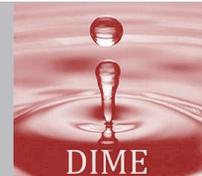


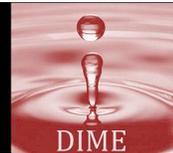
Arianna Legovini  
 Development Impact Evaluation Initiative (DIME)  
 World Bank

## What some of the evidence on HIV prevention says



## The Heat of the Moment...

Ariely and Loewenstein (2005)



Question	Response from non-aroused (%)	Response from aroused (%)
Can you imagine ...being attracted to a 12 year old?	23	46
...having sex with a 60 year old woman?	7	23
Is just kissing frustrating?	41	69
A condom decreases sexual pleasure	66	78
Would you always use a condom if you did not know the sexual history of the partner?	88	69
Would you use a condom even if you were afraid that the woman might change her mind while you went to get it?	86	60

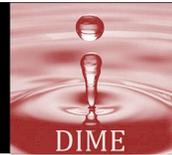
## Transactional sex as a response to risk... Robinson and Ye (2008)



Impact of family illness on self reported sex worker behavior

Behavior	Change in the probability of behavior (%) on days in which a family member falls ill
See a client	3.2
Have anal sex	21.7
Have unprotected sex	20.6

## Open questions



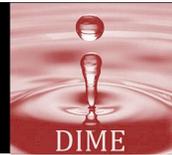
- Do we understand why people do the things they do?
- Prevention in HIV/AIDS is predicated on knowing the right answer
- Do people do what they know is "right"?
- Do we need to rethink how prevention work if knowledge alone is not enough?

## If knowledge might not be enough...



- Contingent transfers
  - Scholarships to stay in school in Kenya, Malawi
  - Cash transfers conditional on staying HIV negative in Tanzania...pending results
  - Health insurance for sex workers?...
  
- Precommitment strategies
  - Legislating condoms in hotel rooms (Eritrea)
  - Abstinence?
  - Carrying condoms?

## What has been tested



- Communication strategies
  - Social mobilization versus peer-to-peer in Senegal
  - School-based communication in Kenya
- Contingent transfers
  - Conditional in-kind transfers in Kenya
  - Conditional cash transfers in Malawi
- Medical
  - Circumcision in Kenya, South Africa and Uganda

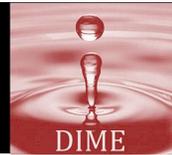
## Senegal communication: peer-to-peer vs. traditional social mobilization



- Experimental design
- Routine administrative data from health districts
- Impact of funding community-based organizations to increase voluntary testing & counseling and modify behavior of HIV-positive individuals.
- Two treatment groups:
  - HIV/AIDS sensitization using traditional social mobilization techniques,
  - New peer-mentoring mechanism
- Control: health districts received no funding.

## Senegal results

Sakho, Arcand 2010



- Peer mentoring doubles the number of individuals who get tested, take pre-test counseling and collect test results
- Traditional social mobilization is ineffective
- Both increase the number of partners of HIV-positive individuals who get tested
- Traditional social mobilization is more effective than that of peer-mentoring at that
- Both significantly increase the number of HIV-positive individuals who follow post-test counseling

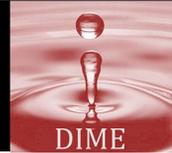
## Kenya: school based HIV prevention

Duflo (2006), Duflo, Dupas, Kremer, Sinei (2006), Dupas (2009)



1. School curriculum focused on “risk avoidance” (i.e. abstinence before marriage, no condoms); all students receive HIV/AIDS education
2. HIV active learning: student debates and essay competition
3. Reduce costs of staying in school: uniform provision (\$6 per student)
4. Relative risk campaign:
  - Students shown HIV prevalence in Kenya, disaggregated by age and gender
  - Screening of “Sarah, the Trap” warning about the dangers of “Sugar Daddies”
  - Group discussion about cross-generational sex

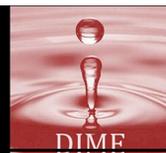
## Prevalence Aggregated by Age



Age	15-19	20-24	25-29	30-39
Female	22%	36%	35%	32%
Male	4%	13%	28%	32%

Theory of Intervention: Girls will calculate the trade-off their partners' wealth, and their risk of infection.

## Kenya results



Teacher Training	No impact on childbearing incidence Improves students' HIV knowledge If pregnant, more likely to be married
Critical Thinking	Increased knowledge & self-reported condom use No change in self-reported sexual activity
Cost reduction	Reduced dropout rates by 17% (boys), 14% (girls) Reduced teen marriage by 9% for girls Reduced childbearing by 12%
Relative Risks	28% decrease in incidence of childbearing More self-reported sexual activity amongst boys No increase in pregnancy among teenage couples 61% fewer cross-generational pregnancies

## Malawi: Conditional Cash Transfers

Baird, Chirwa, McIntosh and Ozler (2009)



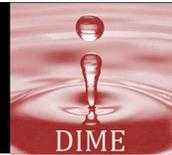
- Zomba Cash Transfer Program is a randomized, ongoing conditional cash transfer intervention
- Targeting young women in Malawi
- \$10/month incentives in the form of school fees and cash transfers to schoolgirls and recent dropouts to stay in or return to school

## Malawi results: CCT reduce sexual activity, teen pregnancy, and early marriage



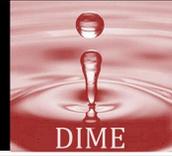
- Lower early marriage teenage pregnancy
- Lower self-reported sexual activity
- For the out of school at baseline
  - 40% lower probability of getting married
  - 30% lower probability of pregnancy
- 38% lower incidence of the onset of sexual activity

## Kenya in-kind transfers



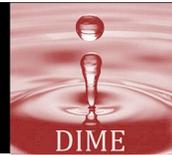
- Reduce costs of staying in school: uniform provision (\$6 per student)
- Results
  - Reduced dropout rates by 17% (boys), 14% (girls)
  - Reduced teen marriage by 9% for girls
  - Reduced childbearing by 12%

## Male circumcision



- Adult, HIV-negative heterosexual male volunteers are assigned at random to either:
  - Circumcision performed by trained medical professionals in a clinic setting) or
  - Delayed circumcision
- All participants were extensively counseled in HIV prevention and risk reduction techniques.

## Male circumcision results

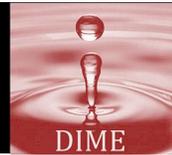


- South Africa
  - 3,274 uncircumcised men, aged 18-24 yr
  - **60%** reduction of HIV acquisition (20 men in the treatment vs. 49 in the control)
  - Risky sexual behavior increased in the circumcised group
- Kisumu, Kenya
  - 2,784 HIV-negative men
  - **53%** reduction of HIV acquisition
- Rakai, Uganda
  - 4,996 HIV-negative men
  - **48%** reduction of HIV acquisition

## Conclusions



- Contingent transfer are effective
- Need to get communication right
- Circumcision is most effective at lowering transmission



Thank You