

Violence against women and girls 1



Prevention of violence against women and girls: what does the evidence say?

Mary Ellsberg, Diana J Arango, Matthew Morton, Floriza Gennari, Sveinung Kiplesund, Manuel Contreras, Charlotte Watts

In this Series paper, we review evidence for interventions to reduce the prevalence and incidence of violence against women and girls. Our reviewed studies cover a broad range of intervention models, and many forms of violence—ie, intimate partner violence, non-partner sexual assault, female genital mutilation, and child marriage. Evidence is highly skewed towards that from studies from high-income countries, with these evaluations mainly focusing on responses to violence. This evidence suggests that women-centred, advocacy, and home-visitation programmes can reduce a woman's risk of further victimisation, with less conclusive evidence for the preventive effect of programmes for perpetrators. In low-income and middle-income countries, there is a greater research focus on violence prevention, with promising evidence on the effect of group training for women and men, community mobilisation interventions, and combined livelihood and training interventions for women. Despite shortcomings in the evidence base, several studies show large effects in programmatic timeframes. Across different forms of violence, effective programmes are commonly participatory, engage multiple stakeholders, support critical discussion about gender relationships and the acceptability of violence, and support greater communication and shared decision making among family members, as well as non-violent behaviour. Further investment in intervention design and assessment is needed to address evidence gaps.

Introduction

Violence against women and girls is a global human rights violation and a substantial development challenge. It affects women throughout the world, and crosses cultural and economic boundaries. WHO estimates that more than 30% of women worldwide have experienced either physical or sexual partner violence.^{1,2} 7% of women worldwide have experienced non-partner sexual assault.³ About 100–140 million girls and women worldwide have undergone female genital mutilation (FGM) and more than 3 million girls are at risk for FGM every year in Africa alone.⁴ Nearly 70 million girls worldwide have been married before the age of 18 years, many of them against their will.^{5,6} The effect of violence against women and girls on their health and welfare, their families, and communities is substantial.^{7–9} The costs of violence against women and girls, both direct and indirect, are a staggering burden for households and economies.¹⁰

In the past 20 years, much research has been dedicated to the extent of violence against women and girls and understanding the underlying causes and risk factors associated with violence perpetration and victimisation.¹¹ There has also been enormous growth in the quantity and breadth of interventions in diverse settings, including in health care, justice systems, and social campaigns to address violence against women and girls worldwide. The first generation of interventions mainly focused on provision of support services for survivors of violence, and sought to reduce perpetrators' impunity and increase the effectiveness of the justice system. A second generation of programming, mainly in low-income and middle-income countries, has had a greater focus on violence prevention. These interventions developed organically, often linked to

Key messages

- Evidence for interventions is highly skewed towards high-income countries, and response, rather than prevention. Most research has been done in intimate partner violence, with far less evidence on how to prevent other forms of violence.
- In high-income countries, response interventions have shown greater success in improvements in physical and mental health outcomes for survivors of violence and increased use of services, but evidence for their effectiveness to reduce revictimisation is weak. Much research has been done on interventions for perpetrators, with little evidence of effectiveness.
- In low-income and middle-income countries, there is increasing emphasis on prevention of different forms of violence against women and girls, including intimate partner violence, non-partner sexual assault, female genital mutilation, and child marriage. Assessments of programmes indicate that it is possible to prevent violence, with some interventions achieving large effects in programmatic timeframes. Successful programmes engage multiple stakeholders with multiple approaches, aim to address underlying risk factors for violence including social norms that condone violence and gender inequality, and support the development of non-violent behaviours.
- The specialty of violence prevention is at an early stage. Further investment is needed to expand the evidence base for what interventions are effective in different contexts, assess a broader range of intervention models, and explore issues of intervention cost, sustainability, and scalability.

Published Online
November 21, 2014
[http://dx.doi.org/10.1016/S0140-6736\(14\)61703-7](http://dx.doi.org/10.1016/S0140-6736(14)61703-7)

This is the first in a Series of five papers about violence against women and girls

See Online/Comment
[http://dx.doi.org/10.1016/S0140-6736\(14\)61775-X](http://dx.doi.org/10.1016/S0140-6736(14)61775-X) and
[http://dx.doi.org/10.1016/S0140-6736\(14\)61840-7](http://dx.doi.org/10.1016/S0140-6736(14)61840-7)

Global Women's Institute (Prof M Ellsberg PhD, D J Arango MSc, M Contreras PhD), George Washington University, Washington, DC, USA; Department of Global Health (Prof M Ellsberg), and Department of Prevention and Community Health (F Gennari MPH), Milken Institute School of Public Health, George Washington University, Washington, DC, USA; The World Bank Group, Washington, DC, USA (M Morton PhD, S Kiplesund MPACS); and Gender, Violence, and Health Centre, London School of Hygiene & Tropical Medicine, London, UK (Prof C Watts PhD)

Correspondence to: Prof Mary Ellsberg, Global Women's Institute, George Washington University, Washington, DC 20052, USA mellsberg@gwu.edu

Panel: Systematic review of reviews on interventions to reduce violence against women and girls¹⁴

We used the results of a 2014 systematic review of reviews¹⁴ to identify assessments of interventions to reduce all forms of violence against women and girls. The review of reviews identified 58 reviews and 84 rigorously evaluated interventions (using experimental or quasi-experimental methods) that aimed to reduce one or more forms of violence against women. We examined the studies identified in the review of reviews and extracted relevant information including sample size, outcomes, and effect sizes. From these, we identified 21 studies with significantly positive results. We also searched relevant electronic databases and supplemental sources (search terms available in the appendix) and did outreach to more than 30 experts in the specialty to identify recently published and unpublished studies that had not been identified through the review of reviews. Through this process, we identified six more rigorously evaluated studies with significantly positive or highly promising results. Our Series paper summarises the findings from more than 100 reviews and evaluations.

From the systematic review of reviews,¹⁴ evidence for effective interventions was highly skewed towards high-income countries. More than 80% of the rigorous evaluations were done in six high-income countries (Australia, Canada, Hong Kong, New Zealand, the UK, and the USA), comprising 6% of the world's population. The USA alone accounted for two thirds of all the intervention studies. The search strategy included all forms of violence against women and girls mentioned in the definition established by the UN General Assembly (1993),¹⁵ including child and forced marriage, child sexual abuse, female genital mutilation, femicide, intimate partner violence, non-partner sexual assault, and trafficking. However, rigorous intervention evaluations were only identified for four types of violence: intimate partner violence, non-partner sexual assault, female genital mutilation, and child marriage.

Intimate partner violence was the subject of more than two thirds (58 of 84) of the rigorously evaluated interventions, followed by non-partner sexual assault with 17 studies and nine studies addressing harmful traditional practices (either female genital mutilation or child marriage). Only one study addressed multiple forms of violence (intimate partner violence and female genital mutilation). No studies meeting our inclusion criteria were related to trafficking or child sexual abuse. Among the interventions to prevent non-partner sexual assault, most were implemented with college students; no studies addressed sexual violence in conflict settings.

The types of violence against women and girls studied varied according to geographic location. In high-income countries, most of studies (51 of 66) dealt with intimate partner violence, followed by non-partner sexual assault with 15 studies. By contrast, half of the studies in low-income and middle-income countries (nine of 18) addressed child marriage or female genital mutilation, followed by intimate partner violence (seven), with non-partner sexual assault and multiple types of violence each represented by one study.

Among the 84 studies with available data, about two thirds (52) focused on responses to violence against women and girls at the individual level, and the remaining 32 interventions focused on prevention at the community or group level. Interestingly, the proportion of studies focusing on prevention was much lower in high-income countries (16 of 66) compared with low-income and middle-income countries where nearly all of the studies (16 of 18) focused on prevention. Most of the interventions targeted women alone (38) or women and men (17). 22 studies targeted only men, most of which were interventions for men who assault women (18).

