

# Lessons from the Broad Street Pump: The importance of addressing structural factors that drive HIV

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**STRIVE Research Symposium**

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# Disease determinants

**Factor** → **Biological**      **Behavioural**      **Social**

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**Intervention** → **Bio-medical**      **Educational**      **Structural**

# Structural interventions

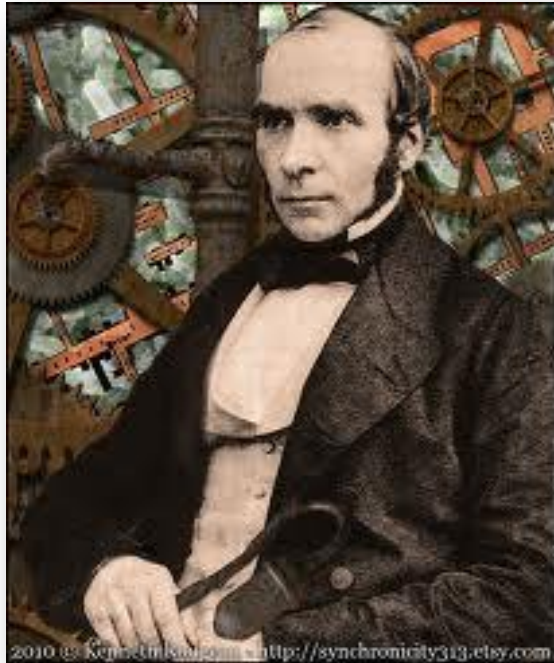


<b>HIV</b>	<b>“Have fewer partners”</b>	<b>Improve livelihoods</b> <i>(to reduce transactional sex)</i>
<b>Obesity</b>	<b>“Exercise more”</b>	<b>Create walkable neighbourhoods</b>
<b>Hazardous drinking</b>	<b>“Drink responsibly”</b>	<b>Regulate alcohol advertising and promotion</b>

