

DRG LEARNING, EVALUATION, AND RESEARCH (DRG-LER) ACTIVITY IMPACT EVALUATION: COMMUNITY BASED TRAUMA HEALING IN DEMOCRATIC REPUBLIC OF CONGO FINAL REPORT

August 2022

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ACRONYMS

CBTH	Community-Based Trauma Healing
CTS	Conflict Tactics Scale
DRC	Democratic Republic of Congo
FDR	False Discovery Rate
GBV	Gender-Based Violence
HA	Health Area
IE	Impact Evaluation
IPV	Intimate Partner Violence
ITT	Intent to Treat
LATE	Local Average Treatment Effect
MSC	Most Significant Change
SBCC	Social and Behavior Change Communication
SV	Sexual Violence
ТН	Trauma Healing
THC	Trauma Healing Champion

EXECUTIVE SUMMARY

Gender Based Violence remains a persistent problem in many countries in the world. Thirty-five percent of women globally report being victims of physical or sexual abuse during their lifetime and one-third of women who have been in a relationship have experienced physical or sexual violence from a partner. Globally, one out of every five women is expected to become a victim of rape or attempted rape during her lifetime, and intimate partner violence (IPV) is the most common form of violence against women.

This report presents key results from an Impact Evaluation (IE) of a program that aimed to change norms around Gender Based Violence in the Democratic Republic of Congo. The evaluation collected primary data on Gender Based Violence norms and behaviors across multiple waves in a large sample and assesses the impact of selected aspects of the *Tushinde Ujeuri* program to reduce gender-based violence and improve community cohesion. The program was coordinated by IMA World Health and implemented by several partners including Panzi Foundation, Heal Africa, ABA Rule of Law Initiative and Search for Common Ground.

The IE employs a randomized controlled trial design to test the effectiveness of Community-Based Trauma Healing (CBTH) as a core approach to change norms and behavior around gender-based violence (GBV), and particularly intimate partner violence (IPV) as well as sexual violence (SV) more broadly. For the impact evaluation, 80 villages were randomly selected to receive the CBTH program from a list of 160 villages across 3 health zones in Eastern DRC. The remaining 80 villages served as a control group. We collected detailed baseline and follow-up data in all villages. For the CBTH program in each community, Trauma Healing Champions (THCs) were recruited and trained to organize up to eight trauma healing sessions. Each session spanned across three days, meeting for about 2-3 hours each day for both men and women. The sessions focused on understanding the signs of trauma, thinking about healing and solutions, and understanding services and other forms of support that exist in the community or near the community.

The IE assesses impacts on perceived norms and individual attitudes and behaviors (self-reported and observed). In addition, the IE aims to assess whether and how these interventions affect the uptake of services provided to survivors of GBV through the Aire de Sante (health area) level service delivery of the Tushinde Ujeuri program. These services included the uptake of legal, medical, psychological, and socio-economic services. Within each Aire de Sante (40 in total), the CBTH programming was implemented in two randomly selected villages and two additional villages served as controls. This study is among the first to rigorously evaluate a CBTH intervention in regions with an ongoing conflict.

We find that outcomes improve in the entire study area, across both intervention and control villages, over the study period – likely reflecting broader social trends and positive impacts from the holistic Tushinde program. Between the two survey waves, we find a drop in IPV, non-Partner GBV, IPB and GBV perpetration as well as increases in many of our mental health indicators including depression, anxiety and PTSD. There is a 14-percentage point decrease of women reported having experienced IPV and a 9-percentage point decrease in non-partner GBV. These changes are impressive, as they occurred despite the global COVID-19 pandemic.

When comparing villages assigned to CBTH programming and control, we see some promising changes. Non-partner sexual violence was 50% lower in villages assigned to CBTH programming compared to

those assigned to control villages (a drop in reported incidence from 5% to 2.6%). This study is among the first interventions to show an effective reduction in the experience of non-partner sexual violence among female participants of an intervention. Self-efficacy and community resilience also improved in villages assigned to CBTH programming. While the differences are small, these findings show some promise, and indicate that CBTH has helped improve the outcomes it aimed to target—feelings of agency and ability to improve one's own life and a greater sense of connectedness with, and trust in, one's community as a whole.

However, these results should be seen as suggestive and not conclusive evidence that CBTH improved GBV related outcomes. When we adjust our analysis for multiple hypothesis testing (a statistical procedure to correct p-values), none of the reported results are significantly different from zero. Other mental health outcomes also moved in the right direction, but are not significantly different between villages assigned to CBTH programming and those assigned to control (even before correcting for multiple hypothesis tests).

One explanation for finding over-time changes in all villages but no experimental effect of CBTH is that spillover between treatment and control villages tampered the differences between CBTH and control villages. Indeed, nearly identical proportions of respondents across treatment and control villages expressed awareness of and exposure to CBTH programming in our survey. Combined with the positive overall progression in GBV outcomes between baseline and endline, this suggests that the program may have had an overall positive effect on both types of villages.

There are several potential paths by which spillovers could have taken place. The program implementation relied on the existing program services available at the Aire de Sante level. In each Aire de Sante, two villages received the program and two villages served as controls. These villages were often geographically close to each other (with a mean distance of just under 3 kilometers), because of the need to assign treatment and control among villages receiving the wider *Tushinde* programming. In post-implementation debriefs with implementers, it seems the geographic proximity resulted in individuals in control villages seeking out CBTH programming. People in control villages may also have heard about the CBTH programming when participating in other *Tushindi* activities or services organized at the Aire de Sante level (i.e., the legal, medical, psychological and socio-economic services). Indeed, between 7 and 22% of respondents in both treatment and control villages report to have benefited from these services.

The exact degree of spillover is unknown. Our survey data shows that many people in control villages were aware of and exposed to CBTH programming. However, according to implementation documents, there were no activities organized in control villages, nor do the records show people from control villages were present at the CBTH sessions. It is thus hard to precisely quantify to what degree control villages were exposed to programming. Qualitative investigations suggest that people from control villages only occasionally participated in CBTH sessions or asked the community mobiliser (the THC) to talk to them in private or organize a session on trauma healing in their villages. It is therefore unlikely that people in control villages were exposed to the same level of programming as the treatment group (all 8 CBTH sessions). The true amount of spillover likely lies somewhere between the records of the implementing partner and people responding to our survey questions.

Regardless of the precise path or amount of spillover, spillover means that the outcomes we observe in control villages were likely affected by CBTH programming in nearby treatment villages. As a

consequence, a comparison between treatment and control villages likely underestimates the true impact of CBTH. The positive over-time changes in all villages also supports the idea that the experimental analysis underestimates the effect of CBTH on the outcomes under study.

The COVID-19 pandemic occurred during project implementation – temporarily disrupting CBTH services and calling for adaptations to the programming model. While implementation was eventually able to resume, it is important to acknowledge that the pandemic represents a significant influence on villages participating in this IE. Around the world, there is significant evidence that the pandemic and its associated lockdown measures significantly impacted women's social and economic inclusion, and physical security while simultaneously increasing the risk of multiple forms of violence. Within our own study, we presented findings that highlight how COVID-19 has had negative impacts on both individuals and villages. COVID-19 increased insecurity in nearly one in four villagers and disproportionately affected women. One in four respondents also said that they had quarantined at home as a result of the pandemic - women were four times more likely to report staying at home compared to men. Of those individuals who reported staying home, one in five experienced violence with the vast majority stating this violence had gotten worse since quarantine began. These adverse impacts of COVID-19 on mental health overall may have attenuated larger gains in mental health in treatment villages. IPV perpetration and victimization decreased over the course of the study period in all villages; however, this decrease was not higher in intervention villages compared to control villages.

Uptake of Tushinde services was quite high across all project sites, despite potential disruptions from COVID-19. However, 15% of endline respondents stated that they did not seek services when they otherwise would have because of concerns about the COVID-19. In addition, women had 80% greater odds of stopping to seek service compared to men.

The positive over-time changes we observe in the study villages, both intervention and control, are notable given it has been implemented in regions with ongoing conflict that were simultaneously affected by a global pandemic. Though we found no conclusive experimental evidence for the effectiveness of the CBTH programming, some of the positive over-time changes are likely due to the Tushinde program and CBTH programming. The over-time changes could, in theory, be caused by other environmental factors, but it is unlikely that any environmental factors would cause such large changes (e.g., a 14-percentage point decrease in intimate partner violence) during COVID-19. Those positive changes are also unlikely to result from respondents learning how to respond to the survey because not all outcomes improve. As such, there is promise for CBTH interventions to contribute to positive change in GBV-related outcomes, even in highly unstable environments.

EVALUATION PURPOSE AND EVALUATION QUESTIONS

BACKGROUND ON THE IMPACT EVALUATION

This report presents key results from a randomized Impact Evaluation (IE) of a program that aims to use trauma healing approaches to reduce gender-based violence (GBV) and improve mental health outcomes in Eastern Democratic Republic of Congo (DRC). The IE tests the effectiveness of Community-Based Trauma Healing (CBTH) as a core approach to changing both norms and behavior around GBV, particularly intimate partner violence (IPV) as well as sexual violence (SV) more broadly. CBTH was implemented as one aspect of the holistic Tushinde Ujeuri program to reduce gender-based violence, coordinated by IMA World Health and implemented by several partners including Panzi Hospital, Heal Africa, ABA Rule of Law Initiative and Search for Common Ground.

The Tushinde Ujeuri program seeks to:

- I. Promote positive gender norms, power-relations and attitudes to address a core driver of GBV;
- 2. Respond to survivors' medical, emotional, and legal needs; and
- 3. Reduce stigma to enhance reintegration of survivors.

Tushinde Ujeuri (a Kiswahili phrase that means "overcoming violence") builds on the previous 5-year program known as Ushindi, which has implemented a holistic approach to supporting survivors of GBV through the integrated delivery of psychosocial, medical, legal, and economic services to survivors and their villages. While there is an overwhelmingly positive perception of the holistic service delivery approach for survivors of GBV among implementing partners, and suggestive evidence from an independent study to confirm this (Amisi 2016), far less is known about the effectiveness of community-based mental health approaches as a tool for reducing GBV.