HIV prevention efforts, and have used many approaches. These include large-scale campaigns, sophisticated education-entertainment or so-called edutainment programmes, skills building and economic empowerment programming, community mobilisation, and participatory group education efforts, aiming to change attitudes and norms that support violence against women and girls, empowering women and girls economically and socially, and promoting non-violent, gender-equitable, behaviours. Not much research has been done to assess the effectiveness of these programmatic efforts, particularly in low-income and middle income countries.^{12,13} Despite the scarcity of empirical research, a small, but promising, body of evidence shows either significant or highly promising positive effects in reductions or prevention of violence against women and girls.

In this Series paper, we review available evidence for what works to reduce the prevalence and incidence of violence against women and girls (panel). The studies

cover a range of interventions, and many forms of violence against women and girls, ranging from violence in armed conflict and intimate partner relationships, to FGM and child marriage. We used a broad focus to allow cross-learning across interventions and types of violence.

When we synthesise the findings, we use the terms prevention and primary prevention to refer to interventions that work with individuals or communities irrespective of their history of violence. These interventions seek both to prevent violence from occurring in individuals who have not experienced it before and to reduce reoccurrence in those who have already experienced or used violence. We use the term response and secondary prevention interchangeably to refer to interventions that specifically target either women who have already experienced some form of violence or male perpetrators, with the aim of reducing revictimisation or recidivism.

Intervention evidence from high-income countries

Introduction

In practise, although reduction of some form of violence against women and girls was a stated aim of all of the studies identified through the systematic review of reviews (panel),¹⁴ most studies identified from high-income countries focused on responses to violence. We also identified evidence from prevention programmes for school and university sexual violence.

Women-centred interventions for survivors of violence

We reviewed 22 rigorously evaluated interventions that provided services to women who experienced intimate partner violence.^{16–19} These interventions, often referred to as women-centred, use a combination of strategies, including psychosocial support, advocacy and counselling, and home visitation to provide women with resources and support to reduce their future risk of violence, and to improve their physical and psychological health and wellbeing. Most of the interventions take place in health-care services such as family planning or antenatal care, in which women with histories of intimate partner violence are identified through routine inquiry.^{19–22} Basic psychosocial support by health providers usually includes danger assessments, safety planning, information about rights and available resources, and referral to specialised services.

As described by García Moreno and colleagues²³ in the second paper in this Series, there is evidence that some health-sector-based interventions can have some positive outcomes for women and their children such as reductions in depression.^{16,24–27} However, only two studies report significant decreases in violence. Randomised control trials done in Washington, DC, and Hong Kong in pregnant women with histories of intimate partner violence showed significantly lower rates of violence revictimisation among women who received a psychosocial intervention, compared with women in control groups.^{28,29} Two other intervention models, involving advocacy and home visitation interventions, have also had promising results to reduce intimate partner violence victimisation.^{30–32} These interventions include psychosocial support and the provision of additional assistance by a trained layperson, to help women identify and access services. Usually, these studies have a longer duration and greater intensity than have health services-based interventions alone. For example, Hawaii's Healthy Start Programme was designed mainly to prevent child abuse and neglect and to promote child health and development in newborn babies from families at risk of poor child outcomes. A 3 year follow-up study showed lower rates of intimate partner violence victimisation in mothers given the intervention compared with controls (appendix).^{33,34}

Interventions for perpetrators

Although several high-income countries have implemented extensive court-mandated programmes to reduce recidivism in male perpetrators, there is little evidence of

programme effectiveness. Of 18 rigorous studies identified through Arango and colleagues'¹⁴ systematic review of reviews (panel), only two studies reported any significantly positive results (appendix).^{14,35,36} Interventions for men who assault their female partners typically involve some type of group education lasting from 8 weeks to 24 weeks. Common approaches include the Duluth Model, a feminist approach that engages men in discussions around power and control, as well as cognitive behavioural therapy and anger management, both of which mainly focus on the use of violence itself, rather than on underlying beliefs.³⁷ Some newer approaches have also been tested, such as combining these interventions with substance abuse programmes, couples therapy, or culturally adapted programmes for specific populations. The findings from these studies have been inconclusive.^{38,39}

Reports about interventions for men who assault their female partners indicate a general decrease in recidivism in men who complete the full training. However, there are important methodological weaknesses in the available evidence base. Most studies reviewed the histories of men who were court-mandated to such treatment as a result of a domestic violence arrest, and compare recidivism (measured either as new arrests, or spousal reports of violence) among men completing the programme to men who dropped out or never attended at all. Overall, these programmes have very high dropout rates, with few consequences for failure to complete the programme. Since men who drop out are likely to be less motivated to change than are those who complete the programme, it is not possible to identify how much of the change can be attributed to the intervention itself.^{39–42}

School-based interventions

Most prevention programmes for intimate partner violence and non-partner sexual assault in high-income countries are school-based group training interventions. Evidence from these programmes has not been encouraging, but there have been a few exceptions. The Healthy Relationships programme in Canada was tested in two settings: one with male and female high school students and the other in the community with male and female at-risk young people. Both studies showed significant reductions in both perpetration and victimisation of dating violence in both boys and girls in the intervention groups compared with the control groups (appendix).^{43,44} Studies of two well known interventions, Shifting Boundaries and Safe Dates, reported a reduction in dating violence in adolescents. Neither investigators reported results separately by sex of the victim or perpetrator, and so it is not clear whether the effect was similar for boys and girls.^{45,46}

Only two of 17 rigorously assessed school-based interventions to reduce non-partner sexual assault had significantly positive results.^{14,47,48} Both were done in the USA, in female college students, and focused on sexual assaults by acquaintances or so-called date rape. It is

See Online for appendix

not yet clear whether these programmes could be meaningfully applied to other settings or populations.^{49–51} Some of the interventions with null findings were very brief (for example, a 1 h educational session), which likely contributed to the absence of positive findings.

High-level policy commitment and legislative reform

Although many of the programme evaluations described above did not show reductions in violence against women and girls during the relatively short periods of study follow-up, the potential cumulative effect of these interventions should not be overlooked. According to the US Bureau of Justice, the rate of intimate partner violence in the USA fell by 53% between 1993 and 2008 and the number of intimate partner homicides of women decreased by 26%. Many experts attribute this decline to the Violence against Women Act (VAWA), first authorised by Congress in 1994, which provides funding for many of the programmes mentioned above.⁵² The Act originally authorised US\$1.6 billion in funding in 5 years and has been reauthorised three more times since then. A study of more than 10 000 jurisdictions between 1996 and 2002 showed that jurisdictions that received VAWA grants had significant reductions in the numbers of sexual and aggravated assaults compared with jurisdictions that did not receive VAWA grants.⁵³

Promising practices in low-income and middle-income countries

Legislative and justice sector responses

Until recently, programmes in low-income and middle-income countries to prevent violence against women and girls followed the tendency of those in high-income countries to focus mainly on increases in women's access to justice through better legislation and training of judges and police and to provide survivors of violence with coordinated emergency services. Although the number of countries with domestic violence legislation has grown exponentially as a result (from four to 76 between 1993 and 2013),⁵⁴ implementation is a serious problem. Most domestic violence laws are not accompanied by budget allocations and there is often resistance to the laws from male-dominated judiciary and police.^{55–57}

One of the most prominent public policies to address violence against women and girls in low-income and middle-income countries is the establishment of specialised police stations for women and girls, particularly in Latin America and south Asia. In Latin America, 13 countries have women's police stations, and in Brazil alone there are more than 300 such stations.⁵⁸ They vary a great deal according to the type of services they provide and the quality of these services. Although they have undoubtedly raised visibility around the issue of violence against women and girls, and have led to increased reporting of violence in some settings,

there is little evidence as yet for effectiveness. Qualitative research suggests that training and improved legislation alone do not improve outcomes for women or reduce violence at a community level, and that system-wide changes are needed to improve the enforcement of laws.¹²

Health sector approaches and one-stop centres

As discussed in the second paper in this Series,²³ the health sector in low-income and middle-income countries has been slower to engage on the issue of violence against women and girls. One common approach has been the establishment of one-stop centres, which aim to provide comprehensive care for survivors of violence against women and girls. Many of the centres are located in hospitals, such as the Thuthuzela care centres in South Africa, the family support centres in Papua New Guinea, and the Malaysian one-stop centres.⁵⁹ In Latin America, they are frequently stand-alone centres run by women's rights activists, and, in some cases, by the national or municipal governments—eg, Ciudad Mujer (city of women) in El Salvador or the Centros Emergencia Mujer (women's emergency centres) in Peru. Most one-stop centres provide services for both intimate partner violence and sexual violence. However, in much of sub-Saharan Africa, the demand for sexual assault services and access to post-exposure prophylaxis to prevent HIV infection after rape has spurred the creation of post-rape care centres in many hospitals, which are not necessarily linked with services for intimate partner violence.⁶⁰ As with the women's police stations, there is enormous variation in the level of funding, accessibility, and quality of services provided, and little evidence exists for their effectiveness to reduce violence against women and girls or to mitigate the negative consequences for survivors.

