



WhatWorks

TO PREVENT VIOLENCE

A Global Programme To Prevent
Violence Against Women and Girls



The cost-effectiveness of intimate partner violence prevention: Evidence from six low- and middle-income countries

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ABOUTWHATWORKS

The *What Works to Prevent Violence Against Women and Girls* Global Programme is a flagship programme from the UK Department for International Development (DFID), which is investing an unprecedented £25 million over five years to prevent violence against women and girls. It supports primary prevention efforts across Africa and Asia that seek to understand and address the underlying causes of violence, and to stop it from occurring. Through three complementary components, the programme focuses on generating evidence from rigorous primary research and evaluations of existing interventions to understand what works to prevent violence against women and girls generally, and in fragile and conflict areas. Additionally, the programme estimates social and economic costs of violence against women and girls, developing the economic case for investing in prevention.

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For more information on this CEA analysis see the peer-reviewed journal article [here](#).



Globally, one in three women has experienced physical and/or sexual violence in their lifetime.¹ Sustainable Development Goal (SDG) 5 aims to eradicate violence against women and girls (VAWG). Many interventions designed to prevent VAWG in low- to middle-income countries (LMICs) are showing substantial impact. However, despite the emerging evidence and high-level policy and public commitment to reduce VAWG, funding for VAWG prevention remains insufficient. Cost-effectiveness analysis helps governments and funders decide which VAWG prevention interventions are most effective when budgets are limited.

This brief presents findings from the first multi-country cost-effectiveness study of six VAWG prevention interventions delivered across a range of platforms and approaches from schools to community mobilisation and workshop-based small-group formats. It highlights how costs and health effects vary across platforms, approaches, countries, and populations, with methods commonly used to analyse and justify investment in the health sector.

This brief is intended for donors, policy makers, and practitioners of VAWG prevention. It is one of a series of evidence briefs published as part of the UKAID-funded *What Works to Prevent Violence* programme, which has rigorously evaluated 15 interventions across 12 countries in Africa and Asia.

THE ISSUE

While preventing VAWG is a moral imperative, understanding the costs and impact of VAWG prevention is critical to making the case for investment and scale-up, particularly in LMICs, where resources are highly constrained.

Those considering investment in VAWG prevention often do not have the evidence to show decision-makers that VAWG prevention delivers good value for money.

To date, there are only two published cost-effectiveness studies of VAWG-prevention interventions: the Intervention with Microfinance for Gender Equity (IMAGE) in South Africa² and the SASA! community mobilisation programme in Uganda.³ IMAGE was cost-effective when it was scaled up locally. SASA! only reported cost per year free from IPV rather than cost per disability-adjusted life-year (DALY) averted, which is the standardised measure of health outcomes. For this reason, the cost-effectiveness of SASA! cannot be directly compared with that of other interventions.

To address the evidence gap, *What Works* assessed the costs and cost-effectiveness of six VAWG-prevention interventions, that were evaluated using randomised controlled trials in five sub-Saharan African countries and in Pakistan. A standard methodology was used to estimate the costs and cost-effectiveness of the pilots and examine potential cost effectiveness at scale.⁴

KEY MESSAGES

- Well-established interventions aimed at changing harmful gender-norms in communities are a cost-effective approach to prevent VAWG.
- Expanding established community mobilisation-based VAWG prevention interventions is justified from an economic perspective, as it helps health ministries to maximise population health, even with very constrained budgets. However, further investment is needed to develop and refine a range of prevention delivery models that are cost-effective.
- Although interventions that improve participants' livelihood skills, including their financial management skills, can be cost-saving, they may not yet be sufficiently impactful to reduce violence against women and girls.
- Despite their potential to reduce IPV, one-on-one interventions, such as psychosocial support, may not be cost-effective compared to other health interventions in low-resource settings, and may need further integration into essential mental health service provision or other platforms.
- The target population must be considered. Some of the more vulnerable populations may be more expensive to reach and cost-effectiveness needs to be traded off with equity considerations.
- Costs per participant are expected to decrease at scale but they may increase if the delivery platform cannot be modified (e.g. schools) to adjust for numbers of potential participants, or with increased transport costs as the programmes reach more sparsely populated or less easily accessible areas.
- Most prevention interventions have demonstrated broader social and financial benefits, suggesting that the impact of VAWG prevention may go beyond the health sector. This creates possibilities for different ministries or sectors to jointly finance the same intervention, and consider impacts not currently incorporated into this analysis.