THE COMMUNITY-BASED TRAUMA HEALING APPROACH

During a scoping trip conducted by the research team in 2017, implementing partners identified two key factors driving both the incidence of GBV and perpetuating stigma among survivors: i) "traditional culture and norms", and ii) exposure to, and fallout from, conflict-related traumatic events.¹ These observations are also borne out by quantitative studies, which find that higher levels of conflict are associated with higher levels of IPV in multiple countries.²,³ An analysis of the baseline findings from this IE also report this association: women who experienced at least one war-related abuse had a 12 percent

¹ See Kelly, Khan and Voors. "Scoping Trip Report". December 7, 2017.

² Kelly, et al. 2021. The Risk that Travels with You: Links between Forced Displacement, Conflict and Intimate Partner Violence in Colombia and Liberia. The World Bank; Ekhator-Mobayode, et al. 2021. Intimate Partner Violence and Household Decision-making Autonomy: Effects of the Malian Conflict on Women. The World Bank.

³ Kelly, et al. 2021. Conflict, Displacement and Overlapping Vulnerabilities: Understanding Risk Factors for Gender based Violence among Displaced Women in Eastern Democratic Republic of Congo. The World Bank.

higher risk of lifetime IPV and a 14 percent higher risk of past-year IPV compared to women not affected by war-related abuses.

Partners also pointed to the importance of sensitization efforts in the form of trainings, workshops and "Social and Behavior Change Communication" (SBCC) campaigns conducted as part of Ushindi. These efforts created awareness about specific issues relating to GBV, and the program services. However, it remains an open question as to whether these efforts lead to enduring changes in attitudes, norms and behaviors that would reduce the future incidence of GBV. There is also little evidence of which types of efforts are most effective in doing so. This mirrors an overall dearth of empirical evidence from interventions oriented towards primary prevention of GBV (Ellsberg 2015).

This IE seeks to narrow this evidentiary gap by evaluating a trauma healing strategy for GBV prevention in a post-conflict context. The CBTH program involves explicitly addressing post-conflict trauma resulting from, among other things, systematic rape, indigenous conflict, internal displacement, and inheritance conflicts through community.

This IE randomly selects 80 villages from a list of 160 villages across 3 health zones in Eastern DRC to receive the CBTH program. The IE assesses impacts on reported IPV and GBV, mental health indicators, and attitudes behaviors. Moreover, the IE aims to assess whether and how these interventions affect the uptake of services provided to survivors of GBV through the health area-level service delivery of the Tushinde Ujeuri program.

GENDER-BASED VIOLENCE AND CONFLICT

GBV is one of the most pervasive and harmful forms of violence globally. It encompasses any form of violence that is perpetrated on a person as a result of their gender identity. Men, women, boys and girls can all be victims as well as perpetrators of GBV. However, global evidence suggests that the great majority of GBV victims are women and that men have higher rates of GBV perpetration than women.

Thirty-five percent of women globally report being victims of physical or sexual abuse during their lifetime and one-third of women who have been in a relationship have experienced physical or sexual violence from a partner. Globally, IPV is the most common form of violence against women and one out of every five women will become a victim of rape or attempted rape during her lifetime. Sequelae of sexual abuse include injury and death as well as poorer mental and reproductive health outcomes, including unintended pregnancy; physical harm; increased vulnerability to sexually transmitted diseases, and HIV.

GBV has many forms, and a complex interplay of risk factors that contribute to this form of violence. While the types and causes of GBV may vary from one context to another, a number of multi-country research efforts have begun to uncover some of the risk factors and mechanisms underlying GBV. Unequal power relations between men and women, harmful gender norms and beliefs, experiences with violence in childhood, and drug and alcohol abuse are some of the factors that are consistently associated with GBV.

There is also a link between political instability and increased rates of GBV. Research from Uganda, Thailand, Colombia, Côte d'Ivoire, DRC, Liberia, and Mali has found that women who are subject to higher levels of conflict-related abuses also report higher levels of IPV victimization during and after conflict. Exposure to political violence and to human rights abuses has been linked to higher rates of IPV perpetration among men in conflict and post-conflict settings. Thus, personal experience with conflict-related abuse appears to enhance vulnerability to IPV.

Relatively little systematic information is available about the factors associated with men's perpetration of sexual violence, particularly in war-affected areas. Rates of perpetration vary greatly from context to context – reinforcing the finding that social norms and gendered inequalities, as well as other factors, can affect levels of violence across the globe. Men's reports of perpetrating physical IPV vary from 42% in South Africa to 22% in India. Reports of non-partner rape vary from 9% in Chile to 37% in South Africa.

The United Nations Multi-Country Study on Men and Violence in Asia and the Pacific is one of the most comprehensive efforts to examine the prevalence and risk factors of GBV perpetration among men (Fulu et al, 2013). This study found that a number of factors are linked to sexual violence perpetration, including: having more sexual partners, seeking transactional sex, using physical violence against female partners, men's own victimization, and low socioeconomic status.

While the UN study included two post-conflict sites, this was not a focus of their study. Indeed, very little is known about why men perpetrate rape in active conflict settings. Yet, data suggests that war may increase the rates of sexual victimization among women. It is therefore particularly important to understand how experiences related to political conflict may be associated with men's perpetration of sexual violence.

The data presented here suggest links between political instability and GBV, although practitioners and policy makers are still working to fully understand these links and how to address them. The Tushinde Ujeuri project attempts to directly address the harmful gender attitudes, norms and practices that may underlie perpetration of IPV and other forms of GBV. This evaluation aims to strengthen this effort by more fully examining how political conflict and war-abuses may be linked to the perpetration of multiple forms of GBV, and particularly IPV.

EVALUATION OBJECTIVES AND HYPOTHESIS

Our core outcome of interest is behaviours related to GBV, including reports of past-year victimization among women and perpetration among men. However, experiences of GBV are inherently related to a highly complex set of beliefs and behaviours, which may take significant amounts of time to shift. Acknowledging this, the authors have also identified secondary outcomes that may indicate important shifts in beliefs and behaviours related to the intervention, as well as shifts in mental health that may be associated with risk of experiencing or perpetrating GBV. These outcomes include: self-reported attitudes about the acceptability of domestic violence, respondent mental health outcomes, comprising validated scales relating to depression, anxiety, and trauma. Finally, another set of secondary outcomes relate to the intervention on individual coping, resilience, and social cohesion – important psychosocial outcomes that may change as a result of the intervention.

EVALUATION QUESTION 1 – VICTIMIZATION AND PERPETRATION OF VIOLENCE

The key expectation underlying this work is that explicitly addressing underlying individual and communal trauma through CBTH will help individuals better cope with stress and conflict in their day to

day lives, which will in turn reduce the acceptability of GBV, particularly IPV and non-partner sexual violence, and result in a decrease in these forms of violence.

Our main outcomes are reported victimization related to IPV and non-partner sexual violence for women. We also look at perpetration of these forms of violence by men.⁴ Our main research hypothesis are:

- Hypothesis I.I : Community Based Trauma Healing decreases past-year reported physical and sexual IPV victimization for women
- Hypothesis 1.2 : Community Based Trauma Healing decreases reported past-year non-partner sexual violence victimization for women
- Hypothesis 1.3 : Community Based Trauma Healing decreases reported past-year physical and sexual IPV perpetration by men
- Hypothesis I.4 : Community Based Trauma Healing decreases reported past-year non-partner sexual violence perpetration by men
- Hypothesis 1.5 : Community Based Trauma Healing decreases past-year reported emotional IPV victimization for women
- Hypothesis I.6 : Community Based Trauma Healing decreases past-year reported emotional IPV perpetration by men

EVALUATION QUESTION 2 – ATTITUDES TOWARDS AND FACTORS ASSOCIATED WITH VIOLENCE

While CBTH is expected to decrease the incidence of GBV, we realize that the program may also change the propensity of people to speak out about GBV. An observed shift in reported GBV may reflect both changes in incidence as well as changes in reporting about incidence. These forces may work in opposite directions. While it is impossible to fully determine what is causing the observed changes in our measures of GBV, to help interpretation, we also examine if CBTH changes respondent-reported changes in GBV attitudes as well as a host of validated mental health measures and other psychosocial outcomes that may change as a result of the intervention, including individual coping, resilience and social cohesion. Finally, we examine whether participation in CBTH may also be associated with increased uptake of other Tushinde services.

- Hypothesis 2.1: Community Based Trauma Healing increases Gender Equitable Attitudes among women and men
- Hypothesis 2.2: Community Based Trauma Healing decreases depression and anxiety (Hopkins Symptom Depression and Anxiety Checklist)
- Hypothesis 2.3: Community Based Trauma Healing decreases PTSD (Harvard Trauma Scale)
- Hypothesis 2.4: Community Based Trauma Healing increases self-efficacy
- Hypothesis 2.5: Community Based Trauma Healing increases individual resilience
- Hypothesis 2.6: Community Based Trauma Healing increases community resilience

⁴ The authors acknowledge that men and boys also face multiple forms of GBV, and that women can be perpetrators of GBV. However, global studies on GBV -as well as results from our baseline – emphasize that women are far more likely to be victimized by this violence, while men are more likely to report perpetration. For the purposes of this analysis, and particularly due to power and sample size considerations, we look at victimization among women and perpetration among men.

• Hypothesis 3: Community Based Trauma Healing increases take up of economic, psychological and medical services

PROGRAM BACKGROUND

We evaluate the impact of Community Based Trauma Healing (CBTH) as a core strategy to help strengthen community capacity to support the trauma healing process and increase individual mental health, and reduce GBV in a (post)-conflict context. CBTH was part of a wider Tushinde Ujeuri programme activities which were targeting villages in Nyangezi, Katana, and Walikale Health Zones in Eastern DRC. These other activities included legal support (such as a legal clinic, legal aid, working with a paralegal), medical support (such as visiting a health center, training of service providers, care and services for GBV survivors, family planning services), psychological support (such as speaking to a service provider or counselor) and economic support (village savings and loan programs or microcredit) and were available to all villages in the Health Zones.

