

The Cost-Effectiveness of Preventing Violence Against Women and Girls: Results from a Multi-Country Study of Four Interventions, from Piloting to National Scale-up

PRELIMINARY RESULTS – WHAT WORKS

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Background & motivation

- Preventing violence against women and girls
- What is most cost-effective use of resources?
 - IMAGE & SASA! intervention
- Multiple outcomes
- Cost effectiveness from research settings to scale



Methods – Value for Money

Analysis

- ▶ Research setting
 - ▶ Multilevel mixed-effects models
 - ▶ Violence-free years
 - ▶ DALYs averted
- ▶ Uncertainty – probabilistic sensitivity analysis
 - ▶ Simulations with 1,000 beneficiaries
 - ▶ $DALYs \sim N(DALY_{mean}, DALY_{var})$
 - ▶ $Costs \sim \Gamma(a, b)$ – a & b from empirical findings
 - ▶ Research setting & scale-up

Health benefits – DALYs averted

- ▶ Research setting
 - ▶ Depression
 - ▶ Anxiety
 - ▶ Alcohol misuse
 - ▶ Drug use
- ▶ Different ways of estimating DALYs
- ▶ Duration of intervention effect
- ▶ Other impacts

Cost-effectiveness defined as cost per DALY averted (health sector perspective)

IPV-free years for women from each intervention

	IPV-free years	95% Confidence Interval
RSS (Ghana, n=35,347)	2,510	(6,256 to -1,237)
Impower (Kenya, n=4,125)	-2,518	(2,014 to -7,059)
Indashyikirwa couples (Rwanda, n=1,660)	226	(150 to 301)
SSCF (South Africa, n=339)	5.46	(6.06 to -16.97)
Zambia	Work underway	
Pakistan	Work underway	



