 | 55.80%    | 0.17         |
| Living as if married                                       | 545  | 33.70%    | 19 | 44.20%    |              |
|  |      |           |    |           |              |
| Husband has other wives                                    | 1437 | 88.90%    | 38 | 88.40%    | 0.90         |
| Partner definitely or probably has sex with other partners | 490  | 30.30%    | 15 | 34.90%    | 0.56         |
|  |      |           |    |           |              |
| <b>VSLA Membership</b>                                     |      |           |    |           |              |
| Wife   | 692  | 42.80%    | 19 | 44.20%    | 0.83         |
| Husband  | 253  | 15.70%    | 8  | 18.60%    |              |
| Both   | 672  | 41.60%    | 16 | 37.20%    |              |
|  |      |           |    |           |              |
| <b>Religion</b>  |      |           |    |           |              |
| Catholic   | 627  | 38.80%    | 16 | 37.20%    | 0.24         |
| Protestant   | 456  | 28.20%    | 13 | 30.20%    |              |
| Adventist  | 248  | 15.40%    | 2  | 4.70%     |              |
| Muslim   | 20   | 1.20%     | 1  | 2.30%     |              |
| Other/No religion  | 264  | 16.40%    | 11 | 25.60%    |              |
|  |      |           |    |           |              |
| <b>Household assets</b>                                    |      |           |    |           |              |
| Bicycle  | 532  | 33.20%    | 10 | 23.80%    | 0.17         |
| Cellphone  | 1296 | 80.90%    | 29 | 69.10%    | <b>0.03</b>  |
| Radio  | 1054 | 65.80%    | 22 | 52.40%    | 0.10         |
| Electricity  | 324  | 20.20%    | 7  | 16.70%    | 0.54         |
| HH has livestock   | 946  | 58.50%    | 17 | 39.50%    | <b>0.03</b>  |
| HH owns land   | 1038 | 64.20%    | 17 | 39.50%    | <.001        |
| HH owns home   | 1406 | 87.00%    | 28 | 65.10%    | <.001        |
| Weighted assets score (range: 0-15.05)                     |      | 7.0 (.19) |    | 5.2 (.65) | <b>0.004</b> |
|  |      |           |    |           |              |
| <b>Who earns more</b>                                      |      |           |    |           |              |
| Husband more   | 721  | 44.60%    | 19 | 44.20%    | 0.91         |
| About the same   | 125  | 7.70%     | 3  | 7.00%     |              |
| Wife more  | 147  | 9.10%     | 5  | 11.60%    |              |
| Do all work together                                       | 623  | 38.60%    | 16 | 37.20%    |              |
|  |      |           |    |           |              |
| <b>Partner's Alcohol Use</b>                               |      |           |    |           |              |
| Does partner drink alcohol?                                |      |           |    |           |              |
| No   | 435  | 26.90%    | 10 | 23.30%    | 0.88         |
| Yes  | 1042 | 64.40%    | 29 | 67.40%    |              |



|  |      |        |    |        |             |
|--|------|--------|----|--------|-------------|
| Don't know   | 140  | 8.70%  | 4  | 9.30%  |             |
|  |      |        |    |        |             |
| Has seen partner drunk (past 12m)  | 720  | 44.60% | 22 | 51.20% | 0.49        |
|  |      |        |    |        |             |
| <b>Woman's previous experience of violence</b>   |      |        |    |        |             |
| Experienced physical or sexual IPV with a past partner (prior to current relationship) | 206  | 12.80% | 9  | 20.90% | <b>0.05</b> |
|  |      |        |    |        |             |
| Experience at first sex  |      |        |    |        |             |
| Willing  | 943  | 58.40% | 23 | 53.50% | 0.69        |
| Persuaded  | 276  | 17.10% | 7  | 16.30% |             |
| Forced   | 397  | 24.60% | 13 | 30.20% |             |
| Forced sex by non-partner (age >= 15)  | 265  | 16.50% | 6  | 14.00% | 0.69        |
| Forced sex by non-partner (age <15)  | 163  | 10.10% | 6  | 14.00% | 0.39        |
| Unwanted sexual touching (age <15)   | 409  | 25.30% | 12 | 27.90% | 0.72        |
| Any prior sexual violence*   | 784  | 48.60% | 26 | 60.50% | 0.08        |
| * forced first sex, forced sex at any age, unwanted sexual touch at age <15            |      |        |    |        |             |
|  |      |        |    |        |             |
| <b>Sexual history</b>  |      |        |    |        |             |
| Lifetime sex partners  |      |        |    |        |             |
| 1  | 1276 | 79.00% | 33 | 76.70% | 0.79        |
| 2  | 219  | 13.60% | 7  | 16.30% |             |
| 3 or more  | 120  | 7.40%  | 3  | 7.00%  |             |
|  |      |        |    |        |             |
| Number of sex partners in past 12 months   |      |        |    |        |             |
| 1  | 1555 | 96.30% | 41 | 95.40% | 0.96        |
| 2 or more  | 59   | 3.70%  | 2  | 4.70%  |             |

**Table 8: Male couples' cohort participants comparing baseline characteristics of those retained to those lost to follow-up**

|                           | Retained |           | Lost  |           |         |
|---------------------------|----------|-----------|-------|-----------|---------|
|                           | N=1536   |           | N=115 |           |         |
|                           | N        | % or mean | N     | % or mean | p-value |
| <b>Age of respondents</b> |          |           |       |           |         |
| Mean age                  |          | 35.6      |       | 35.0      | 0.51    |
| <=25yrs                   | 112      | 7.30%     | 11    | 9.60%     | 0.72    |
| 26-30yrs                  | 280      | 18.80%    | 26    | 22.60%    |         |
| 31-35yrs                  | 417      | 27.20%    | 29    | 25.20%    |         |
| 36-40yrs                  | 296      | 19.30%    | 20    | 17.40%    |         |
| >=40yrs                   | 423      | 27.50%    | 29    | 25.20%    |         |
|                           |          |           |       |           |         |
| <b>Education</b>          |          |           |       |           |         |
| No school                 | 239      | 15.70%    | 26    | 23.00%    | 0.08    |
| Primary (complete)        | 1019     | 67.00%    | 69    | 61.10%    |         |
| Secondary (complete)      | 170      | 11.20%    | 8     | 7.10%     |         |



|  |      |            |    |            |              |
|--|------|------------|----|------------|--------------|
| Other schooling  | 92   | 6.10%      | 10 | 8.90%      |              |
| <b>Relationship status</b>                                   |      |            |    |            |              |
| Married  | 1030 | 67.10%     | 65 | 56.50%     | <b>0.003</b> |
| Living as if married   | 506  | 32.90%     | 50 | 43.50%     |              |
|  |      |            |    |            |              |
| Man has other wives  | 86   | 5.60%      | 7  | 6.10%      | 0.8          |
|  |      |            |    |            |              |
| <b>VSLA Membership</b>                                       |      |            |    |            |              |
| Wife   | 445  | 29.00%     | 41 | 35.70%     | 0.32         |
| Husband  | 288  | 18.80%     | 17 | 14.80%     |              |
| Both   | 803  | 52.30%     | 57 | 49.60%     |              |
|  |      |            |    |            |              |
| <b>Religion</b>  |      |            |    |            |              |
| Catholic   | 664  | 43.20%     | 47 | 40.90%     | 0.17         |
| Protestant   | 366  | 23.80%     | 29 | 25.20%     |              |
| Adventist  | 237  | 15.40%     | 10 | 8.70%      |              |
| Muslim   | 21   | 1.40%      | 1  | 0.90%      |              |
| Other/No religion  | 248  | 16.20%     | 28 | 24.40%     |              |
|  |      |            |    |            |              |
| <b>Who earns more</b>  |      |            |    |            |              |
| Husband more   | 400  | 26.10%     | 37 | 32.20%     | 0.46         |
| About the same   | 123  | 8.00%      | 10 | 8.70%      |              |
| Wife more  | 136  | 8.90%      | 10 | 8.70%      |              |
| Do all work together   | 875  | 57.00%     | 58 | 50.40%     |              |
|  |      |            |    |            |              |
| <b>Household assets</b>                                      |      |            |    |            |              |
| Bicycle  | 511  | 33.30%     | 32 | 27.80%     | 0.28         |
| Cellphone  | 1248 | 81.30%     | 82 | 71.30%     | <b>0.02</b>  |
| Radio  | 1017 | 66.30%     | 63 | 54.80%     | <b>0.04</b>  |
| Electricity  | 314  | 20.50%     | 19 | 16.50%     | 0.32         |
| HH has livestock   | 913  | 59.60%     | 58 | 50.90%     | 0.06         |
| HH owns land   | 1054 | 68.60%     | 65 | 56.50%     | <b>0.009</b> |
| HH owns home   | 1375 | 89.60%     | 97 | 84.40%     | <b>0.04</b>  |
| Weighted assets score (range: 0-15.05)                       |      | 7.07 (.18) |    | 6.06 (.48) | <b>0.02</b>  |
|  |      |            |    |            |              |
| <b>Man's previous perpetration or experience of violence</b> |      |            |    |            |              |
| Perpetration of physical or sexual IPV with a past partner   | 191  | 12.50%     | 13 | 11.30%     | 0.7          |
|  |      |            |    |            |              |
| Experience at first sex                                      |      |            |    |            |              |
| Willing  | 1267 | 82.80%     | 91 | 79.10%     | 0.53         |
| Persuaded  | 198  | 12.90%     | 17 | 14.80%     |              |
| Forced   | 66   | 4.30%      | 7  | 6.10%      |              |
| Witnessed mother being beaten by father or another man       | 673  | 43.90%     | 48 | 42.10%     | 0.71         |
| Beaten often or very often as a child                        | 425  | 27.70%     | 41 | 35.70%     | <b>0.02</b>  |



| <b>Sexual history</b>                    |      |        |     |        |      |
|--|------|--------|-----|--------|------|
| Lifetime sex partners                    |      |        |     |        |      |
| 1  | 741  | 48.40% | 52  | 45.20% | 0.55 |
| 2  | 351  | 22.90% | 25  | 21.70% |      |
| 3 or more                                | 440  | 28.70% | 38  | 33.00% |      |
|  |      |        |     |        |      |
| Number of sex partners in past 12 months |      |        |     |        |      |
| 1  | 1340 | 88.20% | 100 | 87.70% | 0.89 |
| 2 or more                                | 179  | 11.80% | 14  | 12.30% |      |

#### Data-based decisions regarding construction of outcome models

Based on the findings presented above, it was decided that models for outcomes among women would be adjusted for type of VSLA membership reported at baseline (self, partner or both); baseline asset scores; and experience of physical or sexual IPV from a previous partner. For theoretical reasons regarding the known importance of victimization, prior experience of sexual violence reported at baseline was also included in the model to improve precision of point estimates. For men, covariates for outcomes models were legal marriage at baseline, VSLA membership type, baseline asset scores, and being beaten often or very often as a child. For theoretical reasons regarding known risk factors for perpetration of IPV, perpetration of physical or sexual IPV against a previous partner and witnessing abuse of their mother were also included to improve precision of point estimates. All models were adjusted for age and the baseline value of the outcome in question.

#### Primary outcome measures: Physical and Sexual IPV

The results of all outcome models for women are given in Table 9 and for men in Table 10. Women who participated in the couples' curriculum, compared to women in the control, reported a significant reduction in experience of physical and/or sexual IPV at both the interim 12 month point and the final 24 month outcome measure ( $aOR= 0.45$ ; 95% CI: 0.34, 0.60). Men who participated in the couples' curriculum also significantly reduced self-reported perpetration of physical and/or sexual IPV compared to men in the control, again at both the interim assessment and with a significant intervention effect sustained at 24 months ( $aOR= 0.53$ ; 95% CI: 0.38 – 0.75) versus the more expansive definition of any single act of physical or sexual IPV ( $aOR= 0.65$ ; 95% CI: 0.49 – 0.87).

These findings may be interpreted as a reduction of 55% in the odds of experience of IPV among women and a reduction of 47% in odds of reporting perpetration IPV among men among couples participating in the training at 24 months post-baseline as compared to couples in the VSLA-only control group.



### Secondary outcome measures: IPV-related secondary outcomes

#### *Differential impact based on experience of IPV reported at baseline*

Among the women in the couples' cohort who reported no experience of IPV (according to the What Works definition) in the 12 months prior to the intervention, there was a significant reduction in IPV in the intervention versus control group at the 12 month midpoint, but this was non-significant by 24 months. Among the women who did report experience of IPV at baseline (What Works definition), there was a significant reduction in intervention versus control at both the 12 -month midpoint and the final 24 month assessment ( $aOR= 0.36$ ; 95% CI: 0.21 – 0.63). Taken together, this analysis suggests that the benefit of the intervention in reducing IPV was most impactful during the first 12 months with some attenuation at the final 24 month assessment, and that the benefit in reducing violence accrued more to women who had experienced recent IPV at baseline than to those who had not.

Among the men in the couples' cohort who reported no perpetration of IPV (What Works definition) in the 12 months prior to the intervention, there was a marginally significant reduction in IPV in the intervention versus control group at the 12 month midpoint, but this was non-significant by 24 months. Among men who DID report perpetration of IPV at baseline (What Works definition), there was a significant reduction in the intervention versus control group at both the 12 month midpoint and the final 24 month assessment ( $aOR= 0.36$ ; 95% CI: 0.16 – 0.74). This suggests that, as with the results for women above, the benefit of the intervention in reducing IPV was most impactful during the first 12 months with some attenuation at the final 24 month assessment, and that the benefit in reducing violence accrued more to men who had recently perpetrated IPV at baseline compared to those who had not.

