the new Bonnie and Clyde of HIV-prevention?’

Lucie Cluver, Mark Orkin, Mark Boyes, Lorraine Sherr
UNICEF 2013: Eastern & Southern Africa

- 2005-2012: AIDS-deaths in adolescents rose 50%
- 2012: 160,000 new adolescent infections
- 66% of adolescent HIV infections were in girls.
- 1.3 million HIV+ adolescents
Effectiveness of HIV prevention for youth in sub-Saharan Africa: systematic review and meta-analysis of randomized and nonrandomized trials

Kristien Michielsen\textsuperscript{a,b}, Matthew F. Chersich\textsuperscript{a,c}, Stanley Luchters\textsuperscript{a}, Petra De Koker\textsuperscript{a}, Ronan Van Rossem\textsuperscript{b} and Marleen Temmerman\textsuperscript{a}

‘Thirty-one studies….No positive effects on sexual behavior were detected and condom use at last sex only increased among males (relative risk = 1.46; 95\% confidence interval = 1.31-1.64. One study reported a reduction in herpes simplex virus-2, but not HIV-incidence.’
Collaborative research: science to assist policy
National longitudinal study of adolescents
6850 adolescents, 2500 adult caregivers, 2008-2012

Longitudinal national survey
- Main study: N=6000 (age: 10-18)
- 3 provinces South Africa; 6 sites >30% prevalence
- Stratified random sampling of census EAs
- Every household with a child aged 10-17
- Urban/rural, 1 year follow-up in 2 provinces
- n=3401, 97% follow-up

Measures
- Standardised scales, national surveys

Ethics
- Approved by University of Cape Town, Oxford, KwaZulu-Natal, Province Health & Education D
- Social & health service referrals
TEEN TALK SOUTH AFRICA

Whatever you say is confidential. This means we will not report your real name.

Please write your name here:

........................................

Now, please think of a different name which we can use when we are writing about this research. You can pick any name you want!

........................................

Questionnaire number: ................. Boy/Girl
Place of interview: ...........................
School/org: .............................. Grade: ........
ID number: ..............................
Interviewer: .............................. Date: ........
Enumeration Area Number: ..........................
GPS longitude (E): ........
GPS latitude (S): ........

Would you mind if we contacted you again? Please write your address and telephone number so we can get back in touch:

Address: ..............................
Telephone: ..............................

Privacy code: ..............................

EMIS #: ..............................

Thank you for taking the time to help. This is not a test. There are no right or wrong answers! This research aims to help young people in South Africa.

Have you ever had sex? ....... Yes ....... No

If your answer is ‘No’, do not fill in the rest of this page. Go on to the next page!

How old were you the first time you had sex? Write down the age: ...........

How many people have you had sex with in the past year? Write down the number: ............

Of these people in the past year, write down how many of them were:
............... your main boyfriend/girlfriend, or a husband/wife?
............... someone who wasn’t your main partner, but you had sex with quite regularly?
............... a casual partner like a one-night stand?
............... someone you paid to have sex with?

Have you ever had sex with someone when you didn’t want to because they hurt you, or you were afraid that they were going to hurt you if you didn’t?
............... Yes ........... No

Have you ever had sex when you were drunk?
............... Yes ........... No

Have you ever had sex when you were high on a drug like tik, dagga or anything else?
............... Yes ........... No

People have sex for lots of different reasons and for different benefits. Sometimes, people give presents to the person they are having sex with. Have you had any of the following presents given to you because you had sex with someone? Circle which ones:

Money
Clothes
Cellphone airtime
A place to stay
Lifts in a car/taxi
Better marks at school
School fees
Food
Anything else

HIV can be spread when people have sex. What do you think your chances of getting HIV/AIDS are?
............... no chance at all
............... a little chance
............... pretty much 50/50
............... a very big chance
............... I have been tested in the past 3 months and know my status
............... I don’t know what HIV/AIDS is

Quickly write down any things you think a person can do to avoid getting HIV, the virus that causes AIDS.