Source: Adapted from Jim Thomas, Measure Evaluation

# Stemming the tide of cholera

## London 1854



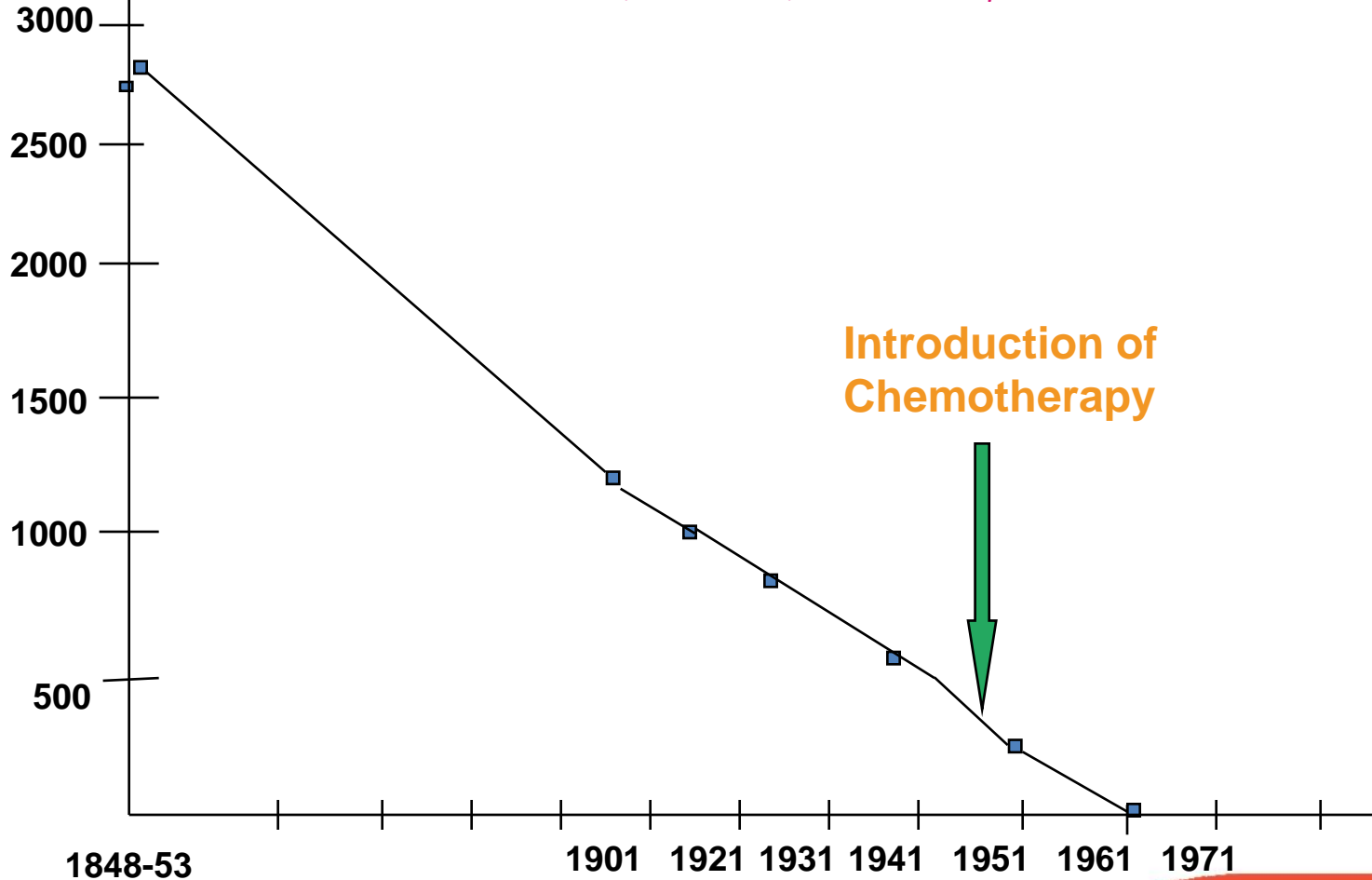
**John Snow,**  
**Father of modern epidemiology**



