THE ROLE OF EPIDEMIOLOGY IN BUILDING RESPONSES TO VIOLENCE:

THE CASE OF VIOLENCE AGAINST WOMEN

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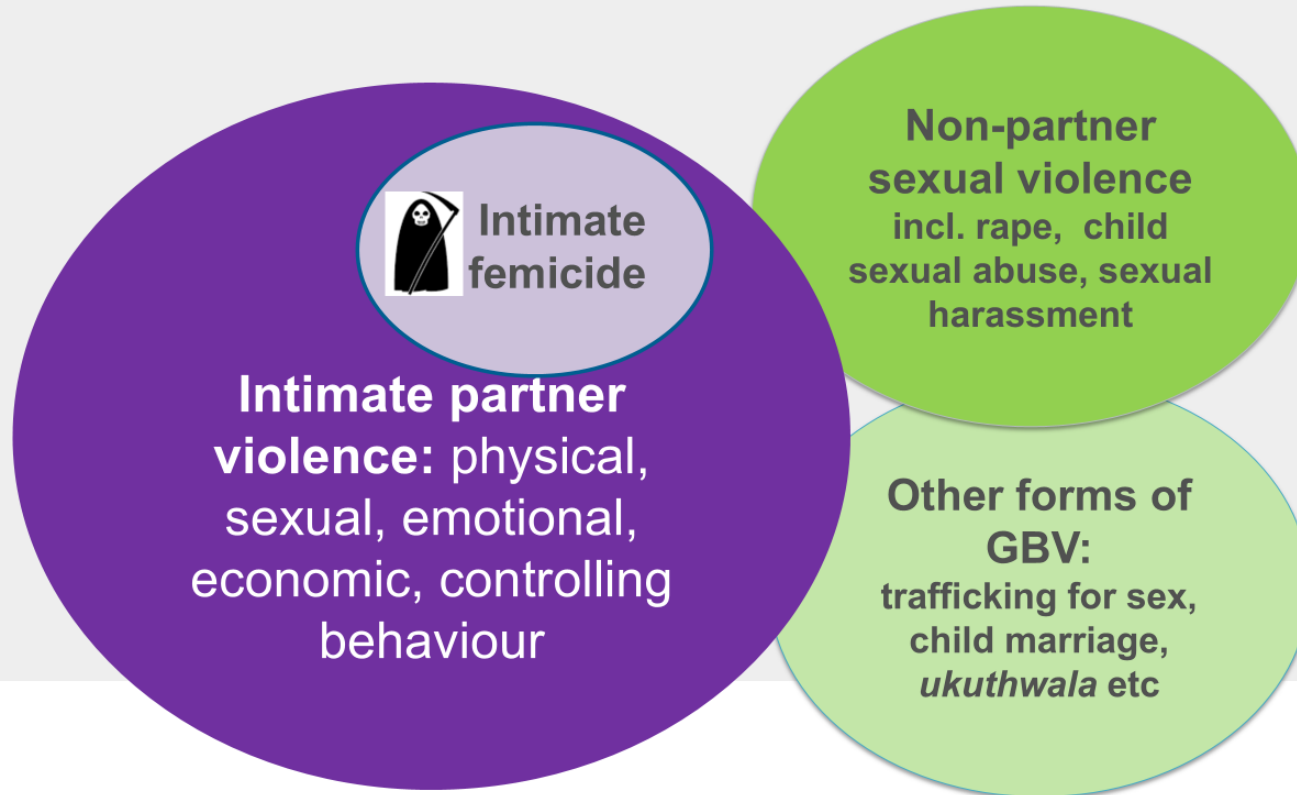South African Medical Research Council

Introduction

the scale and nature of the problem, in its diversity

risk factors and drivers

health outcomes to make the case of the burden of disease associated with VAW

interventions to prevent VAW

Violence against women:
many different forms, clarifying definitions, reporting periods and measurement is essential

Intimate femicide

Intimate partner violence: physical, sexual, emotional, economic, controlling behaviour