Violence prevention programmes

There has been a much greater emphasis on violence prevention in low-income and middle-income countries. Many models of violence prevention emerged from HIV programming and the growing recognition that gender inequality and violence underpin many women's vulnerability to HIV. As we describe below, prevention programmes use a wide range of approaches, including group training, social communication, community mobilisation, and livelihood strategies. Most interventions use more than one approach, and many target underlying risk factors for violence, such as poverty, women's economic dependence on men, low education, and inequitable norms for male and female behaviour. Whereas women and girls were originally their focus, programmes are now also target men and boys or both men and women. Programmes are moving from trying to achieve change in groups of individuals to trying to achieve change at a community level.¹¹

Group-based training interventions to empower women and girls

Most violence prevention programmes in low-income and middle-income countries use participatory group training, which consists of a series of educational meetings or workshops with targeted groups of individuals. The goal of such programmes is not only to prevent violence against women and girls, but also to address underlying expectations about male and female

roles and behaviour, and to support the development of new skills for communication and conflict resolution through a process of critical reflection, discussion, and practice. There is a wide range of training durations, target groups, and components. Violence against women and girls prevention components are often embedded in programmes that aim to improve sexual and reproductive health, or livelihood programmes such as microfinance or vocational training.

Study details	Summary of intervention	Population	Outcome	Effect size	p value	Results	
Group training for women and girls							
Bandiera et al, 2012 ⁶¹	2-year RCT ITT analysis of more than 4800 adolescent girls; interviews were done in 2008, follow-up surveys in 2010	Assessment of Empowerment and Livelihood for Adolescents Programme; designed to improve the cognitive and non-cognitive skills of adolescent girls through adolescent development clubs	Adolescent girls (aged about 14–20 years)	Reports of having had sex unwillingly	OLS -0.171	p<0.01	A reduction of about 17% (from a baseline of 21%) shows that almost no girls living in communities where ELA programme operates report having sex unwillingly
Erulkar et al, 2009 ⁶²	Quasi-experimental analysis done between 2004–06; used χ^2 tests, proportional hazard models, and logistical regression	Berhane Hewane was a 2-year pilot project that sought to reduce child marriage in rural Ethiopia (Amhara) by supporting girls to stay in school and group training	Girls aged 10–14 years	Ever married; married in the past year	HR 0.1	p<0.001; p<0.001	At baseline, the likelihood of having ever been married among girls aged 10–14 years decreased with years of education. At the endpoint, girls in the intervention group were much less likely than were girls at the control site to have gotten married. However, among girls aged 15–19 years, those in the intervention area had a higher likelihood of having gotten married
Pande et al, 2006 ⁶³	Quasi-experimental study in rural Maharashtra, India, 1997–2001. Bivariate and multivariate logistic regression used	A life skills course that sought to delay the age of marriage by 1 year. The course was taught 1 h in the evening each weekday for 1 year by an educated village woman	Girls aged 12–18 years who had not yet been married, with a particular focus on girls who were not in school or working	Proportion of girls (aged 11–17 years) married between 1997 and 2001	AOR 4.0	p<0.01	Between 1997 and 2001, the proportion of marriage in young girls (aged 11–17 years) steadily decreased in the intervention villages (including girls who did not participate in life skills training). Median marriage age increased from 16 years to 17 years. No significant changes were noted in the control group
Sarnquist et al, 2014 ⁶⁴	Quasi-experimental study in four neighbourhoods in informal settlements in Nairobi in 2012	Empowerment and self-defence intervention. 6 2-h intervention sessions for 6 weeks	Adolescent girls aged 13–20 years, attending secondary schools	Incidence of sexual assault (forced or coerced penetration and sexual harassment)	RR 1.61 (95% CI 1.26–1.86)	p<0.001	10.5 months after the intervention, the rate of sexual assault among the intervention group decreased by 60%, whereas no difference was shown for the comparison group. Disclosures of sexual assault also increased significantly in the intervention group but not in the comparison group
Group training for women and men							
Jewkes et al, 2008 ⁶⁵	Cluster RCT of 70 villages (clusters) in eastern Cape province of South Africa. Villages randomised to receive either Stepping Stones or 3 h intervention on HIV and safer sex. Analysis using generalised linear mixed models to compare differences at follow-up	Stepping Stones, a programme that uses participatory learning to build HIV risk awareness, knowledge, and communication. Group-based delivery of intervention, with separate groups for men and women. The intervention consisted of 50 h of training	Young men and women (aged 15–26 years), who were mostly attending schools	Men's reports of perpetration of physical and or sexual IPV at 24 months post-intervention	AOR 0.62 (95% CI 0.38–1.01)	p<0.05	Reported IPV perpetration was significantly reduced among men in the intervention group compared with the control group at 24 months, but not at 12 months. No significant reduction in reported victimisation by women at 12 months or 24 months
Group training for men							
Verma et al, 2008 ⁶⁶	Quasi-experimental 3 group design in urban slums of Mumbai and in rural villages in Gorakhpur, 2006–07. Used multivariate logistic regression analysis	Individuals in the first group received a lifestyle social marketing campaign and group education sessions (LSMC plus GES). Individuals in the second group received only the group education sessions. The third group was the control	Young men aged 16–29 years, both unmarried and married (Mumbai) and young men aged 15–24 years (Gorakhpur)	Reported perpetration of physical or sexual IPV in the past 3 months	GES plus LSSM group in Mumbai AOR 0.176; GES group in Gorakhpur AOR 0.502	p=0.001; p=0.001	Young men in the intervention groups in Mumbai and Gorakhpur were about five times and two times, respectively, less likely to report perpetration of partner violence than those in the comparison sites. The levels of partner abuse rose in both comparison sites

(Table 1 continues on next page)

Study details	Summary of intervention	Population	Outcome	Effect size	p value	Results	
(Continued from previous page)							
Community mobilisation for all							
Abramsky et al, 2014 ⁵⁷	A cluster RCT in 8 communities (4 intervention and 4 control) in Kampala; ITT analysis; 2007–12	SASA! Activist Kit for Preventing Violence against Women and HIV to change social norms, attitudes, and behaviours at a community level with the aim of reducing violence, gender inequity, and HIV vulnerability among women	Women who had an intimate partner in the past year	Physical IPV in the past 12 months (measured using the WHO Multi-Country Study instrument)	ARR 0.48 (95% CI 0.16–1.39)	..	Experience of physical IPV in the year was substantially lower in the intervention group than in the control group, although results were not significant. There was a higher level of intersite variation in the control group at follow-up than was recorded at baseline, which weakens the researchers' ability to obtain a significant result when analysed at the cluster level (although the effect size was large)
Diop et al, 2004 ⁶⁸	Quasi-experimental study of 40 villages in Senegal—20 participated in the intervention, 20 did not; began in 2001	Tostan, a community based educational programme in Senegal; consists of four themes: hygiene, problem solving, women's health, and human rights (including FGM); additional educational and community mobilisation activities were held in the communities	Women directly and indirectly exposed to intervention	Prevalence of women's experience of any type of violence in last 12 months; FGM prevalence among daughters aged 0–10 years	At endline, women who lived in the Tostan villages reported less violence in the past 12 months than did those in the comparison communities. The differences were significant for women who participated in the Tostan programme and those who did not, although participants had a greater decrease. The prevalence of FGM among girls aged 0–10 years reported by mothers in the Tostan communities was significantly lower than in the comparison villages
Wagman et al, 2014 ⁵⁹	Cluster RCT in Rakai, Uganda, between 2005–09; aPRR were calculated and Poisson multivariable regression used	SHARE intervention based on the transtheoretical model of behaviour change; five strategies of prevention were used, including: capacity building, advocacy, special events, community activism, and learning materials; those clusters who received the intervention were exposed to at least 9 days per month of violence prevention programming.	Men and women aged 15–49 years	Physical IPV victimisation in 12 months among women; sexual IPV victimisation in 12 months among women	aPRR 0.80 (95% CI 0.68–0.93); aPRR 0.82 (95% CI 0.69–0.99)	..	The intervention resulted in significant reductions in physical and sexual IPV; reductions in emotional violence were borderline significant; there was no difference in men's reported perpetration between the groups; in addition, SHARE resulted in a significant increase in HIV disclosure and a reduction in HIV incidence among men and women
RCT=randomised controlled trial. ITT=intention to treat. OLS=ordinary least squares. HR=hazard ratio. NA=not available. AOR=adjusted odds ratio. RR=risk ratio. IPV=intimate partner violence. ARR=absolute risk ratio. FGM=female genital mutilation. aPRR=adjusted prevalence risk ratios.							
Table 1: Group training and community mobilisation programmes in low-income and middle-income countries							