During January 2019 - December 2020, in 80 randomly selected villages, Search for Common Ground (SFCG) implemented the CBTH program. At its core CBTH includes several steps:

- 1. **Recruiting Trauma Healing Champions.** In each community, SFGC recruited and trained local mobilizers, so called Trauma Healing Champions (THCs). Identification and training of THCs occurred between January and March 2019. To be eligible to become a THC, these champions should be a member of the community; are trusted by community members; have meeting facilitation skills, be sensitive of issues related to equitable representation of the local population (for instance, ensuring that multiple tribes and religions are represented); know the conflict issues and GBV issues that affect the community welfare; be a leader for the community; be inclusive and exert effort to include victims of: past rape, indigenous conflict, internal displacement and inheritance conflicts, traditional leaders and faith-based leaders, taking into account all sensitivities; and be able to read and write. To select candidates, SFCG convened a public forum where the selection criteria were explained, and the community selected their THC. Prior to this selection forum, SFCG field assistants sensitized different people in the community to explain the approach and the purpose of the public forum so that everyone was prepared and all had a chance to participate.
- 2. **Training Local Mobilizers.** The local THC were then trained on trauma healing, GBV, conflict resolution and community participatory facilitation techniques, by SFCG staff using a CBTH manual. To train THCs, SFCG conducted several training workshops gathering together several THCs from nearby villages. Each training lasted several days, and included extensive practice and assessment. Over the course of the project, several refresher training sessions were organized to refresh the skills of the THC, share experiences, and update the facilitation materials if required.
- 3. **CBTH Facilitated Sessions.** Over the project period, THCs in each community held trauma healing (TH) sessions each month for a total of 12 sessions. Each TH session brought together 20-25 interested persons from the community, each session span across three days, meeting for about 2-3 hours each day. Separate sessions were organized for men and women, and these groups were further divided to ensure that community members were convened within a group that would facilitate trust and open sharing. For instance, young women would convene together, as would older men, etc. Using the facilitation guide THCs facilitated each session to enable participants to identify incidents that affect their personality and cause trauma. They also aimed to help participants understand the signs of trauma, think about healing and solutions, and understand psychosocial services and other forms of support that exist in the community or

near the community. Discussions included gender and conflict related issues as well as other trauma-related factors. The facilitator aimed to foster open dialogues to allow participants to feel comfortable to share their experiences. These discussions are as engaging as possible, for example using storytelling, where facilitators draw from local myths, legends of the Bible /Quran to inspire and provide hope and relief. Participants requiring additional support were referred to medical, judicial, and mediation services as relevant. THC also served as local and community references and resource persons to help support other community members being confronted with trauma issues. While monthly sessions were the goal, the COVID-19 pandemic caused disruption in implementation, especially during July to August 2020. During this time, there were no sessions conducted due to social distancing measures associated with the COVID-19 pandemic. The exception to this was the site Walikale which did not have social distancing measures imposed. CBTH sessions resumed in September 2020 with appropriate social distancing and other health measures (e.g., mask wearing).

4. **Community Celebrations.** During the programming period, SFCG organized eight cultural public events for CBTH participants from several villages, organized in a central location in each Health Zone. These events took the form of a festival, traditional celebration of dances, drum, music, etc. SFCG engaged with the community to make sure the content reflects community preferences and is implemented as a community-led initiative. GBV and conflicts issues were integrated in an edutainment program, where the emphasis was on enjoyment and building community cohesion and engagement to surpass trauma healing issues and open safe space to survivors. During the celebrations, voluntary testimonies of former victims were encouraged.

METHODS AND LIMITATIONS

SELECTION OF STUDY AREA

The intervention areas for the Tushinde Ujeuri program include Health Areas (Aires de Santé) across five Health Zones (Karisimbi, Walikale, Katana, Nyangezi, Bunyakiri) in the North Kivu and South Kivu provinces of Eastern DRC, see Figure I. The study sample for the IE comprises a total of 40 health areas within three largely rural Health Zones (Nyangezi, Katana and Walikale) out of the five in which the Tushinde program is taking place. Given the largely rural settings of USAID programs in Congo, the USAID Mission has greater interest in learning what works in rural settings, which led to the exclusion of the semi-urban Karisimibi health zone. In addition, and in consultation with the implementing partner, the Bunyakiri health zone was excluded from the survey sample due to accessibility concerns (an escort for the field teams would be required to gain access).

	HEALTH ZONE	CHARACTERISTICS	HEALTH AREAS	TOTAL VILLAGE CLUSTERS*
North Kivu	Walikale	Rural & Access Issues	12	48
South Kivu	Katana	Rural and Accessible	18	72
South Kivu	Nyangezi	Rural & Accessible	10	40
Total			40	160

Table I: Sample

Note: 4 village clusters were selected in each selected health area.



Figure 1: Map indicating location of study villages in Eastern DRC

Notes: Left figure is a map of DRC with shared areas indicating North and South Kivu. Right figure shows the included 160 study villages with CBTH Intervention (Treatment) sites in green and Control sites in red across the three health zones Walikale, Katana, and Nyangezi.

RANDOM ASSIGNMENT TO CBTH INTERVENTION

The random assignment procedure proceeded in two stages. First, within each of the three selected health zones, IMA and its implementation partners created a list of 40 Health Areas (HAs) that met three criteria: they are receiving Tushinde Ujeuri interventions, they are relatively accessible, and they are not anticipated to present major security risks that might undermine or interrupt program and evaluation implementation. Block randomization occurred at the HA level since Tushinde operates programs based on this geographic assignment.

Within this subset of health areas, 160 eligible villages were identified by IMA and its implementation partners based on their accessibility, relative security, population size and household count, and a limited presence of other projects that might contaminate any impact of the intervention. In each health area, they identified on average four villages. The baseline survey was conducted in these villages during fall 2018, before they were randomly assigned to the treatment or control group. Within each health area, two villages were randomly assigned to receive the CBTH program, while the other two were assigned to not receive the intervention.

Figure 2: Experimental Sample



The Stata Package "randomize" (Kennedy and Mann, 2017) was used to assign these 160 villages to either receive the CBTH intervention (treatment) or no CBTH intervention (control). The health areas were randomized in blocks, meaning 50% of villages in each of the 40 health areas across 3 health zones (Katana, Nyangezi, Walikale) were assigned to receive the CBTH intervention. Figure 2 and Table 2 shows the overall distribution of villages by health zone and treatment status.

	CONTROL		TREATMENT		TOTAL	
	No.	%	No.	%	No.	%
Katana	35	48.6	37	51.4	72	100
Walikale	20	50	20	50	40	100
Nyangezi	25	52. I	23	47.9	48	100
Total	80	50	80	50	160	100

Table 2: Treatment Status by Health Zone

SELECTION OF RESPONDENTS FOR BASELINE SURVEY

Within each of the 160 study villages, field teams aimed to interview about 20 households. Households were selected using a "random-walk" methodology. Enumerators interviewed every 3rd household on the right in rural areas and every 5th household on the right in semi-urban areas, starting from a predetermined village landmark (market, administrative building, well, tree, etc.) Prior to the start of daily data collection, the team supervisor was in charge of dispersing enumerators around the village so that they could cover all the area and that the sample would not be confined to a small portion of the observation area.

In each selected household, enumerators interviewed a random adult respondent (age 18 or over) selected from within the household (using a kish-grid method programmed on the tablet). As per the programming, and to ensure the highest level of responsiveness on sensitive topics, female enumerators

only interviewed female respondents and male enumerators only interviewed male respondents. In total, we collected baseline data from 3,550 respondents. An extensive description of the baseline data is included in NORC (2019) Countering Gender Based Violence in Eastern Democratic Republic of Congo Baseline Report (available via https://pdf.usaid.gov/pdf_docs/PA00TWRX.pdf).

ENDLINE SURVEY AND RESPONDENT REPLACEMENT

Endline data was collected during April through June 2021. We aimed to resurvey all baseline respondents. When enumerators were unable to interview a baseline respondent, they recorded the reason (unable to locate respondent, respondent temporarily away, permanently away, died, or refusal). If the enumerator was able to locate the household but not the specific baseline respondent in that household, then the enumerator attempted to find another eligible respondent (18 or older) of the same sex as the baseline respondent within the household that was closest in age. Failing that, the enumerator would replace the household with the household to the right of the original household and would identify an eligible respondent of the same sex as the baseline respondent in the new household. This last step would continue until an eligible respondent was available for an interview.

For the endline survey, we interviewed 2,824 respondents (see Table 3). Of these, in total 1534 respondents (54%) were the same individuals as interviewed at baseline, 484 were replaced within the household, and others were full replacements, selected using the strategy outlined above. This level of attrition is not unusual given the time period between the survey rounds (2018-2021) and the high rate of displacement and migration in DRC. Attrition is well balanced across villages assigned to the CBTH intervention and control. In addition, individual characteristics of respondents that attrited from the sample are not systematically different across both types of villages (see Annex Table B.5).

	CONTROL	CBTH INTERVENTION	TOTAL
Longitudinal respondent	750	784	1,534
In HH Replacement	245	239	484
New HH replacement	418	360	778
Generic replacement	18	10	28
Total	1,431	1,393	2,824

Table 3: Type of respondent

LIMITATIONS

The CBTH program was implemented across 40 Health Areas across 3 health zones in Eastern DRC. Within each Health Area, the implementing partner chose four villages, of which two were randomized to receive the program and two severed as control villages. An attractive feature of this design was that it would allow for the impact of the program on use of Health Area level services offered by the wider Tushindi program (including legal, medical, psychological, and socio-economic services). However, the selected villages within each Health Area turned out to lie within close geographic proximity to each other (see Figure 1). The average distance between villages was just under 3 kilometers (with a standard deviation of 1.7). This opened up the possibility for potential spillovers: that some of the effect of the CBTH intervention may have spilled over to comparison communities. People in control communities

may have heard about the program, and asked for CBTH programming to be implemented in their villages as well. Alternatively, they may have asked people participating in the CBTH program to come and discuss lessons learned with them. People in control villages may also have heard about the CBTH programming when participating in the *Tushindi* activities or services organized at the Aire de Sante level.