Non-partner sexual violence incl. rape, child sexual abuse, sexual harassment

Other forms of GBV: trafficking for sex, child marriage, *ukuthwala* etc
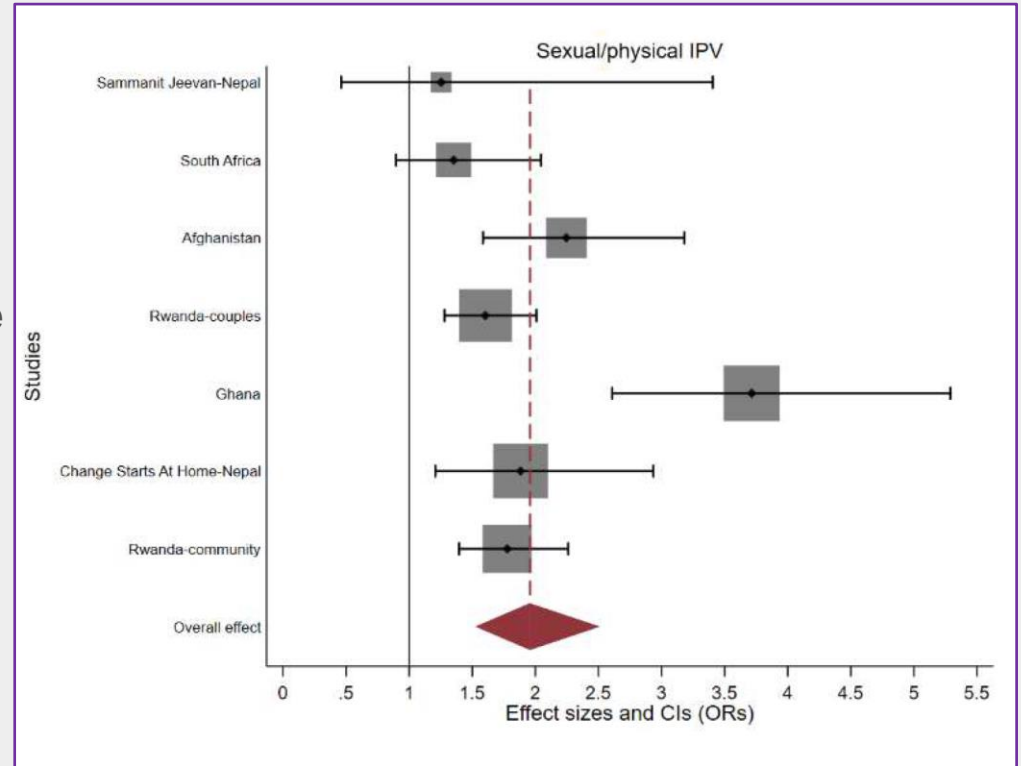
PREVALENCE MAY VARY MORE BETWEEN THAN ACROSS SETTINGS:
Women's experience of physical or sexual violence in the past 12 months
(data from research studies conducted as part of the What Works to Prevent Violence Against Women and Girls? Global Programme)