Two successful programmes in Uganda and Kenya sought to empower adolescent girls through training in life skills, self-defence, and vocational training (table 1).^{61,64} Findings from randomised control trials showed significant improvements in knowledge and behaviour in sexual and reproductive health in girls in the intervention group, and large reductions in coerced sex (in Kenya, sexual assaults decreased by 60% in girls in the intervention group compared with those in the control group). Training programmes for girls have also had some success in lowering rates of child marriage, although they are more likely to combine direct activities for girls with community level activities. Two programmes, one in India⁶³ and one in rural Ethiopia (the Berhane Hewan programme)⁶² used a comprehensive set of activities including intensive life skills training for unmarried girls, community conversations, mentorship, and community service activities to encourage parents to keep girls in school and to delay marriage. The Berhane Hewan programme also provided support for basic school supplies and an economic incentive (a goat) for

families whose daughters were still unmarried by the end of the programme. Both programmes showed some success in delay of the age of marriage by 1 or more years. The programmes yielded additional benefits by addressing of several drivers of early marriage, resulting in increased knowledge and skills in the girls and changes in attitudes in the community towards child marriage.

Group training that targets men and boys

As presented by in the third paper in this Series by Jewkes and colleagues,⁷⁰ there is a diverse range of interventions involving boys and men in violence prevention, although the evidence of their effectiveness is still limited. One successful programme, Yaari Dosti, was carried out in two sites in India.⁶⁶ The intervention was based on programme H, which was developed in Brazil,⁷¹ and investigators aimed to reduce male-perpetrated violence against women and girls by transforming gender inequitable norms through group training and social communication programmes. Young men in the intervention groups in Mumbai and

	Study details	Summary	Population	Outcome	Effect size	p value	Results
Duflo et al, 2006 ⁸²	3 group RCT in western Kenya; OLS regression analysis	Evaluation comparing 3 school-based HIV/AIDS interventions in Kenya	70 000 students from 328 primary schools	Teen marriage	OLS 0.014	p<0.10	Girls in schools where free uniforms were provided were 1.4 percentage points (or 12%) less likely to be married (not significant). No reduction in teen pregnancy was seen after training teachers in the HIV/AIDS curriculum in Kenya, however this increased the probability that a teen pregnancy occurred within a marriage
Gupta et al, 2013 ⁸⁶	Non-blinded RCT in north and northwestern rural Côte d'Ivoire; multi-level analysis. Both ITT and per protocol analysis. Items from the WHO Multi-Country Study were used to measure IPV	Both an 8 session 16 week gender dialogue group (GDG) and an economic empowerment group savings programme (VSLA) vs VSLA only	Partnered women aged 18 years and older (married or in a relationship with a man for at least 1 year) who had no previous participation in group savings programmes	Economic abuse; physical violence among women with high adherence to the intervention	AOR 0.39 (95% CI 0.25-0.60); AOR 0.45 (95% CI 0.21-0.94)	p<0.0001; p=0.04	Slightly lower odds of reporting physical or sexual violence (not significant) in groups given GDG. There were reductions (although not significant) in reporting of sexual and physical IPV. Women who attended more than 75% of the intervention sessions with their male partner showed a reduction in likelihood to report physical IPV, as compared with the women in the control group. No statistically significant reductions for sexual IPV and physical IPV or for sexual IPV alone
Haushofer et al, 2013 ⁸³	Two-level cluster RCT; OLS regression analysis	The Give Directly programme provided unconditional cash transfers to poor households in rural Kenya. Transfers were randomly assigned to be given to either men or women	1010 primary women in the household	Only physical IPV in the past 6 months; only sexual IPV in the past 6 months	OLS -0.07; OLS -0.05	p<0.1; p<0.05	No significant reductions for emotional abuse. Reduction in IPV was stronger when transfers made to women than to men
Hidrobo et al, 2013 ⁸⁴	RCT in women and Colombian refugees in northern Ecuador (seven urban centres in the provinces of Carchi and Sucumbíos). ANCOVA models and linear probability models	Cash, Food, and Voucher Program; households received 6 monthly transfers of vouchers, cash, or food	Women aged 15-69 years in relationships	Moderate physical violence in past 6 months; physical or sexual violence in past 6 months	ANCOVA -0.06; ANCOVA -0.06	p=0.02; p=0.03	Decreases in controlling behaviours and physical and sexual violence. Effects did not vary by mode of transfer. No significant effect on severe physical or emotional violence
Kim et al, 2007 ⁸⁵	Cluster RCT with 4 intervention and 4 control populations in rural South Africa	Combined group-based microfinance with additional participatory training in gender, violence, and HIV risk	Women in IMAGE groups vs comparable women in control communities	Rates of past year experience of physical or sexual violence by an intimate partner	AOR 0.45 (95% CI 0.23-0.91)	..	Women in the IMAGE groups were 55% less likely to experience physical or sexual violence by a partner in the past 12 months than were women in the comparison groups

RCT=randomised controlled trial. OLS=ordinary least squares. ITT=intention to treat. IPV=intimate partner violence. AOR=adjusted odds ratio. ANCOVA=analysis of covariance.

Table 2: Livelihood programmes in low-income and middle-income countries

Gorakhpur were about five times and two times, respectively, less likely to report perpetration of physical or sexual partner violence in the previous 3 months than were participants in the comparison sites.

Other similar programmes targeting young men have been implemented globally, including the young men's initiative in the Balkans,⁷² Parivartan (targeting cricket coaches in India),⁷³ and the male norms initiative in Ethiopia.⁷⁴ Assessments of these interventions indicate promising outcomes in changes to young men's attitudes towards gender equality and the use of violence, but they did not result in significant behavioural changes. It is not clear why Yaari Dosti was more successful than the other interventions, but it could be related to the intensity and duration of the intervention, or that the other studies were underpowered. More

research is needed to understand what elements of the interventions with men and boys are key to achieve behavioural changes.⁷⁵

Group training with men and women: synchronising gender approaches

In response to the increasing recognition that both men and women should be engaged in efforts to prevent violence against women and girls, more programmes are using gender synchronised approaches that intentionally reach out to both men and women in a coordinated way. Stepping Stones is a widely adapted programme that uses participatory learning approaches with both men and women to build knowledge, risk awareness, communication, and relationship skills around gender, violence, and HIV. A cluster randomised

trial of young men and women in South Africa showed that at 2 years after the intervention, men's self-reported perpetration of physical and sexual intimate partner violence was significantly lower than were those from

men in control villages. The programme also achieved a significant reduction in infections with herpes simplex virus 2 in both men and women. No differences were noted in women's reports of victimisation from intimate partner violence between the intervention and control villages.⁶⁵

Some prevention methods used in non-conflict settings are now being adapted to conflict and post-conflict settings. Two studies from Côte D'Ivoire looked at the incremental effect on intimate partner violence when gender dialogue groups were added to an economic empowerment group savings programme for women. One of the studies showed a reduction in physical intimate partner violence in couples who attended more than 75% of the meetings, whereas the second study showed improvements in men's attitudes towards violence but no significant behavioural changes.^{76,77}

Community mobilisation

By contrast with group-training programmes, which seek to reduce violence in a targeted group of individuals, community mobilisation interventions aim to reduce violence at the population level through changes in public discourse, practices, and norms for gender and violence. Community mobilisation approaches are typically complex interventions that engage many stakeholders at different levels (eg, community men and women, youth, religious leaders, police, teachers, and political leaders). They use many strategies, from group training to public events, and advocacy campaigns such as the 16 Days of Activism Against Gender Violence (Nov 25–Dec 10).

