CAN MONEY REDUCE HIV RISK??

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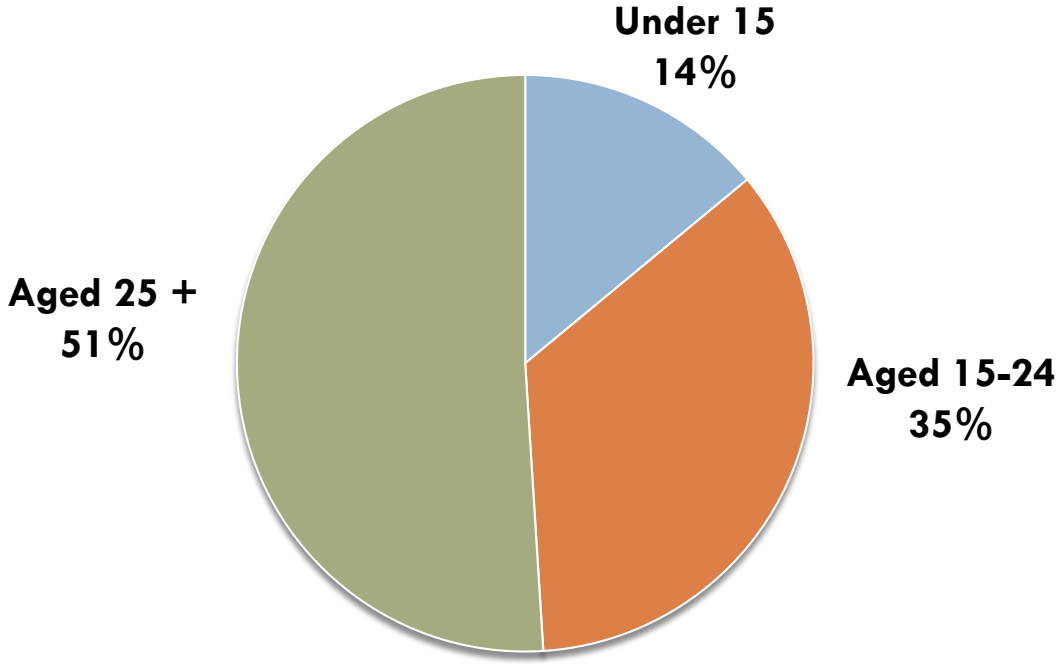
Overview

- Epidemiology of HIV in young people
- Rationale behind cash transfers
- Review completed and current studies that provide cash to to reduce HIV risk