# The historical decline of TB deaths in England and Wales 1848-1961

McKeown T, Record RG, Turner RD *Population Studies* 1975

Death Rate  
per Million

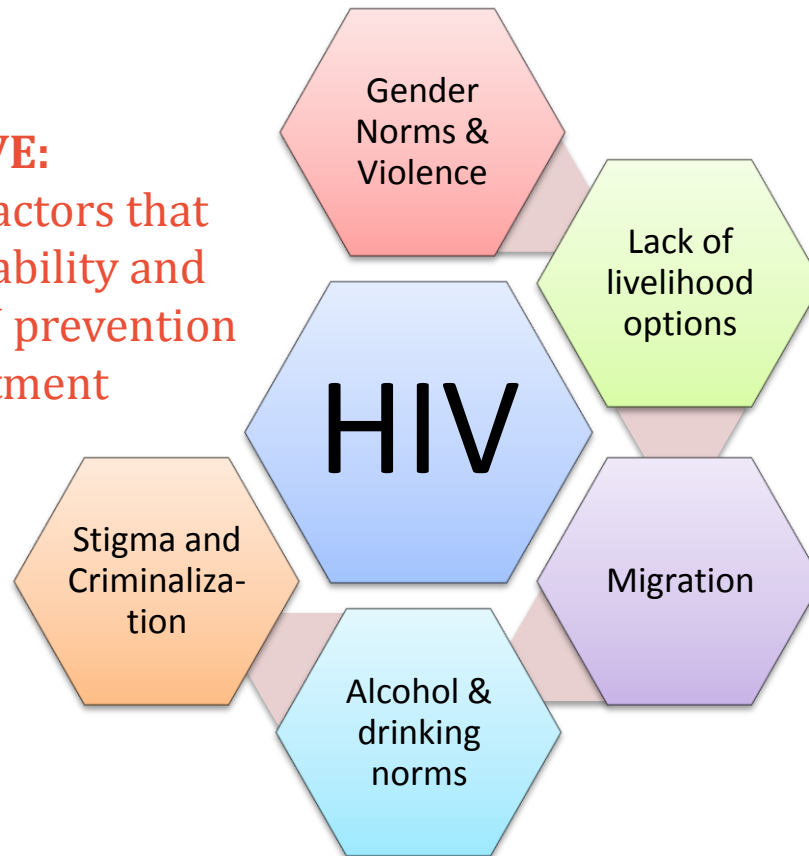


Source: Paul Pronyk



# STRIVE Priority Research Topics

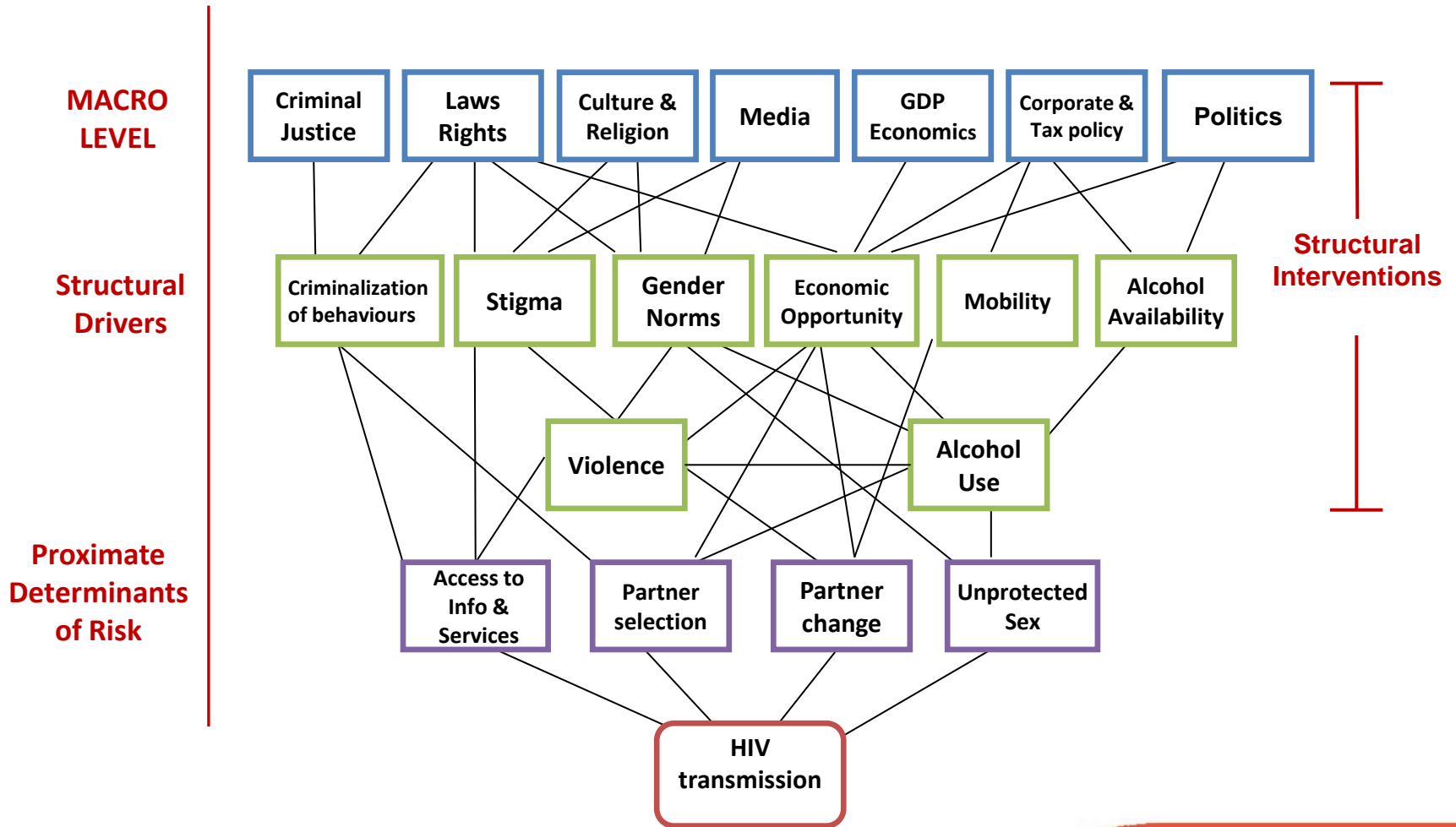
**STRIVE:**  
Tackling the factors that  
create vulnerability and  
undermine HIV prevention  
and treatment