The interventions often make use of social media, including mobile phone applications, such as Hollaback, Circle of Six, and Safetipin in India, to provide information about violence and neighbourhood safety, and to help women to report violence or to receive emergency help from friends and authorities.¹⁰ Community activists have partnered with innovative edutainment programmes such as Soul City, Sexto Sentido, and Bell Bajao, in the development of high-quality communication materials such as posters, street theatre, and radio and television programmes. Although there is no evidence that social communication programmes alone can prevent violence, rigorous assessments have shown significant changes in knowledge and use of services, attitudes towards gender, and acceptance of violence against women and girls, which can provide crucial support for local efforts.^{10,78–80}

Because of their complexity, community mobilisation programmes are challenging to evaluate, and very few rigorous assessments have been done. As described in the fourth paper of this series by Michau and colleagues,⁸¹ a small cluster randomised trial of the SASA! programme in Kampala, Uganda, showed highly promising (although non-significant) results, by reducing community prevalence of physical partner violence by 54% (table 2).⁶⁷ A similar programme in Rakai, Uganda, showed not only reductions in physical and sexual

Example		Type of violence	Evidence level	
			High-income countries	Low-income and middle-income countries
Response to violence against women				
Women-centred programmes for survivors*	Psychosocial counselling, post-exposure prophylaxis and emergency contraception as needed, risk assessment, referrals, safety planning	IPV, NPSA	Conflicting	Insufficient evidence
Perpetrators programmes*	Interventions for men who assault their female partners	IPV	Conflicting	Insufficient evidence
One-stop crisis centres	Multidisciplinary crisis centres (community or hospital based)	IPV, NPSA	Not applicable or no evidence	Insufficient evidence
Shelters	Safe accommodations that provide short-term refuge and other services	IPV	Insufficient evidence	Insufficient evidence
Women's police stations	Specialised police services for survivors of violence against women, can include psychosocial counselling and referrals	IPV, NPSA	Not applicable or no evidence	Insufficient evidence
Victim Advocacy*	Case management, connection to legal services and information	IPV	Promising	Insufficient evidence
ICT services	National emergency hotlines or mobile applications	IPV, NPSA	Insufficient evidence	Insufficient evidence
Population-based prevention				
Community mobilisation*	Participatory projects, community-driven development engaging multiple stakeholders and addressing gender norms	IPV, NPSA, FGM, CM	Not applicable or no evidence	Promising
Awareness-raising campaigns*	One-off information or media efforts, billboards, radio programmes, posters, television advertisements	IPV, NPSA, FGM, CM	Ineffective	Ineffective
Social marketing campaigns or edutainment plus group education*	Long-term programmes engaging social media, social media, mobile applications, thematic television series, posters, together with interpersonal communication activities	IPV, NPSA, FGM, CM	Insufficient evidence	Insufficient evidence
Group-based training or workshops for prevention of violence against women and girls				
Empowerment training for women and girls*	School or community programmes to improve women's agency. Can include other components such as safe spaces, mentoring, life skills, or self-defence training	IPV, NPSA, FGM, CM	Insufficient evidence	Promising
Men and boys norms programming*	School programmes and community workshops to promote changes in social norms and behaviour that encourage violence against women and girls and gender inequality	IPV, NPSA	Insufficient evidence	Conflicting
Women and men*	School or community workshops to promote changes in norms and behaviour that encourage violence against women and girls and gender inequality	IPV, NPSA	Insufficient evidence	Promising

(Table 3 continues on next page)

partner violence, but also reduced incidence of HIV/AIDS.⁶⁹ This model is now being adapted in other settings throughout sub-Saharan Africa and in Haiti.

Community mobilisation approaches have also been used successfully to reduce FGM and child marriage. Use of the Tostan model,⁶⁸ developed in Senegal, has been replicated in several countries in sub-Saharan Africa, with community-based education programmes that address a range of issues, including health, literacy, and human rights. Through these programmes, villagers identify priority issues for community action, and both FGM and intimate partner violence emerged as key issues. In many cases, villages have taken pledges to renounce FGM and to encourage neighbouring villages to do the same. A quasi-experimental assessment of the programme in Senegal noted that women in the intervention villages reported significantly less violence in the preceding 12 months than did women in the comparison villages.⁶⁸ Also, mothers of girls aged 0–10 years less frequently reported that their daughters had undergone FGM in the intervention villages.⁸⁶

Economic empowerment

Studies around the world have consistently shown associations between intimate partner violence and poverty at both a household and community (correlated with country wealth) level^{87,88} although the directionality and mechanisms for these associations are not clear. These findings have led some development practitioners to argue that increasing of women's economic opportunities should be a key strategy to reduce violence. However, the evidence for women's economic empowerment and its effect on violence is mixed, with research suggesting that increased access to credit and assets could either decrease or increase women's risk of intimate partner violence, depending on the context in which the women live.^{89–91} Increased access to assets could reduce a woman's risk of violence in many ways; potentially allowing financial autonomy enabling women to leave a violent relationship. It could also increase a woman's value to the household, and increase a woman's relative bargaining power within the relationship. More broadly, reductions in household poverty could reduce economic stress and so reduce potential triggers for conflict.

To test whether adding a gender training and HIV prevention component to microfinance programmes for women could contribute to reductions in intimate partner violence, investigators for the IMAGE study⁸⁵ combined livelihood and empowerment strategies to address gender issues, HIV, and violence in women living in rural South Africa. The intervention combined microfinance with ten participatory training and skills-building sessions on HIV, cultural beliefs, communication, and violence. After 2 years, a cluster-randomised trial showed a 55% reduction in reports of physical or sexual partner violence from women, with economic assessments that suggested

Example	Type of violence	Evidence level		
		High-income countries	Low-income and middle-income countries	
(Continued from previous page)				
Alternative rites of passage	Training for girls in life skills culminating in a ceremony without FGM	FGM	Not applicable or no evidence	Insufficient evidence
Economic and livelihoods				
Economic empowerment and income supplements*	Microfinance; vocational training or job placement; cash or asset transfers (eg, land reform)	IPV, NPSA, FGM, CM	Not applicable or no evidence	Conflicting
Economic empowerment and income supplements plus gender equality training*	Microfinance; vocational training or job placement; cash or asset transfers (eg, land reform) plus gender equality and violence prevention training	IPV, NPSA, FGM, CM	Not applicable or no evidence	Promising
Retraining for traditional excisors	Microfinance or vocational training	FGM	Not applicable or no evidence	Ineffective
System-wide approaches				
Screening*	Universal IPV screening among nurses and doctors at all visits	IPV, NPSV	Ineffective	Not applicable or no evidence
Home visitation and health worker outreach*	Visits by community health workers or nurses to households	IPV	Promising	Insufficient evidence
Justice and law-enforcement interventions	Mobile courts, increased enforcement, second response	IPV, NPSV	Ineffective	Not applicable or no evidence
Personnel training*	Sensitisation, identification, or response training with institutional personnel (eg, teachers, police officers, first responders, health professionals)	IPV, NPSA, FGM, CM	Ineffective	Ineffective
Infrastructure and transport	Improving the safety of public transport, street lighting	NPSA	Insufficient evidence	Insufficient evidence
Programmes will often incorporate multiple components and overlaps reflecting more than one intervention type. IPV=intimate partner violence. NPSA=non-partner sexual assault. FGM=female genital mutilation. CM=child marriage. *Classification based on rigorous trials including randomised controlled trials or quasi-experimental trials with comparison groups. Evidence classification adapted from WHO (2010). ²⁵				

Table 3: Effectiveness of intervention strategies to reduce violence against women and girls

that the intervention is cost-effective.⁸⁵ IMAGE is being scaled up in South Africa and is being expanded to Tanzania and Peru.