#### *Impact by specific type of IPV*

Female intervention participants compared to control group participants reported less experience of any physical IPV, any forced sexual or sexual coercion, any economic abuse, and any emotional aggression at both the 12 month interim assessment and the final 24 month timepoint. Among male participants, there was a significant reduction in perpetration of physical IPV at the 12 month interim measure that was non-significant by the 24 month final assessment. In contrast, there was a significant impact on the perpetration of forced or coerced sex (sexual IPV) that was sustained at the 24 month final assessment. There was no difference between the intervention and control groups on men's self-reported perpetration of economic abuse. Emotional aggression was not assessed for men as prior research has found that it is difficult to get accurate assessments on this form of perpetration.

#### *Impact on incidents of children witnessing IPV*

Among both women and men who reported children under 18 residing in the household and who had either experienced or perpetrated physical or sexual IPV in the past 12 months, there were significant reductions in reports of children witnessing the mother being beaten that were significant at both the 12 month interim measures and the final 24 month assessment.



## *Impact on help seeking among women experiencing IPV*

There was no significant difference between the intervention and control arms on the rate of help seeking among women who had experienced any physical or sexual IPV in the past 12 months.

### *Secondary outcome measures: Relationship Quality*

Both women and men in the intervention arm compared to the control arm reported statistically significant improvements in measures of relationship quality, with decreased scores for the level of conflict in the relationship, and increased scores on effective conflict management strategies, with improvements at both 12 and 24 months. Female intervention participants were also more likely to report the maximum possible score on measures of couple communication and trust at both the interim 12 month and the final 24 month assessments. Among men, the intervention versus control participants showed improvements in couple communication at both time points, but no significant difference in perception of trust at either time point.

### *Secondary outcome measures: Beliefs and community engagement*

Female and male intervention participants versus control group participants both reported significant reductions in the number of reasons endorsed to justify wife beating at both time points. Female intervention participants also reported significantly increased scores on self-efficacy for community engagement at both time points (not assessed for men). Neither men nor women reported increased confidence advising neighbours on relationships at 12 months, but both did so at 24 months. Both female and male intervention participants reported increased frequency of advising neighbours on relationships and increased participation in actions to prevent IPV at both time points.

### *Secondary outcome measures: Mental Health and Substance Use*

Female intervention participants compared to control group participants reported significantly lower scores on the CES-D 10 short form measuring depressive symptoms and were significantly less likely to report scores  $\geq 12$  (indicating possible depression) with improvements at both interim and final assessments. Male intervention versus control participants also showed significant reductions in both CES-D 10 short scores and prevalence of possible depression at both time points, although the magnitude of effect was slightly lower for men than for women. There was no significant change in the level of problematic alcohol use (AUDIT-C score  $\geq 4$ ) reported by male participants, although there was a non-significant reduction. Alcohol use was not assessed for women at baseline but was added later at the request of partners and in response to emerging qualitative findings; however, no impact on alcohol use among women was observed.

### *Exploratory outcome measures*

#### *Exploratory outcomes: Household economic development*

Male and female intervention participants both reported increased odds of having cash income and household food security, the latter accompanied by overall reductions in household scores for hunger. Both



reported a slight increase in payment of any household debt in the last month at the interim 12 month assessment, but there was no difference at 24 months.

#### *Exploratory outcomes: Health Related*

Both women and men in the intervention arm versus control reported similar improvements in the odds of reporting “good” or “excellent” health at both interim 12 month and final 24 month assessments. While PTSD symptoms were not initially assessed, they were added as an exploratory outcome from midline at the request of the programme partners. Both men and women in the intervention versus control groups reported significantly fewer PTSD symptoms and were less likely to score as possibly experiencing PTSD at both the 12- and 24- month time points. Given the lack of a pre-intervention baseline assessment, however, this finding must be taken as exploratory.

#### *Exploratory outcomes: Parenting*

Both women and men in the intervention arm reported significantly less endorsement of physical discipline in raising children compared to the control arm, and both also reported a significantly reduced frequency versus control on smacking or beating children in the home, both when assessed as “ever doing so” or doing so “often” or “very often”. These benefits were present at both the 12 month interim assessment and the final 24 month assessment.



**Table 9: Primary, secondary, and exploratory outcomes among female participants in the couples' cohort**

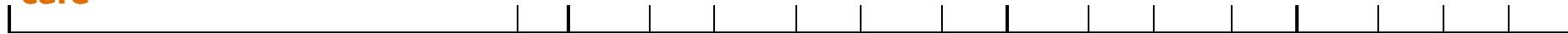
|  |     |           |      |           |      |           |      | 12 month outcomes |        |      | Final 24 month outcomes |        |       |
|--|-----|-----------|------|-----------|------|-----------|------|-------------------|--------|------|-------------------------|--------|-------|
|  |     | Baseline  |      | Midline   |      | Endline   |      | aOR or coeff      | 95% CI | p    | aOR or coeff            | 95% CI | p     |
|  | Arm | % or Mean | N/SE | % or Mean | N/SE | % or Mean | N/SE |                   |        |      |                         |        |       |
| <b>Primary Outcome</b>   |     |           |      |           |      |           |      |                   |        |      |                         |        |       |
| <i>Intimate partner violence with main partner</i>   |     |           |      |           |      |           |      |                   |        |      |                         |        |       |
| Experience of physical or sexual IPV in the past 12 months from current male partner, assessed with standardized What Works consortium definition    | I   | 49.7%     | 410  | 33.7%     | 278  | 35.0%     | 282  | 0.37              | 0.28   | 0.49 | <.001                   | 0.45   | 0.34  |
|  | C   | 41.0%     | 336  | 43.0%     | 355  | 42.0%     | 332  |                   |        |      |                         | 0.60   | <.001 |
| <b>Secondary Outcomes</b>  |     |           |      |           |      |           |      |                   |        |      |                         |        |       |
| <i>IPV-related secondary outcomes</i>  |     |           |      |           |      |           |      |                   |        |      |                         |        |       |
| <i>By experience of IPV reported at baseline</i>   |     |           |      |           |      |           |      |                   |        |      |                         |        |       |
| Among women reporting <b>no experience of IPV (What Works definition) in the past year at baseline</b> (N=897 total, 415 Intervention & 482 control) | I   | 0.0%      | 0    | 18.1%     | 75   | 22.0%     | 90   | 0.6               | 0.37   | 0.96 | 0.03                    | 0.74   | 0.47  |
|  | C   | 0.0%      | 0    | 24.9%     | 120  | 26.5%     | 125  |                   |        |      |                         |        |       |
| Among <b>women who did experience of IPV (What Works definition) in the past year at baseline</b> (N=746 total, 410 intervention & 336 control)      | I   | 100.0%    | 410  | 49.5%     | 203  | 47.6%     | 192  | 0.23              | 0.13   | 0.41 | <.001                   | 0.36   | 0.21  |
|  | C   | 100.0%    | 336  | 69.9%     | 235  | 63.1%     | 207  |                   |        |      |                         | 0.63   | <.001 |
| <i>By specific type of IPV</i>   |     |           |      |           |      |           |      |                   |        |      |                         |        |       |
| Any experience of physical intimate partner violence from the main partner in the past 12 months   | I   | 42.6%     | 352  | 25.7%     | 211  | 25.0%     | 205  | 0.35              | 0.26   | 0.47 | <.001                   | 0.39   | 0.29  |
|  | C   | 33.0%     | 270  | 34.0%     | 281  | 32.0%     | 255  |                   |        |      |                         | 0.53   | <.001 |
| Any experience of being forced or coerced into sexual activity by the main partner in the past 12 months   | I   | 44.9%     | 371  | 33.0%     | 272  | 32.0%     | 260  | 0.49              | 0.37   | 0.65 | <.001                   | 0.50   | 0.38  |
|  | C   | 37.5%     | 307  | 38.0%     | 314  | 38.0%     | 302  |                   |        |      |                         | 0.67   | <.001 |
| Any experience of economic abuse by the main partner in the past 12 months   | I   | 46.0%     | 383  | 33.0%     | 273  | 31.0%     | 251  | 0.45              | 0.34   | 0.6  | <.001                   | 0.31   | 0.24  |
|  | C   | 38.5%     | 315  | 39.8%     | 325  | 43.0%     | 345  |                   |        |      |                         | 0.42   | <.001 |



|   |   |       |             |       |             |       |             |       |       |       |       |              |              |              |       |
|---|---|-------|-------------|-------|-------------|-------|-------------|-------|-------|-------|-------|--------------|--------------|--------------|-------|
| Any experience of emotional aggression/abuse from main partner in the past 12 months  | I | 74.6% | 616         | 67.0% | 551         | 60.0% | 490         | 0.82  | 0.61  | 1.09  | 0.18  | <b>0.56</b>  | <b>0.42</b>  | <b>0.74</b>  | <.001 |
|   | C | 70.0% | 575         | 67.0% | 547         | 66.6% | 530         |       |       |       |       |              |              |              |       |
| <i>Children in household witnessing IPV</i>   |   |       |             |       |             |       |             |       |       |       |       |              |              |              |       |
| Children in household witnessing IPV (taken out of all hh with kids and physical or sexual IPV in the last 12 months at each wave, N=786 at baseline, N=689 at midline, N=640 at endline) | I | 45.7% | 196/<br>428 | 30.4% | 93/<br>306  | 32.6% | 101/<br>310 | 0.31  | 0.19  | 0.50  | <.001 | <b>0.32</b>  | <b>0.20</b>  | <b>0.52</b>  | <.001 |
|   | C | 43.3% | 155/<br>358 | 42.3% | 162/<br>383 | 43.1% | 146/<br>339 |       |       |       |       |              |              |              |       |
| <i>Help seeking</i>   |   |       |             |       |             |       |             |       |       |       |       |              |              |              |       |
| Help seeking among survivors of IPV (taken out of women reporting any physical or sexual IPV in the last 12 months at each wave, N=913 at baseline, N=781 at midline, N=743 at endline)   | I | 57.0% | 281/<br>493 | 54.3% | 191/<br>352 | 55.4% | 194/<br>350 | 1.09  | 0.78  | 1.53  | 0.62  | 1.08         | 0.76         | 1.52         | 0.67  |
|   | C | 51.9% | 218/<br>420 | 47.6% | 204/<br>429 | 50.4% | 198/<br>393 |       |       |       |       |              |              |              |       |
|   |   |       |             |       |             |       |             |       |       |       |       |              |              |              |       |
| <i>Relationship quality secondary outcomes</i>  |   |       |             |       |             |       |             |       |       |       |       |              |              |              |       |
| Level of conflict in intimate partnership (Possible range 0-24; lower scores represent better outcomes)   | I | 5.26  | 0.17        | 3.85  | 0.17        | 4.42  | 0.21        | -0.3  | -0.37 | -0.22 | <.001 | <b>-0.31</b> | <b>-0.38</b> | <b>-0.23</b> | <.001 |
|   | C | 4.39  | 0.24        | 4.58  | 0.10        | 5.37  | 0.24        |       |       |       |       |              |              |              |       |
| Quality of conflict management strategies (Possible range 6-24, higher scores represent better outcomes)  | I | 15.24 | 0.24        | 16.47 | 0.16        | 16.15 | 0.17        | 1.13  | 0.82  | 1.44  | <.001 | <b>0.98</b>  | <b>0.67</b>  | <b>1.29</b>  | <.001 |
|   | C | 15.45 | 0.14        | 15.46 | 0.06        | 15.30 | 0.09        |       |       |       |       |              |              |              |       |
| Couple communication: Percent of couples who achieved the maximum score on a scale for range of topics and frequency  | I | 19.0% | 160         | 30.0% | 254         | 31.0% | 252         | 2.06  | 1.54  | 2.83  | <.001 | <b>1.76</b>  | <b>1.30</b>  | <b>2.39</b>  | <.001 |
|   | C | 21.0% | 177         | 23.0% | 191         | 25.0% | 202         |       |       |       |       |              |              |              |       |
| Perception of trust, care, and respect in relationship with main partner: Percent of couples who achieved the maximum score on a scale for perception of trust and care in relationship   | I | 26.0% | 215         | 31.0% | 262         | 29.0% | 238         | 1.51  | 1.13  | 2.02  | <.001 | <b>1.82</b>  | <b>1.34</b>  | <b>2.45</b>  | <.001 |
|   | C | 30.0% | 251         | 29.0% | 242         | 25.0% | 201         |       |       |       |       |              |              |              |       |
|   |   |       |             |       |             |       |             |       |       |       |       |              |              |              |       |
| <i>Beliefs and community engagement secondary outcomes</i>  |   |       |             |       |             |       |             |       |       |       |       |              |              |              |       |
| Acceptability of wife beating (number of reasons endorsed as justifications, range 0-5)   | I | 2.29  | 0.10        | 1.04  | 0.07        | 0.90  | 0.05        | -0.83 | -0.92 | -0.73 | <.001 | <b>-0.93</b> | <b>-1.03</b> | <b>-0.84</b> | <.001 |
|   | C | 2.42  | 0.11        | 2.37  | 0.08        | 2.27  | 0.07        |       |       |       |       |              |              |              |       |