Young people are at high risk

Young People as Percent of Global Number of New HIV Infections, 2009

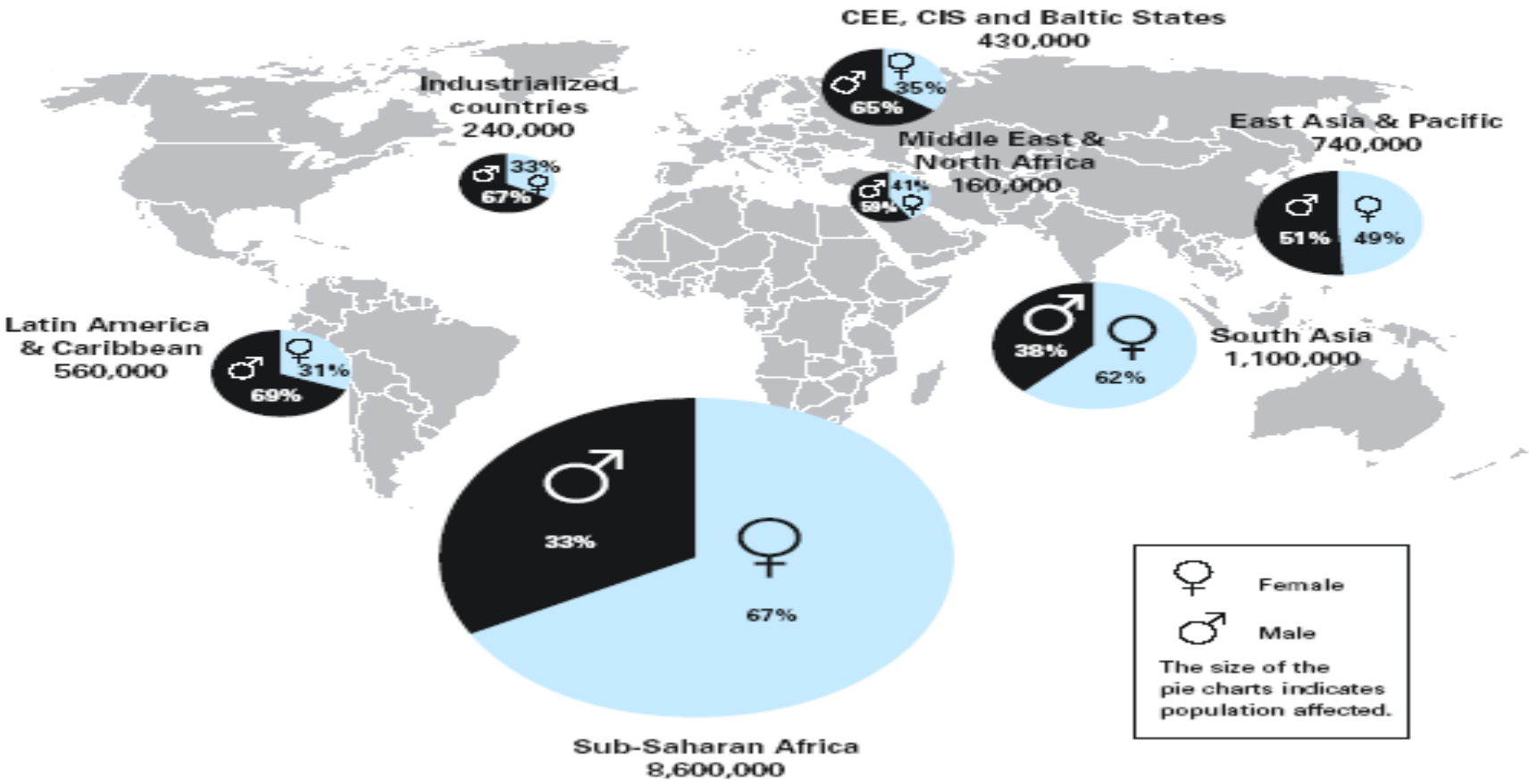


New Infections = 2.6 million

NOTE: Calculations are estimates.