The degree of spillover is unknown. Qualitative investigation and our survey data show that many people in control villages were aware of CBTH programming. However, according to implementation documents, there were no activities organized in control villages, nor do the records show people from other villages—not assigned to the program—were present at the CBTH sessions. Thus, while there is evidence of people in the control villages being aware of the CBTH programming, it is not clear whether or to what extent they were exposed to the actual intervention itself. It is however unlikely that they were exposed to the same level of programming, i.e., all 8 CBTH sessions, more likely far less if at all. Qualitative investigations suggest that only occasionally people from control villages participated in CBTH sessions, or asked the community mobiliser (the THC) to talk to them in private or organize a session on trauma healing in their villages. This implies that the outcomes we observe in control villages are likely different than they would have been without CBTH programming happening in nearby places. Unfortunately, we are unable to measure to what extent outcomes are different in the control villages because we do not have a good measure of program exposure, which likely lies somewhere between the records of the implementing partner and people responding to our survey question on knowledge of the program.

Below, we report the differences between villages assigned to the program and the control villages. The impact based on this comparison is the so called intent-to-treat (ITT) effect, i.e., the effect of being assigned to receive the program. This comparison is however likely biased by spillover effects. However, we can reason about the direction of the potential bias: very likely these spillovers imply that respondents on control villages moved in the same direction as the treatment would have been had they been fully exposed. This implies that a comparison across villages assigned to the program vs control is likely downward biased estimate of the true impact of CBTH. So, the results we present here can be viewed as an underestimate of true result but in the right direction.

The lack of a clear definition of program participation makes it hard to analyze the impact of participation in CBTH programming (i.e., the Local Average Treatment Effect or the LATE estimate), rather than being assigned to receive the program. We therefore limit the assessment to reporting the ITT, recognizing that it represents an underestimate of the true program effect.

FINDINGS

In this section, we report the characteristics of our respondents at baseline, show the change between baseline and endline of our main outcome variables and then compare the impacts of the CBTH program.

RESPONDENT CHARACTERISTICS AT BASELINE AND BALANCE

Table 4 reports the descriptive statistics of our sample of respondents at baseline for both respondents in villages assigned to the CBTH intervention as well as those in control villages. The respondents of the baseline household survey were equally divided across gender. The average age of respondents is 36.5 years old (range, 18 to 97). Female respondents in the sample are younger, with an average age of 33

years, while male respondents have an average age of 40 years. The majority of our sample is literate. We asked whether the respondent can write a simple message, e.g. "It is hot today", in any language, in both types of villages 61% responded they could. Twelve percent of respondents reported being single. However, this proportion is higher for men (14%) compared to women (9%). Just over half of the respondents were heads of household, with a much higher proportion of male respondents (82% compared to 24% for women).

The primary source of income for most respondents is derived from farming (62%). On average, households surveyed own 9.5 assets (including radio, phone, livestock). Just over half of the respondents have ever been displaced (52.5%), and 36% reported recent security issues (related to theft, assault, or paying bribes). About half of the respondents report violence in the household during youth.

In the next section below, we discuss our outcome variables and describe their change over time.

The included characteristics are well balanced across respondents in villages assigned to the CBTH intervention and the control villages. An F-test of the equality of means of all variables across both types of villages is not significant (F=0.52, p=0.99).

VARIABLE	RESPOND	ENTS IN CON VILLAGES	NTROL	RESPOI INTERV	NDENTS IN C ENION VILLA	BTH AGES	PVALUE
	OBS	MEAN	SD	OBS	MEAN	SD	
Gender	1754	0.50	0.50	1767	0.50	0.50	0.50
Age	1754	36.41	15.41	1767	36.98	15.78	0.24
Literate	1430	0.62	0.49	1392	0.60	0.49	0.41
Single	1771	0.12	0.32	1779	0.12	0.33	0.71
Household head	1754	0.53	0.50	1767	0.53	0.50	0.92
Farmer	1422	0.62	0.49	39	0.66	0.47	0.01
Asset count	1771	9.43	2.11	1779	9.57	2.04	0.03
Ever displaced	1754	0.54	0.50	1767	0.51	0.50	0.50
Security Issue	1771	0.36	0.48	1779	0.35	0.48	0.36
Father beat mother	1614	0.49	0.50	1625	0.45	0.50	0.04
IPV	673	0.47	0.50	635	0.46	0.50	0.74
Non-Partner GBV	824	0.13	0.33	846	0.13	0.33	0.93
IPV Perpetration	673	0.25	0.44	687	0.23	0.42	0.23
Non-Partner GBV Perpetration	649	0.19	0.39	668	0.19	0.39	0.86
Depression/Anxiety	1752	1.08	0.70	1779	1.07	0.68	0.73
PTSD	1752	0.95	0.73	1779	0.96	0.72	0.47
Self-Efficacy	1752	66.75	16.78	1779	67.43	16.89	0.44
Resilience	1753	77.89	11.43	1779	78.24	11.73	0.44
Positive Gender Attitudes	1753	53.04	13.77	1611	52.62	13.60	0.48

Notes: Balance test of F-test of the equality of means. P value reported in final column comes from OLS regression with randomization block fixed effects and clustered standard errors. A Ftest of the equality of means of all variables across both types of villages is not significant (F=0.52, p=0.99).

CHANGES IN OUTCOMES OVER THE STUDY PERIOD

As a first step to understanding the changes in core program outcomes, we look at the changes in IPV and GBV victimization for women, and perpetration by men, as well as mental health outcomes relating to Depression and Anxiety, PTSD, Emotional IPV, Self-Efficacy, Resilience and Gender Equitable Attitudes. We describe how each variable was created from our survey, and discuss the mean values for respondents during the baseline and endline survey. We also look at the uptake of wider services offered by the Tushindo program relating to Legal, Medical Psychological and Socio-economic support.

In the next section, we examine impacts relating to the CBTH programming. We report the results in Figures 3-7 below.

INTIMATE PARTNER VIOLENCE AND NON-PARTNER SEXUAL VIOLENCE

Intimate partner violence among ever-partnered women was measured through the conflict tactics scale (CTS) and included acts of physical or sexual violence perpetrated by a partner. Ever-partnered women were asked to report the frequency (Never, Sometimes, or Often) with which their current or most recent partner engaged in a set of actions. For respondents reporting that a behavior took place Sometimes or Often, the survey asked a follow-up as to whether the partner had perpetrated the action in the last 12 months. The survey also examined women's experiences with sexual violence committed by a non-partner.

Figure 3 reports the proportion of women who experienced physical or sexual violence by a partner and non-partner. Specifically, we asked whether ever married/partnered women had experienced any of the following from an intimate partner in the last 12 months, they (i) pushed you, shook you, or threw something at you? (ii) slap you or twist your arm? (iii) punch you with his fist or with something that could hurt you? (iv) kick you or drag you? (v) try to strangle you or burn you? (vi) threaten you with a knife, gun, or another type of weapon? (vii) attack you with a knife, gun, or another type of weapon? (viii) physically force you to have sexual intercourse with him even when you did not want to? (ix) force you to perform other sexual acts you did not want to?

During the endline survey across all villages (CBTH programming and control), 32% of all everpartnered women surveyed reported having (either physical or sexual) during the prior 12 months. This is a 14-percentage point decrease from the baseline in 2018, where 46% of women reported having experienced IPV in the past year.

We also asked if women had experienced (during the last 12 months): "anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?" or if "anyone, other than your (current/last) husband/partner, hit, slapped, kicked, or done anything else to hurt you physically?". Here reports drop from 13% to 4% between both survey rounds.

For emotional IPV we asked ever partnered women if they have experienced any of the following from an intimate partner in the last 12 months: (i) he (is/was) jealous or angry if you (talk/talked) to other men? (ii) he (accuses/accused) you of being unfaithful? (iii) he (does/did) not permit you to meet your girl friends?, (iv) he (tries/tried) to limit your contact with your family? (v) he (insists/insisted) on knowing where you (are/were) at all times? (vi) he (does/did) not trust you with any money? And (vii) he humiliates/humiliates you in front of others? As negative experiences.

At baseline 89% of the respondents indicated having experienced any of these events during the past year. At endline this proportion increased slightly to 91%.

Figure 3: Changes in the proportion of ever-partnered women having experienced IPV, Non-Partner GBV and Emotional IPV during the past year



Notes: Reported IPV and Non-Partner GBV and Emotional IPV victimization at endline and baseline. Values are in proportions, a value between 0 and 1. For example in the figure 0.32 implies 32% of women in our sample report intimate partner violence victimization in the past year.

INTIMATE PARTNER VIOLENCE AND NON-PARTNER SEXUAL VIOLENCE PERPETRATION

Next, we report on past-year physical and sexual IPV perpetration and past-year non-partner sexual violence perpetration by men (Figure 4). For IPV perpetration we asked male respondents if during the last 12 months, they "hit, slapped, kicked, or did anything else to hurt your current or previous wife/husband or girlfriend/boyfriend physically?" and if they "forced your current or previous wife/husband or girlfriend/boyfriend to have sex with you or perform another sexual act when he/she did not want to?" A man responding "yes" to either one of these acts was coded as perpetrating in the past-year.

On average, 12% of men report to have perpetrated IPV during the endline survey, half of the reported IPV perpetration level at baseline (24%). It is important to remember that this was not a survey of married couples- only one individual per household was interviewed. Despite this, one might expect to see higher degree of agreement between the level of IPV women report experiencing and the levels of IPV men report perpetrating. However, other studies have also found similar levels of discrepancy in reporting between men's disclosure of IPV perpetration compared to women's reporting of IPV victimization. Reasons for this include; men's reluctance to report perpetrators versus victims, among other reasons (Chan, 2011). For instance, A study focusing on inter-partner agreement on IPV in Tanzania found a discrepancy between women reporting IPV experiences and men reporting perpetration of IPV: "couples whose female partners reported IPV victimization when male partners did not report IPV perpetration appeared in the sample up to five times as frequently as couples whose male partners reported IPV perpetration and female partners did not report any victimization" (Halim et al, 2018). This study also found disagreement regarding the *type* of IPV experienced: "of the couples

whose female partner reported experiencing a form of IPV, between 52–87% of men disagreed that they had perpetrated that form of IPV" (Halim et al, 2018).

For past-year non-partner sexual violence perpetration, we asked male respondents if "you hit, slapped, kicked, or done anything else to hurt someone OTHER THAN your wife/husband or girlfriend/boyfriend physically?" and if "You forced someone OTHER THAN your current or previous wife/husband or girlfriend/boyfriend to have sex with you when they did not want to?"