|  |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
|--|---|-------|------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Self-efficacy for community engagement (Possible range 2-6; higher scores represent better outcomes) | I | 3.89  | 0.04 | 4.53  | 0.03 | 4.76  | 0.06 | 0.39  | 0.29  | 0.50  | <.001 | 0.59  | 0.48  | 0.70  | <.001 |
|  | C | 4.01  | 0.04 | 4.20  | 0.04 | 4.24  | 0.07 |       |       |       |       |       |       |       |       |
| Feels confident advising neighbours on relationships   | I | n/a   |      | 69.2% | 571  | 72.6% | 589  | 1.20  | 0.88  | 1.64  | 0.25  | 1.69  | 1.23  | 2.33  | <.001 |
|  | C | n/a   |      | 66.9% | 547  | 65.3% | 522  |       |       |       |       |       |       |       |       |
| Has advised neighbours on relationships in past 12 months  | I | n/a   |      | 59.6% | 492  | 60.8% | 493  | 1.83  | 1.32  | 2.52  | <.001 | 2.8   | 2.01  | 3.89  | <.001 |
|  | C | n/a   |      | 50.1% | 410  | 44.2% | 353  |       |       |       |       |       |       |       |       |
| Participating in action to prevent IPV   | I | 68.0% | 562  | 90.0% | 749  | 92.0% | 749  | 5.82  | 4.18  | 8.10  | <.001 | 6.91  | 4.88  | 9.78  | <.001 |
|  | C | 74.0% | 607  | 75.0% | 616  | 75.0% | 605  |       |       |       |       |       |       |       |       |
| <i>Mental health related secondary outcomes</i>  |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Depressive symptoms as assessed using the CES-D 10 (Possible range 0-30)                             | I | 8.72  | 0.20 | 6.78  | 0.13 | 6.96  | 0.21 | -1.63 | -2.01 | -1.26 | <.001 | -1.77 | -2.14 | -1.39 | <.001 |
|  | C | 8.03  | 0.15 | 7.99  | 0.14 | 8.27  | 0.16 |       |       |       |       |       |       |       |       |
| CES-D 10 > = 12  | I | 22.0% | 184  | 13.0% | 107  | 14.0% | 117  | 0.47  | 0.34  | 0.64  | <.001 | 0.48  | 0.35  | 0.66  | <.001 |
|  | C | 20.0% | 168  | 19.0% | 161  | 21.0% | 169  |       |       |       |       |       |       |       |       |
| <i>Exploratory outcomes</i>  |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| <i>Household economics exploratory outcomes</i>  |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Any income   | I | 49.0% | 407  | 62.0% | 513  | 68.0% | 552  | 1.16  | 0.88  | 1.52  | 0.29  | 1.43  | 1.08  | 1.89  | 0.01  |
|  | C | 58.0% | 480  | 64.0% | 528  | 67.0% | 534  |       |       |       |       |       |       |       |       |
| Household debt payments  | I | 81.0% | 673  | 87.0% | 723  | 88.0% | 719  | 1.42  | 1.01  | 2.01  | 0.04  | 1.29  | 0.91  | 1.85  | 0.16  |
|  | C | 82.0% | 677  | 85.0% | 698  | 87.0% | 695  |       |       |       |       |       |       |       |       |
| Food security  | I | 17.0% | 145  | 15.0% | 124  | 24.0% | 199  | 1.09  | 0.79  | 1.49  | 0.61  | 2.19  | 1.62  | 2.94  | <.001 |
|  | C | 21.0% | 176  | 15.0% | 126  | 16.0% | 133  |       |       |       |       |       |       |       |       |
| Hunger score   | I | 4.95  | 0.09 | 5.00  | 0.06 | 4.65  | 0.08 | -0.26 | -0.41 | -0.12 | <.001 | -0.47 | -0.61 | -0.32 | <.001 |
|  | C | 4.76  | 0.10 | 5.17  | 0.11 | 5.04  | 0.06 |       |       |       |       |       |       |       |       |
| <i>Health related exploratory outcomes</i>   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Self-rated health  | I | 66.0% | 551  | 75.0% | 626  | 70.0% | 576  | 2.16  | 1.62  | 2.86  | <.001 | 1.95  | 1.48  | 2.57  | <.001 |
|  | C | 71.0% | 588  | 67.0% | 551  | 63.0% | 506  |       |       |       |       |       |       |       |       |
| PTSD symptoms  | I | n/a   |      | 11.29 | 0.28 | 11.57 | 0.23 | -0.09 | -0.14 | -0.05 | <.001 | -0.08 | -0.13 | -0.04 | <.001 |
|  | C | n/a   |      | 12.36 | 0.23 | 12.56 | 0.22 |       |       |       |       |       |       |       |       |
| PTSD score >=14  | I | n/a   |      | 26.7% | 219  | 30.6% | 248  | 0.48  | 0.35  | 0.67  | <.001 | 0.62  | 0.45  | 0.86  | <.001 |
|  | C | n/a   |      | 37.0% | 302  | 37.6% | 299  |       |       |       |       |       |       |       |       |
| Problematic alcohol use  | I | n/a   |      | 4.7%  | 39   | 4.2%  | 34   | 0.85  | 0.43  | 1.69  | 0.65  | 0.97  | 0.47  | 2.00  | 0.94  |
|  | C | n/a   |      | 4.5%  | 37   | 3.8%  | 30   |       |       |       |       |       |       |       |       |





Parenting exploratory outcomes

|  |   |       |     |       |     |       |     |      |      |      |       |      |      |      |       |
|--|---|-------|-----|-------|-----|-------|-----|------|------|------|-------|------|------|------|-------|
| Support physical punishment of children  | I | 50.0% | 416 | 36.0% | 300 | 38.0% | 307 | 0.30 | 0.23 | 0.39 | <.001 | 0.34 | 0.26 | 0.45 | <.001 |
|  | C | 49.0% | 402 | 55.0% | 447 | 54.0% | 432 |      |      |      |       |      |      |      |       |
| Reports punishing children by smacking or beating them                         | I | 84.8% | 624 | 80.7% | 602 | 76.9% | 572 | 0.38 | 0.25 | 0.58 | <.001 | 0.46 | 0.31 | 0.68 | <.001 |
|  | C | 84.7% | 613 | 87.4% | 653 | 84.9% | 611 |      |      |      |       |      |      |      |       |
| Reports punishing children by smacking or beating them "often" or "very often" | I | 7.2%  | 53  | 5.4%  | 40  | 6.6%  | 49  | 0.26 | 0.16 | 0.43 | <.001 | 0.39 | 0.24 | 0.65 | <.001 |
|  | C | 5.9%  | 43  | 12.9% | 96  | 11.3% | 81  |      |      |      |       |      |      |      |       |

**Table 10: Primary, secondary, and exploratory outcomes among male participants in the couples' cohort**

|   | Arm | Baseline  |      |           |      | Midline   |      | Endline      |             | 12 month outcomes |             |              | Final 24 month outcomes |             |             |
|---|-----|-----------|------|-----------|------|-----------|------|--------------|-------------|-------------------|-------------|--------------|-------------------------|-------------|-------------|
|   |     | % or Mean | N/SE | % or Mean | N/SE | % or Mean | N/SE | aOR or coeff | lower bound | upper bound       | p           | aOR or coeff | lower bound             | upper bound | P           |
| <b>Primary Outcome</b>  |     |           |      |           |      |           |      |              |             |                   |             |              |                         |             |             |
| <i>Intimate partner violence with main partner</i>  |     |           |      |           |      |           |      |              |             |                   |             |              |                         |             |             |
| Perpetration of physical or sexual IPV in the past 12 months from current male partner, assessed with standardized What Works consortium definition   | I   | 26.0%     | 206  | 13.0%     | 105  | 13.0%     | 99   | 0.44         | 0.31        | 0.60              | <.001       | 0.53         | 0.38                    | 0.75        | <.001       |
|   | C   | 22.0%     | 178  | 19.0%     | 155  | 17.0%     | 128  |              |             |                   |             |              |                         |             |             |
| <b>Secondary Outcomes</b>   |     |           |      |           |      |           |      |              |             |                   |             |              |                         |             |             |
| <i>IPV-related secondary outcomes</i>   |     |           |      |           |      |           |      |              |             |                   |             |              |                         |             |             |
| <i>By perpetration of IPV reported at baseline</i>  |     |           |      |           |      |           |      |              |             |                   |             |              |                         |             |             |
| Among men reporting no IPV perpetration ( <b>What Works definition</b> ) in the past year at baseline (N=1,212 total, 587 intervention & 625 control) | I   | 0.0%      | 0    | 8.4%      | 49   | 8.9%      | 49   | 0.6          | 0.36        | 1.00              | <b>0.05</b> | 0.78         | 0.46                    | 1.30        | 0.34        |
|   | C   | 0.0%      | 0    | 11.8%     | 74   | 10.6%     | 63   |              |             |                   |             |              |                         |             |             |
| Among men who did report IPV perpetration ( <b>What Works definition</b> ) in the past year at baseline (N=384 total, 206 intervention & 178 control) | I   | 100.0%    | 206  | 27.2%     | 56   | 24.9%     | 50   | 0.29         | 0.14        | 0.58              | <.001       | 0.36         | 0.18                    | 0.74        | <b>0.01</b> |
|   | C   | 100.0%    | 178  | 45.5%     | 81   | 38.9%     | 65   |              |             |                   |             |              |                         |             |             |
| <i>By specific type of IPV</i>  |     |           |      |           |      |           |      |              |             |                   |             |              |                         |             |             |
| Any perpetration of physical intimate partner against the main partner in the past 12 months  | I   | 26.0%     | 203  | 15.0%     | 115  | 15.0%     | 115  | 0.52         | 0.38        | 0.72              | <.001       | 0.79         | 0.57                    | 1.11        | 0.18        |



|   |       |     |       |     |       |     |  |  |  |  |  |  |
|---|-------|-----|-------|-----|-------|-----|--|--|--|--|--|--|
| C | 23.0% | 183 | 19.0% | 155 | 16.0% | 123 |  |  |  |  |  |  |
|---|-------|-----|-------|-----|-------|-----|--|--|--|--|--|--|



|   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
|---|---|-------|------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Any report of forcing or coercing main partner into sexual activity in the past 12 months   | I | 21.8% | 172  | 14.0% | 111  | 11.0% | 84   | 0.61  | 0.44  | 0.85  | <.001 | 0.50  | 0.35  | 0.71  | <.001 |
|   | C | 19.0% | 156  | 17.0% | 136  | 15.5% | 118  |       |       |       |       |       |       |       |       |
| Any perpetration of economic abuse against the main partner in the past 12 months   | I | 29.0% | 226  | 22.0% | 178  | 20.0% | 152  | 0.95  | 0.71  | 1.27  | 0.72  | 0.90  | 0.66  | 1.22  | 0.50  |
|   | C | 29.0% | 230  | 23.0% | 185  | 21.0% | 163  |       |       |       |       |       |       |       |       |
|   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| <i>Children in household witnessing IPV</i>   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Children in household witnessing IPV (taken out of all hh with kids and physical or sexual IPV in the last 12 months at each wave, N=786 at baseline, N=689 at midline, N=640 at endline) | I | n/a   |      | 19.9% | 33   | 26.3% | 41   | 0.42  | 0.19  | 0.91  | 0.03  | 1.07  | 0.48  | 2.38  | 0.87  |
|   | C | n/a   |      | 33.3% | 67   | 24.4% | 42   |       |       |       |       |       |       |       |       |
|   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| <i>Relationship quality secondary outcomes</i>  |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Level of conflict in intimate partnership (Possible range 0-24; lower scores represent better outcomes)   | I | 4.48  | 0.11 | 3.70  | 0.12 | 4.39  | 0.14 | -0.18 | -0.26 | -0.11 | <.001 | -0.18 | -0.26 | -0.11 | <.001 |
|   | C | 4.45  | 0.23 | 4.43  | 0.21 | 5.13  | 0.25 |       |       |       |       |       |       |       |       |
|   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Quality of conflict management strategies (Possible range 6-24, higher scores represent better outcomes)  | I | 16.67 | 0.14 | 17.57 | 0.12 | 17.47 | 0.12 | 0.5   | 0.23  | 0.78  | <.001 | 0.48  | 0.21  | 0.76  | <.001 |
|   | C | 16.74 | 0.07 | 17.10 | 0.14 | 17.04 | 0.12 |       |       |       |       |       |       |       |       |
|   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Couple communication: Percent of couples who achieved the maximum score on a scale for range of topics and frequency  | I | 33.0% | 258  | 44.0% | 347  | 47.0% | 349  | 2.13  | 1.61  | 2.82  | <.001 | 2.66  | 1.99  | 3.54  | <.001 |
|   | C | 34.0% | 270  | 34.0% | 274  | 34.0% | 262  |       |       |       |       |       |       |       |       |
|   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Perception of trust, care, and respect in relationship with main partner: Percent of couples who achieved the maximum score on a scale for perception of trust and care in relationship   | I | 34.0% | 271  | 37.0% | 291  | 32.0% | 242  | 1.29  | 0.98  | 1.68  | 0.06  | 1.28  | 0.96  | 1.68  | 0.10  |
|   | C | 38.0% | 302  | 34.0% | 276  | 31.0% | 236  |       |       |       |       |       |       |       |       |
|   |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| <i>Beliefs and community engagement secondary outcomes</i>  |   |       |      |       |      |       |      |       |       |       |       |       |       |       |       |
| Acceptability of wife beating (number of reasons endorsed as justifications, range 0-5)   | I | 83.0% | 0.05 | 36.0% | 0.03 | 37.0% | 0.04 | -0.91 | -1.08 | -0.73 | <.001 | -0.86 | -1.04 | -0.68 | <.001 |
|   | C | 88.0% | 0.07 | 86.0% | 0.08 | 82.0% | 0.06 |       |       |       |       |       |       |       |       |
| Feels confident advising neighbours on relationships  | I | 62.0% | 487  | 77.0% | 607  | 78.0% | 583  | 2.9   | 0.8   | 1.34  | 0.77  | 2.80  | 2.11  | 3.72  | <.001 |
|   | C | 67.0% | 536  | 64.0% | 513  | 66.0% | 504  |       |       |       |       |       |       |       |       |
| Has advised neighbours on relationships in past 12 months   | I | 62.0% | 487  | 77.0% | 607  | 78.0% | 583  | 2.9   | 2.21  | 3.81  | <.001 | 2.81  | 2.12  | 3.72  | <.001 |