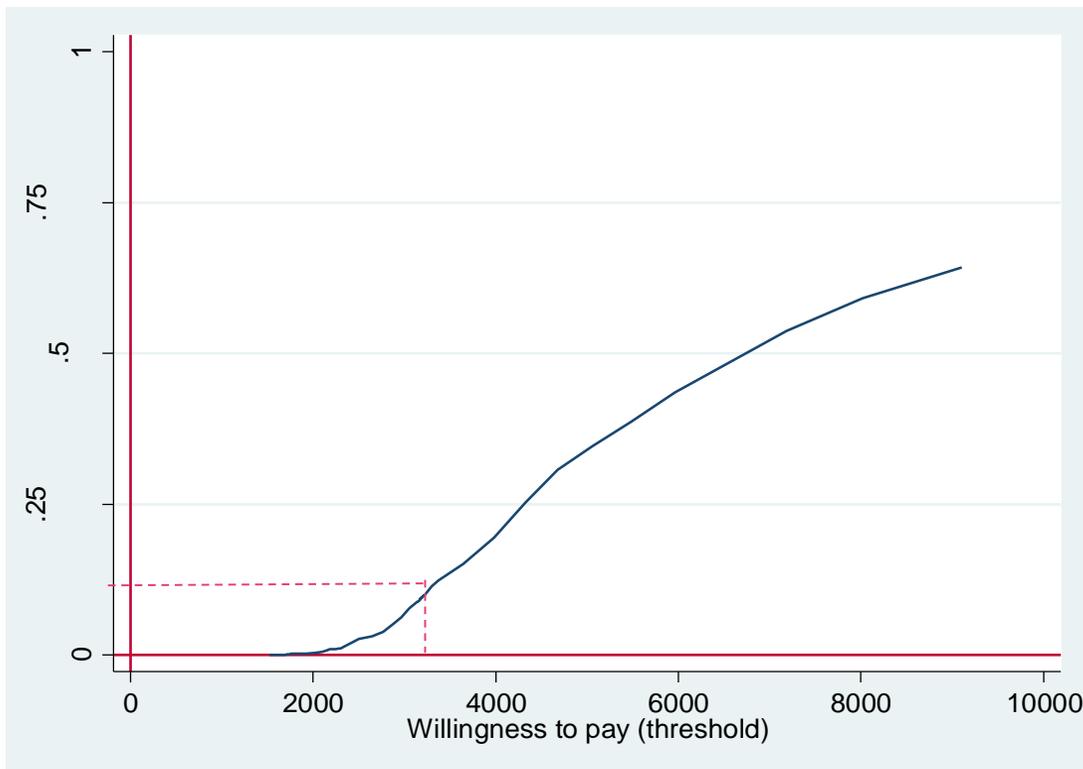
Cost-effectiveness

WOMEN PROVIDER COSTS



Cost-effectiveness in research setting

SSCF – South Africa



Probability of cost-effectiveness at various thresholds

Mean cost per DALY averted: \$ 6,422 (2018 prices)

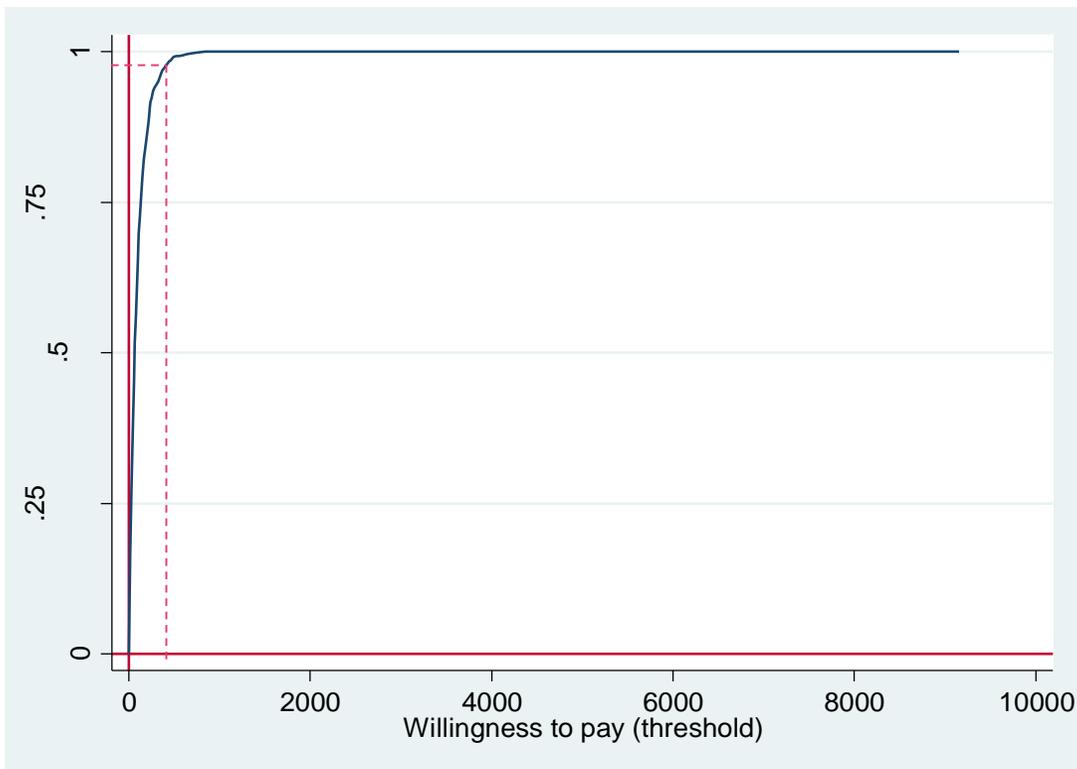
10% probability that the intervention is cost-effective on health effects alone

At South Africa's threshold of \$ 3, 266 per DALY



Cost-effectiveness in research setting

RSS – Ghana



Mean cost per DALY averted: \$ 87 (2018 prices)