There was a similar large drop in reported non-partner sexual violence perpetration, decreasing from 19% to 5%.





Notes: Reported IPV and Non-Partner GBV perpetration at endline and baseline. Values are in proportions, a value between 0 and 1. For example in the figure 0.12 implies 12% of men in our sample report to have perpetrated sexual or physical violence in the past year.

DEPRESSION AND ANXIETY, PTSD

To assess Depression and Anxiety and PTSD, this analysis draws on the methodology outlined by Bass et al (2013) from a mental health project in eastern DRC. We use the Hopkins Symptom Checklist (25 items) to create a Depression and Anxiety Scale and the Harvard Trauma Questionnaire (16 items) to create a measure of PTSD. For both the scales, respondents report the frequency of symptoms in the past month on a 4-point scale: 0 - Not at all, I - A little, 2 - Moderately, 3 - A lot. We generate an average score of the 25 items and 16 items respectively (with each item weighted equally) for each individual respondent, which ranges from 0 to 3, with higher scores indicating worse symptoms.

Figure 5 reports average responses for each scale at baseline and endline survey rounds. There is a small improvement in both scales. Depression and Anxiety decreased by 20 percentage points (from 1.07 to 0.88) and PTSD decreased by 22 percentage points (from 0.96 to 0.61).



Figure 5: Changes in Depression and Anxiety Scale and PTSD

Notes: Reported depression and anxiety and PTSD scale for baseline and endline. Values are the mean index on a scale of 0 (Not at all) – 3 (A lot).

SELF EFFICACY, RESILIENCE, GENDER EQUITABLE ATTITUDES

To measure Self-Efficacy, we asked respondents in a 5-point agreement scale if they (fully) disagreed or agreed with several statements: (i) I can manage to solve difficult problems if I try hard enough, (ii) I can deal with unexpected events. (iii) I can handle unexpected situations. (iv) I can remain calm when facing difficulties (v) If I am in trouble, I can usually think of a solution (iv) Even when things are tough, I am able to succeed. We take the average of this scale across the seven questions and then rescale the variable to create a score between 0-100; higher scores indicate better self-efficacy.

At baseline respondents scored just over 67 points, and this increased to 69 at endline.

For Resilience we again use a 5-point agreement scale, and take the average (rescaled to range 0-100) across responses to: (i) I feel that I belong in my community, (ii) I know where to go if I need help, (iii) I cooperate with people around me, (iv) I have people in my life who I can respect, (v) Spiritual beliefs are a source of strength for me, (vi) If I am hungry, I can usually get enough food to eat, (vii) I think it is important to help out in my community.

Over time Resilience of our respondents decreased. At baseline respondents had an average score of 78 which remained the same at endline.

For Gender equitable attitudes, we use the same 5-point agreement scale, averaged (and rescaled to range 0-100) across several Violence exposure themes (e.g. there are times when a woman deserves to be beaten; a woman should tolerate violence to keep her family together; it is alright for a man to beat his wife if she is unfaithful; a man can hit his wife if she won't have sex with him; if someone insults a man, he should defend his reputation with force if he has to; a man using violence against his wife is a private matter that shouldn't be discussed outside the couple), for Domestic Chores and Daily Life (changing diapers, giving a bath, and feeding kids is the mother's responsibility; a woman's role is taking care of her home and family; the husband should make the final decision about all major household purchases; a man should have the final word about decisions in his home; a woman should obey her husband in all things), and Political & Economic (when jobs are scarce, men should have more right to a job than women; women should have the same rights as men to own and inherit land; men make better political leaders than women and should be elected rather than women).

Gender equitable attitudes at baseline was 52.8 which increased to 59.5 at endline.





Notes: Self Efficacy, Resilience and Positive Gender Attitudes for baseline and endline. Values are the mean index on a scale of 0 to 100.

PROGRAM UPTAKE

The wider Tushindi Program offered a range of legal, medical, psychological and socio-economic services in each of the 40 Health Areas. These services were open for anyone to use. Figure 7 reports the use of these services by respondents. On average, 10% of respondents say they used the programs legal services, 22% used medical services, 7% used psychological services and 20% received socio-economic support.





Notes: Reported uptake of wider Tushindi program services. Values are in proportions, a value between 0 and 1. For example in the figure 0.10 implies 10% of respondents in our sample report use Legal Services offered by the Tushindi Program.

EVALUATING THE IMPACT OF CBTH ON GBV AND MENTAL HEALTH OUTCOMES

Next, we assess whether CBTH programming activities impacted the main outcomes of interest, intimate partner violence and non-partner GBV victimization and perpetration as well as key mental health indicators. Results below are depicted as coefficient plots, reporting the difference in the outcome variables between respondents in treatment villages and those in control villages. In the annex, we include associated tables reporting coefficients, standard errors, p-values, from a regression including randomization fixed effects (Aire de Sante or Health Area), the baseline value of the outcome (where available) and clustered standard errors.

For our analysis, the primary estimand is the Intent-to-treat effect (ITT), i.e., the effect of a community being assigned to receive CBTH programming. Specifically, we estimate:

$$Y_{ivt} = \beta_0 + \beta_1 T_v + B_k \Pi + \beta_2 Y_{ivt-1} + \varepsilon_{ivt}$$
(1)

where Y_{ivt} is outcome for respondent i in village v, T_v is the CBTH treatment assignment indicator. B_k contains the Health Area-level blocking variables (due to our randomization procedure), controlling for any differences across Health Areas. Where available, we include Y_{ivt-1} , which is the outcome at baseline. Finally, ε_{ivt} is the usual idiosyncratic error term, clustered at the village level. The parameter of interest is β_1 , our estimate of the ITT. We note that due to the potential for spillovers, the estimated ITT is likely downward biased, see discussion in Section 3 Limitations.

PROGRAM IMPLEMENTATION

The program ran between December 2019 and December 2020 and included 8 sessions for female and male participants separately. Monitoring data from the implementing partner for Katana and Nyangezi Health Zones reveals that the program was successfully implemented in the assigned villages. Data for implementation in Walikali Health Zone are unfortunately missing. There is no mention of CBTH activities being implemented in other villages (including our control villages).

On average 15 - 16 people participated per session with some variation across Health Zones and gender, see Figure 8.



Figure 8: Program Rollout in Katana and Nyangezi Health Zones

To check to what degree respondents report interacting with program activities central to CBTH programming we asked respondents (i) "During the past two years, is there someone in your community that has organised meetings to come together and discuss issues related to trauma, grievances and community?" (ii) "Did you attend any community celebrations or theater shows organized to allow community members to come together over the past year?" (iii) "During the past year, did you discuss experiencing trauma? This could have been with friends, village leaders, NGOs, or civil-society organizations." (iv) "During the past year, did you discuss social cohesion with friends / village leaders / NGOs civil-society organizations?" and (v) "During the past year, did you discuss community healing from conflict with friends / village leaders / NGOs civil-society organizations?"

While these questions do not directly ask about participating in CBTH activities, they ask about key activities that CBTHs programming ought to have increased, i.e., we would expect for example CBTH programming to have increased people discussing trauma or healing from conflict.

Figure 9 reports the fraction of respondents both in CBTH intervention villages and control villages that reported they participated in events or discussed topics that were central to the CBTH programming. On average 40% of respondents report that someone organized meetings to discuss trauma and grievances, just under 30% report they participated in community celebrations, and about 30% reported they discussed experiencing trauma, social cohesion, or community healing within the past year.



Figure 9: Respondent Reports on Core Program Activities

Notes: Responses to manipulation check questions for CBTH intervention and control villages. Values are in proportions, a value between 0 and 1. For example in the figure 0.40 implies 40% of respondents in our sample report that meetings to discuss trauma took place in their village.

An important observation from Figure 9 is that even though these program elements were central to the design of the CBTH program, the fraction of respondent reports is nearly the same for respondents in villages assigned to receive the program and the control villages (see Annex Table B.1 for test statistics on the difference). Even individuals in control villages commonly reporting exposure to community meetings, discussions, and celebrations are common in villages even without the CBTH programming activities. The implementing partner did not record conducting formal programming in the control villages. However, intensive follow up with THCs revealed some additional insights into why this might have occurred. Overall, THCs confirmed that there were no other CBTH-like activities offered in control villages by a different NGO – which would be one possible explanation for high levels of control group reporting of activities. However, another possible explanation – high program crossover – seems more likely. Villages in intervention and control groups were often quite close together. This was a result of Tushinde programs being implemented in specific health zones, and villages being clustered on similar "axes" or active routes. To investigate how this proximity may have resulted in program crossover, a member of the NORC research team followed up with THCs in Katana 1, Katana 2, Nyangezi, and Walikale after implementation was completed. One of our field staff reported,

"at the end of the project implementation, some people from nearby/control villages, especially those who have relatives, friends or regular contacts among community members in CBTH villages were already aware of how helpful the program had been and were reaching out to some THCs to learn about the project"

He also noted that,

"Community members in Walikale live concentrated along the road and because of the escalation of insecurity in the past years, people moved from near the thick forest and joined the main road where the vast majority of the Walikale populations live –this made the spread of awareness about CBTH very easy and quick amongst community members over the villages. People in Walikale meet in one market – – in the middle and towards the end of the implementation period of the program, some community members from nearby/control villages started reaching out to THC to ask if they could also join the sessions. He did not formally welcome them to the sessions but the few people who courageously met him at his home, he provided counseling based on the content of the CBTH module."

These feedbacks from the post-implementation follow up help explain how awareness of the program may have spread rapidly from treatment villages to the control villages. Information suggests that, by endline, many people throughout the health areas were aware of the program, even if their village didn't directly receive the program.

We also asked respondents if they had heard of a Trauma Healing Champion (THC) and if yes, if there is one in their village. Figure 10 reports 30% of respondents had heard about a THC. Of those who have heard about a THC, about 60% report that there is one available for people in their village. Again, we see no clear difference between villages assigned to the CBTH intervention and control villages (the difference in availability of a THC is just 4%).



Figure 10: Trauma Healing Champion

Notes: Responses to whether respondents heard of a Trauma Healing Champion, and if Yes if there is one available in their village for CBTH intervention and control villages. Values are in proportions, a value between 0 and 1. For example in the figure 0.30 implies 30% of respondents in our sample report that they have heard of a Trauma Healing Champion.