## Designed around 4 research themes

- **Theme 1:** Deepening fundamental understanding of structural factors and pathways
- **Theme 2:** Evaluating the impact and cost-effectiveness of structural interventions
- **Theme 3:** Advancing methods for evaluating structural interventions; and
- **Theme 4:** Enhancing insights into processes of change

# Conceptual framework





## Evidence of Impact: Partner violence

3 prospective studies link IPV with Incident HIV or STI

	IRR (95% CI)	p value	HSV2-adjusted IRR (95% CI)*	p value
<b>Relationship power scale</b>				
Medium or high equity	1.00	..	1.00	..
Low equity	1.51 (1.05-2.17)	0.027	1.51 (1.05-2.17)	0.027
<b>Physical or sexual intimate partner violence</b>				
None or one	1.00	..	1.00	..
>1 episode	1.65 (1.13-2.40)	0.009	1.51 (1.04-2.21)	0.032

IRR=incidence rate ratio. HSV2=herpes simplex virus type 2. IRRs adjusted for age, treatment, stratum, and person-years of exposure. \* Additionally adjusted for HSV2 infection at baseline.

**Table 4: Relative HIV incidence with exposure to both partner violence and relationship inequity**

**\*Strongest data comes from South Africa:** Jewkes et al, *The Lancet*, 2010;

Cross-sectional data more mixed; methodological limitations

Consistent association found between more severe IPV and HIV risk

## Evidence of Impact: Livelihood options, transactional sex & HIV

- 2 longitudinal studies; 1 RCT link transactional sex to incident HIV\*
- Cohort study, embedded in intervention trial, enrolled 1077 sexually active, HIV- women 15-26 yrs in rural South Africa
  - HIV incidence:
    - **3 times higher** among girls with a once-off partner
    - **2 times higher** among girls with on-going concurrent partner
- Effect over and above adjustments for total number of partners, relationship control, violence and other potentially confounding factors
- Not mediated through partner age

\* Shaffer et al, JAIDS, 2010  
Jewkes et al, J AIDS Clinical Res, 2012  
Baird et al, Health Econ. 2010 & the Lancet, 2012



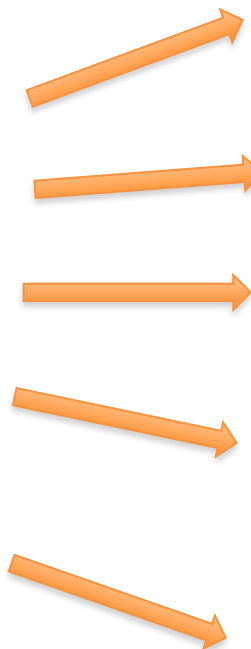
# Transactional sex & HIV: Conditional Cash Transfer Trial in Zomba, Malawi

Cash transfer scheme to keep girls in school – Zomba, Malawi

\$10/month provided to HH of in and out-of-school girls (13-22 yrs)

