SOCIAL PROTECTION FOR HIV-POSITIVE ADOLESCENTS

NEW DATA FROM SOUTH AFRICA
INITIAL ANALYSES
E. Toska, L. Sherr, M. Orkin, R. Hodes, L. Cluver, J. Steinert & the Mzantsi Wakho team
ADOLESCENT NON-ADHERENCE

- Southern Africa: 1.6 million HIV+ adolescents
- Lowest-adherent age group (Hudelson 2015, Nachega 2009)
- 3 systematic reviews: no evidence-based programs (Hudelson & Cluver, 2015; MacPherson et al., 2015; Vreeman, Wiehe et al, 2008).
- Could cash + care social protection help?
HIV+ ADOLESCENTS: ADHERENCE AND SEXUAL RISK

Qualitative ethnography (2013-2016, led by Dr R Hodes, UCT)
- N=150 youth, healthcare providers, families
- 24 months of home, school and clinic observations
- 1000+ hours of youth engagement
- Dream clinics & consultations
- Youth Summits, innovative youth-led games

Quantitative longitudinal panel study (2014-2018)
- N=1,526 adolescents, 1060 HIV+, 467 HIV-
- Every adolescent who ever initiated ART in an urban/rural health district of the Eastern Cape: 53 health facilities
- Community-tracing, 3-year longitudinal tracking
- Clinical and interview data, standardised questionnaires
Teen Confidential

Teenagers have different ideas and feelings about sex. Nobuhle often discusses with her boyfriends their thoughts about relationships, pregnancy, and HIV. Nobuhle and his friends sometimes chat about other teens he is attracted to and his ideas about sex.

6. Who is your favourite sports player?

GAME TIME

7. Do you support a team?

8. What are your favourite sports?

9. Which sports are you most like?

10. Why are you like them?
SAMPLE REPRESENTATIVITY
Eastern Cape, urban/rural/peri-urban health district
53 government facilities

- Interviewed 90%
- Refused 4%
- Excluded 1%
- Severe cognitive delay 1%
- Unable to trace 4%
WHO ARE OUR SAMPLE? (n=1526)

- Maternal orphan
- Paternal orphan
- Double orphan
- Lacks basic necessities
- Knows HIV-status
NON-ADHERENCE (n=1060 HIV+ adolescents)

Past-week non-adherence to ART: 36% (self-report)
- Non-adherent: 50%
- Adherent: 50%

Past-weekend non-adherence to ART: 25% (self-report)
- Non-adherent: 30%
- Adherent: 70%

Past-year non-adherence to ART: 52% (self-report)
- Non-adherent: 60%
- Adherent: 40%

Detectable VL (>75 copies/ml: clinic records)
- Detectable: 80%
- Undetectable: 20%
**IS SELF-REPORTED NON-ADHERENCE VALID?**

**Past-week non-adherence - associations with biomarkers**

<table>
<thead>
<tr>
<th>Current opportunistic infections</th>
<th>B.269 p&lt;.006</th>
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<tbody>
<tr>
<td>Detectable Viral Load</td>
<td>OR 1.98, CI 1.13-4.45 p&lt;.05</td>
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</tbody>
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Controlling for: age, gender, perinatal/horizontal infection, rural/urban location, ethnicity, formal/informal home, maternal orphanhood, paternal orphanhood, health status, time on treatment, travel time to clinic

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**WEEKENDS**

On weekends, Andiwe spends time with friends and family. Sometimes he travels to visit family members, or stays out late with his friends. Some weekends he stays at home, goes to church and helps out his parents and grandparents. It is not always easy for him to take his medication during Saturdays and Sundays, but he does his best. Think about last weekend – Saturday and Sunday.