It is likely that some respondents in control villages also participated in some of the CBTH activities. From qualitative reports, there is some indication of additional demand for CBTH services. In a few cases, THCs reported that 1-2 people from control villages may have attended trauma healing sessions; community celebrations were also a public intervention that could theoretically be attended by anyone in the vicinity.

An illustrative quote from one THC's feedback is given here,

"As the word spread [about CBTH], THCs realized the curiosity of community members about CBTH was becoming higher and higher. Speaking to another THC who was the focal point for the others in the KATANA 2 Health Zone, he reveals that at the end of the project, as the word about CBTH spread already, 3 CBTH sessions took place in 3 nearby control villages. The THC and focal point here confirms the sessions were done on their own and not recommended or asked by SFCG [the implementing partner], no other group, organizations or independent service providers did or do similar services to CBTH."

In addition, given the high demand and interest, it is possible that participants (rather than SFCG staff) might have passed on information or conducted meetings about CBTH in control villages – although this is not confirmed.

These testimonies suggest awareness of and participation in the CBTH program by people in control communities. It is difficult to quantify the degree to which people in control villages participated in CBTH programming because we do not have a good measure of program participation, but it is unlikely that control communities received the same level of programming as treatment communities (i.e., all 8 CBTH sessions). We thus interpret villages assigned to CBTH programming as receiving a higher dosage of CBTH programming than control villages. Participation by people in control communities would reduce the difference between the treatment and control villages, so our comparison between treatment and control villages likely underestimates the true impact of CBTH.

Figure 11A-11D reports respondents' attitudes about THCs. For respondents that had heard of a THC, we asked if they felt the THC is trusted, is a good facilitator, is knowledgeable, and is inclusive. Figure 11 shows that on average respondents agree or strongly agree to these statements. Attitudes towards THCs are similarly positive in both treatment and control villages. This indicates that THCs were popular and suggest that many people requested engagement from the THCs, including respondents from the control villages.



Figure IIA: Trust in the Trauma Healing Champion

Notes: Trust in the Trauma Healing Champion in CBTH intervention and control villages (if respondent had heard of a THC). Values are on an agreement scale from strongly agree to strongly disagree.



Figure IIB: The Trauma Healing Champion is a good facilitator

Graphs by CBTH Intervention

Notes: Trauma Healing Champion is a good facilitator in CBTH intervention and control villages (if respondent had heard of a THC). Values are on an agreement scale from strongly agree to strongly disagree.





Notes: Trauma Healing Champion is a knowledgeable in CBTH intervention and control villages (if respondent had heard of a THC). Values are on an agreement scale from strongly agree to strongly disagree.



Figure IID The Trauma Healing Champion is inclusive

Graphs by CBTH Intervention

Notes: Trauma Healing Champion is inclusive in CBTH intervention and control villages (if respondent had heard of a THC). Values are on an agreement scale from strongly agree to strongly disagree.

INTIMATE PARTNER VIOLENCE AND NON-PARTNER SEXUAL VIOLENCE

We next assess impacts on intimate partner violence and non-partner sexual violence victimization of women and perpetration by men, comparing respondent reports in CBTH intervention and control villages.

Figure 12 reports the proportion of women experiencing IPV and non-partner sexual victimization. There were no differences in IPV victimization between respondents in villages assigned to the treatment and control group. However, non-partner GBV is significantly lower for respondents in villages assigned to the CBTH intervention. In control villages, 5% of women reported to have experienced non-partner sexual violence during the past year, and this is to just under 2.6% in CBTH villages, about halving reported incidence. This difference in GBV is not significant, however, after we adjust p-values to control the false discovery rate (FDR).⁵ There was also no statistically significant change in physical and sexual IPV, emotional IPV and non-partner perpetration (see Annex Table B.2).

⁵ In the Annex, we report false discovery rate (FDR) adjusted p-values for all outcomes.





Notes: ITT estimates for Reported IPV and Non-Partner GBV and Emotional IPV victimization, comparing respondents in villages assigned to CBTH programming and control. Values of these variables are dummies, 1 if yes, 0 else.

DEPRESSION AND ANXIETY AND PTSD

Next, we report core mental health outcomes. We first look at impacts on Depression and Anxiety, PTSD, Figure 13, comparing respondents in CBTH intervention villages and control villages. Across these indicators, the coefficients are small and not statistically significant (see Annex Table B.3).

Figure 13: Depression Anxiety and PTSD



Notes: ITT estimate of depression and anxiety and PTSD comparing respondents in villages assigned to CBTH programming and control. Values of these variables range 0 (Not at all) - 3 (A lot).

SELF EFFICACY, RESILIENCE, POSITIVE GENDER ATTITUDES AND IMPULSIVITY

We next assess changes in Self Efficacy, Individual and Community Resilience and Positive Gender Attitudes. Figure 14 reports the results comparing respondents in villages assigned to CBTH programming and those in control villages. There is a significant increase in Self Efficacy and Community Resilience, indicating that the program increased people's feeling they can manage unexpected situations and difficulties as well as that they feel they live in a resilient community. The sign for individual resilience is positive but not significant. See Annex Table B.3 for a formal regression type analysis. Note that the effects are small. Recall that the range for these variables is between 0 and 100 points. The ITT effects are all below 1 point, so while improvements are in the right direction the effects are marginal. In addition, In the formal analysis in the Annex, we also report FDR adjusted p-values for multiple hypothesis testing (i.e., we account for the number of hypothesis tests we conduct within a group of outcomes). After this adjustment our p-values increase and the results are all statistically insignificant.



Figure 14: Self Efficacy, Resilience, Positive Gender Attitudes

Notes: ITT estimate of Self Efficacy, Resilience and Positive Gender Attitudes, comparing respondents in villages assigned to CBTH programming and control. The values of these variables are on a scale of 0 to 100.

UPTAKE OF WIDER TUSHINDI PROGRAM SERVICES

Figure 15 presents results across CBTH intervention villages and control villages on the uptake of wider Tushindi project services. Across the types of services offered by Tushindi partners, there is no large difference for respondents in both types of villages. Use of legal services is about 10% throughout, psychological support is used by 7% of respondents and socio-economic interventions reach 20% of respondents. The only exception is medical services, where respondents in control villages report a 5-percentage point higher utilization. Only the medical services difference is statistically significant. It's not clear why seeking medical service declined in treatment villages relative to control villages, but addressing the high burden of trauma in these villages could have led to fewer people seeking medical care. See Annex Table B.4 for more details about these results.





Notes: ITT estimates for uptake of legal, medical, psychological and socio-economic services, comparing respondents in villages assigned to CBTH programming and control. Values of these variables are dummies, 1 if yes, 0 else.

EXPERIENCES DUE TO COVID-19

Figure 16 summarizes experiences of respondents due to the COVID-19 crisis. One in four respondents (24%) said that they had quarantined at home as a result of the pandemic (duration of quarantine from one to more than 14 days, 33% below a week, 18% one to two weeks, 48% longer than two weeks.). Women were four times more likely to report staying at home compared to men. Of those individuals who reported staying home, 18% reported experiencing violence and, among these individuals, 80% said this violence had gotten worse since quarantine began.



Figure 16: Experiences due to COVID-19

When asked whether the pandemic had affected service-seeking, 15% of the endline sample stated that they did not seek services when they otherwise would have because of concerns about the virus. Women had 80% greater odds of not seeking services compared to men and this result was statistically significant.

Respondents were also asked whether COVID-19 increased insecurity in their community. One in four respondents (21%) stated that insecurity had either somewhat or greatly increased due to COVID-19, with men and women reporting this outcome at similar rates. Of those people who said insecurity increased, the most commonly cited reason was environmental disaster (including increased hunger) as well as problems associated with government entities, including corruption, see Figure 17.

Notably, there were significant gender differences in every source of instability described, except for illicit mining activity. Women were significantly more likely to say that insecurity increased due to environmental disasters, land or natural resource disputes, social conflict or presence of armed groups. Men were significantly more likely to say that insecurity increased due to government entities.





Notes: Sources of instability due to COVID-19 for male and female respondents. Values are in proportions, a value between 0 and 1. For example in the figure 0.66 implies 66% of female respondents in our sample report that COVID-19 has increased instability from environmental disasters.

POPULATION-LEVEL ESTIMATES OF THE CORE IMA INDICATORS

An additional goal of this project was to measure key indicators for IMA's implementation of Tushinde. Below using our endline survey, we report population-level estimates for four key indicators used by IMA in their M&E activities of the CBTH program. The values reported throughout this report are representative for the sample. To move from sample to population averages, we re-weight the villagelevel sample averages, with the (inverse) probability of being selected for the survey in the village.

Note however, that this approach does not provide population averages for either the North Kivu and South Kivu Provinces as a whole. This is because the selection of the 160 study villages within the HAs was not random—the criteria for the villages to be included in the sampling frame were accessibility, relative security, population size and household count, and a limited presence of other projects that might contaminate any impact of the intervention.

IMA Indicator I: GI.I Prevalence rate of GBV among women, men, and children in target geographic areas

We report the proportion of ever-partnered women at the endline survey that ever experienced IPV (physical or sexual) for each health zone in Figure 18 and proportions for the past year in Figure 19. Overall 48% of women report to have ever experienced IPV and of these 35% experienced IPV during the past year. There is considerable variation across Health Zones, with highest values (58%) reported in Walikali Health Zone.





Figure 19: Proportion of ever-partnered women having experienced IPV (physical or sexual) during the last 12 months, by health zone, at the population-level



IMA Indicator 2: IR 1.2.1 Percentage of target population reporting increased agreement that males and females should have equal access to social, economic and political opportunities

Figure 21 and 21 report our positive gender attitudes index by health zone and gender. There is some variation across Health Zones and gender. Walikali scores lowest, and women on average report lower values compared to men.









IMA Indicator 3: IR 1.2.4 Percentage of target population that views GBV as less acceptable after participating in or being exposed to USG programming

Figure 22 reports positive gender attitudes index by treatment assignment status, i.e., comparing villages assigned to CBTH programming and control villages for each Health Zone. There are differences in attitudes between the types of villages, both for each Health Zone level and at aggregate levels.