Have you ever heard of HIV/AIDS?
............... Yes ........... No

Do you have any children? Please write their ages:

Have you ever been pregnant or made someone pregnant?
............... Yes ........... No

How often did you use condoms?
............... always
............... more than half the time
............... half the time
............... less than half the time
............... never

Have you ever had sex in the past year, how often did you use condoms?
............... always
............... more than half the time
............... half the time
............... less than half the time
............... never

Has anyone that you’ve had sex with been more than 5 years older than you?
............... Yes ........... No

If you have had sex in the past year, how often did you use condoms?
............... always
............... more than half the time
............... half the time
............... less than half the time
............... never

How many people have you had sex with in the past year?

Have you ever had sex when you were drunk?

Have you ever had sex when you were high on a drug like tik, dagga or anything else?

Have you ever had sex when you were young and your parents/will find out?

Have you ever had sex with someone when you didn’t want to because they hurt you, or you were afraid that they were going to hurt you if you didn’t?

Have you ever had sex when you were drunk?

Have you ever had sex when you were high on a drug like tik, dagga or anything else?

If you have had sex in the past year, how often did you use condoms?

Have you ever heard of HIV/AIDS?

Do you have any children? Please write their ages:

Have you ever been pregnant or made someone pregnant?

How often did you use condoms?

Have you ever had sex in the past year, how often did you use condoms?

Has anyone that you’ve had sex with been more than 5 years older than you?

If you have had sex in the past year, how often did you use condoms?

Has anyone that you’ve had sex with been more than 5 years older than you?

If you have had sex in the past year, how often did you use condoms?

Have you ever heard of HIV/AIDS?

Do you have any children? Please write their ages:

Have you ever been pregnant or made someone pregnant?

How often did you use condoms?
Parental HIV/AIDS predicts food insecurity

% children with insufficient food >2 days in past week

- Healthy caregiver: 13.8%
- Other-orphan: 16%
- Other-sick caregiver: 14.2%
- AIDS-orphan: 22.9%
- AIDS-sick caregiver: 32%
- AIDS-dual affected: 36.5%

Effects of abuse, poverty & parental AIDS on female adolescent risk of transactional sex

Cluver, Orkin, Boyes, Meinck, Makhasi (2011). JAIDS
Pathways to HIV-risk

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Pathways to HIV-risk

Pathways to HIV-risk

Pathways to HIV-risk

AIDS-orphan

- Poverty
  - Stigma
  - Abuse
  - Psych. distress
  - HIV RISK BEHAVIOUR

AIDS-sick parent

- Education risks

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CASH INCENTIVES?
Incentivising safe sex: a randomised trial of conditional cash transfers for HIV and sexually transmitted infection prevention in rural Tanzania

Damien de Walque,1 William H Dow,2 Rose Nathan,3 Ramadhani Abdul,4 Faraji Abilahi,4 Erick Gong,5 Zachary Isdahl,6 Julian Jamison,7 Boniphace Jullu,4 Suneeta Krishnan,8 Albert Majura,4 Edward Miguel,6 Jeanne Moncada,9 Sally Mtenga,3 Mathew Alexander Mwanyangala,4 Laura Packel,10 Julius Schachter,9 Kizito Shirima,3 Carol A Medlin11

ABSTRACT

Objective: The authors evaluated the use of conditional cash transfers as an HIV and sexually transmitted infection prevention strategy to incentivise safe sex.

Design: An unblinded, individually randomised and controlled trial.

Setting: 10 villages within the Kilombero/Ulanga districts of the Ifakara Health and Demographic Surveillance System in rural south-west Tanzania.


Existing prevention strategies have had a limited impact on the trajectory of the HIV/AIDS epidemic.