SOURCE: Kaiser Family Foundation calculations based on UNAIDS, *Core Slides: Report on Global AIDS Epidemic,* 2010.

11.8 MILLION YOUNG PEOPLE (AGED 15-24) LIVING WITH HIV/AIDS

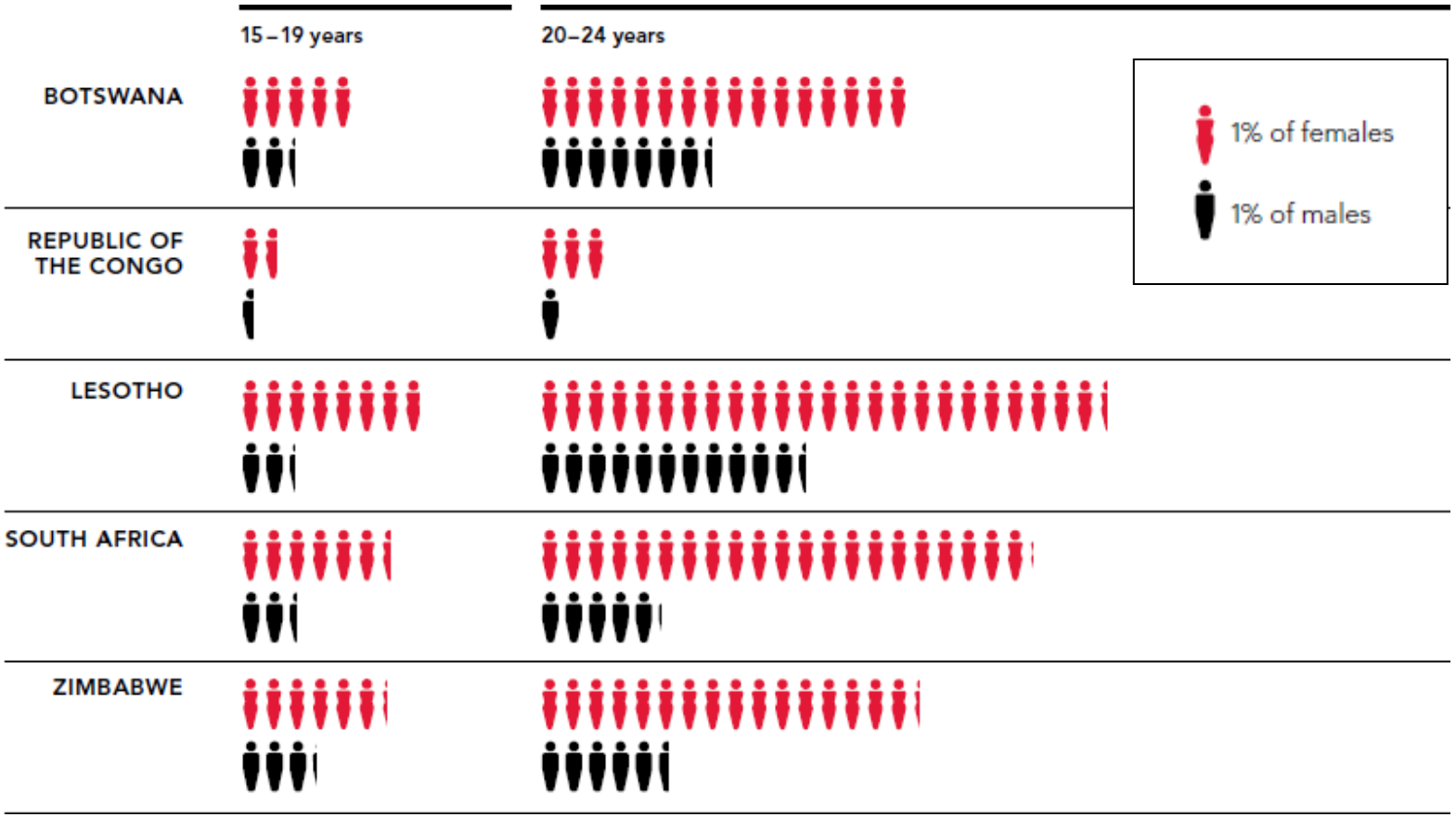
7.3 million young women and 4.5 million young men