Figure 22: Positive gender attitudes index, by treatment, at the population-level

IMA Indicator 4: IR 2.3.2 Percentage of target population reporting disagreement with identified barriers to accessing GBV-related community services

In Figure 23 and 24 report the number of barriers to access GBV-related services identified by women that had GBV perpetrated by family members (Figure 22) and non-family (Figure 23). On average women report 3.7 barriers (out of 6) with considerable variation across Health Zones. Most barriers are experienced by women in Katana Health Zone.





Figure 24: Number of indicated barriers to access GBV-related services if perpetrated by family member, by health zone and gender, at the population-level



EXTERNAL VALIDITY

Eastern DRC has been affected by more than two decades of conflict, and has notably high levels of GBV. Sadly, these characteristics do not make it unique in the world. DRC ranks among the worst ten countries on the Women, Peace, and Security Index, but other fragile states have similar or worst scores, including: Chad, South Sudan, Iraq, Pakistan, Yemen, Syria and Afghanistan. Like DRC, these countries are deeply affected by conflict and displacement, have highly inequitable norms and customs for women and limited public health and social service infrastructure.

The fact that all villages in the sample improved on several outcomes, even during active conflict and during a pandemic recognized for triggering increased violence, suggests that the Tushinde program and CBTH approach may be effective in other highly unstable environments. However, it will be critical to ensure that future CBTH interventions are adapted to their context. Future work where CBTH is evaluated in other countries, or through a multi-country study would provide further insight into the generalizability of these findings.

LIMITATIONS

The rigorous design of this impact evaluation is a notable strength of this work. However, it is important to discuss limitations associated with this study. Because this endline survey was carried out just 2-3 months after program completion, we are not able to determine the long-term impact of CBTH on our outcomes of interest. It is possible that programming results in short-term changes, but these decay over time. Similarly, we might have seen larger changes in the outcomes of interest had programming continued for a longer duration. Below, we also present information about delays and interruptions in the programming, which might also have attenuated the results presented here.

As we noted above, programming that addresses violence can potentially change reporting related to this experience. It is possible that respondents receiving the CBTH intervention may be systematically different in reporting compared to control villages. It is possible that discussing traumatic events and exposure to violence may increase individuals' likelihood of recognizing and reporting trauma symptoms, which would bias these results towards the null.

It is also possible that raising awareness around acceptance and cohesion could increase the social desirability bias in responses from those in intervention villages. These respondents might be more likely to report espousing beliefs and behaviours that are deemed more "positive" based on the programming messages. This could lead to results that inflate the effectiveness of the program.

A notable challenge that arose during this programming was the COVID-19 global pandemic. As noted above, social isolation measures resulted in a stop in programming from July to August 2020. In addition to delays related to COVID-19, there was also a pause in programming due to budgetary lapses in October.

Despite these significant challenges, it is notable that this intervention proved effective in changing some outcomes. In particular, the social isolation measures associated with the pandemic are widely recognized to increase IPV – a key outcome of interest for this program. Additionally, feelings of trauma, depression and anxiety could easily have increased as a result of this unprecedented health threat. As seen in the results below, some respondents reported that COVID-19 impacted community security as

well, potentially counteracting some of the effects of the CBTH programming. While the rigorous RCT design allows us to see changes across both intervention and control villages, it is possible that the harmful effects of the pandemic and the cessation in programming may have impacted the outcomes of interest for this study.

Another important challenge with this work was the extent to which the intervention moved across community borders. Inherently, CBTH aims to create change within and across villages. Its messages focus on identifying and addressing sources of trauma, in deconstructing harmful assumptions that can lead to tensions and stereotyping, and to building a sense of trust and cohesion with others. We saw that CBTH is, indeed, a community-based intervention with the capacity to "travel" across borders and affect those in neighboring villages. Because this IE randomized to villages that had access to other Tushinde programs activities at the Health Area level, the randomization was constrained to a relatively limited geographic area. In addition, the villages assigned to the program and control villages were in relatively close proximity, and which had high levels of exchange across community borders. As noted by both CBTH implementers and IE observers, there may have been some spillover across treatment and control villages. Markets, churches, schools and close social networks all mean that villages in close proximity have very porous borders. As noted in the findings section, we find high levels of awareness to concepts related to CBTH in control villages. In fact, there appears to be nearly identical proportions of program concept awareness in treatment and control villages (see Annex Table B.I for test statistics on the difference). However, while at the extensive margin program elements look similar across both types of villages, we do not know the degree of exposure to program activities. IE observers and qualitative interviews note that some control villages received at least some program activities, but not to the same degree. This implies we can interpret the difference between villages assigned to the CBTH program and control villages as receiving a difference dose. The results presented here thus represent an underestimate of the likely program impact. While this spillover is problematic for our IE, as we don't observe what would have happened without any programming, this fact also speaks to CBTH's ability to potentially achieve impact across broad geographic areas. Future designs should aim to include a "pure" control group where spillovers are less likely, for example by creating a minimal distance between treatment and control sites, or treating groups of villages rather than villages separately (i.e., clustering).

The extremely high burden of trauma in DRC is widely documented, and the extremely high toll on mental health is reinforced again by the current study. Because of the highly violent and unstable history of the conflict in eastern DRC, CBTH programming was widely in demand. Implementers of CBTH and members of the research team who observed implementation both noted that people from neighboring villages heard about this programming and traveled to intervention sites to ask to also participate.

CONCLUSIONS, & RECOMMENDATIONS

This study is among the first to rigorously evaluate a CBTH intervention in an ongoing conflict. We find that outcomes improve across both intervention and treatment villages over the study period. From baseline to endline, there is a 14-percentage point decrease of women reported having experienced IPV and a 9-percentage point decrease in non-partner GBV. These changes occurred despite the global COVID-19 pandemic, which we would expect to increase IPV and GBV. These changes reflect broader social trends and positive impacts from the holistic Tushinde program, as well as spillovers from the CBTH program villages to control villages. Added to these positive across-the-board changes, we also see some promising impacts of the CBTH intervention itself. Below, key findings are presented. First,

the outcomes of interest for the IE are discussed, followed by general observations from the study and then reflections on how COVID-19 pandemic may have affected villages involved in this work.

OUTCOMES OF INTEREST

Non-partner sexual violence decreased by 50% (from 5% to just under 2.6%) in treatment compared to control villages over the course of the IE. This intervention resulted in a 50% decrease in non-partner sexual violence among female beneficiaries in treatment villages. This is among the first interventions to show an effective reduction in the experience of non-partner sexual violence among women participants. However, this result should be seen as suggestive and not conclusive evidence of CBTH impacts. When we adjust our analysis for multiple hypothesis testing this result is not statistically significant.

IPV perpetration and victimization decreased over the course of the study period in all villages, however, there was no significant effect of CBTH in particular on IPV outcomes. Despite the lack of impact of CBTH on IPV, the overall decrease in this form of violence is noteworthy, particularly given that the global pandemic is widely seen as a risk factor for increasing violence within the home. More work would be needed to understand why these changes are occurring; however, widespread awareness raising, active engagement from NGOs addressing this issue, holistic programming through Tushinde and other factors may play a role in this positive trend.

To increase CBTH's impact on IPV, it may be worthwhile to purposely engage couples for participation in CBTH programming – something that was not done for this evaluation. Several IPV interventions have been rigorously evaluated, and these programs generally find ways to engage both partners separately as well as with dedicated couple's sessions. Integrating this model into CBTH – where couples can undertake CBTH privately and individually, but also have opportunities to speak with each other, could be an interesting way to address IPV.

Self-efficacy and community resilience significantly improved in CBTH treatment villages compared to control. Individual resilience moved in the right direction, but did not reach significance. Across the board the differences are small but promising, suggesting that CBTH has helped improve the very outcomes it aimed to target- feelings of agency and ability to improve one's own life and a greater sense of connectedness with, and trust in, one's community as a whole. We note however that these results are not significant when we adjust for testing multiple IPV/GBV related outcomes, so further research should be conducted to confirm these effects.

Mental health outcomes moved in the right direction for individuals in treatment villages, but did not reach significance. It is possible the high spillover between treatment and control villages may have played a role in tempering this result. Additionally, adverse impacts of COVID-19 on mental health overall may have attenuated what might have been larger gains in mental health in treatment villages. Below, some recommendations are suggested to improve CBTH's impact on mental health outcomes.

GENERAL FINDINGS

The community-based and inclusive nature of this intervention meant potential spillovers between villages assigned to the CBTH program and control villages. This potentially biases the results towards

zero. Near identical proportions of respondents across treatment and control villages expressed having awareness of CBTH programming, and reported highly positive perceptions of trauma healing champions (THCs). THCs in control villages noted that they would be visited by delegations from neighboring control villages, requesting access to the CBTH services they had heard about. In addition, implementers noted that treatment and control villages were geographically close to each other, and had high levels of social interaction through markets, churches, schools and close social networks all mean that villages in close proximity have very porous borders. This spillover likely causes an underestimate of the true effect of this programming; results may be viewed as an underestimate of true result but in the right direction.

Uptake of Tushinde programs is high across all project sites, despite COVID-19 challenges that disproportionately affected women. Fifteen percent of the endline respondents stated that they did not seek services when they otherwise would have because of concerns about the virus. Women had 80% greater odds of stopping seeking services compared to men (p<0.001). Overall service uptake was relatively high. However, medical service seeking in treatment villages was significantly lower compared to control villages. Since mental health care in eastern DRC is extremely limited, clinics and hospitals become the first point of care for those seeking mental health services. It is not possible to know exactly why medical service seeking in control villages decrease. However, it is possible that addressing the high burden of trauma in these villages could mean fewer people seeking medical care. Future research on this question would be illuminating.

COVID-19 IMPACT

COVID-19 increased insecurity in nearly one in four villages and disproportionately affected women. Respondents were also asked whether COVID-19 increased insecurity in their community. One in four respondents stated that insecurity had either somewhat or greatly increased due to COVID-19, with men and women reporting this outcome at similar rates. One in four respondents also said that they had quarantined at home as a result of the pandemic - women were four times more likely to report staying at home compared to men. Of those individuals who reported staying home, one in five experienced violence with the vast majority stating this violence had gotten worse since quarantine began.