|  |   |       |      |       |      |       |      |       |       |       |             |       |       |       |
|--|---|-------|------|-------|------|-------|------|-------|-------|-------|-------------|-------|-------|-------|
|  | C | 67.0% | 536  | 64.0% | 513  | 66.0% | 504  |       |       |       |             |       |       |       |
| Participating in action to prevent IPV                                   | I | 74.0% | 586  | 93.0% | 738  | 93.0% | 699  | 5.49  | 3.76  | 8.03  | <.001       | 4.30  | 2.88  | 6.40  |
|  | C | 80.0% | 645  | 82.0% | 659  | 85.0% | 648  |       |       |       |             |       |       |       |
| <b><u>Mental health related secondary outcomes</u></b>                   |   |       |      |       |      |       |      |       |       |       |             |       |       |       |
| Depressive symptoms as assessed using the CES-D 10 (Possible range 0-30) | I | 6.95  | 0.18 | 6.09  | 0.10 | 6.16  | 0.12 | -1.06 | -1.4  | -0.72 | <.001       | -0.84 | -1.19 | -0.50 |
|  | C | 7.14  | 0.22 | 7.17  | 0.15 | 7.03  | 0.14 |       |       |       |             |       |       |       |
| CES-D 10 > = 12  | I | 12.0% | 95   | 10.0% | 79   | 10.0% | 78   | 0.5   | 0.35  | 0.74  | <.001       | 0.59  | 0.40  | 0.87  |
|  | C | 14.0% | 111  | 15.0% | 121  | 14.0% | 108  |       |       |       |             |       |       |       |
| Problematic alcohol use  | I | 16.0% | 130  | 13.0% | 105  | 13.0% | 101  | 0.71  | 0.49  | 1.03  | 0.07        | 0.73  | 0.50  | 1.07  |
|  | C | 14.0% | 109  | 15.0% | 120  | 15.0% | 114  |       |       |       |             |       |       |       |
| <b><u>Exploratory outcomes</u></b>                                       |   |       |      |       |      |       |      |       |       |       |             |       |       |       |
| <i>Household economics exploratory outcomes</i>                          |   |       |      |       |      |       |      |       |       |       |             |       |       |       |
| Any income   | I | 49.0% | 407  | 62.0% | 513  | 68.0% | 552  | 1.16  | 0.88  | 1.52  | 0.29        | 1.43  | 1.08  | 1.89  |
|  | C | 58.0% | 480  | 64.0% | 528  | 67.0% | 534  |       |       |       |             |       |       |       |
| Household debt payments  | I | 81.0% | 673  | 87.0% | 723  | 88.0% | 719  | 1.42  | 1.01  | 2.01  | <b>0.04</b> | 1.29  | 0.91  | 1.85  |
|  | C | 82.0% | 677  | 85.0% | 698  | 87.0% | 695  |       |       |       |             |       |       |       |
| Food security  | I | 17.0% | 145  | 15.0% | 124  | 24.0% | 199  | 1.09  | 0.79  | 1.49  | 0.61        | 2.19  | 1.62  | 2.94  |
|  | C | 21.0% | 176  | 15.0% | 126  | 16.0% | 133  |       |       |       |             |       |       |       |
| Hunger score   | I | 4.95  | 0.09 | 5.00  | 0.06 | 4.65  | 0.08 | -0.26 | -0.41 | -0.12 | <.001       | -0.47 | -0.61 | -0.32 |
|  | C | 4.76  | 0.10 | 5.17  | 0.11 | 5.04  | 0.06 |       |       |       |             |       |       |       |
| <i>Health related exploratory outcomes</i>                               |   |       |      |       |      |       |      |       |       |       |             |       |       |       |
| Self-rated health  | I | 72.0% | 569  | 73.0% | 579  | 66.0% | 494  | 2.50  | 1.87  | 3.35  | <.001       | 1.96  | 1.48  | 2.59  |
|  | C | 74.0% | 592  | 62.0% | 498  | 57.0% | 434  |       |       |       |             |       |       |       |
| PTSD symptoms  | I | n/a   |      | 11.3  | 0.28 | 11.6  | 0.23 | -0.09 | -0.13 | -0.04 | <.001       | -0.10 | -0.14 | -0.05 |
|  | C | n/a   |      | 12.4  | 0.23 | 12.6  | 0.22 |       |       |       |             |       |       |       |
| PTSD score >=14  | I | n/a   |      | 25.5% | 201  | 22.3% | 166  | 0.43  | 0.29  | 0.63  | <.001       | 0.44  | 0.29  | 0.65  |
|  | C | n/a   |      | 36.8% | 292  | 33.0% | 249  |       |       |       |             |       |       |       |



Parenting exploratory outcomes

|   |   |       |     |       |     |       |     |      |      |      |       |      |      |      |       |
|---|---|-------|-----|-------|-----|-------|-----|------|------|------|-------|------|------|------|-------|
| Support physical punishment of children   | I | 35.0% | 279 | 25.0% | 197 | 21.0% | 161 | 0.28 | 0.21 | 0.38 | <.001 | 0.22 | 0.16 | 0.30 | <.001 |
|   | C | 34.0% | 271 | 40.0% | 322 | 40.0% | 306 |      |      |      |       |      |      |      |       |
| Reports punishing children by smacking or beating them                            |   | 73.1% | 543 | 74.3% | 550 | 70.2% | 495 | 0.54 | 0.39 | 0.77 | <.001 | 0.58 | 0.41 | 0.80 | <.001 |
|   | I | 71.8% | 528 | 79.1% | 589 | 76.7% | 541 |      |      |      |       |      |      |      |       |
| Reports punishing children by smacking or beating them<br>"often" or "very often" | C | 3.5%  | 26  | 3.2%  | 24  | 3.7%  | 26  | 0.35 | 0.18 | 0.68 | <.001 | 0.33 | 0.17 | 0.63 | <.001 |
|   | I | 3.0%  | 22  | 7.1%  | 53  | 8.8%  | 62  |      |      |      |       |      |      |      |       |



## Community Survey

### Enrolment and socio-demographic measures

The baseline survey successfully collected data from 1399 women and 1400 men living in households within identified community sampling areas, split evenly between intervention and control areas (target 1400 each; the missing woman was ill on the day of her appointment and not replaced). Endline data were collected from 1400 women and 1400 men. As illustrated in Tables 11 to 12, there were minimal statistically significant differences between study arms in terms of sociodemographic or outcome measures at baseline reported by either women or men, with the exception of a higher proportion of men reporting problematic alcohol use in intervention rather than control communities (15% versus 9%). On average, women in the intervention areas had a higher asset score as compared to women in the control group (7.11 versus 6.55) at both time points. Men in the intervention communities had a higher asset score than men in the control communities at baseline but not endline. Because of these differences, this measure for asset ownership was added as a covariate in all regression models (see section on “*Data Analysis for the Repeated Cross-Sectional Community Surveys*, p 17-18, above for more detail on covariates included in outcome models).

**Table 11: Descriptive data for all women from baseline and endline community surveys**

| Variables                                    | Baseline     |           |     |           |      | Endline      |           |     |           |      |
|--|--------------|-----------|-----|-----------|------|--------------|-----------|-----|-----------|------|
|  | Intervention |           | N   | % or Mean | p    | Intervention |           | N   | % or Mean | P    |
|  | N            | % or mean |     |           |      | N            | % or Mean |     |           |      |
| <b>Socio-demographics</b>                    |              |           |     |           |      |              |           |     |           |      |
| <b>Age</b>                                   |              |           |     |           |      |              |           |     |           |      |
| <=25yrs                                      | 115          | 16.5%     | 102 | 14.6%     | 0.21 | 124          | 17.7%     | 109 | 15.6%     | 0.28 |
| 26-30yrs                                     | 181          | 25.9%     | 169 | 24.1%     |      | 166          | 23.7%     | 173 | 24.7%     |      |
| 31-35yrs                                     | 180          | 25.8%     | 167 | 23.9%     |      | 191          | 27.3%     | 172 | 24.6%     |      |
| 36-40yrs                                     | 121          | 17.3%     | 140 | 20.0%     |      | 135          | 19.3%     | 155 | 22.1%     |      |
| >=41yrs                                      | 102          | 14.6%     | 122 | 17.4%     |      | 84           | 12.0%     | 91  | 13.0%     |      |
|  |              |           |     |           |      |              |           |     |           |      |
| <b>Education</b>                             |              |           |     |           |      |              |           |     |           |      |
| None   | 102          | 15.0%     | 138 | 20.1%     | 0.15 | 128          | 18.0%     | 129 | 18.5%     | 0.66 |
| Primary                                      | 461          | 66.0%     | 450 | 64.0%     |      | 451          | 64.4%     | 429 | 61.4%     |      |
| Secondary or above                           | 135          | 19.0%     | 112 | 16.0%     |      | 121          | 17.3%     | 141 | 20.2%     |      |
|  |              |           |     |           |      |              |           |     |           |      |
| <b>Marital Status</b>                        |              |           |     |           |      |              |           |     |           |      |
| Married                                      | 424          | 61.0%     | 404 | 58.0%     | 0.61 | 391          | 55.9%     | 363 | 51.9%     | 0.44 |
| Living as if married                         | 274          | 39.0%     | 296 | 42.0%     |      | 309          | 44.1%     | 337 | 48.1%     |      |
|  |              |           |     |           |      |              |           |     |           |      |
| <b>Polygamy/Other women treat as married</b> |              |           |     |           |      |              |           |     |           |      |
| Yes  | 62           | 9.0%      | 80  | 11.0%     | 0.34 | 81           | 12.0%     | 66  | 9.4%      | 0.59 |
| No   | 514          | 74.0%     | 534 | 76.0%     |      | 423          | 60.4%     | 468 | 66.9%     |      |
| Do not know                                  | 123          | 18.0%     | 86  | 12.0%     |      | 196          | 28.0%     | 166 | 23.7%     |      |
|  |              |           |     |           |      |              |           |     |           |      |
| <b>No. of children</b>                       |              |           |     |           |      |              |           |     |           |      |



|                                    |     |       |     |       |             |     |       |     |       |             |
|------------------------------------|-----|-------|-----|-------|-------------|-----|-------|-----|-------|-------------|
| None                               | 39  | 5.6%  | 37  | 5.3%  | 0.51        | 45  | 6.4%  | 47  | 6.7%  | 0.45        |
| One                                | 100 | 14.3% | 98  | 14.0% |             | 130 | 18.6% | 115 | 16.4% |             |
| Two                                | 164 | 23.5% | 157 | 22.4% |             | 161 | 23.0% | 155 | 22.1% |             |
| Three                              | 163 | 23.3% | 157 | 22.4% |             | 149 | 21.3% | 153 | 21.9% |             |
| Four or more                       | 233 | 33.3% | 251 | 35.9% |             | 214 | 30.6% | 230 | 32.9% |             |
|                                    |     |       |     |       |             |     |       |     |       |             |
| <b>Income</b>                      |     |       |     |       |             |     |       |     |       |             |
| No cash                            | 265 | 37.9% | 242 | 34.6% | 0.10        | 359 | 51.3% | 323 | 46.0% | 0.52        |
| <RWF5000                           | 262 | 37.5% | 248 | 35.4% |             | 204 | 29.1% | 239 | 34.2% |             |
| RWF5001-10000                      | 97  | 13.9% | 110 | 15.7% |             | 77  | 11.0% | 83  | 11.9% |             |
| >RWF 10000                         | 75  | 10.7% | 100 | 14.3% |             | 60  | 8.6%  | 54  | 7.7%  |             |
|                                    |     |       |     |       |             |     |       |     |       |             |
| <b>Debt payments in last month</b> |     |       |     |       |             |     |       |     |       |             |
| No debt                            | 134 | 19.2% | 133 | 19.0% | 0.49        | 136 | 19.4% | 133 | 19.0% | 0.29        |
| <RWF1000                           | 122 | 17.5% | 118 | 16.9% |             | 190 | 27.1% | 206 | 29.4% |             |
| RWF2001-                           | 191 | 27.4% | 167 | 23.9% |             | 151 | 21.6% | 164 | 23.4% |             |
| >RWF1000                           | 251 | 36.0% | 282 | 40.3% |             | 223 | 31.9% | 197 | 28.1% |             |
|                                    |     |       |     |       |             |     |       |     |       |             |
| <b>Land Ownership</b>              |     |       |     |       |             |     |       |     |       |             |
| Own land                           | 149 | 21.3% | 192 | 27.4% | 0.43        | 161 | 23.0% | 165 | 23.6% | 0.34        |
| Rent land                          | 239 | 34.2% | 194 | 27.7% |             | 239 | 34.1% | 247 | 35.3% |             |
| Own and rent                       | 245 | 35.1% | 250 | 35.7% |             | 188 | 26.9% | 196 | 28.0% |             |
| Do not own or rent                 | 66  | 9.4%  | 64  | 9.1%  |             | 112 | 16.0% | 92  | 13.1% |             |
|                                    |     |       |     |       |             |     |       |     |       |             |
| <b>Household owns home</b>         | 595 | 85.1% | 597 | 85.4% | 0.92        | 589 | 84.0% | 567 | 81.0% | 0.34        |
|                                    |     |       |     |       |             |     |       |     |       |             |
| <b>Asset Ownership</b>             |     |       |     |       |             |     |       |     |       |             |
| Radio                              | 397 | 57.0% | 336 | 48.0% | 0.08        | 338 | 48.0% | 303 | 43.0% | 0.44        |
| Electricity                        | 158 | 23.0% | 96  | 14.0% | 0.22        | 227 | 32.0% | 174 | 25.0% | 0.23        |
| Bicycle                            | 167 | 24.0% | 183 | 26.0% | 0.74        | 171 | 24.0% | 175 | 25.0% | 0.93        |
| Cellphone                          | 504 | 72.0% | 456 | 65.0% | 0.15        | 483 | 69.0% | 457 | 65.0% | 0.32        |
| <b>Weighted Asset Score</b>        |     | 7.11  |     | 6.55  | <b>0.01</b> |     | 7.2   |     | 6.71  | <b>0.04</b> |
|                                    |     |       |     |       |             |     |       |     |       |             |
| <b>Earning Disparity</b>           |     |       |     |       |             |     |       |     |       |             |
| About same                         | 69  | 6.7%  | 96  | 5.4%  | 1.00        | 64  | 9.2%  | 87  | 12.4% | 0.50        |
| All work together                  | 327 | 36.5% | 324 | 34.4% |             | 239 | 34.2% | 281 | 40.1% |             |
| Husband more                       | 47  | 47.0% | 38  | 46.0% |             | 300 | 43.0% | 283 | 40.4% |             |
| Wife more                          | 255 | 9.9%  | 240 | 13.8% |             | 95  | 13.6% | 49  | 7.0%  |             |
|                                    |     |       |     |       |             |     |       |     |       |             |
| <b>Hunger score</b>                |     | 4.93  |     | 4.89  | 0.84        |     | 5.03  |     | 4.95  | 0.59        |
|                                    |     |       |     |       |             |     |       |     |       |             |
| <b>Alcohol Use</b>                 |     |       |     |       |             |     |       |     |       |             |
| Seen male partner drunk            | 354 | 68.0% | 358 | 71.0% | 0.58        | 386 | 75.0% | 339 | 69.0% | 0.28        |
| Woman's Alcohol Use                |     |       |     |       |             |     |       |     |       |             |
| None                               | 548 | 78.4% | 570 | 81.4% | 0.42        | 616 | 88.0% | 610 | 87.1% | 0.67        |
| Any                                | 101 | 14.5% | 91  | 13.0% |             | 55  | 7.9%  | 57  | 8.1%  |             |
| Alcohol Problem/Issue              | 50  | 7.2%  | 39  | 5.6%  |             | 29  | 4.1%  | 33  | 4.7%  |             |