1. What did you do last weekend?
   - Stayed at home
   - Visited relatives
   - Played sports with friends
   - Go out with friends
   - Other

2. How many times did you not take your medication last weekend?
STRUCTURAL DRIVERS:
CLINIC NON-ACCESS
(missing appointments/medication pick-ups)

Controlling for socio-demographic and HIV covariates:

• lack of travel money - OR 2.1 CI 1.4-3.1, p<.001
• attending clinic alone - OR 2.0 CI 1.2-3.2, p<.004
• travel time
• unsafe area
• missing school for clinic
STRUCTURAL DRIVERS – NON-ADHERENCE

controlling for socio-demographic and HIV covariates:

- Physical abuse at home - OR 1.7 CI 1.2-2.4 p<.001 (20%)
- Teacher abuse – OR 1.5 CI 1.2-2.0 p<.001 (41%)
- Domestic violence- OR 2.0 CI 1.4-3.0 p<.001 (12%)
- Bullying
- Attacked/robbend in the community

Cluver, Meinck, Hodes, Toska, Orkin, Sherr. IAS 2016
% of adolescents reporting past-week ART non-adherence by violence victimisation (predicted probabilities controlling for significant covariates)
### POTENTIAL SOCIAL PROTECTION FACTORS

<table>
<thead>
<tr>
<th>CASH</th>
<th>CARE</th>
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<tbody>
<tr>
<td>• [Government cash transfer (95%)]</td>
<td>• HIV support group (13%)</td>
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<tr>
<td>• Food security (78%)</td>
<td>• Sports group (13%)</td>
</tr>
<tr>
<td>• School access (46%)</td>
<td>• Choir/arts group (15%)</td>
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<tr>
<td>• [School feeding (93%)]</td>
<td>• Positive parenting (42%)</td>
</tr>
<tr>
<td>• Access to clothing (81%)</td>
<td>• Parental supervision (41%)</td>
</tr>
</tbody>
</table>

Controlling for: adolescent age, gender, language, formal/informal housing, urban/rural location, education level, maternal and paternal death, perinatal/horizontal infection, whether adolescent lived with a caregiver who was AIDS-symptomatic or on ART, whether adolescent was aware of their own HIV-positive status duration of time on treatment, general past-month self-reported health, time of travel to clinic, and whether the participant had received care in hospital for illness in the past year.

*Cluver, Toska, Orkin, Meinck, Hodes, Yakubovich, Sherr. In press AIDS Care*
# POTENTIAL SOCIAL PROTECTION FACTORS

**CASH**
- [Government cash transfer]
- Food security aOR 0.57
- School access
- [School feeding]
- Access to clothing

**CARE**
- HIV support group aOR 0.60
- Sports group
- Choir/arts group
- Positive parenting
- Parental supervision aOR 0.56

Controlling for: adolescent age, gender, language, formal/informal housing, urban/rural location, education level, maternal and paternal death, perinatal/horizontal infection, whether adolescent lived with a caregiver who was AIDS-symptomatic or on ART, whether adolescent was aware of their own HIV-positive status duration of time on treatment, general past-month self-reported health, time of travel to clinic, and whether the participant had received care in hospital for illness in the past year.

*Cluver, Toska, Orkin, Meinck, Hodes, Yakubovich, Sherr. In press AIDS Care*
Rates of past-week adolescent ART non-adherence, by social protection access (marginal effects, controlling for socio-demographic co-factors)

- No social protection: 54%
- Support Group: 41%
- Food Security: 40%
- Monitoring: 39%
- Food Security & Support Group: 28%
- Support Group & Monitoring: 28%
- Food Security & Monitoring: 27%
- Food Security, Support Group & Monitoring: 18%
HIV+ ADOLESCENTS AND UNSAFE SEX
(R. Hodes, E. Toska)

- HIV+ adolescents: 17% unprotected last sex
- HIV+ girls: 28% unprotected sex

Interviewer: What makes you not to disclose?

Kwakza: Well you never know if the person will publicise it when we break up.

Thandie: I will never tell him. Never... Sometimes its not really the guys to be blamed. Sometimes it's the girls too. We just want to sleep with him, because he’s popular. Also, because he’s got money. This person wants this man, because of what she benefits from him. You are dependent and you have to survive.

Nurse: In some communities, it’s taboo. They are not supposed to disclose. They cannot talk to their partners about family planning... It’s disrespectful. So they get information, whether its from their friends or what.

R Hodes, E Toska, L Gittings (in progress)
% Probabilities of unprotected sex among HIV-positive adolescent girls (modelled marginal effects controlling for socio-demographic covariates)
INCREDIBLE TEAMS & TEENS