National figure from 2016 South Africa Demographic & Health Survey
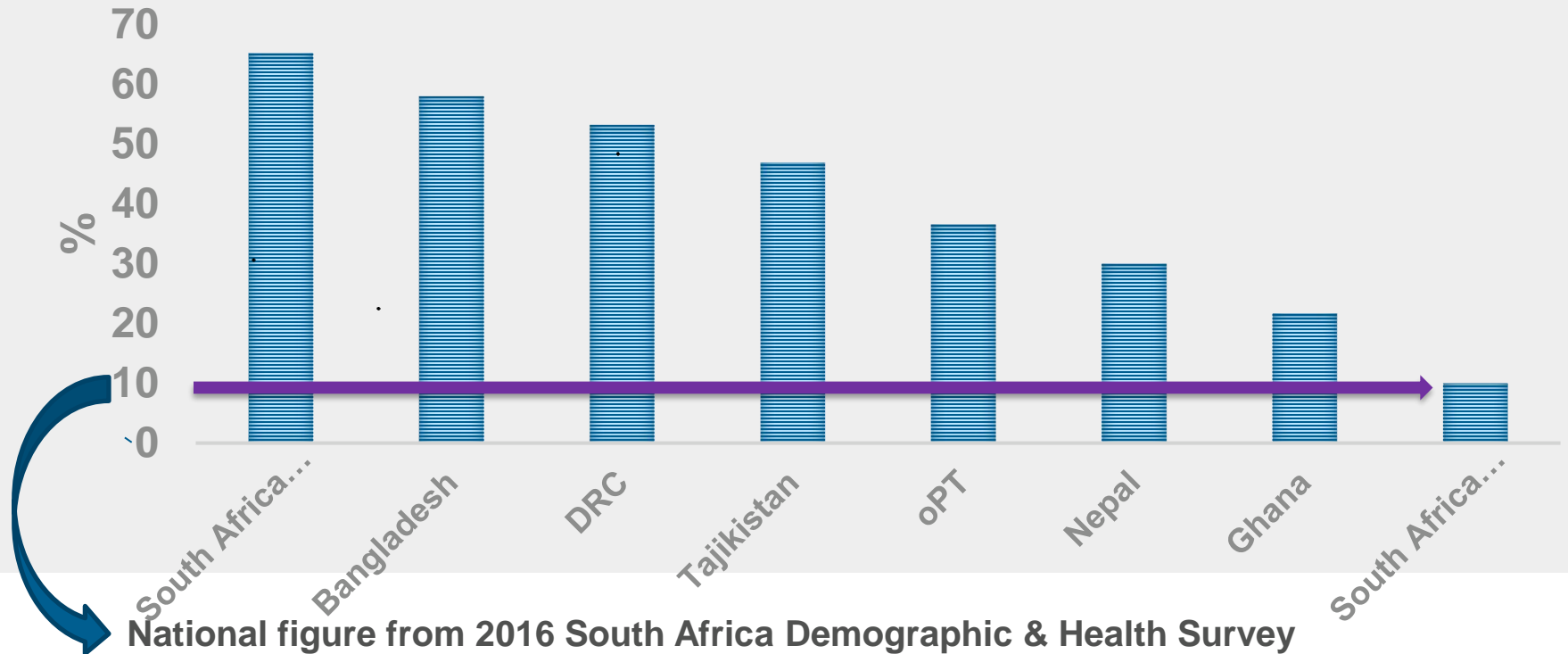
Women and girls with disabilities

- **Using the Washington Group questions**

- **2 x increased risk that women and girls with disabilities will be subject to sexual and/or physical IPV in the past 12 months**

- **Analysis based on data from 7 studies in 5 countries**

Sexual/physical IPV — Forest plot of Effect sizes and CIs (ORs) for studies: Sammanit Jeevan-Nepal, South Africa, Afghanistan, Rwanda-couples, Ghana, Change Starts At Home-Nepal, Rwanda-community, and Overall effect.
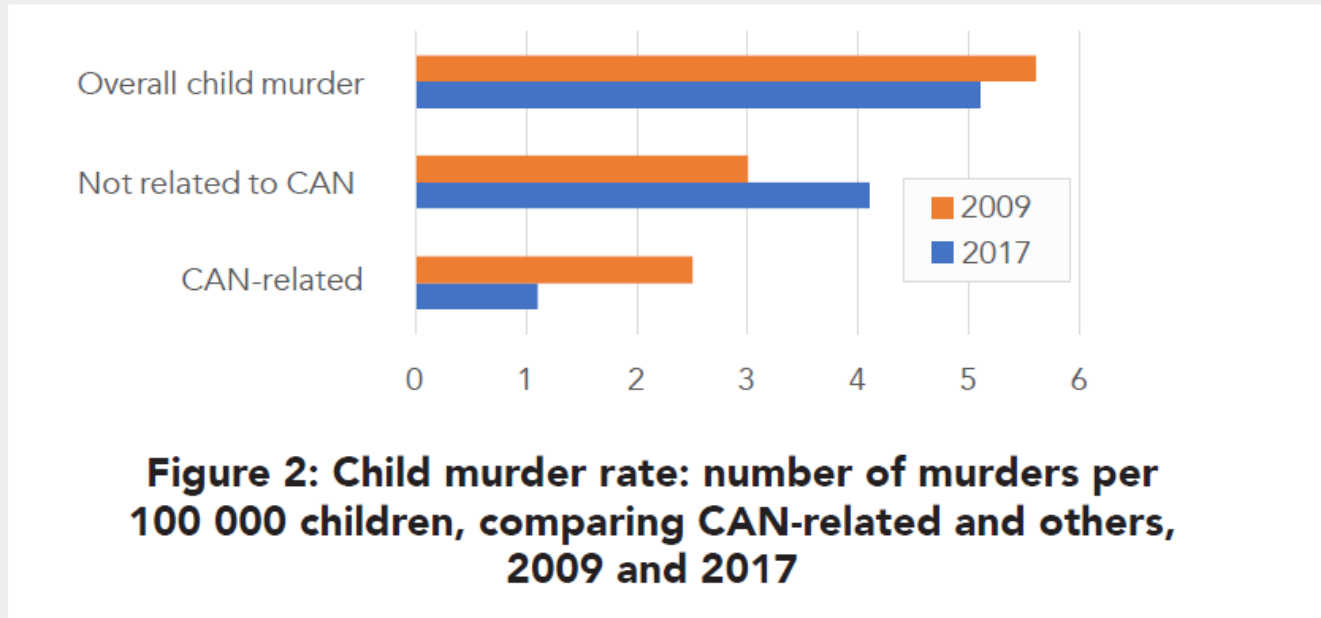
NATIONAL HOMICIDE SURVEILLANCE USING MULTISTAGE, STRATIFIED, CLUSTER SAMPLES