The COVID-19 pandemic occurred during project implementation – temporarily disrupting CBTH services and calling for adaptations to the programming model. While implementation was eventually able to resume, it is important to acknowledge that the pandemic represents a significant influence on villages participating in this IE. Around the world, there is significant evidence that the pandemic and its associated lockdown measures significantly impacted women's inclusion and security while simultaneously increasing the risk of multiple forms of violence. The uptick in GBV during COVID-19 has been called the "shadow" pandemic, and there is evidence that, together, GBV and COVID-19 are acting as mutually reinforcing pandemics, or "syndemics." The Women, Peace and Security index – a measure that ranks countries globally across multiple indicators related to inclusion, justice and security – finds that COVID-19 has exacerbated existing inequalities while triggering new and concerning trends, including widening disparities between women and men and new threats to women's safety. Within our own study, we presented findings that highlight how COVID-19 has had negative impacts on both individuals and villages. The overall improvement in violence outcomes across treatment and control villages during the study period is noteworthy, particularly given that the pandemic likely served as a

countervailing force against violence reduction. It is possible that the implementation of the package of core Tushinde services helped mitigate some of the drivers of violence that the pandemic would otherwise have been further exacerbated. While overall violence decreased, women who noted they quarantined at home as a result of the pandemic stated that IPV violence had gotten worse since quarantine began.

RECOMMENDATIONS

This IE raises a number of promising avenues for future programming. These findings suggest that Tushinde and CBTH is successful at improving a number of key outcomes, even when implantation occurs during periods of active conflict and with COVID-19-related interruptions in programming.

These results point to several recommendations:

- Continue to use evidence-based approaches to strengthen the mental health programming within CBTH, with an emphasis on mental health awareness, basic understanding of symptoms, self-care approaches, and trauma healing. As new evidence continues to emerge related to raising awareness related to addressing mental health at a community level, these findings should be actively integrated into CBTH modules.
- Future evaluation designs should aim to include a "pure" control group where spillovers are less likely, for example by creating a minimal distance between treatment and control sites, or treating groups of villages rather than villages separately (i.e., clustering).
- Future research could determine whether CBTH is equally effective in other contexts. Most importantly, USAID might consider creating core modules with guidance for an adaptation process to ensure it is culturally relevant and appropriate. Creating such guidance would mean that CBTH could be adapted for use regardless of context.
- Strengthening monitoring and evaluation of the programming rollout including feedback from both participants and facilitators after each session would help strengthen CBTH programming overall. Undertaking rigorous M&E could identify areas to emphasize as well as topics that need strengthening. Additionally, such an approach could identify topics or gaps that the community would like to address. Especially in the context of the Eastern DRC, which is fragile and in constant flux where programming has to adapt to the environment and travel and security risks, having a permanent presence of the research team on the ground is highly advisable. These "eyes and ears" on the ground can help inform the IE team early of changes in programming, increase the team's ability to respond early, and help the team make necessary changes in research design and implementation.
- Two approaches could complement the rigorous M&E approach: a most significant change analysis (MSC) and process evaluation. MSC helps identify both intended and unintended impacts through stakeholder narratives. Both approaches are helpful to determine causal mechanisms for change, and can support the development of a theory of change and logic model for programming.

ANNEX A. BIBLIOGRAPHY

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ANNEX B. RESULTS TABLES

	(1)	(2)	(3)	(4)	(5)
	During the past two years, is there someone in your community that has organized meetings to come together and discuss issues related to trauma, grievances and community?	Did you attend any community celebrations or theater shows organized to allow community members to come together over the past year?"	During the past year, did you discuss experiencing trauma? This could have been with friends, village leaders, NGOs, or civil-society organizations.	During the past year, did you discuss social cohesion with friends / village leaders / NGOs civil-society organizations?	During the past year, did you discuss community healing from conflict with friends / village leaders / NGOs civil-society organizations?
CBTH Intervention	0.005	-0.024*	0.011	-0.015	0.006
	(0.017)	(0.014)	(0.017)	(0.013)	(0.014)
FDR Q-values	[1]	[1]	[1]	[1]	[1]
Observations	2747	2791	2793	2793	2792
Mean in Control Villages	0.405	0.285	0.278	0.361	0.300

Table B.I: Respondent Reports on Core Program Activities

Notes: Analysis based on OLS regression with clustered SE, randomization block FE (health area) and baseline dep var (where available). Bottom row reports the mean of the dependent variable in control villages. FDR qvalues in square brackets.

Table B.2: IPV and GBV Outco

	(1)	(2)	(3)	(4)	(5)
	Past-year IPV - physical AND sexual - victimization (women)	Past-year non- partner sexual violence victimization (women)	Emotional IPV (women)	Past-year physical and sexual IPV perpetration (men)	Past-year non- partner physical and sexual violence perpetration (men)
CBTH Intervention	0.009	-0.021**	0.003	-0.017	-0.002
	(0.026)	(0.009)	(0.016)	(0.021)	(0.015)
FDR Q-values	[1]	[0.112]	[1]	[1]	[1]
BL Past-year IPV - physical AND sexual -victimization (women)	0.111***				
	(0.032)				
BL Past-year non-partner physical and sexual violence victimization (women)		0.023			
		(0.019)			
			0.061		
			(0.039)		
BL Past-year physical and sexual IPV perpetration (men)				0.045	
				(0.030)	
BL Past-year non-partner physical and sexual violence perpetration (men)					0.032
					(0.021)
Observations	862	1065	1029	870	929
Mean in Control Villages	0.321	0.048	0.913	0.128	0.045

Notes: Analysis based on OLS regression with clustered SE, randomization block FE (health area) and baseline dep var (where available). Bottom row reports the mean of the dependent variable in control villages. FDR q-values in square brackets.

	(1)	(2)	(3)	(4)	(5)	(6)
	Depression and Anxiety Scale	PTSD	Self-Efficacy	Individual Resilience	Community Resilience	Positive Gender Attitudes
CBTH Intervention	-0.006	-0.002	0.662*	0.148	0.614*	0.030
	(0.014)	(0.015)	(0.394)	(0.252)	(0.315)	(0.344)
FDR Q-values	[1]	[1]	[1]	[1]	[1]	[1]
BL Depression and Anxiety Scale	0.140***					
BL PTSD	(0.017)	0.126***				
BL Emotional IPV (women)		(0.011)				
BL Self Efficacy			0.064*** (0.017)			
BL Individual Resilience			х <i>У</i>	0.057***		
BL Individual Resilience				(0.016)	0.065***	
BL Positive Gender Attitudes						0.192***
Observations	3521	3521	3521	3521	3521	(0.022) 2498
Mean in Control Villages	0.885	0.617	68.570	78.181	75.295	59.460

 Table B.3:
 Mental Health Outcomes

Notes: Analysis based on OLS regression with clustered SE, randomization block FE (health area) and baseline dep var (where available). Bottom row reports the mean of the dependent variable in control villages. FDR qvalues in square brackets.

Table B.4: Service uptake

	(1) LEGAL SERVICES	(2) MEDICAL SERVICES	(3) PSYCHOLOGICAL SERVICES	(4) SOCIO-ECONOMIC INTERVENTIONS
	b/se	b/se	b/se	b/se
CBTH Intervention	-0.012	-0.050***	-0.006	0.005
	(0.010)	(0.012)	(0.007)	(0.012)
FDR Q-values	[0.64]	[0.001]	[0.815]	[0.896]
Observations	2787	2789	2788	2790
Mean in Control Villages	0.102	0.218	0.070	0.203

Notes: Analysis based on OLS regression with clustered SE, randomization block FE (health area). Bottom row reports the mean of the dependent variable in control villages. FDR qvalues in square brackets.

Attrition

For the endline survey, we were able to re-interview 54% of the same respondents and in 17% of the case we were able to replace the respondent with someone of the same gender with in the household. This implies a household level attrition of 29%. This level of attrition is not unusual given the time period between the survey rounds (2018-2021) and the high rate of displacement and migration in DRC. Below in Table A 5 we check if attrition is correlated with respondent characteristics and whether these are different across villages assigned to the CBTH intervention and control. We run a linear regression where the dependent variable is whether a respondent appears both in baseline and endline survey rounds (with I being yes, and o otherwise). We then regress this on a set of baseline variables including age, gender, etc as well as some of our outcome variables. We find that on average women and older respondents are more likely to have remained in the samples, but importantly that these characteristics are not different between experimental groups, i.e., none of the interaction terms are significant. This implies our sample remained well balanced and does not systematically differ across both types of villages.

Table B.5: Attrition

	(2) Panel_Resp
BL Female	0.104**
	(0.044)
BL Age	0.004***
	(0.001)
BL Never Married	0.047
	(0.050)
BL Household head	0.007
	(0.037)
BL Can write	0.002
	(0.025)
BL Assets	-0.002
	(0.007)
Main occupation if farming	-0.041
	(0.030)
Displaced	0.007
	(0.030)
Security Incident	-0.020
	(0.028)
Father beat mother	0.002
	(0.025)
BL Depression and Anxiety Scale	0.024
	(0.042)
BL PTSD	-0.023
	(0.040)
BL Self Efficacy	-0.000
	(0.001)
BL Individual Resilience	0.002
	(0.001)
BL Gender Attitudes	0.002
	(0.001)
CBTH * BL Female	-0.039

	(2) Panel_Resp
	(0.062)
CBTH * BL Age	-0.002
	(0.001)
CBTH * BL Never Married	0.040
	(0.070)
CBTH * BL Household head	0.080
	(0.053)
CBTH * BL Can write	-0.022
	(0.038)
CBTH * BL Assets	-0.005
	(0.011)
CBTH * BL Main occupation if farming	0.024
	(0.039)
CBTH * BL Displaced	-0.013
	(0.035)
CBTH * BL Security Incident	0.038
	(0.039)
CBTH * BL Father beat mother	-0.015
	(0.038)
CBTH * BL Depression and Anxiety Scale	0.017
	(0.056)
CBTH * BL PTSD	0.006
	(0.053)
CBTH * BL Self Efficacy	0.001
	(0.001)
CBTH * BL Individual Resilience	0.002
	(0.002)
CBTH * BL Gender Attitudes	-0.001
	(0.001)
CBTH Intervention	-0.139
	(0.197)
Observations	2991

Clustered SE, Block FE included in regression

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