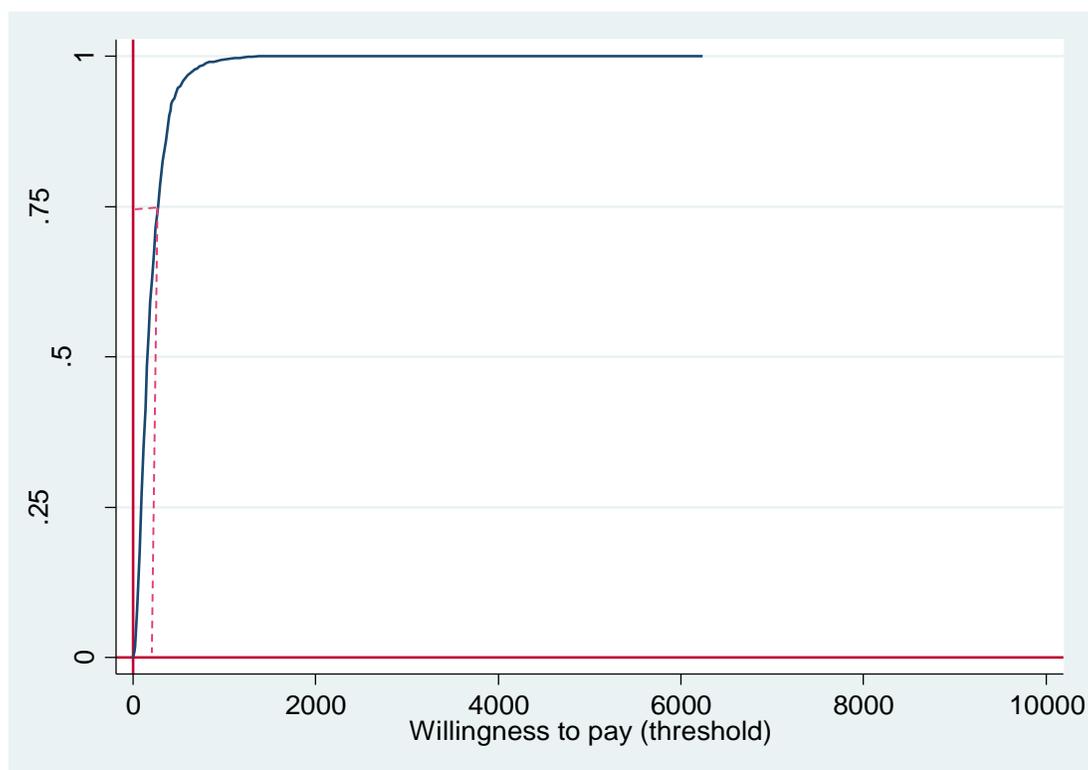
There is more than 95% probability that the intervention is cost-effective

Ghana's threshold of \$497 per DALY



Cost-effectiveness in research setting

Indashyikirwa - Rwanda



Probability of cost-effectiveness at various thresholds

Mean cost per DALY averted: \$ 196 (2018 prices)

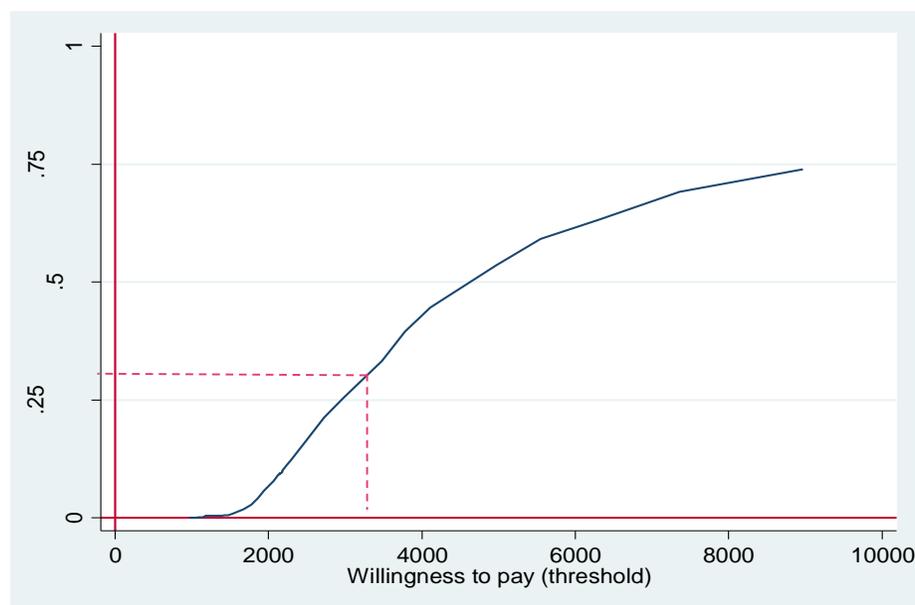
There is a 75% probability that the intervention is cost-effective