30% went directly to girls

*(Baird et al., 2010 & 2012)*



**35% reduction school drop-out rate**



**40% reduction early marriages**



**76% reduction in HSV-2 risk**



**30% reduction in teen pregnancies**



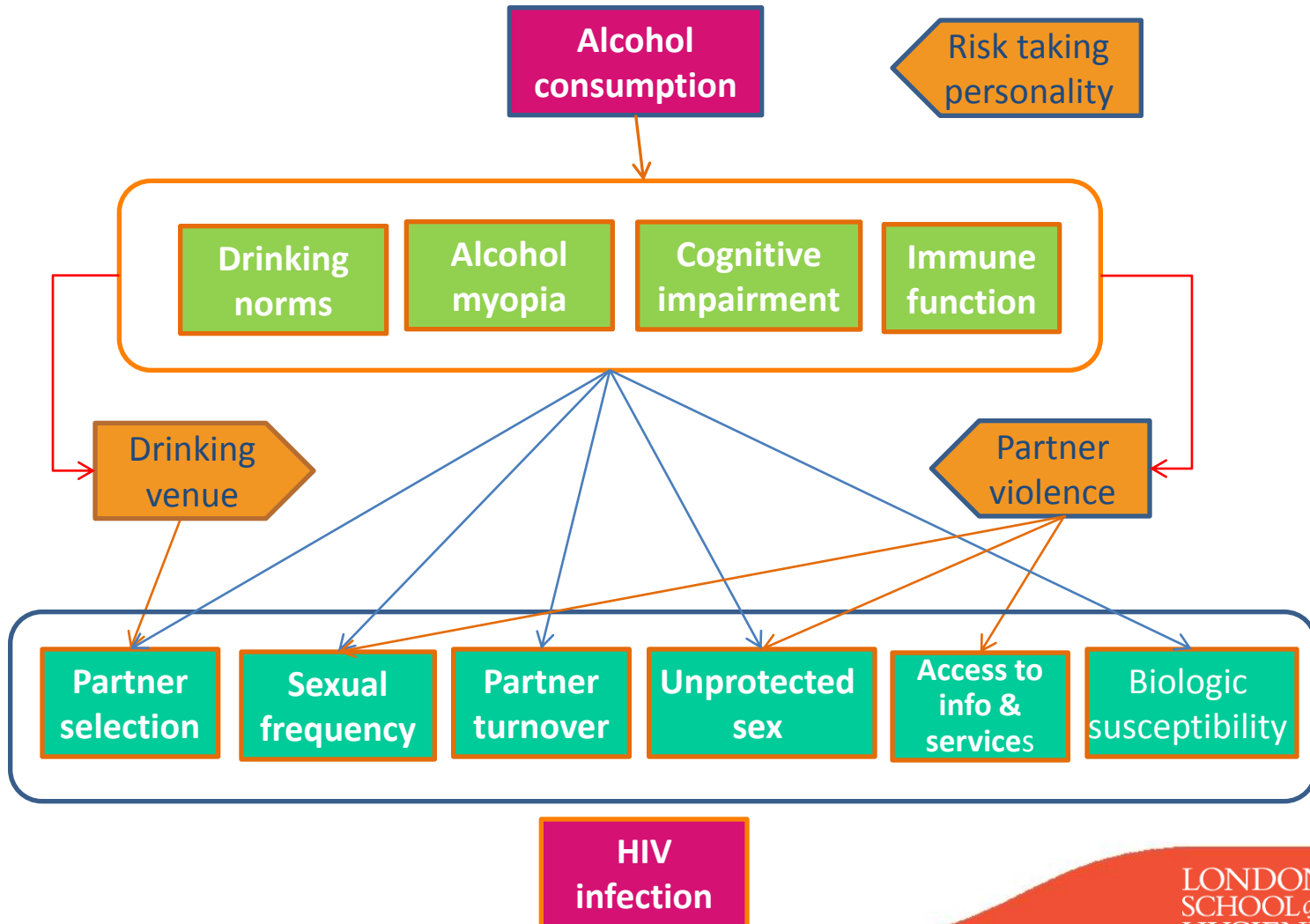
**64% reduction in HIV risk**



**Results after 18 months among baseline school girls**

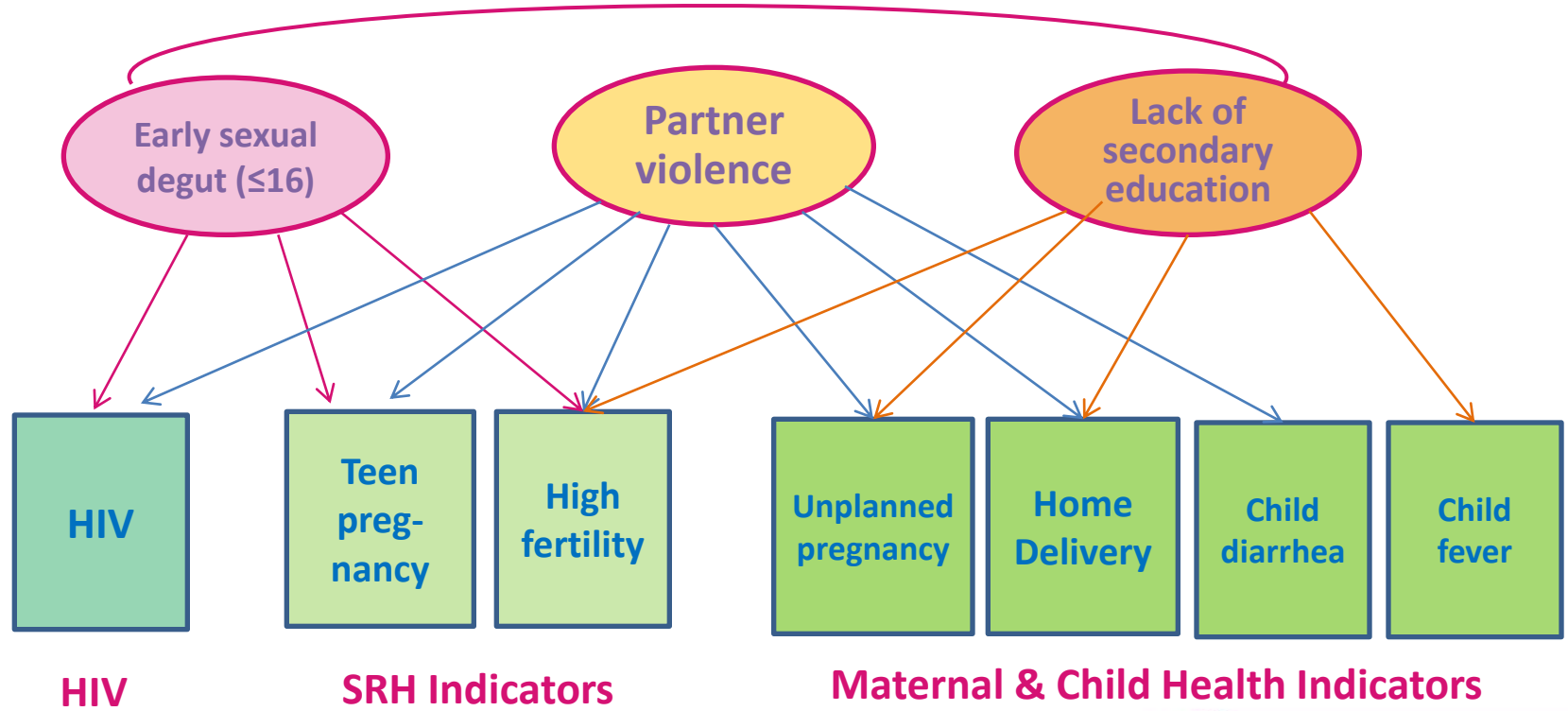


# Evidence of impact: alcohol use



# Capturing the multiple benefits of intervening “upstream”

## Indicators of Gender Inequality





[View](#)

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## RESEARCH ON STRUCTURAL CHANGE TO PREVENT HIV



Social forces drive the HIV epidemic and block prevention efforts. STRIVE partners investigate how structural factors create vulnerability and what programmes work to tackle them.