Note: This map does not reflect a position by UNICEF, WHO or UNAIDS on the legal status of any country or territory or the delimitation of any frontiers.

Source: UNAIDS/UNICEF, 2001.

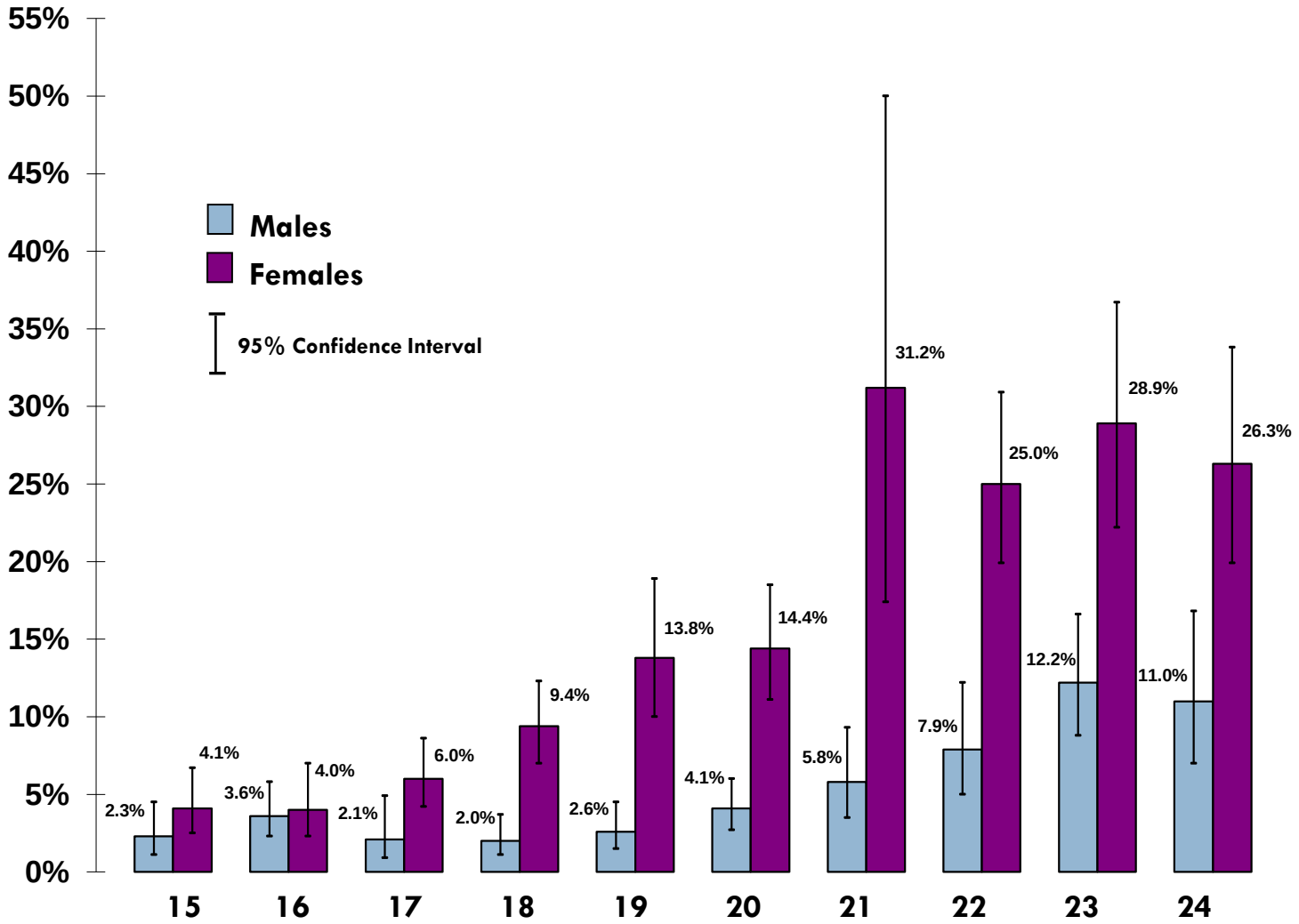
Gender inequity is large in SSA



HIV Prevalence among Young People (age 15-24) in sub-Saharan Africa

SOURCE: UNAIDS, Human Rights and Gender Equality. Global Report, 2010.

HIV prevalence by age and gender among South Africans age 15-24



SOURCE: Pettifor A, et al. AIDS 2005, 19: 1525-1534.

Adolescent HIV in the U.S.

Estimated New HIV Infections in US (2006)

Age Group	Black/ African American		Hispanic/Latino		White	
Male	No.	%	No.	%	No.	%
13-29	6,760	42	3,010	41	4,050	25
30-39	4,170	26	2,520	34	5,600	34
40-49	3,680	23	1,410	19	4,640	29
≥50	1,510	9	480	6	1,980	12
Female						
13-29	2,810	32	820	36	1,050	32
30-39	2,670	30	720	31	1,060	32
40-49	2,360	27	440	19	840	25
≥50	960	11	320	14	360	11

Note: Data have been adjusted for reporting delay. Data presented on blacks/African Americans, Hispanics/Latinos and whites only.

SOURCE: CDC, HIV Incidence, 2006.

High risk behaviors not observed

- We found that young South African women do not report engaging in “high risk” sexual activity, despite the incredibly high incidence and prevalence of HIV among young women.
- Structural produce strong and consistent associations with HIV risk in young women.
- Few interventions have addressed structural barriers or rigorously evaluated them.