Rwanda's threshold of \$280 per DALY



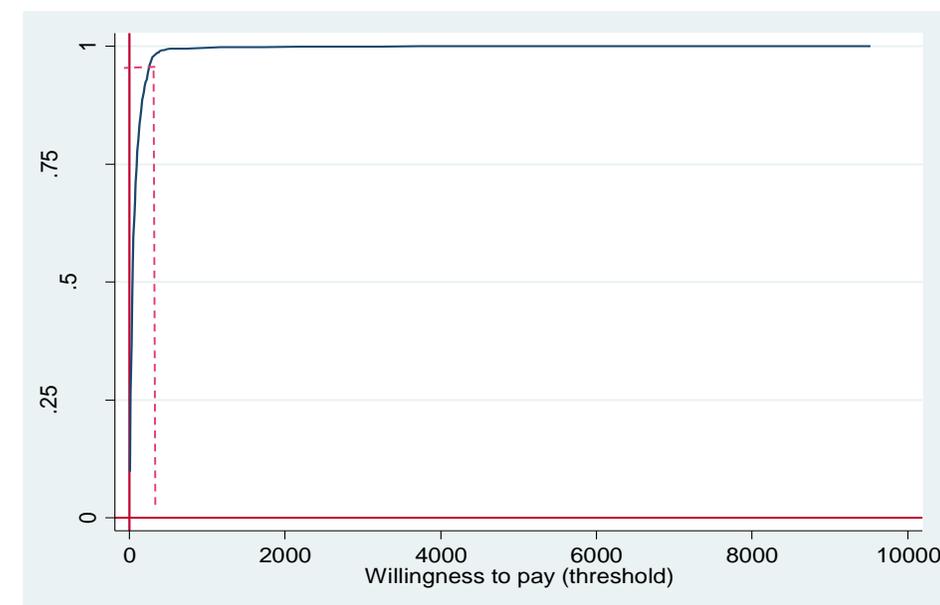
Predicted cost-effectiveness at national scale

SSCF – South Africa



Mean cost per DALY averted: \$ 4, 507
30% probability that the intervention is cost-effective considering measured health benefits alone