### Affiliated projects



#### Phuza Wize

Phuza Wize (or "consume sensibly") is a five-year campaign of STRIVE affiliate, Soul City Health and Development Institute, to reduce alcohol use a

**Drivers:** Alcohol, Gender inequality and violence

**Methods:** Changing social norms



### Latest



### Resources

#### What Works to Prevent Partner Violence? An Evidence Overview

Lori Heise reviews the empirical evidence of what works in low- and middle-income countries to prevent violence against women by their

#### STRIVE on twitter



#### hivdrivers

Unicef's Report Card on #Adolescents 2012, in Indian press. [t.co/uKrMPPhg](http://t.co/uKrMPPhg)

1 day 8 hours ago.

# Measuring HIV stigma and discrimination

TECHNICAL BRIEF  
>> MARCH 2017

Authors: Anne L. Stangl, Laura Brady and Katherine Fritz from the International Center for Research on Women, Washington, DC

This brief is designed to guide researchers to study HIV stigma, either as the main focus or as an add-on. It outlines the key domains of HIV stigma that need to be measured if we are to understand how stigma



**Figure 1. Reducing HIV stigma and discrimination for programme implementation and measurement**

**WHAT WORKS TO PREVENT PARTNER VIOLENCE?**  
An evidence overview

Table 1. Illustrative questions by domain of HIV stigma and discrimination

	GENERAL POPULATION	HEALTHCARE WORKERS*	PEOPLE LIVING WITH HIV** AND KEY POPULATIONS
<b>SOBRIAN</b>			
<b>Fear of infection</b>	Do you fear that you could become infected with HIV if you are exposed to the saliva of a person living with HIV?	How worried are you of becoming infected with HIV from HIV infected patients if you do the following: • Dressed the wounds of a patient living with HIV? Do you typically use any of the following measures when providing care or services for a patient living with HIV? • Avoiding physical contact? How worried are you about assisting in labour and delivery if: • The woman is HIV positive? • The woman's HIV status is unknown?	Not applicable.
<b>Shame</b>	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV	Do you agree or disagree with the following statement: • People with HIV should feel ashamed of themselves • I would be ashamed if I were infected with HIV	Do you agree or disagree with the following statement: People think that having HIV is shameful and they should not be associated with me
<b>Structural drivers and facilitators</b>	Further development needed. Currently national governments have to report whether they have an anti-discrimination policy and whether they have incorporated stigma into their national plans for addressing HIV.	My health facility has policies to protect HIV-positive patients from discrimination.	Have you heard of (insert the best-known national law/policy or set of guidelines from your country, which protect the rights of people living with HIV in this country)? If yes, have you ever read or discussed the content of this law/policy/set of guidelines?
<b>Anticipated stigma</b>	In your opinion, are people hesitant to take an HIV test due to fear of people's reaction if the test result is positive for HIV?	In your opinion, are healthcare workers hesitant to take an HIV test due to fear of people's reaction if the test result is positive result?	In the last 12 months, have you been fearful of any of the following things happening to you – whether or not they actually have happened to you? • Being gossiped about • Being verbally insulted, harassed and/or threatened • Being physically harassed and/or threatened • Being physically assaulted
<b>Internalized stigma</b>	Not applicable.	Not applicable.	In the last 12 months, have you experienced any of the following feelings because of your HIV status? • I feel ashamed • I feel guilty • I blame myself • I blame others • I have low self-esteem • I feel I should be punished • I feel suicidal

\* These questions are currently being piloted by HIV partners and are thus illustrative of a project.  
\*\* These questions are currently collected in the People Living with HIV Stigma Index tool ([www.stigindex.org](http://www.stigindex.org)).  
† Just one example is provided here; a complete questionnaire would list several different patient care scenarios.  
‡ Just one example is provided here; a complete questionnaire would list several different situations.