|  |     |       |     |       |      |     |       |     |       |             |
|--|-----|-------|-----|-------|------|-----|-------|-----|-------|-------------|
|  |     |       |     |       |      |     |       |     |       |             |
| <b>VSLA membership</b>   |     |       |     |       |      |     |       |     |       |             |
| I belong   | 230 | 33.0% | 214 | 31.0% | 0.38 | 254 | 36.3% | 203 | 29.0% | 0.06        |
| Spouse belongs   | 119 | 17.0% | 104 | 15.0% |      | 108 | 15.4% | 125 | 17.9% |             |
| Both   | 199 | 29.0% | 221 | 32.0% |      | 185 | 26.4% | 181 | 25.9% |             |
| None   | 150 | 21.0% | 161 | 23.0% |      | 153 | 21.9% | 191 | 27.3% |             |
|  |     |       |     |       |      |     |       |     |       |             |
| <b>Previous experience of IPV</b>                                    |     |       |     |       |      |     |       |     |       |             |
| Physical   | 25  | 27.0% | 23  | 20.0% | 0.34 | 37  | 40.0% | 27  | 30.0% | <b>0.05</b> |
| Sexual   | 56  | 8.0%  | 52  | 7.0%  | 0.77 | 39  | 41.0% | 21  | 22.0% | <b>0.02</b> |
|  |     |       |     |       |      |     |       |     |       |             |
| <b>Forced first sexual experience</b>                                | 180 | 26.0% | 173 | 25.0% | 0.72 | 197 | 28.0% | 173 | 25.0% | 0.34        |
|  |     |       |     |       |      |     |       |     |       |             |
| <b>Actions taken towards IPV</b>                                     |     |       |     |       |      |     |       |     |       |             |
| Spoken with someone about violence between couples                   |     |       |     |       |      |     |       |     |       |             |
| Never  | 184 | 26.0% | 161 | 23.0% | 0.80 | 206 | 29.5% | 212 | 24.9% | 0.45        |
| Once   | 109 | 15.6% | 121 | 17.3% |      | 119 | 17.0% | 141 | 12.7% |             |
| Twice  | 103 | 14.7% | 106 | 15.2% |      | 122 | 17.5% | 104 | 15.1% |             |
| Three or more times  | 303 | 43.4% | 311 | 44.5% |      | 252 | 36.1% | 243 | 47.3% |             |
| Offered emotional support to someone suffering in their relationship |     |       |     |       |      |     |       |     |       |             |
| Never  | 57  | 8.2%  | 52  | 7.4%  | 0.91 | 83  | 11.9% | 62  | 8.9%  | 0.13        |
| Once   | 129 | 18.5% | 140 | 20.0% |      | 154 | 22.0% | 134 | 17.9% |             |
| Twice  | 140 | 20.1% | 130 | 18.6% |      | 141 | 20.1% | 168 | 19.4% |             |
| Three or more times  | 372 | 53.3% | 377 | 53.9% |      | 322 | 46.0% | 336 | 53.9% |             |
| Attempted to intervene if someone was being beaten or harassed       |     |       |     |       |      |     |       |     |       |             |
| Never  | 161 | 23.1% | 104 | 14.9% | 0.66 | 193 | 27.6% | 174 | 17.3% | 0.39        |
| Once   | 156 | 22.4% | 139 | 19.9% |      | 146 | 20.9% | 160 | 19.2% |             |
| Twice  | 146 | 20.9% | 134 | 19.2% |      | 152 | 21.8% | 143 | 22.3% |             |
| Three or more times  | 235 | 33.7% | 320 | 45.9% |      | 208 | 29.8% | 223 | 41.2% |             |
| Encouraged a victim of violence to seek help                         |     |       |     |       |      |     |       |     |       |             |
| Never  | 193 | 27.6% | 135 | 19.3% | 0.57 | 208 | 29.8% | 194 | 22.0% | 0.61        |
| Once   | 169 | 24.2% | 169 | 24.2% |      | 174 | 24.9% | 179 | 23.0% |             |
| Twice  | 130 | 18.6% | 130 | 18.6% |      | 130 | 18.6% | 136 | 20.6% |             |
| Three or more times  | 207 | 29.6% | 265 | 37.9% |      | 187 | 26.8% | 191 | 34.4% |             |
| Total Score (4 response categories for each item)                    |     | 11.1  |     | 11.1  | 0.94 |     | 10.6  |     | 10.7  | 0.53        |



**Table 12: Descriptive data for all men from baseline and endline community surveys**

| Variables                                    | Baseline     |           |         |           |      | Endline      |           |         |           |             |  |  |
|--|--------------|-----------|---------|-----------|------|--------------|-----------|---------|-----------|-------------|--|--|
|  | Intervention |           | Control |           | P    | Intervention |           | Control |           | p           |  |  |
|  | N            | % or mean | N       | % or mean |      | N            | % or mean | N       | % or mean |             |  |  |
| <b>Sociodemographic</b>                      |              |           |         |           |      |              |           |         |           |             |  |  |
| <b>Age</b>                                   |              |           |         |           |      |              |           |         |           |             |  |  |
| <=25yrs                                      | 55           | 7.9%      | 47      | 6.7%      | 0.31 | 41           | 5.9%      | 58      | 8.3%      | 0.40        |  |  |
| 26-30yrs                                     | 138          | 19.7%     | 174     | 24.9%     |      | 134          | 19.1%     | 135     | 19.3%     |             |  |  |
| 31-35yrs                                     | 195          | 27.9%     | 188     | 26.9%     |      | 180          | 25.7%     | 199     | 28.4%     |             |  |  |
| 36-40yrs                                     | 134          | 19.1%     | 154     | 22.0%     |      | 181          | 25.9%     | 138     | 19.7%     |             |  |  |
| >=41yrs                                      | 178          | 25.4%     | 137     | 19.6%     |      | 164          | 23.4%     | 170     | 24.3%     |             |  |  |
|  |              |           |         |           |      |              |           |         |           |             |  |  |
| <b>Education</b>                             |              |           |         |           |      |              |           |         |           |             |  |  |
| None   | 116          | 17.0%     | 125     | 18.0%     | 0.72 | 139          | 19.9%     | 128     | 18.3%     | 0.64        |  |  |
| Primary                                      | 460          | 66.0%     | 453     | 65.0%     |      | 451          | 64.4%     | 458     | 65.5%     |             |  |  |
| Secondary or above                           | 124          | 18.0%     | 122     | 17.0%     |      | 110          | 15.7%     | 113     | 16.2%     |             |  |  |
|  |              |           |         |           |      |              |           |         |           |             |  |  |
| <b>Marital Status</b>                        |              |           |         |           |      |              |           |         |           |             |  |  |
| Married                                      | 461          | 66.0%     | 424     | 69.0%     | 0.34 | 418          | 59.7%     | 376     | 53.7%     | 0.25        |  |  |
| Living as if married                         | 239          | 34.0%     | 276     | 39.0%     |      | 282          | 40.3%     | 324     | 46.3%     |             |  |  |
|  |              |           |         |           |      |              |           |         |           |             |  |  |
| <b>Polygamy/Other women treat as married</b> |              |           |         |           |      |              |           |         |           |             |  |  |
| Yes  | 32           | 4.6%      | 41      | 5.9%      | 0.23 | 45           | 6.4%      | 40      | 5.7%      | 0.61        |  |  |
| No   | 668          | 95.4%     | 659     | 94.1%     |      | 655          | 93.6%     | 660     | 94.3%     |             |  |  |
|  |              |           |         |           |      |              |           |         |           |             |  |  |
| <b>No. of children</b>                       |              |           |         |           |      |              |           |         |           |             |  |  |
| None   | 33           | 4.7%      | 39      | 5.6%      | 0.49 | 46           | 6.6%      | 55      | 7.9%      | 0.42        |  |  |
| One  | 109          | 15.6%     | 90      | 12.9%     |      | 119          | 17.0%     | 119     | 17.0%     |             |  |  |
| Two  | 142          | 20.3%     | 173     | 24.7%     |      | 149          | 21.3%     | 147     | 21.0%     |             |  |  |
| Three  | 130          | 18.6%     | 139     | 19.9%     |      | 144          | 20.6%     | 150     | 21.5%     |             |  |  |
| Four or more                                 | 286          | 40.9%     | 259     | 37.0%     |      | 242          | 34.6%     | 228     | 32.6%     |             |  |  |
|  |              |           |         |           |      |              |           |         |           |             |  |  |
| <b>Income</b>                                |              |           |         |           |      |              |           |         |           |             |  |  |
| No cash                                      | 220          | 31.0%     | 238     | 34.0%     | 0.76 | 207          | 29.6%     | 187     | 26.7%     | 0.57        |  |  |
| <RWF5000                                     | 273          | 39.0%     | 268     | 38.3%     |      | 281          | 40.1%     | 282     | 40.3%     |             |  |  |
| RWF5001-10000                                | 108          | 15.4%     | 91      | 13.0%     |      | 122          | 17.4%     | 132     | 18.9%     |             |  |  |
| >RWF 10000                                   | 99           | 14.1%     | 103     | 14.7%     |      | 90           | 12.9%     | 99      | 14.1%     |             |  |  |
|  |              |           |         |           |      |              |           |         |           |             |  |  |
| <b>Debt payments in last month</b>           |              |           |         |           |      |              |           |         |           |             |  |  |
| No debt                                      | 109          | 15.6%     | 109     | 15.6%     | 0.40 | 88           | 12.6%     | 133     | 19.0%     | <b>0.04</b> |  |  |
| <RWF1000                                     | 211          | 30.1%     | 235     | 33.6%     |      | 247          | 35.3%     | 243     | 34.8%     |             |  |  |
| RWF2001-                                     | 175          | 25.0%     | 161     | 23.0%     |      | 149          | 21.3%     | 128     | 18.3%     |             |  |  |
| >RWF1000                                     | 205          | 29.3%     | 195     | 27.9%     |      | 216          | 30.9%     | 195     | 27.9%     |             |  |  |
|  |              |           |         |           |      |              |           |         |           |             |  |  |
| <b>Land Ownership</b>                        |              |           |         |           |      |              |           |         |           |             |  |  |