Methods: Sampling frame is a listing of medico-legal laboratories (MLLs) in the country, stratified by size; random sample of MLLs is drawn, all injury deaths (potentially) related to murder in a calendar year identified; interview with police to gather information from the investigation

	Male			M/F Incidence Rate Ratio (95% CI)
	Number (95%CI)	Percentage (95%CI)**	Age-standardised rate/ 100 000 population (95% CI)*	
All homicides (n = 19477)*	16835 (15735, 17936)	86.7 (86.2, 87.2)	59.7 (55.5, 63.9)	6.9 (6.4, 7.4)

be located for 502 femicides in 1999, 38 in 2009 and 379 in 2017.

NATIONAL SURVEILLANCE OF CHILD ABUSE AND NEGLECT DEATHS

Figure 2: Child murder rate: number of murders per 100 000 children, comparing CAN-related and others, 2009 and 2017

Using epidemiology to understand the impact of VAW on women's health

Evidence from the cohort of the Stepping Stones RCT : physical/sexual IPV exposure and having a highly controlling partner both elevate HIV acquisition by about 50%

GBV and gender inequity in relationships increase South African women's risk of HIV acquisition
(Jewkes et al, *The Lancet 2010*)

	IRR	95%CI	P value
Low power in relationship	1.51	1.05, 2.17	0.027
Experience of >1 episode of physical and/or sexual IPV	1.51	1.04, 2.21	0.032

Post-rape HIV incidence *(Abrahams et al 2020)*

The RICE study : cohort of 852 women post-rape & 852 controls

HIV Incidence over the follow up period: comparing women who did and did not report rape

WOMEN WHO DID NOT REPORT RAPE — WOMEN WHO REPORTED RAPE
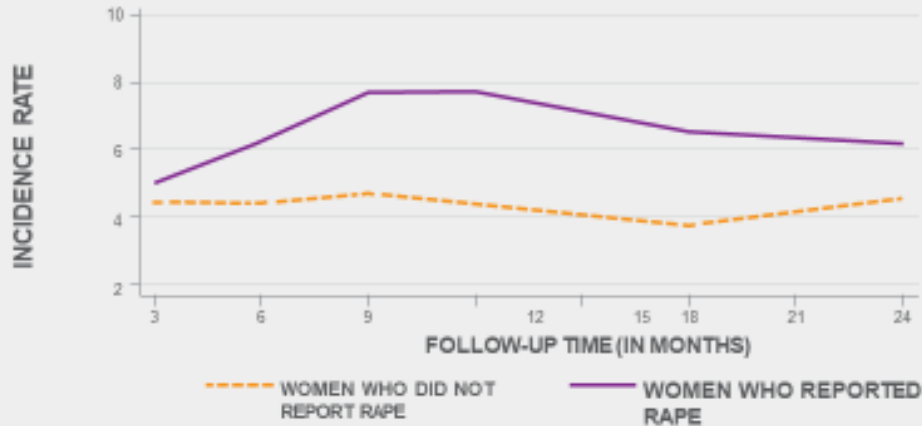
Rape exposed women were 60% more likely to acquire HIV compared to women in the control group <u>and</u> seroconversion was also associated with more exposure to physical IPV (p=0.03)