Conditional cash transfers have been used successfully in a variety of settings to promote activities that are beneficial to the participants.
Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: a cluster randomised trial

Sarah J Baird, Richard S Garfein, Craig T McIntosh, Berk Özler

Summary

Background Lack of education and an economic dependence on men are often suggested as important risk factors for HIV infection in women. We assessed the efficacy of a cash transfer programme to reduce the risk of sexually transmitted infections in young women.

Methods In this cluster randomised trial, never-married women aged 13–22 years were recruited from 176 enumeration areas in the Zomba district of Malawi and randomly assigned with computer-generated random numbers by enumeration area (1:1) to receive cash payments (intervention group) or nothing (control group). Intervention enumeration areas were further randomly assigned with computer-generated random numbers to conditional (school attendance required to receive payment) and unconditional (no requirements to receive payment) groups. Participants in both intervention groups were randomly assigned by a lottery to receive monthly payments ranging from US$1 to $5, while their parents were independently assigned with computer-generated random numbers to receive $4–10. Behavioural risk assessments were done at baseline and 12 months; serology was tested at 18 months. Participants were not masked to treatment status but counsellors doing the serologic testing were. The primary outcomes were prevalence of HIV and herpes simplex virus 2 (HSV-2) at 18 months and were assessed by intention-to-treat analyses. The trial is registered, number NCT01333826.

Findings 88 enumeration areas were assigned to receive the intervention and 88 as controls. For the 1289 individuals enrolled in school at baseline with complete interview and biomarker data, weighted HIV prevalence at 18 month follow-up was 1·2% (seven of 490 participants) in the combined intervention group versus 3·0% (17 of 799 participants) in the control group (adjusted odds ratio [OR] 0·36, 95% CI 0·14–0·91); weighted HSV-2 prevalence was 0·7% (five of 488 participants) versus 3·0% (27 of 796 participants; adjusted OR 0·24, 0·09–0·65). In the intervention group, we noted no difference between conditional versus unconditional intervention groups for weighted HIV prevalence (3/235 [1%] vs 4/255 [2%]) or weighted HSV-2 prevalence (4/233 [1%] vs 1/255 [<1%]). For individuals who had already dropped out of school at baseline, we detected no significant difference between intervention and control groups for weighted HIV prevalence (22/210 [10%] vs 17/207 [8%]) or weighted HSV-2 prevalence.
UNCONDITIONAL GOVERNMENT CASH TRANSFERS?
Longitudinal propensity score matching with .20 SD caliper, nearest-neighbor-matching & matching without replacement

- Age of child
- Gender of child
- Urban/rural location (baseline)
- Informal housing (baseline)
- Household assets (baseline)
- Household unemployment (baseline)
- Positive parenting (baseline)
- Parental discipline (baseline)
- Parental monitoring (baseline)
- Family support (baseline)
- Number of moves between homes (baseline)
- Biological/non-biological primary caregiver (baseline)
- Female/male primary caregiver (baseline)
- Maternal orphan (baseline)
- Paternal orphan (baseline)
- Urban/rural location (follow-up)
- Informal housing (follow-up)
- Household assets (follow-up)
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### Table 3: Multivariate logistic regression of risky sexual behaviour in the past year for all potential covariates

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National, state-run cash transfers reduce incidence and prevalence of *transactional sex* for girls

% Incidence of transactional sex

(OR .49 CI .26-.93*)

![Graph showing incidence of transactional sex for 12-14 and 15-17 years old with and without cash transfers.](image)

National, state-run cash transfers reduce incidence and prevalence of *age-disparate sex* for girls

% Incidence of age-disparate sex  
(OR .29 CI .13-.67**)

The Government of Kenya’s Cash Transfer Program Reduces the Risk of Sexual Debut among Young People Age 15-25

Sudhanshu Handa¹*, Carolyn Tucker Halpern², Audrey Pettifor³, Harsha Thirumurthy⁴