RSS - Ghana

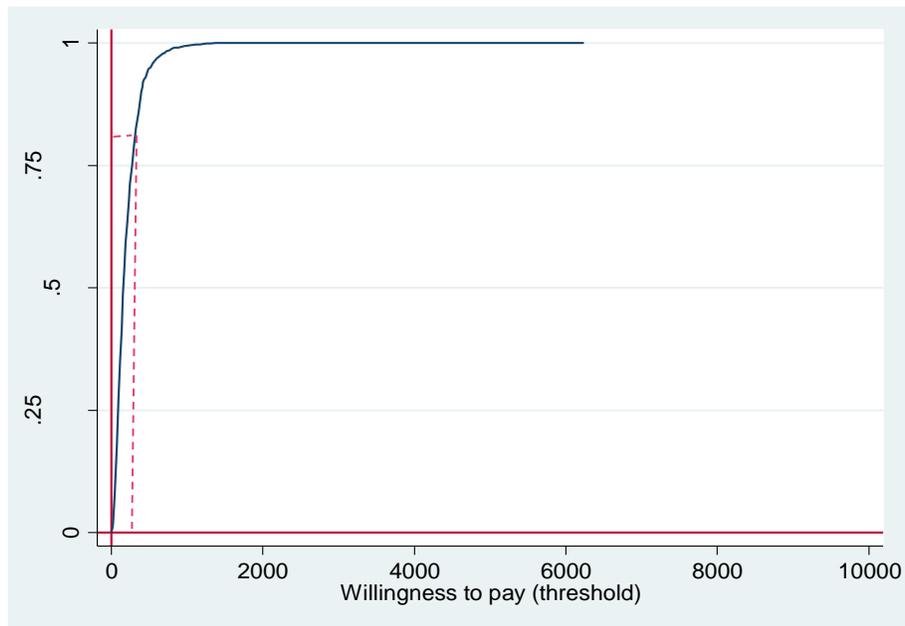


Mean cost per DALY averted: \$ 61
95% probability that the intervention is cost-effective considering measured health benefits alone



Predicted cost-effectiveness at national scale

Indashyikirwa - Rwanda



Mean cost per DALY averted: \$ 137

86% probability that the intervention is cost-effective considering measured health benefits alone



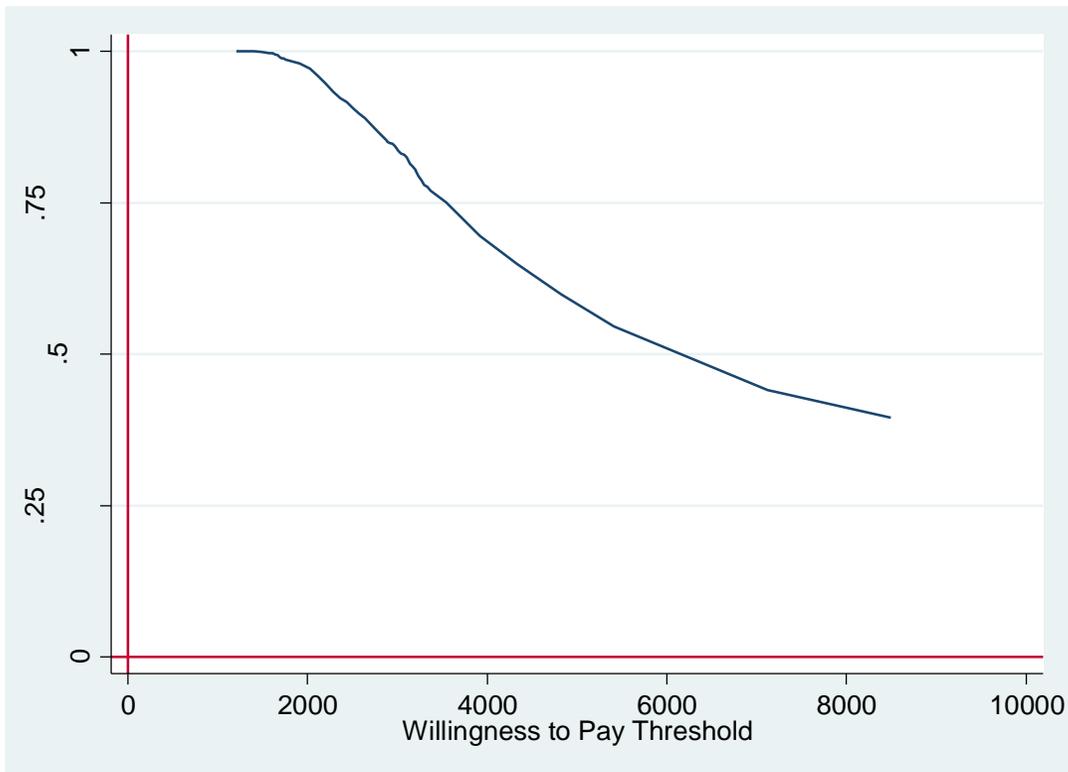
Cost-effectiveness

WOMEN
PROVIDER COSTS + ECONOMIC IMPACT



Cost-effectiveness in research setting

SSCF – South Africa



Probability of cost-effectiveness at various thresholds

The intervention is cost saving:

Incremental cost: -\$ 9,703

DALYs averted: - 8

79% probability that the intervention is cost-effective

At South Africa's threshold of \$ 3, 266 per DALY

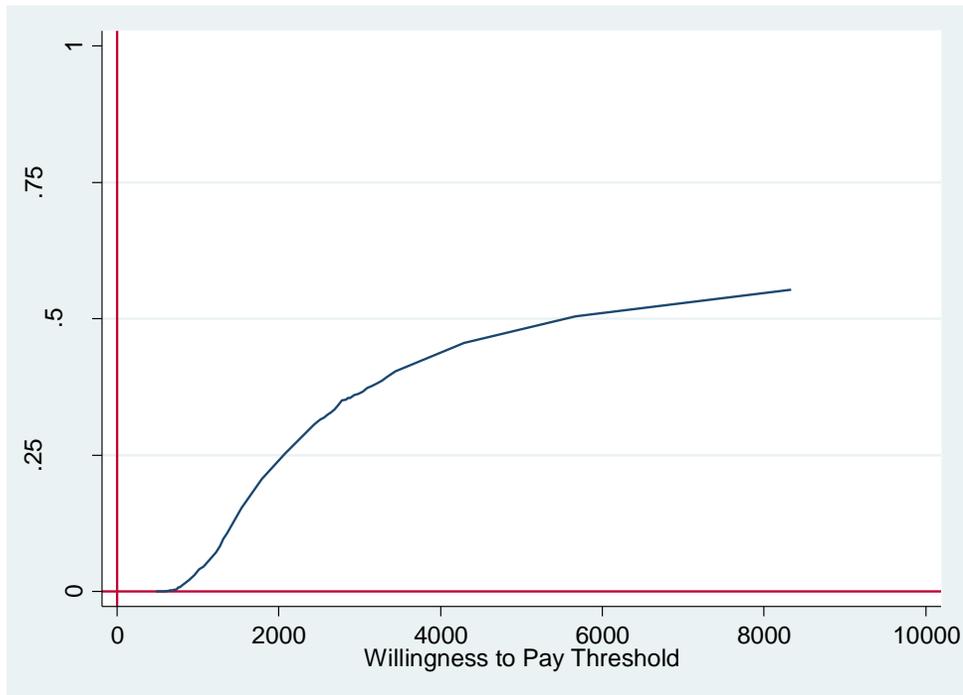


Cost-effectiveness

WOMEN AND MEN
PROVIDER COSTS + ECONOMIC IMPACT



Cost-effectiveness in research setting



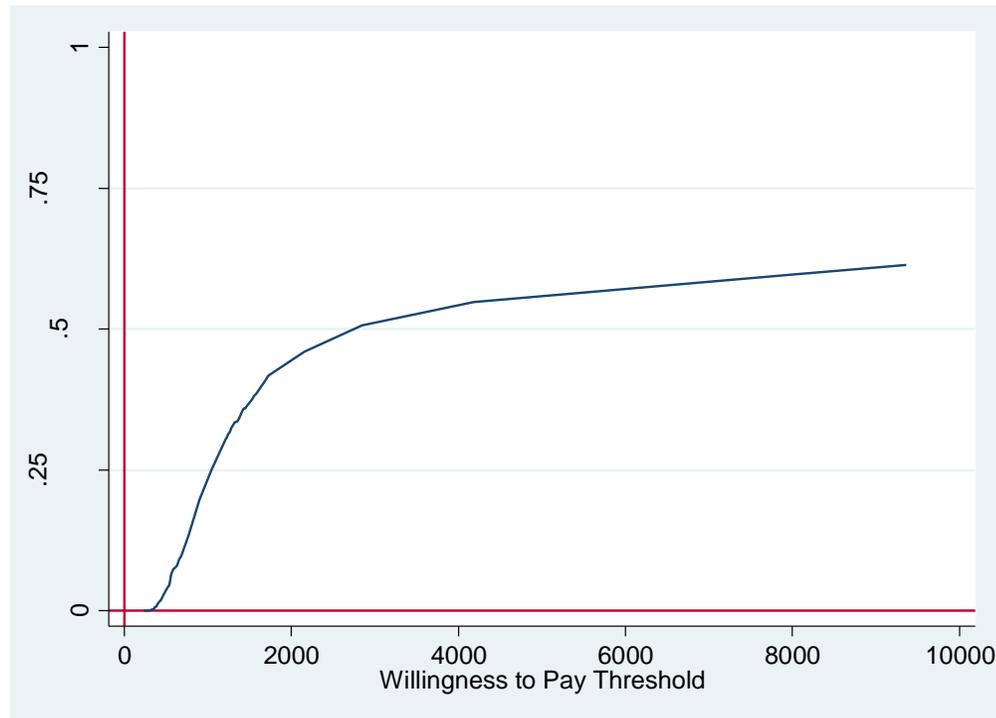
Incremental cost: \$ 1,815 (2018 prices)
DALYs averted: 4