Hazard Ratio: 1.58 (95% CI 1.01-2.47)

Understanding risk factors and drivers of IPV and rape perpetration

Drivers of gender-based violence

(Gibbs et al 2020)
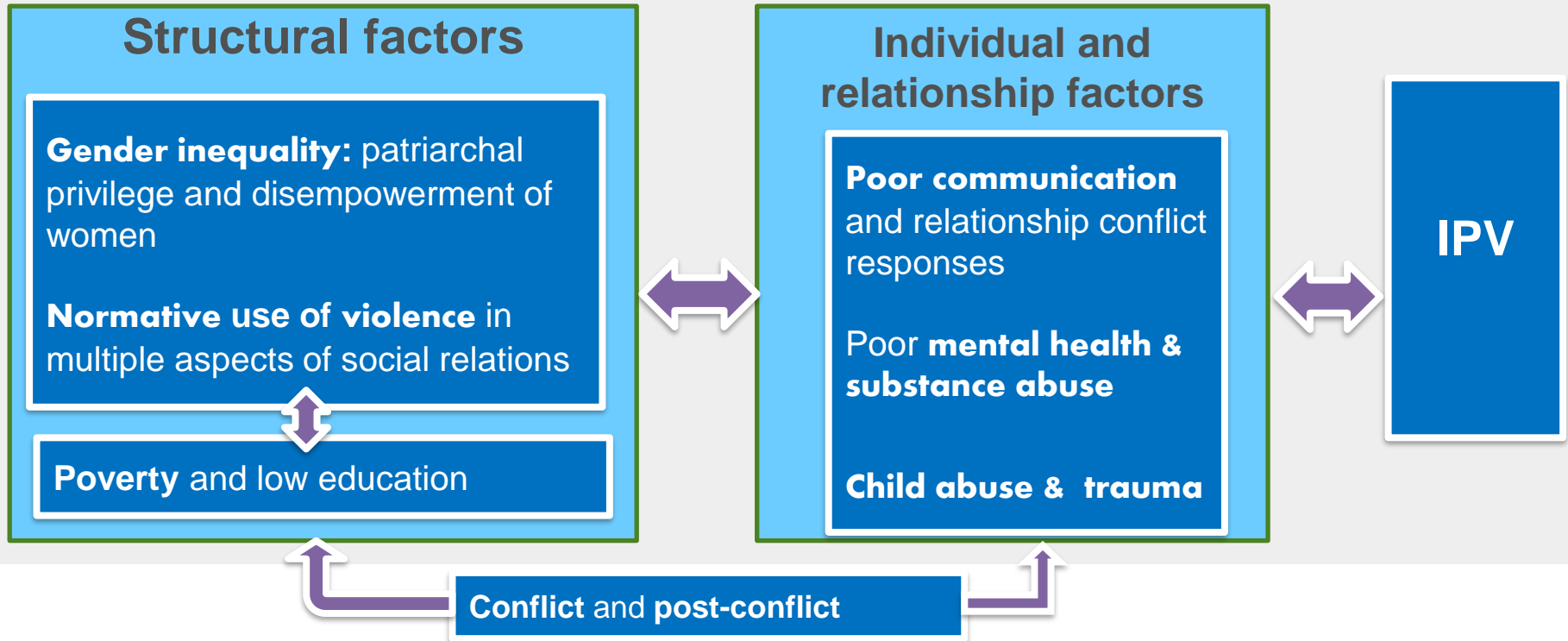
Risk factors for rape perpetration

(UN Multi-country study on men and violence in Asia and the Pacific, the Lancet Global Health 2013)