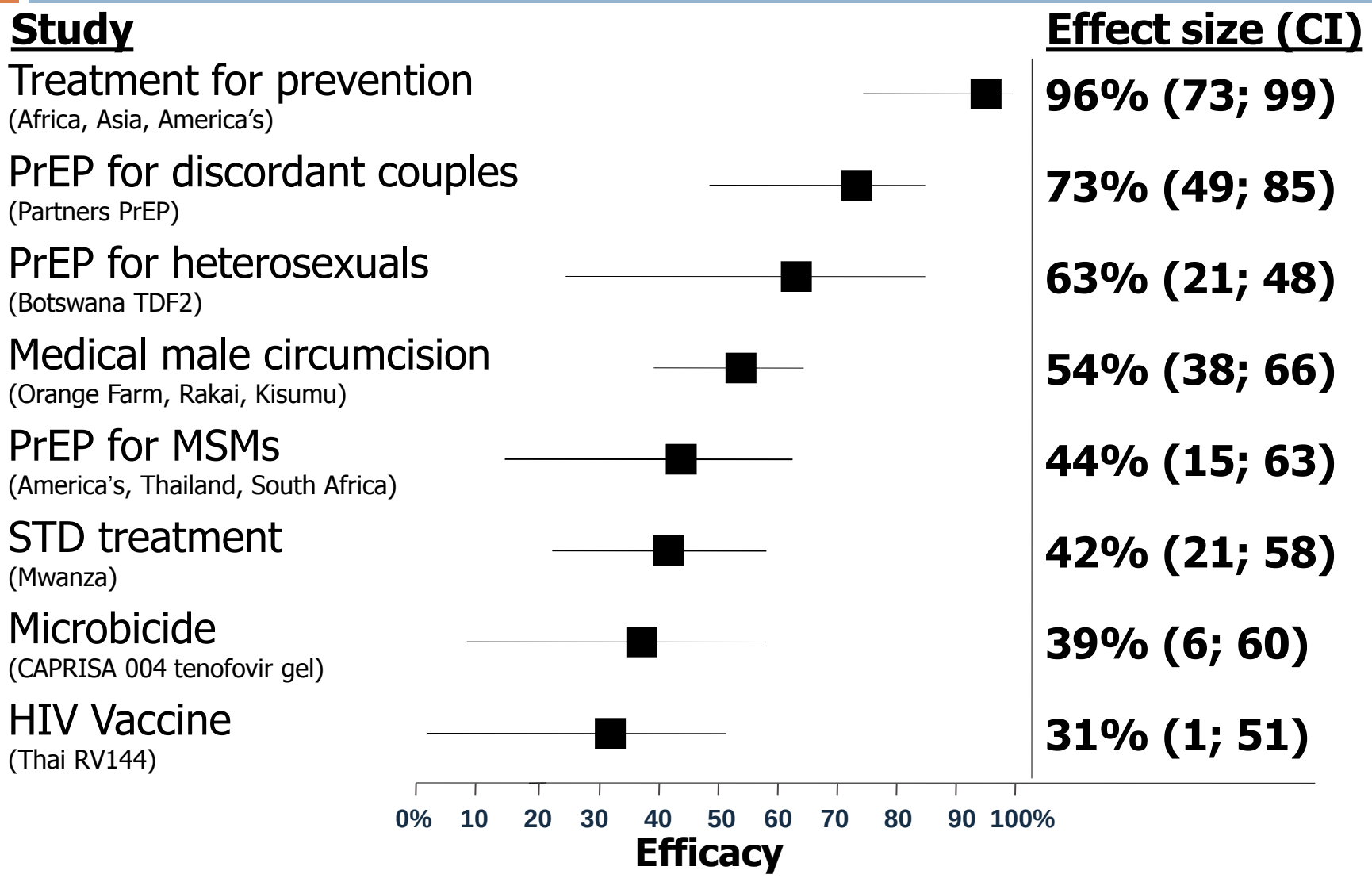
Table 1: Randomised controlled trials of HIV prevention with HIV incidence as an outcome for sexual transmission

Intervention	Individual or cluster randomization	RCTs completed or stopped	RCTs showing efficacy	RCTs ongoing
Behavior change (abstinence/delay,	Individual	2 [3,24]	0	0
	Cluster	5 [15,25-28]	0	2 [29,30]
Male Circumcision	Individual	4 [1] [5-7,31]	3 [5-7]	0
Microbicides	Individual	9 [32-40]	0	3 [41-43]
Oral pre-exposure prophylaxis (PrEP)	Individual	1 [35]	0	4 [44-47]
HIV Treatment	Individual	0	0	1 [48]
STI Treatment	Individual	3 [1,2,14]	0	1 [49]
	Cluster	4 [8,15,16,50]	1 [8]	0
HIV Vaccines	Individual	4 [4,51-53]	0	1 [54]
All Interventions		**31**[2]	**4**	**12**

[1] The trial which did not show efficacy was of the impact of male circumcision on female HIV acquisition
[2] Total = 31 trials because study [15] is shown twice, under behavior change and STI treatment

Wassserheit July 2008

Clinical trial evidence for preventing sexual HIV transmission – 14 July 2011



Few successes in HIV prevention

- Biomedical interventions show promise however they will require behavioral and structural changes to work
- What role do incentives and cash play in the prevention landscape?

Cash to prevent HIV Infection

- 2 main approaches to the issue
  - Upstream-- Cash for poverty alleviation which aims to reduce HIV risk
  - Cash as an incentive for behavior change (ie, money to test for HIV, for negative STI tests, to take your ART)
- Will both approaches work the same in different populations?
- What is the implication for scale up of both approaches?

Cash Transfers to keep young women in school

- In Mexico, the Oportundides program, which provides conditional cash transfers to poor families to send their children to school, has found that the program increases school enrollment, particularly for girls (Schultz T IFPRI 2000)
- Children in South African households that receive government social welfare grants are more likely to attend school and the observed effects are greater for young women than young men (Samson M et al. 2004)
  - the greatest benefit of social welfare grants on educational outcomes appears to be for young women from the poorest households

Education and HIV: protection or risk?