40% probability that the intervention is cost-effective

At South Africa's threshold of \$ 3, 266 per DALY



Predicted cost-effectiveness at national scale



Incremental cost: \$ 1,741 (2018 prices)
DALYs averted: 4

50% probability that the intervention is cost-effective

At South Africa's threshold of \$ 3, 266 per DALY



Impact inventory

Domains	Aggregate dimensions	Countries											
		Ghana		Kenya		Pakistan		Rwanda		South Africa		Zambia	
		F	M	G	B	G	B	F	M	F	M	F	M
Healthcare sector													
Intimate partner (or non-partner) violence	Natural units												
Child abuse													
Bullying													
Mental health	DALYs												
Attempts at taking own life													
Hazardous drug/alcohol use													
Physical injuries													
Pregnancy & perinatal complications													
HIV/STIs													
Hunger													
Access to healthcare	Costs (OOP/health sys)												
Social protection													
Women's participation in health-related household decisions	Individual Agency												
Individuals' ability to retain control over their own income													
Gender attitudes (e.g., women should cook; women deserve to be beaten)	Structural agency												
Labour													
Individuals' employment outside the household	Labour market outcomes												
Individuals' income/consumption													
Lost productivity													
Education													
School grades/marks	School outcomes												
Absence from school													
School dropout (incl. pregnancy-related)													
Justice													
Access to police and criminal justice services (+ cost to individual, if available)	Reporting and prosecuting												
Stealing, unlicensed firearms	Criminality												
Social services													
Refuges, support/helpseeking	Formal OR Informal												
Intersectoral													
Life satisfaction OR flourishing	Subjective wellbeing												
Amount would pay for treatment; amount paid for similar courses (6 items)	Willingness to Pay												

Individual
Societal
Societal & Individual
None
N/A

Factors that influence cost-effectiveness

- ▶ Interventions can be cost-effective or cost-saving
- ▶ Comprehensiveness + intensity of intervention
- ▶ Inter-sectoral impact
 - ▶ Range/type of effect/ externalities
 - ▶ Methods to synthesize and value outcomes
- ▶ Sustained effects and long-term costs

Take-away messages

- ▶ Caution synthesising (countries, interventions, populations)
- ▶ Effective interventions can be delivered for low costs per beneficiary **for certain populations**
- ▶ Potential case for complex/expensive interventions: efficient design and measuring comprehensive effect to achieve cost-effectiveness
- ▶ Next steps
 - ▶ Scale-up scenario modelling across populations for cost-effectiveness
 - ▶ Health benefit packages/ co-financing
 - ▶ Simplified routine costing from many sites
 - ▶ Define core effects for M&E
- ▶ For some interventions
 - ▶ Promising/ hard to reach but expensive: further comprehensive economic evaluation/ careful design
 - ▶ Sustained effect (even 2 years)