	Single perpetrator rape		Multiple perpetrator rape	
	Relative risk ratio (95% CI)	p value	Relative risk ratio (95% CI)	p value
Social characteristics				
No high school	NS	NS	1·42 (1·06–1·92)	0·021
Present food insecurity	NS	NS	1·42 (1·09–1·85)	0·009
Ever married or cohabited	1·49 (1·08–2·07)	0·017	NS	NS
Victimisation history				
Childhood sexual abuse	1·66 (1·31–2·09)	<0·0001	1·74 (1·32–2·28)	<0·0001
Childhood physical abuse	1·30 (1·05–1·62)	0·018	NS	NS
Childhood emotional abuse or neglect	1·80 (1·26–2·55)	0·001	2·27 (1·46–3·55)	<0·0001
Any homophobic abuse or violence	NS	NS	2·85 (1·71–4·73)	<0·0001
Psychological factors and substance misuse				
Alcohol problems	1·70 (1·38–2·08)	<0·0001	1·46 (1·08–1·98)	0·015
Empathy scale	0·85 (0·78–0·92)	<0·0001	0·81 (0·72–0·92)	0·001
Sexual and relationship practices				
Any physical IPV perpetration	1·71 (1·35–2·17)	<0·0001	2·01 (1·50–2·70)	<0·0001
Number of sexual partners				
0 or 1	1·00	..	1·00	..
2–3	4·05 (3·11–5·28)	<0·0001	2·13 (1·53–2·96)	<0·0001
≥4	6·05 (4·50–8·15)	<0·0001	4·11 (2·92–5·78)	<0·0001
Ever had sex with a sex worker or engaged in transactional sex	2·58 (2·07–3·21)	<0·0001	4·67 (3·37–6·47)	<0·0001
Participation in violence outside the home and drug use				
Involved in fights with weapons	1·76 (1·38–2·24)	<0·0001	1·69 (1·24–2·32)	0·001
Involvement in gangs	NS	NS	2·38 (1·68–3·38)	<0·0001
Drug use in the past year	NS	NS	1·78 (1·20–2·64)	0·005

Only significant associations are shown. NS=non-significant. IPV=intimate partner violence.

Table 4: Multinomial regression model of factors associated with single and multiple perpetrator rape against non-partner women (n=9203) in all countries adjusted for age and site