¹ Carolina Population Center and Department of Public Policy, University of North Carolina, Chapel Hill, North Carolina, United States of America, ² Carolina Population Center and Department of Maternal and Child Health, Gillings School of Global Public Health, University of North Carolina, Chapel Hill, North Carolina, United States of America, ³ Carolina Population Center and Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina, Chapel Hill, North Carolina, United States of America, ⁴ Carolina Population Center and Department of Health Policy and Management, Gillings School of Global Public Health, University of North Carolina, Chapel Hill, North Carolina, United States of America

Abstract

The aim of this study is to assess whether the Government of Kenya’s Cash Transfer for Orphans and Vulnerable Children (Kenya CT-OVC) can reduce the risk of HIV among young people by postponing sexual debut. The program provides an unconditional transfer of US$20 per month directly to the main caregiver in the household. An evaluation of the program was implemented in 2007–2009 in seven districts. Fourteen Locations were randomly assigned to receive the program and fourteen were assigned to a control arm. A sample of households was enrolled in the evaluation in 2007. We revisited these households in 2011 and collected information on sexual activity among individuals between 15–25 years of age. We used logistic regression, adjusted for the respondent’s age, sex and relationship to caregiver, the age, sex and schooling of the caregiver and whether or not the household lived in Nairobi at baseline, to compare rates of sexual debut among young people living in program households with those living in control households who had not yet entered the program. Our results, adjusted for these covariates, show that the program reduced the odds of sexual debut by 31 percent. There were no statistically significant effects on secondary outcomes of behavioral risk such as condom use, number of partners and transactional sex. Since the CT-OVC provides cash to the caregiver and not to the child, and there are no explicit conditions associated with receipt, these impacts are indirect, and may have been achieved by keeping young people in school. Our results suggest that large-scale national social cash transfer programs with poverty alleviation objectives may have potential positive spillover benefits in terms of reducing HIV risk among young people in Eastern and Southern Africa.
CAN WE MAXIMISE EFFECTS OF ECONOMIC STRENGTHENING?
Adverse childhood experiences predict sexual risk behavior (US CDC)

Effect of Economic Assets on Sexual Risk-Taking Intentions Among Orphaned Adolescents in Uganda

Fred M. Ssewamala, PhD, Chang-Keun Han, PhD, Torsten B. Neilands, PhD, Leyla Ismayilova, PhD, and Elizabeth Sperber, BA

Twelve million children worldwide have lost 1 or both parents as a result of AIDS. Growing up as an orphaned child poses psychosocial and economic challenges to these children and the households raising them. Orphaned children are at an elevated risk for early onset of sexual relations and sexual exploitation, which raises their risk of contracting sexually transmitted diseases, including HIV/AIDS.

Sub-Saharan Africa is 1 of the most economically deprived regions on earth and the epicenter of HIV/AIDS: 63% of all persons infected with the HIV virus reside in this region, and 65% of reported new infections occur there. Orphaned adolescents—especially those in households affected by HIV/AIDS—are at elevated risk of growing up in poverty owing to the loss of at least 1 family provider, and usually the deteriorating health of the second member. Such circumstances not only deprive the family of resources as the result of lost earnings but often imply significant and unique stressors.

Objectives. We examined the effect of economic assets on sexual risk-taking intentions among school-going AIDS-orphaned adolescents in rural Uganda.

Methods. AIDS-orphaned adolescents from 15 comparable schools were randomly assigned to control (n=133) or treatment (n=127) conditions. Treatment participants received child savings accounts, workshops, and mentorship. This economic intervention was in addition to the traditional care and support services for school-going orphaned adolescents (counseling and school supplies) provided to both treatment and control groups. Adolescents in the treatment condition were compared with adolescents in the control condition at baseline and at 10 months after the intervention.

Results. After control for sociodemographic factors, child-caregiver/parental communication, and peer pressure, adolescents in the economic intervention group reported a significant reduction in sexual risk-taking intentions compared with adolescents in the control condition.