METHODOLOGY

The *What Works* Economic Evaluation Working Group, based at LSHTM and working with partners from the six settings, adapted state-of-the-art costing and cost-effectiveness methods⁵ to the field of VAWG prevention. The team collected and analysed primary cost data alongside health and economic impact data from each randomised controlled trial.

Cost-effectiveness was evaluated by comparing costs and (physical and mental) health impact of the intervention with that observed in the control group (comparator). This comparison is summarised in the incremental cost-effectiveness ratio (ICER), which reports the additional cost per unit of health impact among participants in the intervention group compared to the control group. Policy-makers and donors can use this information to decide whether to invest in VAWG prevention as opposed to other interventions that also improve health.

The primary outcome measure used was the incremental cost per disability-adjusted-life-year (DALY) averted. DALYs are summary measures of health impact used to estimate the global burden of disease. DALYs combine years of life lost and years of life lived with disability and include both physical and mental health consequences. Since VAWG prevention impacts many other spheres of individuals' lives, the research team also captured available non-health effects, like income.

Costs were estimated considering costs to providers of VAWG prevention and from a broader societal perspective, which includes any economic gains or losses to the participants in VAWG interventions. The incremental cost per DALY from VAWG prevention is then compared to other health-improving interventions, such as investments in HIV treatment.



Photo: Right to Play

Delivering VAWG prevention as part of pilots and research can incur different costs than when VAWG prevention is part of routine service delivery. Results are therefore reported separately on the cost-effectiveness of interventions during the research phase (that is, when the RCTs are underway to test interventions' effectiveness), and at scale (that is, when the intervention is rolled out to a wider area or number of participants, in a routine implementation setting). Cost-effectiveness during the research phase excludes any direct cost due to research (for example, data collectors' time), but captures all implementation costs during the research period.

Understanding how cost-effectiveness changes between these two phases is important for those financing VAWG prevention. For example, pilot interventions typically reach fewer participants (individuals or communities) than when they are routinely implemented at scale; and may involve external support. Average cost per participant reached is therefore generally higher in a research setting than in a routine setting. However, in terms of impact, at scale there may be some loss of quality and fidelity in intervention delivery, with potential loss of effectiveness.

The interventions costed in each setting are summarised in **Figures 1 and 2**.

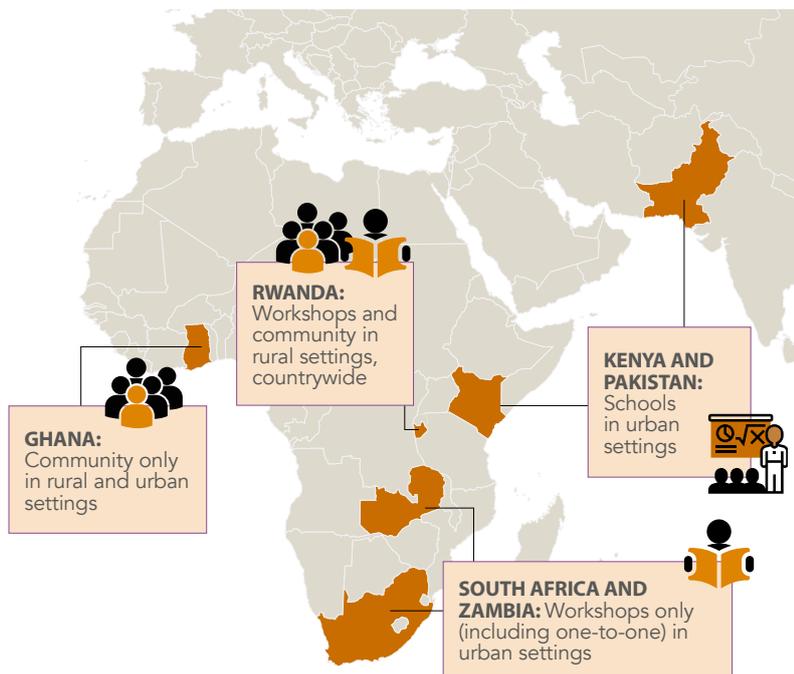


FIGURE 1: WHERE?