Using Structural Equation Modelling (SEM) to elucidate pathways – example of women's use of violence in parenting
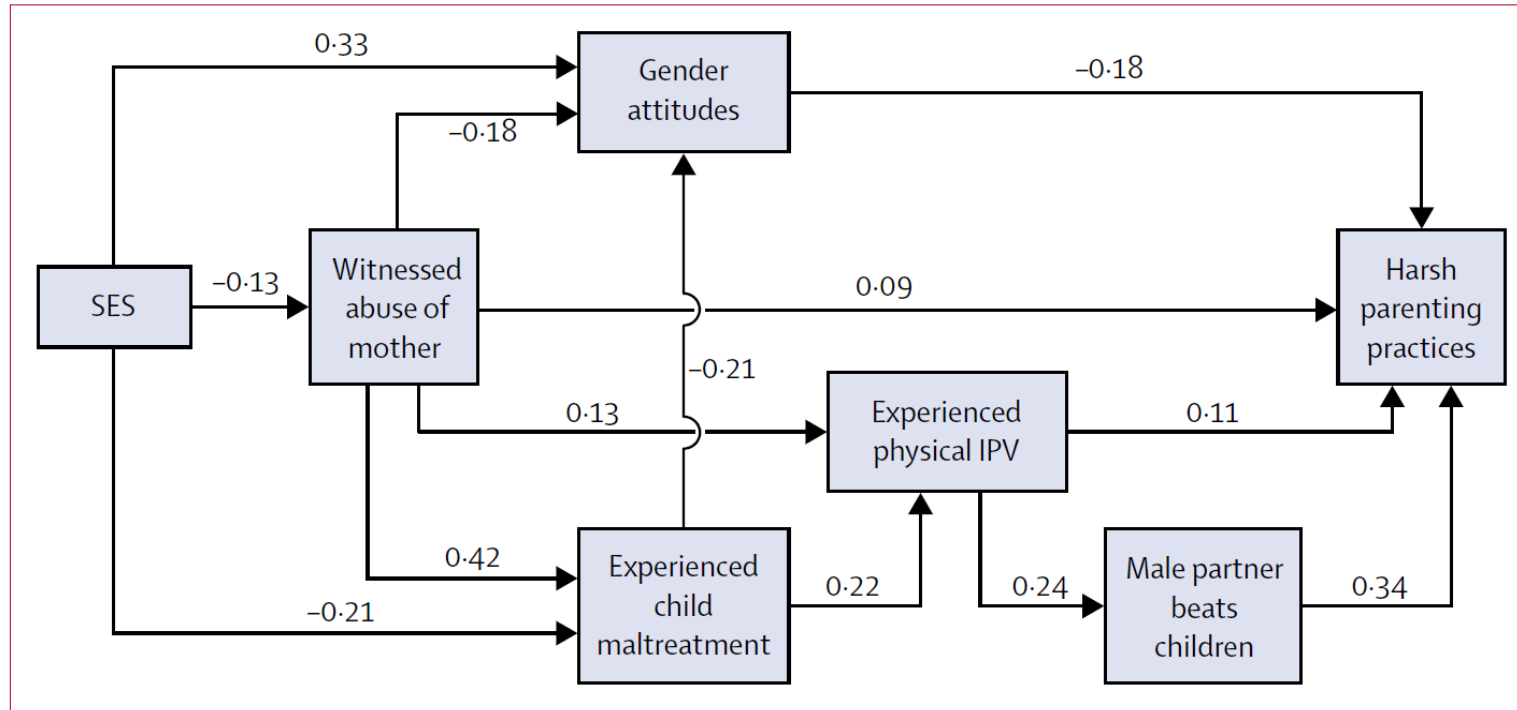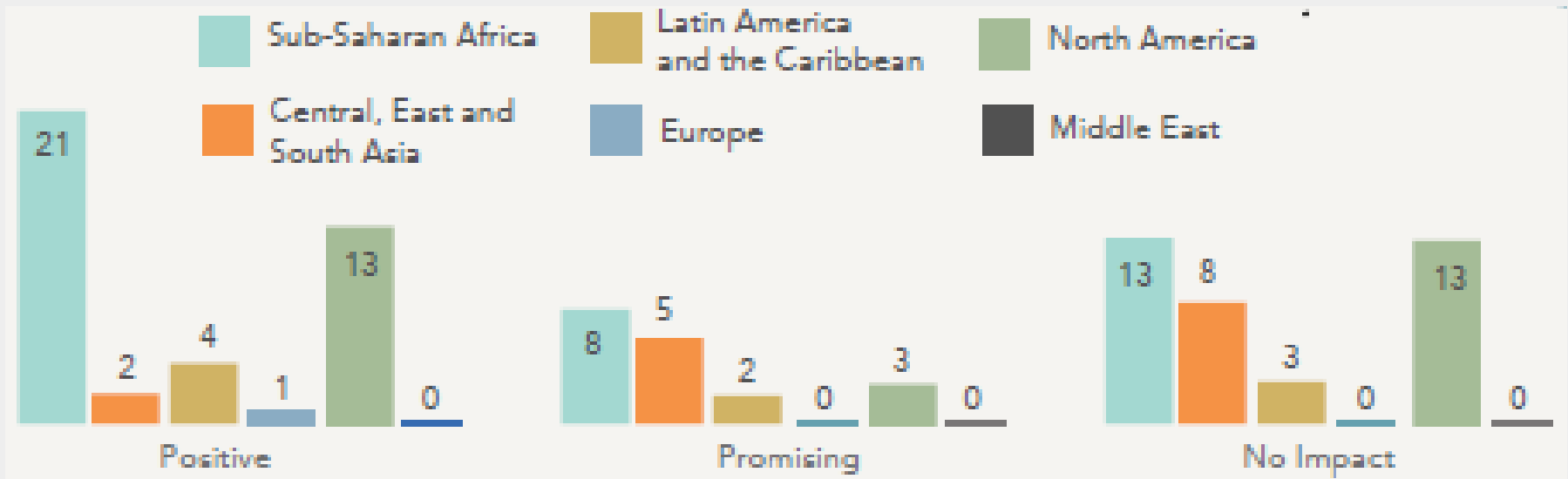

Figure 2: Structural equation model of pathways to women's use of harsh parenting practices
IPV=intimate partner violence. SES=socioeconomic status.