Cash transfers

Although not designed to address violence against women and girls specifically, cash transfer programmes can contribute to reductions in both intimate partner violence and child marriage. Studies of unconditional cash transfer programmes in Kenya⁸³ and Ecuador⁸⁴ reported, in addition to large economic and nutritional benefits to households, significant reductions in rates of intimate partner violence in both settings (table 2). The study from Kenya noted that large transfers were associated with significant decreases in cortisol concentrations in both men and women,

suggesting that the reduction in intimate partner violence might be partly due to drops in household stress. In Ecuador, the investigators reported that the transfers did not lead to increased decision-making power for women in the household, and concluded that the effect on intimate partner violence could be due to reduced stress.

Financial or material incentives have also been used with promising results to reduce child marriage. The incentives include school uniforms, livestock, or cash transfers.^{62,82} Usually, these incentives are conditional on the girl staying in school or staying unmarried until the age of 18 years, although a programme in Malawi showed promising results in keeping girls in school and delaying marriage through unconditional cash transfers.⁹² An innovative programme established in 1994 in the State of Haryana, India, used savings bonds as an incentive to encourage parents not to marry their daughters before they were aged 18 years. Preliminary findings from continuing assessment indicate that beneficiary girls have achieved higher educational attainment compared with non-beneficiaries (table 3).⁹³

Discussion

In view of evidence for the high prevalence and severe health outcomes of violence against women and girls, it is troubling that rigorous data for what works to prevent violence are still scarce. Available intervention research is highly skewed towards studies done in high-income countries, and it largely focuses on response rather than prevention. Our Series paper suggests that, despite the crucial value of provision of timely and appropriate services to survivors of violence, little evidence exists that such programmes alone can lead to significant reductions in violence against women and girls.

The evidence base is limited by several methodological weaknesses. Many of the studies had very small sample sizes (commonly with few clusters in randomised controlled trials). For this reason, some of the null findings reported probably result from underpowered studies rather than a definite absence of intervention effect. There is also a very wide range of outcome measurements and timeframes, which makes comparisons difficult. Of concern, many studies did not control for potential confounding factors, which might result in some bias in the results. Most of the assessments identified did not include a long follow-up period, if any, making it difficult to establish whether changes are sustained over time.

There are several areas in which the evidence base is small or non-existent. We found no rigorous assessments of interventions to prevent trafficking, and a few evaluations from humanitarian and emergency situations. Few assessments have been done in indigenous or ethnically diverse populations or in older populations. With a few exceptions, the evaluations in this review did not measure cost-effectiveness of interventions, which is a pivotal decision point for those who wish to implement and adapt an intervention, particularly in low-resource

settings. There is little documentation on how interventions can be adapted to different settings.

Despite the shortcomings of the available evidence base, some promising trends emerge. Several studies show that it is possible to prevent violence against women and girls, and that large effect sizes can be achieved in programmatic timeframes. Multisectoral programmes that engage with multiple stakeholders seem to be the most successful to transform deeply entrenched attitudes and behaviours. Strong programmes not only challenge the acceptability of violence, but also address the underlying risk factors for violence including norms for gender dynamics, the acceptability of violence, and women's economic dependence on men. They also support the development of new skills, including those for communication and conflict resolution. Some of the studies showed potential benefits from integration of violence prevention into existing development platforms, such as microfinance, social protection, education, and health sector programming, which could allow scalability. Community mobilisation models also provide a means to achieve measurable community level effects. Importantly, there are several positive examples of impact from low-income and middle-income countries that could potentially be transferred to high-income countries.

Overall, the findings point to the imperative of greatly increasing investment in violence research and programme evaluation, particularly in low-income and middle-income countries. Alongside programmatic investment, it will remain important to support rigorous evaluations and guide international efforts to end violence against women and girls. As the specialty continues to develop, importance should be given to learning more about the costs of programmes and identification of models of intervention that can be delivered to scale.

Contributors

ME, DJA, MM, FG, and SK participated in the study design. FG and SK did the systematic review and double screened all abstracts and full texts version of reports and carried out data extraction. DJA, ME, MM, FG, SK, and MC participated in the data analysis. ME, DJA, and CW drafted the manuscript. All authors have commented on and edited the original draft, and all authors have read and approved the final version.

Declaration of interests

We declare no competing interests.

Acknowledgments

We received funding from the World Bank Group and the Australian Government (DFAT). We thank Karen DeVries, Gene Feder, Nancy Glass, and an anonymous reviewer for helpful comments on earlier drafts of the manuscript. We also thank Chelsea Ullman and Amber Hill for their support in the preparation of the manuscript. CW is part funded by the UKAID What Works Consortium and the UK AID Strive Research Programme Consortium.

References

- 1 Devries KM, Mak JY, García-Moreno C, et al. Global health. The global prevalence of intimate partner violence against women. *Science* 2013; **340**: 1527–28.
- 2 Stöckl H, Devries K, Rotstein A, et al. The global prevalence of intimate partner homicide: a systematic review. *Lancet* 2013; **382**: 859–65.
- 3 Abrahams N, Devries K, Watts C, et al. Worldwide prevalence of non-partner sexual violence: a systematic review. *Lancet* 2014; **383**: 1648–54.