We conducted cost-effectiveness studies in six countries, across rural and urban settings, in schools, communities and small-group workshops.

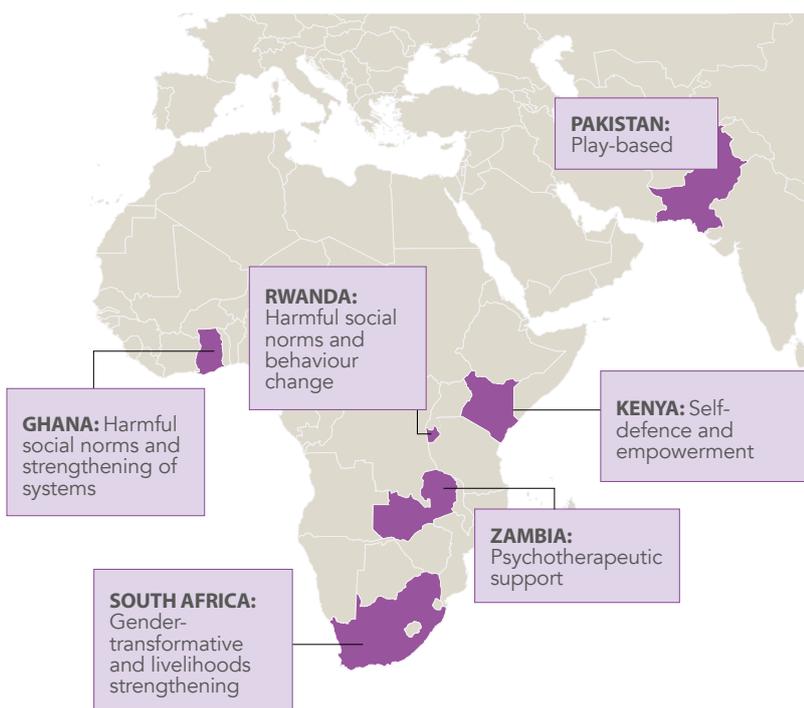


FIGURE 2: WHAT?

VAWG prevention interventions use different approaches to tackle VAWG.

COSTS

Costs per person reached are presented in **Table 1**. Across the six interventions in the study, the cost of VAWG prevention per person reached varied, depending on intensity of contact with participants, the type of human resource capacity required, delivery platform, geographical reach and the number of intervention components.

There was a wide range in costs per person reached. For example, delivering a workshop-based small group intervention to young adults in South Africa cost US\$319 per participant reached, while a community-based gender transformative intervention in Ghana cost US\$4.

The wide reach of community-based interventions and the maturity of the Ghanaian intervention explain some of the difference in per-person costs: implementers had already been delivering this intervention in other areas of Ghana for 14 years, which minimised the costs of local adaptation during the period of our study.

The workshop-based small-group sessions and social norms change intervention in Rwanda cost US\$20 per participant reached. In Kenya, it cost US\$11 to reach one schoolgirl through the eight-session school-based intervention during the research phase, and US\$22 in Pakistan with the 120-session Right To Play intervention over the two-year study. In Zambia, 12 sessions of the one-to-one psychotherapeutic intervention cost US\$1,324 per adult client because the local lay counsellors received training and technical support by international clinical experts for the duration of the research phase.

In most cases, when the cost of interventions was estimated at a national scale, costs per person reached decreased. However, in some cases, cost per person rose because RCTs had been conducted at large sites (e.g., large schools) and scaling up to smaller sites cost more per person reached. Some costs, such as transport costs, increased as the programmes were introduced in more sparsely populated or less easily accessible areas (Table 1).