Using epidemiology to address VAW prevention

Review of VAW prevention RCTs up to 2018: More of the evidence comes from LMICs than HICs

Lessons from studying the control arm across VAW RCTs

Table 3. Mean change in the control arms of across studies, all types of IPV and genders.

	Mean change in percentage points baseline – endline (95%CI)	Mean largest change in percentage points between two time points (95%CI)	Mean proportionate change (baseline to endline)	Mean largest change as a proportion of baseline
All studies (12 datasets)	7.01 (3.68, 10.33)	8.39 (5.08, 11.70)	0.175	0.216
All studies with no active control arms (10 datasets)	3.21 (1.59,4.83)	4.88 (0.94, 8.83)	0.134	0.177
Cohort studies with no active control arms (5 datasets)	4.00 (0.38, 7.62)	6.29 (0, 17.04)	0.13	0.171
Repeat cross-sectional (5 datasets)	2.47 (0, 5.56)	3.57 (0,10.22)	0.137	0.182

KEY

DFID-funde...
Violence Ag...

RESPECT: PREVENTING VIOLENCE AGAINST WOMEN
A FRAMEWORK FOR POLICYMAKERS

R E S P E C T

Implement **7** **strategies** to **prevent violence** against women[2]

Relationship skills strengthened

refers to strategies aimed at individuals or groups of women, men or couples to improve skills in interpersonal communication, conflict management and shared decision-making.

Empowerment of women

refers to both economic and social empowerment including inheritance and asset ownership, microfinance plus gender and empowerment training interventions, collective action, creating safe spaces and mentoring to build skills in self-efficacy, assertiveness, negotiation, and self-confidence.

Services ensured

refers to a range of services including police, legal, health, and social services provided to survivors.

Poverty reduced

refers to strategies targeted to women or the household whose primary aim is to alleviate poverty ranging from cash transfers, savings, microfinance loans, labour force interventions.

Environments made safe

refers to efforts to create safe schools, public spaces and work environments, among others.

Child and adolescent abuse prevented

refers to establishing nurturing family relationships, prohibiting corporal punishment, and implementing parenting programmes as mentioned in *INSPIRE - 7 strategies for preventing violence against children.*

Transformed attitudes, beliefs, and norms

refers to strategies that challenge harmful gender attitudes, beliefs, norms and stereotypes that uphold male privilege and female subordination, that justify violence against women and that stigmatize survivors. These may range from public campaigns, group education to community mobilization efforts.

Ten elements of design and implementation of more effective

DESIGN

Rigorously planned, with a robust theory of change, rooted in knowledge of local context

Use group-based participatory learning methods, for adults and children, that emphasise empowerment, critical reflection, communication and conflict resolution skills building

Based on theories of gender and social empowerment theories that view behaviour change as a collective rather than solely individual process and foster positive interpersonal relations and gender equity

Integrate support for survivors of violence

IMPLEMENTATION

Optimal intensity: duration and freq... overall programme length enables ... experiential learn...

...eers are selected for their gender and non-violence behaviour, and are ...ined, supervised and supported

WhatWorks
TO PREVENT VIOLENCE
A Global Programme To Prevent
Violence Against Women and Kids

ukaid

Effective design and implementation elements in interventions to prevent violence against women and girls

CONCLUSIONS

- A public health approach has been invaluable in shaping our agenda of the last 30 years on VAW

- Our epidemiology has been founded on feminist principles and a key element of our power to advance knowledge has been seamlessly linking social science and epidemiology

- Key elements of our success have been a willingness to push methodological boundaries, working in collaborative and multidisciplinary teams, having a strong theoretical base, and pushing for qualitative research to accompany the quantitative

The South African Medical Research Council

recognizes the catastrophic and persisting consequences of colonialism and

apartheid, including land dispossession and the intentional imposition of

educational and health inequities.

Acknowledging the SAMRC's historical role and silence during apartheid,

we commit our capacities and resources to the continued promotion of justice and

dignity in health research in South Africa.