|  |            |              |            |              |                 |            |              |            |              |             |
|--|------------|--------------|------------|--------------|-----------------|------------|--------------|------------|--------------|-------------|
| Own land                                   | 163        | 23.3%        | 183        | 26.0%        | 0.13            | 139        | 19.9%        | 158        | 22.6%        | 0.82        |
| Rent land                                  | 222        | 31.8%        | 239        | 34.1%        |                 | 249        | 35.6%        | 237        | 33.9%        |             |
| Own and rent                               | 251        | 35.9%        | 209        | 29.9%        |                 | 235        | 33.6%        | 214        | 30.6%        |             |
| Do not own or rent                         | 63         | 9.0%         | 69         | 9.9%         |                 | 76         | 10.9%        | 91         | 13.0%        |             |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Household owns home</b>                 | <b>613</b> | <b>88.0%</b> | <b>603</b> | <b>86.0%</b> | <b>0.50</b>     | <b>621</b> | <b>88.0%</b> | <b>589</b> | <b>84.0%</b> | <b>0.07</b> |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Asset Ownership</b>                     |            |              |            |              |                 |            |              |            |              |             |
| Radio                                      | 432        | 61.7%        | 383        | 54.7%        | 0.14            | 396        | 57.0%        | 388        | 55.0%        | 0.79        |
| Electricity                                | 140        | 20.0%        | 115        | 16.0%        | 0.57            | 197        | 28.0%        | 210        | 30.0%        | 0.79        |
| Bicycle                                    | 244        | 35.0%        | 210        | 30.0%        | 0.53            | 220        | 31.0%        | 182        | 26.0%        | 0.44        |
| Cell phone                                 | 506        | 72.0%        | 496        | 71.0%        | 0.70            | 522        | 75.0%        | 494        | 71.0%        | 0.17        |
| <b>Weighted Asset Score</b>                |            | <b>7.49</b>  |            | <b>6.87</b>  | <b>&gt;.001</b> |            | <b>7.61</b>  |            | <b>7.39</b>  | <b>0.34</b> |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Earning Disparity</b>                   |            |              |            |              |                 |            |              |            |              |             |
| About same                                 | 193        | 28.0%        | 172        | 24.6%        | 0.44            | 160        | 22.9%        | 152        | 21.8%        | 0.62        |
| All work together                          | 83         | 6.2%         | 74         | 7.5%         |                 | 71         | 10.1%        | 70         | 10.0%        |             |
| Husband more                               | 43         | 11.9%        | 52         | 10.6%        |                 | 97         | 13.9%        | 87         | 12.5%        |             |
| Wife more                                  | 378        | 54.2%        | 400        | 57.3%        |                 | 372        | 53.1%        | 390        | 55.8%        |             |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Hunger score</b>                        |            | <b>4.97</b>  |            | <b>5.06</b>  | <b>0.52</b>     |            | <b>4.92</b>  |            | <b>5.02</b>  | <b>0.55</b> |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Alcohol Use</b>                         |            |              |            |              |                 |            |              |            |              |             |
| None                                       | 393        | 56.1%        | 484        | 69.1%        | <b>&gt;.001</b> | 407        | 58.1%        | 429        | 61.3%        | 0.29        |
| Any  | 205        | 29.3%        | 156        | 22.3%        |                 | 180        | 25.7%        | 187        | 26.7%        |             |
| Alcohol Problem/Issue                      | 102        | 14.6%        | 60         | 8.6%         |                 | 113        | 16.1%        | 84         | 12.0%        |             |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>VSLA membership</b>                     |            |              |            |              |                 |            |              |            |              |             |
| I belong                                   | 186        | 27.0%        | 189        | 27.0%        | 0.62            | 144        | 20.6%        | 144        | 20.6%        | 0.78        |
| Spouse belongs                             | 140        | 20.0%        | 134        | 19.0%        |                 | 158        | 22.6%        | 184        | 26.3%        |             |
| Both                                       | 233        | 33.0%        | 214        | 31.0%        |                 | 256        | 36.6%        | 215        | 30.7%        |             |
| None                                       | 140        | 20.0%        | 163        | 23.0%        |                 | 142        | 20.3%        | 157        | 22.4%        |             |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Previous experience of IPV</b>          |            |              |            |              |                 |            |              |            |              |             |
| Physical IPV against previous partner      | 76         | 10.9%        | 59         | 8.0%         | 0.24            | 69         | 25.0%        | 43         | 16.0%        | 0.06        |
| Sexual IPV against previous partner        | 27         | 4.0%         | 30         | 4.0%         | 0.68            | 36         | 12.0%        | 31         | 10.0%        | 0.39        |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Witnessed mothers' abuse as a child</b> | <b>324</b> | <b>46.0%</b> | <b>289</b> | <b>41.0%</b> | <b>0.16</b>     | <b>347</b> | <b>50.0%</b> | <b>322</b> | <b>46.0%</b> | <b>0.35</b> |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Physically abused as a child</b>        |            |              |            |              |                 |            |              |            |              |             |
| Never/sometimes                            | 491        | 70.0%        | 460        | 66.0%        | 0.22            | 431        | 61.6%        | 440        | 62.9%        | 0.84        |
| Often                                      | 132        | 19.0%        | 151        | 22.0%        |                 | 160        | 22.9%        | 147        | 21.0%        |             |
| Very often                                 | 77         | 11.0%        | 89         | 13.0%        |                 | 109        | 15.6%        | 113        | 16.1%        |             |
|  |            |              |            |              |                 |            |              |            |              |             |
| <b>Actions taken towards IPV</b>           |            |              |            |              |                 |            |              |            |              |             |



|  |     |       |     |       |      |     |       |     |       |             |
|--|-----|-------|-----|-------|------|-----|-------|-----|-------|-------------|
| Spoken with someone about violence between couples                   |     |       |     |       |      |     |       |     |       |             |
| Never  | 153 | 21.9% | 170 | 24.3% | 0.40 | 167 | 23.9% | 174 | 30.3% | 0.25        |
| Once   | 105 | 15.0% | 121 | 17.3% |      | 115 | 16.4% | 89  | 20.1% |             |
| Twice  | 120 | 17.2% | 108 | 15.4% |      | 124 | 17.7% | 106 | 14.9% |             |
| Three or more times  | 321 | 45.9% | 301 | 43.0% |      | 294 | 42.0% | 331 | 34.7% |             |
| Offered emotional support to someone suffering in their relationship |     |       |     |       |      |     |       |     |       |             |
| Never  | 60  | 8.6%  | 62  | 8.9%  | 0.98 | 81  | 11.6% | 62  | 8.9%  | <b>0.05</b> |
| Once   | 125 | 17.9% | 132 | 18.9% |      | 121 | 17.3% | 125 | 19.1% |             |
| Twice  | 134 | 19.2% | 126 | 18.0% |      | 164 | 23.4% | 136 | 24.0% |             |
| Three or more times  | 379 | 54.3% | 380 | 54.3% |      | 334 | 47.7% | 377 | 48.0% |             |
| Attempted to intervene if someone was being beaten or harassed       |     |       |     |       |      |     |       |     |       |             |
| Never  | 110 | 15.8% | 178 | 25.4% | 0.19 | 115 | 16.5% | 121 | 24.9% | 0.76        |
| Once   | 153 | 22.0% | 157 | 22.4% |      | 149 | 21.3% | 134 | 22.9% |             |
| Twice  | 169 | 24.3% | 118 | 16.9% |      | 159 | 22.8% | 156 | 20.4% |             |
| Three or more times  | 265 | 38.0% | 247 | 35.3% |      | 276 | 39.5% | 288 | 31.9% |             |
| Encouraged a victim of violence to seek help                         |     |       |     |       |      |     |       |     |       |             |
| Never  | 134 | 19.3% | 188 | 26.9% | 0.44 | 169 | 24.2% | 154 | 27.7% | 0.19        |
| Once   | 175 | 25.2% | 167 | 23.9% |      | 173 | 24.8% | 161 | 25.6% |             |
| Twice  | 150 | 21.6% | 120 | 17.1% |      | 139 | 19.9% | 144 | 19.4% |             |
| Three or more times  | 236 | 34.0% | 225 | 32.1% |      | 217 | 31.1% | 241 | 27.3% |             |
| Total score (4 response categories for each item)                    |     | 11.60 |     | 11.72 |      |     | 11.28 |     | 11.57 | 0.18        |

### Outcome measures

As shown in Tables 13 and 14, there were no measurable differences in either of the primary outcomes related to IPV between participants in the intervention and control communities whether reported by women or by men. This means that overall, there was no measurable diffusion effect on levels of violence in the surrounding villages of the *Indashyikirwa* intervention.

Similarly, we were unable to reject the null hypothesis (observe an effect) with respect to isolated measures of any physical IPV, any sexual IPV, any economic IPV, or any emotional aggression as reported by women (male perpetration of emotional abuse was not asked). Among women, there were no detectable differences in help seeking among women recently experiencing IPV who lived in intervention sectors compared to those in comparison sectors.



**Table 13: Community survey outcomes for women**

|  | Study Arm    | Baseline % or mean | Endline % or mean | aOR/coeff | 95% CI |       | P    |
|--|--------------|--------------------|-------------------|-----------|--------|-------|------|
|  |              |                    |                   |           | lower  | upper |      |
| <b>Primary Outcomes</b>  |              |                    |                   |           |        |       |      |
| Intimate partner violence with main partner*   | Control      | 50.9%              | 49.7%             |           |        |       |      |
|  | Intervention | 58.9%              | 63.1%             | 1.24      | 0.90   | 1.69  | 0.19 |
| Acceptability of wife beating (number of reasons endorsed as justifications, range 0-5)          | Control      | 2.4                | 2.5               |           |        |       |      |
|  | Intervention | 2.0                | 2.2               | 0.04      | -0.23  | 0.31  | 0.77 |
| Actions to support victims of gender-based violence or combat gender-based violence (range 0-12) | Control      | 7.1                | 6.7               |           |        |       |      |
|  | Intervention | 7.1                | 6.6               | -0.09     | -0.61  | 0.44  | 0.75 |
| <b>Secondary Outcomes</b>  |              |                    |                   |           |        |       |      |
| Sources of information on IPV and number of times heard (range 0 – 36)                           | Control      | 19.9               | 20.2              |           |        |       |      |
|  | Intervention | 21.0               | 21.1              | -0.04     | -1.41  | 1.33  | 0.96 |
| Help seeking among survivors of IPV (N=872 baseline, N=933 endline)                              | Control      | 54.3%              | 51.8%             |           |        |       |      |
|  | Intervention | 55.1%              | 56.7%             | 1.15      | 0.79   | 1.68  | 0.46 |
| <b>Other outcomes measures (exploratory)</b>   |              |                    |                   |           |        |       |      |
| Physical intimate partner violence, main partnership*  | Control      | 40.9%              | 41.9%             |           |        |       |      |
|  | Intervention | 49.6%              | 56.7%             | 1.26      | 0.92   | 1.72  | 0.14 |
| Forced or coerced sex with main partner*   | Control      | 46.0%              | 43.8%             |           |        |       |      |
|  | Intervention | 50.5%              | 55.6%             | 1.34      | 0.98   | 1.82  | 0.07 |
| Economic abuse with main partner*  | Control      | 49.1%              | 53.6%             |           |        |       |      |
|  | Intervention | 52.1%              | 64.0%             | 1.29      | 0.95   | 1.77  | 0.11 |
| Emotional aggression with main partner*  | Control      | 71.9%              | 73.8%             |           |        |       |      |
|  | Intervention | 78.5%              | 82.3%             | 1.15      | 0.80   | 1.66  | 0.45 |



|  |              |       |       |       |       |      |      |
|--|--------------|-------|-------|-------|-------|------|------|
| Children in household witnessing IPV<br>(N=798 baseline, N=786 control household with children under 18, who reported physical or sexual IPV, and did not respond "don't know" regarding child witnessing) | Control      | 46.5% | 47.3% |       |       |      |      |
|  | Intervention | 46.2% | 54.6% | 1.29  | 0.86  | 1.94 | 0.22 |
| Support for women working outside the home (range -4 to +4)  | Control      | 1.33  | 1.42  |       |       |      |      |
|  | Intervention | 1.24  | 1.25  | -0.09 | -0.40 | 0.21 | 0.54 |
| Change in strategies used to address IPV (range 0-12)  | Control      | 3.17  | 2.98  |       |       |      |      |
|  | Intervention | 3.23  | 3.56  | 0.50  | -0.13 | 1.13 | 0.12 |

Note: All models control for age, education, and asset score. \*Models for these variables also control for prior experience of physical and/or sexual IPV, first sexual experience before the age of fifteen and forced first experience of sex

**Table 14: Community survey outcomes for men**

|  | Study Arm    | Baseline % or mean | Endline % or mean | aOR/coeff | 95% CI |       | P    |
|--|--------------|--------------------|-------------------|-----------|--------|-------|------|
|  |              |                    |                   |           | lower  | upper |      |
| <b>Primary Outcomes</b>  |              |                    |                   |           |        |       |      |
| Intimate partner violence with main partner*   | Control      | 19.7%              | 21.4%             |           |        |       |      |
|  | Intervention | 31.7%              | 34.7%             | 1.01      | 0.71   | 1.45  | 0.95 |
| Acceptability of wife beating (number of reasons endorsed as justifications, range 0-5)          | Control      | 0.92               | 0.91              |           |        |       |      |
|  | Intervention | 0.92               | 1.03              | 0.09      | -0.10  | 0.29  | 0.34 |
| Actions to support victims of gender-based violence or combat gender-based violence (range 0-12) | Control      | 7.72               | 7.58              |           |        |       |      |
|  | Intervention | 7.60               | 7.29              | -0.13     | -0.65  | 0.40  | 0.64 |
| <b>Secondary Outcomes</b>  |              |                    |                   |           |        |       |      |
| Sources of information on IPV and number of times heard (range 0-36)                             | Control      | 20.4               | 21.9              |           |        |       |      |
|  | Intervention | 21.3               | 22.0              | -0.70     | -2.15  | 0.76  | 0.35 |
| <b>Other outcomes measures (exploratory)</b>   |              |                    |                   |           |        |       |      |
| Physical intimate partner violence, main partnership*  | Control      | 22.5%              | 24.1%             |           |        |       |      |
|  | Intervention | 30.2%              | 35.5%             | 1.14      | 0.81   | 1.62  | 0.45 |
| Forced or coerced sex with main partner*   | Control      | 16.7%              | 17.3%             |           |        |       |      |
|  | Intervention | 27.3%              | 29.8%             | 1.05      | 0.71   | 1.53  | 0.81 |
| Economic abuse with main partner*  | Control      | 33.2%              | 34.1%             |           |        |       |      |



|  | Intervention | 34.6% | 40.9% | 1.23  | 0.89  | 1.69 | 0.20 |
|--|--------------|-------|-------|-------|-------|------|------|
| Children in household witnessing IPV<br>(N=470 baseline, N=476 household with children under 18, who reported physical or sexual IPV, and did not respond "don't know" regarding child witnessing) | Control      | 31.7% | 28.7% |       |       |      |      |
|  | Intervention | 32.8% | 40.1% | 1.66  | 0.93  | 2.94 | 0.09 |
| Support for women working outside the home (range -4 to +4)  | Control      | 0.97  | 0.84  |       |       |      |      |
|  | Intervention | 0.96  | 0.74  | -0.12 | -0.43 | 0.19 | 0.45 |

Note: All models control for age, education, and asset score. \*Models for these variables also control for prior perpetration of physical or sexual IPV, witnessing abuse of mother, and experience of severe physical punishment in childhood

#### Women's Space Service Utilization

Table 15 shows the number of people who attended the women's spaces and accessed services. It shows that the women's spaces were generally well known, well utilized, and well regarded in the communities. The fact that 69% of women and 71% of men reporting that they were aware of the service, and among those who were aware, 93% of women and 96% of men were willing to recommend it to others speaks to the centres' excellent reputation in the community. Moreover, 72% of women and 74% of men who attended activities or sought services at the women's spaces did so more than once.