Table 1: Incremental cost per person reached (USD 2018)

	RSS	IMPOWER	RIGHT TO PLAY	INDASHYIKIRWA	SSCF	VATU
	Ghana	Kenya	Pakistan	Rwanda	South Africa	Zambia
Provider perspective (health sector costs and health outcomes)						
Research setting	\$ 4	\$ 11	\$ 22	\$ 20	\$ 319	\$ 1,324
Scale-up in routine setting	\$ 3	\$ 21	\$ 43	\$ 13	\$ 222	**
Societal perspective (provider perspective + economic benefits to participants)						
Research setting	-\$356	\$ 11	\$ 22	\$ 20	\$ 1,809	**
Scale-up in routine setting	-\$358	\$ 21	\$ 43	\$ 13	\$ 1,711	**

**No estimates available

Staff costs make up a sizeable portion of costs in VAWG-prevention interventions. The proportion of staff costs varied between 70% of cost for the one-to-one psychosocial intervention, to 23% in the community mobilisation approach in Ghana, where activities were led by local volunteers. Staff costs accounted for 60% of total costs in the workshop-based intervention in South Africa, 50% in the classroom-based intervention in Kenya, and 37% and 35% respectively in the small-group and community mobilisation interventions in Rwanda and Pakistan. Type of intervention and intensity of exchange between staff and participants are, in most cases, the key cost drivers for VAWG prevention.⁶

EFFECTS

Violence

To determine the impact of interventions, the study first examined intimate partner violence (IPV), the most prevalent form of VAWG, which was targeted in all interventions except Pakistan. Impact on IPV is captured as person-years free from IPV, (i.e., the number of respondents who reported experiencing or perpetrating no violence during the previous 12 months). The intervention in Ghana reached 73,759 participants and gained 2,431 person-years free from IPV; the intervention in South Africa reached 677 young men and women and yielded 31 person-years free from IPV. The Zambian intervention reached 246 adults and gained 264 IPV-free person-years. The intervention in Pakistan sought to reduce peer-to-peer violence and achieved 6,374 person-years free from peer victimisation among 15,968 students.

COST-EFFECTIVENESS

Table 2 presents the incremental cost per DALY averted, for men and women, and for women only, respectively. We also report the probability that an intervention is cost-effective from a health-sector perspective, taking account of uncertainty in our estimates.

From a provider perspective, the Ghanaian intervention has a 52% probability of being cost-effective for men and women jointly, and a 95% probability of being cost-effective for women only, compared to an opportunity cost threshold (\$). The intervention averted one DALY for US\$52 for female participants, and for US\$360 when the health impacts on men were also considered. **Table 3** shows that the intervention is also cost-effective from a societal perspective.

The Kenyan intervention (IMpower) has a 30% probability of being cost-effective, improving the mental health of schoolgirls as measured by depression and anxiety. It is

possible that, by seeking to improve girls' self-esteem, the intervention also had a positive impact on their mental health. The intervention in Pakistan has less than a 1% chance of being cost-effective from a health sector perspective.

None of the analyses for the full intervention in Rwanda found it to be cost-effective. However, the initial component, which targeted couples only, recorded 53% and 100% probabilities of being cost-effective from the health sector and societal perspectives, respectively.

The South African intervention has no impact on DALYs for women but provides an economic benefit, recording 82% probability of cost-effectiveness from a societal perspective. When men are included, the economic impact is lower for participants than controls, DALYs averted are marginally larger, and the intervention has a 17% probability of being cost-effective from a societal perspective.