	GENERAL POPULATION	HEALTHCARE WORKERS*	PEOPLE LIVING WITH HIV** AND KEY POPULATIONS
<b>SOBRIAN</b>			
<b>Perceived stigma</b>	Are people living with or thought to be living with HIV gossiped about, teased, insulted or sworn at? Do people living with or thought to be living with HIV in your community lose respect or standing?	In the past 12 months, how often have you observed the following in your health facility? • Healthcare workers talking badly about people living with or thought to be living with HIV	See parallel questions under stigma*
<b>Experienced stigma (outside legal purview)</b>	Would you buy fresh vegetables from a shopkeeper or vendor if you know that this person had HIV?	In the past 12 months, how often have you: • Experienced people talking badly about you because you care for patients living with HIV • Been avoided by friends and family because you care for patients living with HIV • Been avoided by colleagues because of your work caring for patients with HIV • Been assumed to be HIV-positive because of your work for caring with patients living with HIV	In the past 12 months, how often have you experienced stigma outside legal purview?
<b>Discrimination (inside legal purview)</b>	Do you think children living with HIV should be able to attend school with children who are HIV negative? In your opinion, if a female teacher has HIV but is not sick, should she be allowed to continue teaching in the school?	I would never test a patient for HIV without informed consent. To assess key population stigma: I would prefer not to care for... • People who inject drugs • MSM • Sex workers • Transgendered people • Women who have sex with women • Migrants For each of the key populations listed, there is a follow-up question: I strongly agree/disagree because of the following reasons. (Please check all reasons that apply) • They put me at higher risk for disease. • This group engages in immoral behaviour. • I have not received training to work with this group. • I am worried that people will think I am part of this group.	In the last 12 months, how often have you been denied health services, including dental care, because of your HIV status? Was the decision to be tested for HIV up to you? • Yes, I took the decision myself to be tested (i.e. it was voluntary) • I took the decision to be tested, but it was under pressure from others • I was made to take an HIV test (coercion) • I was tested without my knowledge • I only found out after the test had been done To assess key population stigma: If you experienced stigma and/or discrimination for reasons other than your HIV status, please choose one category that best explains why you felt you were stigmatized and/or discriminated against: • Sexual orientation (MSM, gay or lesbian, transgender) • Sex worker • Injecting drug user • Refugee or asylum seeker • Internally displaced person • Member of an indigenous group • Migrant worker • Prisoner • None of the above – (other) reason(s)
<b>Resilience</b>	Not applicable.	Not applicable.	Measures need to be developed and tested.

\* This is one example of experienced stigma that people living with HIV may experience. The People Living with HIV Stigma Index asks about a number of additional types of experienced stigma.



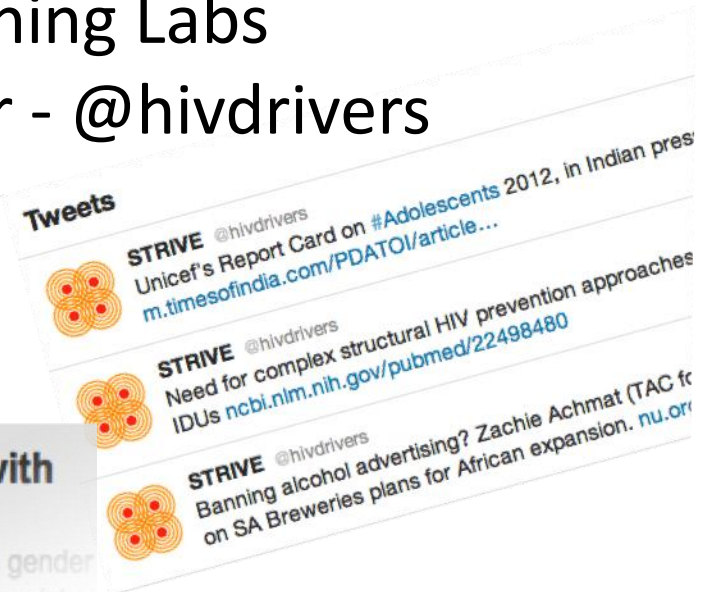
# Visit us at [strive.lshtm.ac.uk](http://strive.lshtm.ac.uk)



STRIVE Digest

STRIVE Learning Labs

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## Learning Lab 7. Work on Gender Norms with Adolescents in India, by Nandita Bhatla

The International Center for Research on Women transforms gender norms through a school-based curriculum (GEMS), and trains crick  
11 views

 Striveconsortium uploaded