- 4 Feldman-Jacobs C, Clifton D. Female genital mutilation/cutting: data and trends, update 2014. Washington, DC: Population Reference Bureau, 2014.
- 5 Lee-Rife S, Malhotra A, Warner A, Glinski AM. What works to prevent child marriage: a review of the evidence. *Stud Fam Plann* 2012; **43**: 287–303.
- 6 Loaiza E, Wong S. Marrying too young. End Child Marriage. New York: UNFPA, 2012. <http://www.unfpa.org/webdav/site/global/shared/documents/publications/2012/MarryingTooYoung.pdf> (accessed Oct 30, 2014).
- 7 Devries KM, Mak JY, Bacchus LJ, et al. Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. *PLoS Med* 2013; **10**: e1001439.
- 8 Ellsberg M, Jansen HA, Heise L, Watts CH, García-Moreno C. Intimate partner violence and women's physical and mental health in the WHO Multi-Country Study on women's health and domestic violence: an observational study. *Lancet* 2008; **371**: 1165–72.
- 9 Bishai D, Bonnenfant YT, Darwish M, et al, for the FGM Cost Study Group of WHO. Estimating the obstetric costs of female genital mutilation in six African countries. *Bull World Health Organ* 2010; **88**: 281–88.
- 10 World Bank Group. Voice and agency: Empowering women and girls for shared prosperity. Washington, DC: World Bank Group, 2014: 195.
- 11 Heise L. What works to prevent partner violence? An evidence overview. London: Strive Research Consortium, 2011.
- 12 Morrison A, Ellsberg M, Bott S. Addressing gender-based violence: a critical review of interventions. *World Bank Res Obs* 2007; **22**: 25–51.
- 13 Bott S, Morrison A, Ellsberg M. Preventing and responding to gender-based violence in middle and low-income countries: a global review and analysis. Washington, DC: World Bank, 2005.
- 14 Arango D, Morton M, Gemari F, Kiplesund S, Contreras M, Ellsberg M. Interventions to reduce or prevent violence against women and girls: a systematic review of reviews. Washington, DC: Women's Voice, Agency and Participation Research Series, World Bank (in press).
- 15 United Nations General Assembly. Declaration on the Elimination of Violence Against Women. 85th Plenary Meeting. Dec 20, 1993; Geneva, Switzerland.
- 16 Ramsay J, Carter Y, Davidson L, et al. Advocacy interventions to reduce or eliminate violence and promote the physical and psychosocial well-being of women who experience intimate partner abuse. *Cochrane Database Syst Rev* 2009; **3**: CD005043.
- 17 Wathen CN, MacMillan HL. Interventions for violence against women: scientific review. *JAMA* 2003; **289**: 589–600.
- 18 Ramsay J, Rivas C, Feder G. Interventions to reduce violence and promote the physical and psychosocial well-being of women who experience partner abuse: a systematic review. London: Department of Health, 2005.
- 19 Taft A, O'Doherty L, Hegarty K, Ramsay J, Davidson L, Feder G. Screening women for intimate partner violence in healthcare settings. *Cochrane Database Syst Rev* 2013; **4**: CD007007.
- 20 Hegarty K, O'Doherty L, Gunn J, Pierce D, Taft A. A brief counseling intervention by health professionals utilising the 'readiness to change' concept for women experiencing intimate partner abuse: the weave project. *J Fam Stud* 2008; **14**: 376–88.
- 21 Kataoka Y, Yaju Y, Eto H, Matsumoto N, Horiuchi S. Screening of domestic violence against women in the perinatal setting: a systematic review. *Jpn J Nurs Sci* 2004; **1**: 77–86.
- 22 Jahanfar S. Interventions for preventing or reducing domestic violence against pregnant women. *Cochrane Database Syst Rev* 2013; **2**: CD009414.
- 23 García-Moreno C, Hegarty K, Lucas d'Oliveira AK, et al. The health-systems response to violence against women. *Lancet* 2014; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(14\)61837-7](http://dx.doi.org/10.1016/S0140-6736(14)61837-7)
- 24 Tiwari A, Leung WC, Leung TW, Humphreys J, Parker B, Ho PC. A randomised controlled trial of empowerment training for Chinese abused pregnant women in Hong Kong. *BJOG* 2005; **112**: 1249–56.
- 25 WHO. Liverpool JMU Centre for Public Health. Violence prevention: the evidence. Geneva: World Health Organization, 2010.
- 26 Taft AJ, Small R, Hegarty KL, Lumley J, Watson LF, Gold L. MOSAIC (MOTHERS' Advocates In the Community): protocol and sample description of a cluster randomised trial of mentor mother support to reduce intimate partner violence among pregnant or recent mothers. *BMC Public Health* 2009; **9**: 159.
- 27 Miller E, Decker MR, McCauley HL, et al. A family planning clinic partner violence intervention to reduce risk associated with reproductive coercion. *Contraception* 2011; **83**: 274–80.
- 28 Tiwari A, Leung WC, Leung TW, Humphreys J, Parker B, Ho PC. A randomised controlled trial of empowerment training for Chinese abused pregnant women in Hong Kong. *BJOG* 2005; **112**: 1249–56.
- 29 Kiely M, El-Mohandes AA, El-Khorazaty MN, Blake SM, Gantz MG. An integrated intervention to reduce intimate partner violence in pregnancy: a randomized controlled trial. *Obstet Gynecol* 2010; **115**: 273–83.
- 30 Sullivan CM, Bybee DI. Reducing violence using community-based advocacy for women with abusive partners. *J Consult Clin Psychol* 1999; **67**: 43–53.
- 31 Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA. Mothers' Advocates In the Community (MOSAIC)—non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. *BMC Public Health* 2011; **11**: 178.
- 32 Bell ME, Goodman LA. Supporting battered women involved with the court system: an evaluation of a law school-based advocacy intervention. *Violence Against Women* 2001; **7**: 1377–404.
- 33 Duggan AK, McFarlane EC, Windham AM, et al. Evaluation of Hawaii's Healthy Start Program. *Future Child* 1999; **9**: 66–90.
- 34 Bair-Merritt MH, Jennings JM, Chen R, et al. Reducing maternal intimate partner violence after the birth of a child: a randomized controlled trial of the Hawaii Healthy Start Home Visitation Program. *Arch Pediatr Adolesc Med* 2010; **164**: 16–23.
- 35 Davis RC, Taylor BG, Maxwell C. Does batterer treatment reduce violence? A randomized experiment in Brooklyn. 2000. New York: Victim Services Research, 2000.
- 36 Waldo M. Relationship enhancement counseling groups for wife abusers. *J Ment Health Couns* 1988; **10**: 37–45.
- 37 Smedslund G. Cognitive behavioural therapy for men who physically abuse their female partner. *Cochrane Database Syst Rev* 2007; **3**: CD006048.
- 38 Fals-Stewart W, Kashdan TB, O'Farrell TJ, Birchler GR. Behavioral couples therapy for drug-abusing patients: effects on partner violence. *J Subst Abuse Treat* 2002; **22**: 87–96.
- 39 Davis R, Weisburd D, Taylor B. Effects of second responder programs on repeat incidents of family abuse. *Campbell Systematic Reviews* 2008; published online Oct 22. DOI:10.4073/csr.2008.15.
- 40 Whitaker DJ, Morrison S, Lindquist C, et al. A critical review of interventions for the primary prevention of perpetration of partner violence. *Aggress Violent Behav* 2006; **11**: 151–66.
- 41 Babcock JC, Green CE, Robie C. Does batterers' treatment work? A meta-analytic review of domestic violence treatment. *Clin Psychol Rev* 2004; **23**: 1023–53.
- 42 Feder L, Austin S. Court mandated interventions for individuals convicted of domestic violence. *Campbell Systematic Review* 2008; published online Aug 30. DOI:10.4073/csr.2008.12.
- 43 Wolfe DA, Crooks C, Jaffe P, et al. A school-based program to prevent adolescent dating violence: a cluster randomized trial. *Arch Pediatr Adolesc Med* 2009; **163**: 692–99.
- 44 Wolfe DA, Wekerle C, Scott K, Straatman AL, Grasley C, Reitzel-Jaffe D. Dating violence prevention with at-risk youth: a controlled outcome evaluation. *J Consult Clin Psychol* 2003; **71**: 279–91.
- 45 Taylor BG, Stein ND, Mumford EA, Woods D. Shifting Boundaries: an experimental evaluation of a dating violence prevention program in middle schools. *Prev Sci* 2013; **14**: 64–76.
- 46 Foshee VA, Bauman KE, Ennett ST, Linder GF, Benefield T, Suchindran C. Assessing the long-term effects of the Safe Dates program and a booster in preventing and reducing adolescent dating violence victimization and perpetration. *Am J Public Health* 2004; **94**: 619–24.
- 47 Hanson KA, Gidycz CA. Evaluation of a sexual assault prevention program. *J Consult Clin Psychol* 1993; **61**: 1046–52.
- 48 Marx BP, Calhoun KS, Wilson AE, Meyerson LA. Sexual revictimization prevention: an outcome evaluation. *J Consult Clin Psychol* 2001; **69**: 25–32.
- 49 Anderson LA, Whiston SC. Sexual assault education programs: a meta-analytic examination of their effectiveness. *Psychol Women Q* 2005; **29**: 374–88.
- 50 Morrison S, Hardison J, Mathew A, O'Neil J. An evidence-based review of sexual assault preventive intervention programs. Washington, DC: Department of Justice, 2004.