**Table 15: Exposure to Women's Space (endline reports, intervention areas only)**

|  | Out of all respondents |       |     |       |      | Out of those who had heard of the women's space |       |     |       |      |
|--|------------------------|-------|-----|-------|------|---|-------|-----|-------|------|
|  |                        | Women |     | Men   |      |   | Women |     | Men   |      |
| Variables  | n                      | %     | N   | %     | p    | N   | %     | n   | %     | p    |
| Have you ever heard about the women space? (out of N= 700 women and N=700 men interview in intervention communities) | 483                    | 69.0% | 497 | 71.0% | 0.63 | n/a   |       | n/a |       | n/a  |
|  |                        |       |     |       |      |   |       |     |       |      |
| Have you ever been involved in the activities of the women's space?  |                        |       |     |       |      |   |       |     |       |      |
| 1. Yes, once   | 86                     | 12.3% | 93  | 13.3% | 0.44 | 100   | 20.7% | 86  | 17.3% | 0.07 |
| 2. Yes, twice  | 89                     | 12.7% | 77  | 11.0% |      | 89  | 18.4% | 77  | 15.5% |      |
| 3. Yes, more than twice  | 170                    | 24.3% | 162 | 23.1% |      | 170   | 35.1% | 162 | 32.5% |      |
| Total:   | 345                    | 49.3% | 332 | 47.4% |      | 358   | 74.2% | 325 | 65.3% |      |
|  |                        |       |     |       |      |   |       |     |       |      |
| Have you sought assistance from the women's space for problems you were having?                                      |                        |       |     |       |      |   |       |     |       |      |
| 1. Yes, once   | 74                     | 10.6% | 78  | 11.1% | 0.47 | 74  | 15.3% | 78  | 15.7% | 0.44 |
| 2. Yes, twice  | 31                     | 4.4%  | 35  | 5.0%  |      | 31  | 6.4%  | 35  | 7.0%  |      |
| 3. Yes, more than twice  | 38                     | 5.4%  | 53  | 7.6%  |      | 38  | 7.9%  | 53  | 10.6% |      |
| Total:   | 143                    | 20.4% | 166 | 23.7% |      | 142   | 29.5% | 166 | 33.3% |      |
|  |                        |       |     |       |      |   |       |     |       |      |
| Are you aware of anyone else who has sought service from the women's space?  | 253                    | 36.1% | 303 | 43.3% | 0.08 | 253   | 52.4% | 303 | 61.0% | 0.01 |
|  |                        |       |     |       |      |   |       |     |       |      |
| Would you advise other women to seek assistance from the women's space?  | 450                    | 64.3% | 479 | 68.4% | 0.34 | 448   | 92.8% | 478 | 96.2% | 0.06 |



### **Couples Cohort**

This impact evaluation found substantial and statistically significant overall reductions in the experience of physical and/or sexual IPV at 24 months of follow up among both women ( $aOR= 0.45$ ; 95% CI: 0.34 – 0.60) and men ( $aOR= 0.53$ ; 95% CI: 0.38 – 0.75) who participated in the *Indashyikirwa* couples' curriculum. This magnitude impact is on par with what has been achieved by the most successful programs globally (Abramsky et al., 2014; Doyle et al., 2018; Pronyk et al., 2006; Wagman et al., 2015) and represents a substantial achievement in the prevention of IPV.

Detailed results for female participants show statistically significant reductions in both physical IPV and sexual IPV, while for men, significant reductions in reported perpetration were achieved only for sexual partner violence at 24 months. Similarly, women participating in the couples' curriculum reported significantly lower odds of experiencing economic abuse not paralleled by men's reports, and also reductions in the experience of emotional aggression (not assessed for men). The discordance between findings among male and female participants in a couples' evaluation is not uncommon (Doyle et al., 2018; Jewkes et al., 2008), and likely reflects normal differences in perception of events between partners in a relationship.

Data from the qualitative research and process evaluation supports this interpretation. According to the qualitative data with trained couples, women were also more likely to report experiencing IPV than men were to report perpetrating it, especially at baseline. However, by the endline interviews, men and women had much more concordant responses around IPV. This was linked to similar processes of change in response to *Indashyikirwa*, including greater awareness of various types and consequences of IPV. The qualitative data confirms women's reports of reduced forms of all IPV, including economic IPV.

The findings for both male and female *Indashyikirwa* participants regarding overall reductions in IPV are bolstered by the quantitative findings from both men and women regarding overall improvements in relationship quality. These include decreased relationship conflict, improved conflict management, increased communication and heightened trust among couples attending the couples' sessions. Several female partners related how they felt increasingly able to initiate and openly communicate with their spouses and appreciated how this was encouraged through the curriculums and take-home activities. Women's greater communication abilities were also said to be linked to fostering their "power within," improved relationship quality, and reduced experiences of GBV. RWAMREC and RWN staff noted that the curriculum itself allowed couples to spend a greater amount of time together, which was identified as an important platform for fostering greater communication. The qualitative research indicates that the skills building sessions and the use of take-home exercises helped couples apply and practice new relationship skills (i.e. communication, conflict resolution) and witness the benefits first-hand. Couples especially appreciated the positive, inspiring approach of the curriculum to build healthier, more equitable relationships (Stern & Nyiratunga, 2017). Learning the concept of "power over" helped couples identify causes and consequences of various forms of IPV and to prevent IPV in their relationships.

Women and men who participated in the couples' curriculum also decreased their endorsement of various justifications for wife beating. Women showed increased self-efficacy to engage with community processes, women and men showed increased willingness to advise their neighbour on their relationships, and both reported increased participation in actions to prevent IPV. According to the qualitative data, the majority of the trained couples expressed commitment and confidence to prevent and respond to IPV in their



communities, as well as a desire to share their benefits and learnings from the curriculum. Indeed, more couples than the programme had budgeted for expressed interest in serving as *Indashyikirwa* Community Activists. Learning the concepts of “power to” and “power with” and how to safely intervene in violence, supported couples’ ability to offer empowering responses to IPV within their communities.

An important additional benefit of the Couples’ Curriculum were the secondary benefits that accrued to children in the households. Parents reporting physical or sexual IPV reported significant reductions in events witnessed by children, and both women and men reported dramatic decreases in their endorsement of corporal punishment of children and reduced frequency of smacking or beating children in the household. This is important not only for the well-being of children, but also for long term future prevention of IPV. It is well known that witnessing abuse of a mother and experiencing harsh physical punishments in childhood are strong risk factors for both experience (among women) and perpetration (among men) of IPV later in life (Roberts et al., 2010). Interrupting this cycle helps to reduce IPV not only in the present but also for future generations. The qualitative data suggests negative implications of IPV on children were identified through the Couples’ Curriculum and provided a powerful platform to promote the value of non-violent families (Stern & Nyiratunga, 2017).

Another important benefit of couples’ participation in *Indashyikirwa* was improvements in both mental and (likely) physical health. Both men and women reported reductions in depressive symptoms on the CES-D 10 scale and improvements in self-rated health. While these results should be interpreted with caution given that both measures are indicative rather than diagnostic, they are highly plausible correlates of the reported improvements in the quality of intimate partnerships and reductions in violence. An additional exploratory finding were lower scores on the Abbreviated PTSD Checklist – Civilian (Lang & Stein, 2005; Lang et al., 2012) in the intervention versus control couples at both midline and endline. This finding must be interpreted with extreme caution as we did not assess this construct at baseline, but taken together with other findings, it affirms the likely benefit of the Couples’ Curriculum for participants’ health. To the extent that the *Indashyikirwa* Couples’ Curriculum leads to improved health, it is possible that additional benefits in terms of increased productivity and decreased health care expenditures could ensue. According to the qualitative data, improved relationship quality and happiness was one of the most significant impacts of *Indashyikirwa*, which was related to reduced experiences of IPV. Many women also asserted how reflecting on the concept of “power within”, learning their rights, and being able to draw on the support of other trained couples and facilitators, improved their self-confidence and well-being.

A final very important benefit of participating in *Indashyikirwa* versus the standard VSLA programme was the improvements shown in household wellbeing in the form of increased income and reduced hunger – also measured as an increase in households considered food secure. There are two possible explanations for this finding, both of which may be simultaneously true. First, the couples’ curriculum included explicit content on the value of women’s economic empowerment and strategies for shared decision making around finances. According to the qualitative data, learning the benefits of shared economic decision-making was a powerful alternative to the dominant social norm of men holding all of the economic decision-making power (Stern & Niyibizi, 2018). It is quite plausible that improving couples’ ability to function as cooperative economic partners could have improved the overall economic standing of *Indashyikirwa* households. In addition, participants in the couples’ curriculum were paid a stipend of RWF 2000, per person per session. According to the qualitative data, many couples made investments using this stipend including purchasing things such as bicycles, livestock, or roofing. They emphasized that these improvements were possible through the combined impact of the stipend and the more equitable financial planning and decision-making skills they learned through the



programme. Many men also reported reduced spending on alcohol, and how this improved their household development. Future efforts to scale up, adapt, or implement *Indashyikirwa* should attempt to tease out the impact of the curriculum on economic development versus the impact of any participation stipends (which may have functioned as conditional cash transfers).

### **Community Surveys**

It is unfortunately not possible to fully assess the effectiveness of the Community Activism component of *Indashyikirwa* as originally designed, because the roll out and implementation of activist activities were significantly delayed. A timeline of programme activities suggests that the majority of activities specifically aimed at reducing violence at a community level—including encouraging disclosure of abuse, modelling appropriate support for victims, enhancing understanding of women's rights under the law, and intervening in IPV, did not begin until April 2018, two months before community endline data were collected. Because of the time to finalize the *Indashyikirwa* design, pre-test and implement the curricula, and choose SASA! activist materials required for adaptation, *Indashyikirwa* only had 1.5 years available for activism (November 2016–June 2018). The programme rigorously adapted SASA! activism materials to the Rwandan context and programmatic theory of change, yet this delayed the rollout of many of the materials. As a result, most activists relied solely on a few materials from the “start” and “awareness” phase of SASA!, which focused on introducing the four types of power and expanding understanding of the different types of IPV. Monitoring data suggest that a large number of individuals were reached by activist activities, although the range of content was highly restricted due to delays in adapting appropriate visual aids (e.g. picture cards and community conversation posters) promoting the “support” and “action” phase of SASA! messaging.

Additionally, qualitative evaluation data suggest that the type of “informal activism” that is the foundation of the SASA! approach did not translate easily to the Rwandan setting, where formal meetings are much more the norm (Stern et al., 2018). Because of this, activists used existing forums, such as parents evening forums and VSLA groups to deliver their messages, especially during the first year of the programme, which likely limited the diffusion of programme content, especially if the same individuals attended these events over time. Community activities were likewise delayed because the Community Activists could not command time at community meetings without the support of village leaders. This necessitated an additional (and unanticipated) round of project introductions and meetings with leaders throughout the seven sectors before activism activities could get underway.

Qualitative data suggest that the activists were just reaching their stride when activism activities had to cease. There was consensus from programme partners that the activism component was too rushed, and that community members were starting to fully understand and apply the learned concepts just as the programme ended. Experience from other settings suggests that the programme would have had to continue for at least another two years to have had a reasonable chance of detecting a shift in attitudes, norms or behaviour around violence at the population level. The SASA! project that did achieve 52% reduction in physical IPV at a community level (and 24% reduction of sexual IPV), was implemented intensively over 4-years in 4 neighbourhoods in a high-density part of Kampala, Uganda. The SASA! fidelity brief suggests that 3-5 years of activist activity is required for activism to cover the required content necessary to shift norms and effect behaviour at a population level.



Thus, a key learning from this evaluation is that much more time was needed for the activism component, and that the SASA! model of community change probably does require more time than was available. This is an important insight for the field of community IPV prevention. Encouragingly, the survey findings hint at greater disclosure of different types of IPV (physical, sexual, emotional, economic) in the intervention communities during endline surveys, which suggests improved awareness of these types of violence. This is one of the anticipated impacts of the programme, and an important part of the trajectory to later behaviour changes. There is also a wealth of qualitative impact evaluation and programme monitoring and evaluation data attesting to a positive trajectory of change among engaged Opinion Leaders, Community Activists, and community members exposed to *Indashyikirwa* activities including reduced experiences of various types of IPV, reduced acceptability of IPV, and more responsive and supportive community responses to survivors of IPV.

Moreover, the community survey suggests the value of the *Indashyikirwa* Women's Safe Spaces. The majority of women and men reported attending the Women's Safe Spaces multiple times. Additionally, the majority would recommend the Women's Safe Spaces to survivors of GBV. The qualitative data confirms that the Women's Safe Spaces provided vital services to women experiencing abuse, as well as the opportunity to connect with other women, learn relationship and income-generating skills, and support their well-being. Safe space attendees expressed their preference to disclose IPV to the Women's Safe Spaces over other more formal options such as the police or local authorities. The community endline survey also suggests that women and men who attended the Women's Safe Spaces for the activism discussions reported slight reductions in experiences and perpetration of IPV. This indicates a positive impact among community members we know were exposed to *Indashyikirwa* educational materials and activism activities.

### **Overall Reflections on Findings**

It is useful to benchmark the findings of this evaluation against the existing literature evaluating similar programs. The reductions in diverse forms of IPV among couples (physical, sexual, economic and emotional) achieved by the *Indashyikirwa* curriculum is significant and higher than that achieved by other successful group-based processes designed to reduce violence in relationships. For example, the *Bandebereho* programme in Rwanda achieved significant decreases in physical and sexual IPV but reduced emotional and economic IPV was not confirmed (Doyle et al., 2018). Likewise, the MAISHA programme in Tanzania, which combined microfinance activities with group gender empowerment training, was found to reduce physical IPV among women. However, there was no impact on women's reports of sexual or emotional IPV, which is likely because women's male partners were not involved in the programme (Harvey et al., unpublished).