Photo: Peter Caton

TABLE 2: Incremental cost per DALY averted – provider perspective

	RSS	IMPOWER	RIGHT TO PLAY	INDASHYIKIRWA		SSCF	VATU
	Ghana	Kenya	Pakistan	Rwanda		South Africa	Zambia
				Community	Couples only		
Female recipients only	\$52	\$1,446	Negative	\$2,629	NA	Negative	\$7,603
Probability cost-effective for women	95%	30%	0%	0%	NA	0%	0%
Female and male recipients (all)	\$360	NA	\$2,326	Negative	\$280	\$18,239	\$9,438
Threshold (provider)§	\$497	\$656	\$177	\$281		\$3,266	\$546
Probability cost-effective for all recipients	52%	NA	0%	0%	53%	0%	0%

§This threshold indicates the current least efficient intervention in the health sector in each country (i.e., the intervention that the funding for VAWG would replace). If the incremental cost per DALY averted is below this ICER, then funding the intervention will improve population health within the current health sector budget

None of the analyses for the intervention in Zambia (VATU) found the intervention to be cost-effective during the research phase and no data was available for this intervention in routine implementation. However, its cost-effectiveness is in line with other mental health interventions in sub-Saharan Africa,⁷ and may benefit from integration with other health services^{8,9} and other VAWG-prevention platforms or interventions. The interventions that are cost-effective in the research phase retain similar likelihoods of achieving cost-effectiveness at scale.¹⁰

TABLE 3: Incremental cost per DALY averted – societal perspective

	RSS	IMPOWER	RIGHT TO PLAY	INDASHYIKIRWA		SSCF	VATU
	Ghana	Kenya	Pakistan	Rwanda		South Africa	Zambia
				Community	Couples only		
Female recipients only	\$1,144	\$1,446	-\$33,614	\$2,630	NA	\$72,767	**
Probability cost-effective for women	62%	52%	24%	0%	NA	82%	
Female and male recipients (all)	-\$32,479	NA	\$2,326	Negative	\$280	\$103,292	**
Threshold (1*GDP per capita)	\$2,202	\$1,711	\$1,482	\$773		\$6,374	\$1,540
Probability cost-effective for all recipients	80%	NA	38%	0%	100%	17%	**

**No estimates available

The great challenge of our age is to improve public health when budgets are limited. This brief shows how VAWG prevention in LMICs can be cost-effective.

Our results suggest that several VAWG-prevention interventions may be cost-effective, while others may need to be adapted before they are scaled up. However, it should be noted that this analysis considers health and economic benefits only. The estimates presented here are conservative as they do not include post-trial health benefits, assuming no sustained economic, health or social impact, nor any future cost. In addition, there are many other justifications for investment in VAWG prevention.

While we find large differences across intervention types, cross-country cost-effectiveness comparisons between interventions should be performed with caution.

Context (country, delivery platform) and target populations are likely to impact cost-effectiveness substantially. Furthermore, results in this brief in part reflect variation in the range of health consequences measured across studies. Going forward, it is necessary to develop standard survey modules to capture all key health outcomes of relevance to IPV exposure and perpetration systematically and ensure comparability of DALY estimates.



Photo: Eoghan Rice (Wikimedia Commons)

CONCLUSION

The *What Works* Economic Evaluation Team has produced the first set of comparable, standardised cost and cost-effectiveness estimates of VAWG-prevention interventions in low- and middle-income countries. It sets a benchmark for future cost-effectiveness assessments of VAWG prevention and related interventions such as women's empowerment and behavioural change interventions in public health.

Effective VAWG prevention can be delivered at low cost when implemented at large scale, with modest human resources requirements. These findings suggest that donors and policy-makers should continue to invest in VAWG prevention, given its potential for cost-effectiveness.

Researchers and practitioners should continue to aim to measure all intervention impacts to quantify cost-effectiveness. Adopting the standard methodology developed by the *What Works* Economic Evaluation Team will aid transparency and comparability across studies.

Key priorities for the future include directly measuring costs and cost-effectiveness of VAWG prevention as interventions are scaled up, to test whether costs and cost-effectiveness can be maintained. Further work is also required to quantify and value the full range of impact of VAWG prevention in different settings and for different populations, including non-health impacts. In addition, efforts are necessary to develop delivery models for both IPV prevention and support services for IPV survivors that are sustainable at scale.

Lastly, it will be important to explore co-financing for VAWG prevention between sectors. Most VAWG-prevention interventions are likely to have non-health impacts and are primarily offered outside of health systems; bringing together health, education and other social services can widen the funding envelope to reach SDG5.



Photo: pxhere.com

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