- 51 DeGue S, Valle LA, Holt M, Matjasko J, Tharp A. A systematic review of primary prevention strategies for sexual violence perpetration. *Aggress Violent Behav* 2014; **19**: 346–62.
- 52 Modi MN, Palmer S, Armstrong A. The role of Violence Against Women Act in addressing intimate partner violence: a public health issue. *J Womens Health* 2014; **23**: 253–59.
- 53 Boba R, Lilley D. Violence Against Women Act (VAWA) funding: a nationwide assessment of effects on rape and assault. *Violence Against Women* 2009; **15**: 168–85.
- 54 World Bank. IFC. Women, Business and the Law 2014: removing restrictions to enhance gender equality. Washington, DC: International Bank for Reconstruction and Development, The World Bank, 2013.
- 55 Ellsberg M, Liljestrand J, Winkvist A. The Nicaraguan network of women against violence: using research and action for change. *Reprod Health Matters* 1997; **10**: 82–92.
- 56 Lawyers Collective Women's Rights Initiative, ICRW. Staying alive: 5th monitoring & evaluation 2012 on the Protection of Women from Domestic Violence Act, 2005. New Delhi: Lawyers Collective Women's Rights Initiative, 2012.
- 57 Ellsberg M, Bradley C, Egan A, Haddad A. Violence against women in Melanesia and East Timor; Building on global best practices. Canberra: Office of Development Effectiveness AusAID, 2008.
- 58 Jubb N, Camacho G, D'Angelo A, et al. Access to justice for women in situations of violence: a comparative study of women's police stations in Latin America. Quito: Centro de Planificación y Estudios Sociales, 2008.
- 59 Colombini M, Mayhew SH, Ali SH, Shuib R, Watts C. An integrated health sector response to violence against women in Malaysia: lessons for supporting scale up. *BMC Public Health* 2012; **12**: 548.
- 60 Keesbury J, Onyango-ouma W, Undie CC, et al. A review and evaluation of multi-sectoral response services ("one-stop centers") for gender-based violence in Kenya and Zambia. Nairobi: Population Council, 2012.
- 61 Bandiera O, Buehren N, Burgess R, Goldstein M, Gulesci S, Rasul I, Sulaiman M. Empowering adolescent girls: evidence from a randomized control trial in Uganda. Washington, DC: World Bank, 2012.
- 62 Erulkar AS, Muthengi E. Evaluation of Berhane Hewan: a program to delay child marriage in rural Ethiopia. *Int Perspect Sex Reprod Health* 2009; **35**: 6–14.
- 63 Pande R, Kurz K, Walia S, MacQuarrie K, Jain S. Improving the reproductive health of married and unmarried youth in India: Evidence of cost and effectiveness from community-based interventions. Washington, DC: International Center for Research on Women, 2006.
- 64 Sarnquist C, Omondi B, Sinclair J, et al. Rape prevention through empowerment of adolescent girls. *Pediatrics* 2014; **133**: e1226.
- 65 Jewkes R, Nduna M, Levin J, et al. Impact of stepping stones on incidence of HIV and HSV-2 and sexual behaviour in rural South Africa: cluster randomised controlled trial. *BMJ* 2008; **337**: a506.
- 66 Verma R, Pulerwitz J, Mahendra V, et al. Promoting gender equity as a strategy to reduce HIV risk and gender based violence among young men in India. Washington, DC: Population Council, 2008.
- 67 Abramsky T, Devries K, Kiss L, et al. Findings from the SASA! Study: a cluster randomised controlled trial to assess the impact of a community mobilisation intervention to prevent violence against women and reduce HIV risk in Kampala, Uganda. *BMC Med* 2014; **12**: 122.
- 68 Diop NJ, Faye MM, Moreau A, Cabral J, Benga H. The TOSTAN program: evaluation of a community based education program in Senegal. Washington, DC: Population Council, 2004.
- 69 Wagman JA, Gray RH, Campbell J, et al. Impact of an integrated intimate partner violence and HIV prevention intervention: a cluster randomised trial in Rakai, Uganda. *Lancet Glob Health* 2014 (in press).
- 70 Jewkes R, Flood M, Lang J. From work with men and boys to changes of social norms and reduction of inequities in gender relations: a conceptual shift in prevention of violence against women and girls. *Lancet* 2014; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(14\)61683-4](http://dx.doi.org/10.1016/S0140-6736(14)61683-4).
- 71 Barker G, Nascimento M, Pulerwitz J, Segundo M. Promoting gender-equity among young Brazilian men as an HIV prevention strategy. Washington, DC: Population Council, 2006.
- 72 Namy S, Heilman B, Stich S, Edmeades J. Be a man, change the rules! Findings and lessons from seven years of CARE International Balkans' Young Men initiative. Washington, DC: International Center for Research on Women, 2014.
- 73 Das M, Ghosh S, Miller E, O'Conner B, Verma R. Engaging coaches and athletes in fostering gender equity: findings from the Parivartan program in Mumbai, India. New Delhi: International Center for Research on Women and Futures Without Violence, 2014.
- 74 Pulerwitz J, Martin S, Mehta M, et al. Promoting gender equity for HIV and violence prevention: results from the Male Norms Initiative evaluation in Ethiopia. Washington, DC: PATH, 2010.
- 75 Ricardo C, Eads M, Barker G. Engaging boys and young men in the prevention of sexual violence. Pretoria: Oak Foundation, 2011.
- 76 Gupta J, Falb KL, Lehmann H, et al. Gender norms and economic empowerment intervention to reduce intimate partner violence against women in rural Côte d'Ivoire: a randomized controlled pilot study. *BMC Int Health Hum Rights* 2013; **13**: 46.
- 77 Hossain M, Zimmerman C, Kiss L, et al. Working with men to prevent intimate partner violence in a conflict-affected setting: a pilot cluster randomized controlled trial in rural Côte d'Ivoire. *BMC Public Health* 2014; **14**: 339.
- 78 Solotaroff J, Pande R. Violence against women and girls: lessons from south Asia. Washington, DC: World Bank, 2014.
- 79 Solorzano I, Bank A, Pena R, Espinoza H, Ellsberg M, Pulerwitz J. Catalyzing personal and social change around gender, sexuality, HIV: impact evaluation of Puntos de Encuentro's communication strategy in Nicaragua. Washington, DC: Population Council, 2008.
- 80 Usdin S, Scheepers E, Goldstein S, Japhet G. Achieving social change on gender-based violence: a report on the impact evaluation of Soul City's fourth series. *Soc Sci Med* 1982; **61**: 2434–45.
- 81 Michau L, Horn J, Bank A, Dutt M, Zimmerman C. Prevention of violence against women and girls: lessons from practice. *Lancet* 2014; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(14\)61797-9](http://dx.doi.org/10.1016/S0140-6736(14)61797-9).
- 82 Duflo E, Dupas P, Kremer M, Sinei S. Education and HIV/AIDS Prevention: evidence from a randomized evaluation in Western Kenya. Working Paper Number 4024. Washington, DC: World Bank, 2006.
- 83 Haushofer J, Shapiro J. Household response to income changes: evidence from an unconditional cash transfer program in Kenya (online appendix). New York: Give Directly, 2013. http://www.princeton.edu/~joha/publications/Haushofer_Shapiro_UCT_Online_Appendix_2013.pdf (accessed Oct 30, 2014).
- 84 Hidrobo M, Peterman A, Heise L. The effect of cash, vouchers and food transfers on intimate partner violence: evidence from a randomized experiment in Northern Ecuador. Washington, DC: International Food Policy Research Institute, 2013.
- 85 Kim JC, Watts CH, Hargreaves JR, et al. Understanding the impact of a microfinance-based intervention on women's empowerment and the reduction of intimate partner violence in South Africa. *Am J Public Health* 2007; **97**: 1794–802.
- 86 Population Reference Bureau. Ending female genital mutilation/cutting: lessons from a decade of progress. Washington, DC: Population Reference Bureau, 2013.
- 87 Heise L. Determinants of partner violence in low and middle-income countries: exploring variation in individual and population-level risk [PhD thesis]. London: London School of Hygiene & Tropical Medicine, 2012.
- 88 Abramsky T, Watts CH, García-Moreno C, et al. What factors are associated with recent intimate partner violence? Findings from the WHO Multi-Country Study on women's health and domestic violence. *BMC Public Health* 2011; **11**: 109.
- 89 Koenig MA, Ahmed S, Hossain MB, Khorshed Alam Mozumder AB. Women's status and domestic violence in rural Bangladesh: individual- and community-level effects. *Demography* 2003; **40**: 269–88.
- 90 International Center for Research on Women. Women's property rights, HIV and AIDS, and domestic violence: research findings from two districts in South Africa and Uganda. Cape Town: Human Sciences Research Council Press, 2008.
- 91 Grabe S. Promoting gender equality: the role of ideology, power, and control in the link between land ownership and violence in Nicaragua. *Anal Soc Issues Public Policy* 2010; **10**: 146–70.
- 92 Baird S, McIntosh C, Özler B. Cash or condition? Evidence from a cash transfer experiment. *Q J Econ* 2011; **126**: 1709–53.
- 93 Nanda P, Datta N, Das P. IMPACT: Impact on Marriage: Program Assessment of Conditional Cash Transfers. New Delhi: International Center for Research on Women, 2014.