Conclusions. The findings indicate that in Uganda, a country devastated by poverty and disease (including HIV/AIDS), having access to economic assets plays an important role in influencing adolescents’ sexual risk-taking intentions. These findings have implications for the care and support of orphaned adolescents, especially in poor African countries devastated by poverty and sexually transmitted diseases. (Am J Public Health. 2010;100:483–488. doi:10.2105/AJPH.2008.158840)
Child-focused grant

Free school uniform

Regular food parcels

Free school meals

Free school transport

Free school transport

Food garden

Home-based carer

Positive parenting

School counsellor

Soup kitchen

Teacher support
Child-focused grant

Free school meals

Food garden

n=3515, longitudinal

Positive parenting

Teacher support
Can combined CASH and CARE reduce incidence of HIV risk behaviors?

- Economic support
- Care & support

- Transactional sex
- Age-disparate sex
- Sex using substances
- Multiple partners
- Unprotected sex
% girls with incidence of 1+ HIV risk behavior:

Cash plus care = halved risk

Cash alone: OR .63
Cash plus care: OR .55

Controlling for: family HIV/AIDS, informal/formal housing, age of child, poverty levels, number of moves of home, baseline HIV risk behaviour

Cluver, Orkin, Boyes, Sherr (in press). *AIDS.*
% boys with incidence of 1+ HIV risk behavior: Cash plus care = halved risk

- Cash alone: no effect
- Cash plus care: OR .50

Controlling for: family HIV/AIDS, informal/formal housing, age of child, poverty levels, number of moves of home, baseline HIV risk behaviour

Cluver, Orkin, Boyes, Sherr (in press). AIDS.
SO CASH & CARE REDUCE HIV RISK BEHAVIORS.

BUT HOW DO THEY WORK?
Pathway from structural deprivation to HIV-risk behavior for adolescents in South Africa

Structural deprivation:
- Poverty
- Informal housing
- Community violence
- Family AIDS

School dropout
Child abuse
Conduct problems
Drug/alcohol use
Psych. distress

HIV-risk behavior incidence

Controlling for:
- Baseline HIV-risk
- Age
- Gender

\( p < .001 \)
\( p < .001 \)
\( p < .001 \)
\( p < .004 \)
\( p < .001 \)
\( p < .001 \)
\( p < .001 \)
\( p < .001 \)
\( p < .002 \)
\( p < .001 \)
\( p < .001 \)
\( p < .05 \)
Cash and care reduce family, school and child-level problems that lead to HIV-risk behavior.

All lines shown are significant \((p<.05-p<.0001)\)

Controlling for:
Baseline HIV-risk
Age, Gender
Interrupted pathway from structural deprivation to HIV-risk behavior incidence for adolescents in South Africa

Structural deprivation: $\rightarrow$ Family, school and psychological problems $\rightarrow$ HIV-risk behavior incidence

CASH $\rightarrow$ Family, school and psychological problems $\rightarrow$ CARE

Controlling for: Baseline HIV-risk, Age, Gender

$p < .001$ throughout the pathway.
Adding economic strengthening to child abuse prevention – advice gratefully accepted!

**Flowchart:**
- **Recruitment**
  - Baseline data collection
    - Random allocation
      - Intervention group
        - Group intervention, ongoing peer support
        - Immediate post-test data collection
        - 1-year follow-up data collection
      - Control wait-list
        - Treatment as usual
'Born free' with HIV

HIV-positive youth in South Africa: Future leaders in ART adherence and sexual health
WHAT DO WE KNOW?
and
RESEARCH GAPS
Unconditional, government cash transfers reduce adolescent HIV risks

Family savings schemes reduce adolescent HIV-risk taking attitudes

Integrated interventions = greater effects

Effective in real-world sub-Saharan Africa
Cash transfers or savings schemes?

Which combinations of cash + care work best?

Which subgroups benefit most/least?

How do we make sustainable programmes?

How do we reach most OVC?

What are barriers to uptake?
Money can’t buy you love?
Funders: thank you.