- Data from early in the epidemic suggested that more education was associated with increased risk of HIV infection
- Two recent reviews on HIV and education indicate a protective association between higher education and HIV infection, particularly as epidemics mature (Hargreaves et al. AIDS 2008, Jukes et al. AIDS 2008)

Barriers to Education

- Costs associated with school are a major barrier
- In South Africa, 65% of young people who were not in school indicated that they did not have enough money to continue their education
  - Hidden costs: uniforms, books/supplies, transport, food, etc.
- Young women are often taken out of school to find employment to support the family or to care for children or sick family members.
- Family commitments cited as barrier by 9% of non-school attending South African females, as opposed to <1% of non-attending males

Samson M et al. The social and economic impact of South Africa's social security system. 2004

Why target girls?

- HIV incidence highest in young women
- Barriers to school attendance and drop out appear greater for girls than boys
- Observed effects on education and HIV are greater for girls than boys
- Programs that have reduced barriers to education have had greater effects for girls than boys

Evidence on CTs and HIV prevention

- To date we have identified 14 studies that are using cash transfers or incentives and are examining the impact on HIV risk reduction
- The majority are focused in SSA and in young people
- The majority are focused on upstream factors (ie, poverty alleviation)
- Seems to be growth of interventions aimed on downstream factors (ie, incentives for testing)

CT Evidence Type 1

- Evaluation of existing government Cash Transfer programs on HIV risk behaviors
  - Handa R01- Kenya OVC study

Current Evidence; Type 1 (study)

- **Schooling Income and HIV Risk (SIHR) – Malawi**
  - PI: Berk Ozler (World Bank), Sarah Baird (GWU), and Craig McIntosh (UCSD)
  - Overview: 176 enumeration areas in Zomba (3796 girls ages 13-22 years, not married). 3 "arms": conditional cash transfers, unconditional transfers, control. Amount to parent varied from USD 4-10 per month. Amount to girl varied from USD 1-5 per month.
  - Results: Higher rates of school enrollment after 1 year (95% in intervention vs. 89% in control); lower rates of HIV prevalence after 18 months (1.2% in intervention vs. 3% in control); lower rates of HSV-2 infection after 18 months (0.7% in intervention vs. 3% in control); younger sexual partners (2 year difference in intervention vs. 3 year in control)
  - No difference between conditional and unconditional arm. Change in partnership characteristics appeared to drive reduction in risk.

Baird SJ, Garfein RS, McIntosh CT, Ozler B. Lancet. 2012 Feb 14. [Epub ahead of print]

Ongoing Studies- Type 1 (2)

- **HPTN 068, Swa Koteka – South Africa**
  - PI: Audrey Pettifor (UNC), Catherine MacPhail (WRHI), Kathleen Kahn (AHPU)
  - Overview: RCT to examine effect of cash transfer conditional on school attendance. Young women ages13-20 years old (grades 9-11) and their parent guardian each receive a monthly payment. Primary endpoint is HIV and HSV-2 incidence in young women.
- **Reducing HIV in Adolescents (CAPRISA 007) – South Africa**
  - PI: Quarraisha Abdool Karim (CAPRISA)
  - Overview: RCT. Cash transfers to boys and girls, school based. Incentives for school performance, HIV testing, etc. Primary endpoint HIV incidence.


ADULT/PARENT
CONSENT
ENGLISH
18 YEARS OR
OLDER CONSENT
COVER
18 YEARS OR
YOUNGER
CONSENT COVER


vodacom

Evidence Type 2

- PI: Damian deWalque (World Bank), Will Dow
- Overview: Unblinded, individually randomized trial. 2399 participants 18-30 randomized to control arm or one of tow intervention arms- low value CCT ($10 per testing round) or high value CCT ($20 per testing round). Participants tested every 4 months over 12 month period for common STIs. CCT tied to negative STI tests.
- Results: At the end of 12 months, for combined prevalence of 4 STIs (CT, NG, TV and M genitalium) RR for high value CCT was 0.73 (95% CI 0.47-0.99.) No significant reduction observed for the low value CCT. No impact of either observed at month 4 or 8 month.

de Walque D, et al. BMJ Open. 2012 Feb 8;2:e000747. Print 2012

Summary

- Cash transfers are increasingly being used and tested in the field of HIV prevention and care
- Different approaches to these programs (upstream vs downstream)
- Stay tuned for effects of programs on HIV incidence