It is also rare for programs to have effectively reduced both men's perpetration and women's experiences of violence. Many impact evaluations, such as the *Stepping Stones* programme in South Africa (Jewkes et al., 2008) tend to report a change in one but not the other. Although some expected discrepancies were found between men and women's reports from this evaluation, the fact that the Couples' Curriculum generated statistically significant declines in both perpetration and experiences of IPV is an uncommon and significant achievement.

Moreover, it is rare for programs to demonstrate significant changes in IPV at the community level via community-based activism and diffusion. Only the SASA! model as implemented in Uganda has shown reductions in IPV at a population level in a rigorous RCT like the one reported here. And as noted above, there



are a range of possible explanations for the discrepancy in findings, including the difference in implementation of the activism component of *Indashyikirwa* compared to the original *SASA!* model, the cultural comfort with informal activism, and most importantly, the length of time available for activism before the final impact assessment was conducted.

**Table 16: A sample of published gender based violence prevention programs similar to *Indashyikirwa***

| <b>Programme Description and Duration</b>   | <b>Study and Timing</b>   | <b>Setting</b>  | <b>Demonstrated Impact on IPV</b>   |
|---|---|-----------------|---|
| <b><i>SASA!</i>: phased Community Activism for 3+ years</b><br><br>Intervention targeted community as a whole, including residents, service providers and Opinion Leaders | RCT: repeat cross-sectional survey of random selection of community members<br><br>Baseline survey conducted prior to implementation and follow up survey conducted 4 years later   | Kampala, Uganda | At follow-up, physical, sexual and emotional IPV (including severe forms of each) were lower in intervention communities compared with control communities, but results were not statistically significant due to low power. <i>SASA!</i> did achieve statistically significant reductions in acceptability of IPV and women's reported ability to refuse sex (Abramsky et al., 2014)<br><br>Statistically significant effects were observed for secondary outcomes including: continued physical IPV (adjusted risk ratio[aRR] 0.42, 95% CI 0.18 to 0.96); continued sexual IPV (aRR 0.68, 95% CI: 0.53 to 0.87); continued emotional aggression (aRR 0.68, 95% CI: 0.52 to 0.89); continued fear of partner (aRR 0.67, 95% CI: 0.51 to 0.89); and new onset of controlling behaviours (aRR 0.38, 95% CI: 0.23 to 0.62). |
| <b><i>SHARE</i>: Community Activism (adaptation of <i>SASA!</i>), screening and intervention to reduce HIV-disclosure-related violence and sexual risk for 4 years</b>    | Community cohort survey, embedded in an on-going cluster randomized trial of HIV prevention education HIV-related counselling, testing and treatment services<br><br>Baseline survey of 5337 individuals in four intervention clusters and 6111 in seven control communities before <i>SHARE</i> was implemented; follow-up interviews with both groups after 16 months and 35 months | Rakai, Uganda   | <i>SHARE</i> reduced past year prevalence of physical IPV reported by women by 4% and past year sexual IPV reported by women by 3%. <i>SHARE</i> was not associated with reductions in emotional IPV or men's perpetration of IPV (Wagman et al., 2015)   |



|   |  |   |   |
|---|--|---|---|
| <b>IMAGE:</b> participatory gender and HIV training of women participating in an existing microfinance group, together with wider community mobilization for 6-9 months                                     | RCT of women receiving gender training plus micro-finance loans, vs loans only (cohort 1); Survey of household members of either sex aged 14–35 years who lived with loan recipients (cohort 2); and random sample of community residents of either sex aged 14–35 years (cohort 3)<br><br>Baseline interviews at beginning and end of 3-year study period | Limpopo, South Africa   | <p>Cohort 2: No significant impact on unprotected sex with a non-spousal partner within the last 12 months among household residents living with loan recipient (IPV not measured)</p> <p>No significant effect on HIV acquisition in the community, the primary outcome for cohort 3. IPV not measured in community cohort.</p> <p>(Pronyk et al., 2006)</p>                               |
| <b>MAISHA:</b> 10 sessions of participatory gender training delivered in the context of micro-finance groups  | RCT: comparing women receiving the MAISHA training plus loans to women receiving only loans<br><br>Baseline interview before intervention; follow up interview after 3 years   | Mwanza, Tanzania  | Reduced past year physical IPV by 30% among women; no significant reduction in emotional or sexual IPV (not yet published)  |
| <b>Bandebereho:</b> 15-session parenting and relationship training programme with expectant/current fathers and their partners (adapted from Programme P)   | <p>Multi-site RCT among 575 men and their partners randomized to intervention compared to 624 control couples</p> <p>Men were interviewed at 3 time points (baseline, 9 months and 21 months); women were interviewed at 9 months and 21 months</p>  | Four districts of Rwanda (Karongi, Musanze, Nyaruguru and Rwamagana)    | <p>Reduced odds of experiencing physical IPV among women in the past 12 months (aOR 0.37; p&lt;0.001) and sexual IPV (aOR 0.34; p&lt;0.001) in the last 12 months. Study did not measure reductions in emotional or economic IPV.</p> <p>Led to reductions in men's dominance in household decision-making and improvements in division of household labour</p> <p>(Doyle et al., 2018)</p> |
| <b>Stepping Stones:</b> Gender and sexual and reproductive health (SRH) curricula delivered to single sex groups during 13, 3-hour long sessions; 3 male & female peer groups and a final community meeting | Cluster RCT among men and women aged 15-26 years, mostly attending school<br><br>Baseline interviews before intervention; follow up interviews at 12 and 24 months   | 70 villages in Eastern Cape, South Africa (35 intervention; 35 control) | Significant reduction in men's reported use of physical IPV at 24 months (aOR 0.62; p=.054), but no sustained impact on women's reported experiences of physical or sexual IPV (Jewkes et al., 2008)  |
| <b>IMAGE:</b> micro-credit and gender training for 10 sessions  | RCT with women enrolled in the IMAGE programme   | Limpopo, South Africa   | Reduced past year physical IPV by 55% among women who participated in the gender training and microfinance  |



|  |   |  |   |
|--|---|--|---|
|  | Baseline interviews after enrolment but before loan disbursement and follow up interviews 2 years later |  | programme compared to microfinance alone.<br><br>Strong effect on attitudes that challenged established gender roles, and more progressive attitudes to IPV, smaller effects on improved self-confidence and communication with partners about sexual matters (Pronyk et al., 2006) |
|--|---|--|---|

### **Strengths and limitations**

As with all projects, this impact evaluation has a number of limitations and a number of strengths. First, all measures rely on self-report, making them subject to under-reporting and disclosure bias. Although repeat interviews over time are one way to improve disclosure of gender-based violence, no method completely solves the problem of underreporting (Basile, 2008). There may also be social desirability bias around participants wanting to report favourably on an intervention they clearly valued or wanting to emphasize what they learned. We attempted to mitigate this possibility by using anonymous reporting through ACASI data collection, which most participants seemed to find highly acceptable. There is a wealth of evidence that suggests that ACASI encourages more truthful and forthcoming reporting compared to face-to-face interviews or self-administered methods for stigmatized topics (Macalino et al., 2002; Fenton et al., 2001), but exceptions have been documented, see (Rathod et al., 2011). We also attempted to mitigate social desirability effects by using field researchers that were external to the programme and emphasizing the confidentiality of all answers. Analysis of disclosure of key variables found no difference in prevalence by whether participants did the interview via ACASI or face to face, so at minimum we are confident that ACASI did not decrease reporting. There was some minor differential loss to follow-up among the couples' cohort participants who are more vulnerable economically and/or who had experienced violence previously; however, this would tend to bias our findings towards the null hypothesis. Moreover, our excellent cohort retention, served to mitigate any significant impact of differential loss to follow up on the findings. Overall, the triangulation of reports from both partners, as well as with the qualitative data, enhances the validity and strength of our findings.

### ***A note on generalizability***

It is important to note that all data collected here were collected for the purpose of impact evaluation, and inferences are therefore limited to conclusions about the effectiveness of the *Indashyikirwa* programme. The sampling procedures used for both the couples' cohort and the community surveys were designed to optimize our ability to test differences between intervention and control arms in the cRCT and should not be used for other purposes. To the best of our knowledge, this was the first project to use ACASI for community data collection in Rwanda, and the data thus generated are therefore not directly comparable to those collected in any research conducted using face-to-face surveys. These data should not be regarded as comparable to any official statistics or population-based estimates from other research. In particular, no conclusions can or should be drawn about the prevalence of any measured variable in any geographic area.



## Lessons Learned and Recommendations

The research generated important lessons for the *Indashyikirwa* programme, and broader lessons in terms of what works to prevent violence against women and girls.

### 1. *Integrate adequate time for programme development and adaptation.*

*Indashyikirwa* had a one-year inception phase which gave adequate time to develop an evidence-informed theory of change and broader programme design and to develop and pilot the curriculum. This inception period was critical to design a strong programme, including relevant and appropriate curricula and activism activities.

However, the adaptation and roll out of the Community Activism component would have benefitted from additional time. In this case, as elsewhere, the implementing partner underestimated the time needed to adapt an existing programme (i.e. SASA!). This includes revising, producing and pre-testing materials and implementation strategies for a new context, which means that it may not be possible to complete a programme in the same timeframe as the original model.

### 2. *Prioritize facilitator training and support.*

The participatory approach of the *Indashyikirwa* trainings, which supported active engagement and Women's Safe Spaces, was invaluable. It was essential to have facilitators who were able to adapt to the programme's participatory facilitation style. The programme had to recruit and train more facilitators than were eventually employed, because even with training, not all people were well-suited for this role.

### 3. *Build on the positive.*

It was important for the curricula and activism materials to cover the benefits of positive alternatives to IPV, and to emphasize skills for building healthy, non-violent relationships.

### 4. *Consider using the power paradigm.*

The fundamental concept of positive types of power (power within, power to, power with) and negative types of power (power over) helped couples identify multiple forms of IPV to move beyond the binary of men = perpetrators; women = victims of IPV. The concept of 'power within' was said to improve women's self-confidence, and the concepts of 'power with' and 'power to' supported couples to work together to prevent and respond to IPV in their communities.

The programme would have benefitted from identifying the need to orient all village leaders from the outset and consciously engaging more village leaders in the initial Opinion Leader's curriculum. Because not all intervention village leaders completed the initial *Indashyikirwa* training, it was essential for programme staff to meet with all village leaders before the activism started to ensure their support of the programme.



### **5. Adapt programming in response to research findings.**

The evaluation research informed the ongoing programming. For instance, the pre-test strengthened the Opinion Leader Training, including further integration of cultural examples and Kinyarwanda proverbs. The ongoing evaluation informed content of refresher trainings with Opinion Leaders, and the development of activism materials, such as messages incorporating religious scriptures. The interviews with programme staff particularly helped identify implementation challenges and solutions.

### **6. Formalize linkages between all programme components.**

For instance, the linkages with Women's Safe Spaces and Opinion Leaders were critical to support the work of Community Activists; the former for referral and the later to support activists' access to activism venues and enhance their credibility. The quarterly meetings with Community Activists, Women's Safe Space facilitators and Opinion Leaders were valuable for fostering these linkages.

### **7. Carefully consider data collection options.**

This study demonstrated that ACASI proved a viable approach to data collection in Rwanda, even among individuals with low levels of literacy. It was important that participants had the option of face-to-face interview; however, the majority of participants nonetheless opted for ACASI. ACASI has limitations including that it may feel impersonal or intimidating; likewise, it limits the complexity of answers to pre-defined responses, especially in settings where the technology is unfamiliar (Metzger et al., 2000). However, it can be used in a group setting which reduces data collection costs and may limit measurement error. Moreover, evidence suggests that the ACASI methodology reduces socially desirable responding compared to face-to-face interviews and has generally yielded higher reporting for sensitive topics such as sexual behaviour (Fenton et al., 2001).

## **Conclusion**

By demonstrating the effectiveness of a couples-based curriculum, this study has global implications for the field of violence prevention. The findings underscore the benefits of an approach that combines critical reflection, healthy relationships, positive alternatives to IPV and skills building. It also highlights the utility of the “4 types of power” as a frame for broaching the subject of violence and encouraging power sharing in relationships (Stern & Nyiratunga, 2017). *Indashyikirwa*'s emphasis on skills building around communication and conflict resolution, together with opportunities to practice new skills through take home activities, appeared critical to successful behaviour change among couples. The programme's focus on the links between and overlapping consequences of all forms of IPV (physical, emotional, economic, sexual), and the legal protections in place against various forms of IPV, also proved important (Stern & Niyibizi, 2018). Both men and women highly valued the opportunity to work together on their relationship, and the joint sessions promoted mutual accountability to the curriculum learning. In this way, working with men and women at the same time may be less risky for women than working with women only to support their empowerment.



The community-based approach of *Indashyikirwa* heavily emphasized skill development and behaviour change, and the goal of wider social norms change. It appeared critical that *Indashyikirwa* supported couples not only to develop skills for their own relationships, but also to take action in their communities, including responding to GBV survivors in more empowering ways and safely intervening in conflict. This speaks to the value of both couples' group and the community-based strategy as pathways to violence reduction.

Although this study did not demonstrate significant impact at the community level, it solidifies the importance of time and intensity of exposure to achieving population-level reductions in violence. Promisingly, the endline survey demonstrated enhanced community awareness of IPV, and underscored the value of the Women's Safe Spaces. The Women's Safe Spaces were a valuable addition to a combined curriculum and activism model. There was also evidence from the qualitative research that positive changes were beginning to occur at a community level, including the emergence of more equitable attitudes, greater understanding of IPV and more support for survivors of domestic violence. When we look at all components of the evidence, the data supports a trajectory of positive change in communities, in addition to the unquestionably strong findings among couples.

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