REDUCING HIV RISK FOR ADOLESCENT GIRLS AND YOUNG WOMEN & THEIR MALE PARTNERS

Learnings from the DREAMS Partnership
Today’s presenters

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DREAMS Implementation Science Research Portfolio
DREAMS Implementation Science (IS) Research

Evidence generation intended to refine programs

10 research activities across 7 DREAMS countries
Iterative, consensus-building process for IS agenda

1. Initial PEPFAR-hosted meeting Johannesburg (Jan 2015)
2. Review IS Qs posed by PEPFAR country teams & literature review
3. Follow on discussions with individual country teams and PEPFAR/HQ
4. Priority IS themes identified based on countries’ interest, global knowledge gaps, & mapped onto DREAMS core package
5. Study countries selected through individual discussions with country teams and PEPFAR/HQ and match with 3 key topics (2015)
6. Study concept notes developed for each proposed study (2015)
7. Study sites and agency roles negotiated with DREAMS country teams & PEPFAR/HQ
8. Partnerships established with implementing partners at study sites (2016)
9. Study protocols developed/refined in consultation with stakeholders (2016–17)
Research approach

2-phased study design

Mixed methods

Multiple perspectives

Engaging stakeholders
The Core Package

- **Community Mobilization & Norms Change**
- **Mobilize Communities for change**
- **School-Based Interventions**
- **Parenting/Caregiver Programs**

**Reduce Risk of Sex Partners**
- VMMC (Other PEPFAR Programming)
- HTS and Tx for Men (Other PEPFAR Programming)
- Characterization of Male Partners to Target Highly Effective Interventions (ART, VMMC)
- Youth-friendly Sexual and Reproductive Health Care (Condoms, HTC, PrEP, Contraceptive Mix, Post-Violence Care)

**Empower Girls & Young Women and reduce risk**
- Social Asset Building

**Strengthen Families**
- Social Protection (Education Subsidies, Combination Socio-Economic Approaches)

**Keywords**
- Determined
- Resilient
- Empowered
- AIDS-Free
- Mentored
- Safe

Range of methodological approaches

**How can we better define HIV vulnerability/risk?**
- Employ **Latent Class Analysis** to understand WHO to reach, WHERE, and with WHAT programming

**How effective is multi-sectoral community-based HIV prevention programming?**
- Employ **Classification and Regression Trees** to assess which combinations of programs increase the likelihood of desired outcomes, and for whom

**How to successfully implement such a program?**
- Assess program **Reach, Effectiveness, Adoption, Implementation, and Maintenance** from participant and implementer perspectives

**What are facilitators/barriers to PrEP use for AGYW?**
- Assess **end-user and provider preferences** using mixed methods approaches
## Study sites & data

<table>
<thead>
<tr>
<th></th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Zambia</th>
<th>Malawi</th>
<th>Eswatini</th>
<th>South Africa</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative</strong></td>
<td>DREAMS/ non-DREAMS AGYW N = 1,778</td>
<td>Health provider survey n = 361</td>
<td>DREAMS/ non-DREAMS AGYW N = 1,915</td>
<td>Round 1 DREAMS AGYW n = 1,672</td>
<td>Men in ‘hot spots’ Round 1 (MEASURE Evaluation) n = 843</td>
<td>Men in informal settlements Round 1 n = 962</td>
<td>Round 2 n = 886</td>
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<td></td>
<td>Panel data DREAMS AGYW n = 740</td>
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<td>Panel data DREAMS AGYW n = 885</td>
<td>Panel data DREAMS AGYW n = 1,257</td>
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<td></td>
<td>Men/MP of AGYW n = 612</td>
<td></td>
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<tr>
<td><strong>Qualitative</strong></td>
<td>DREAMS beneficiaries n = 27 IDIs</td>
<td>FSWs n = 24 IDIs</td>
<td>DREAMS beneficiaries n = 44 IDIs</td>
<td>DREAMS beneficiaries n = 36 IDIs</td>
<td>MP of AGYW n = 66 IDIs</td>
<td>MP of AGYW n = 72 IDIs</td>
<td>MP of AGYW n = 126 IDIs</td>
</tr>
<tr>
<td></td>
<td>Program staff n = 27 IDIs</td>
<td>Unmarried AGYW n = 4 FGDs</td>
<td>Program staff n = 31 IDIs</td>
<td>Program staff n = 35 IDIs</td>
<td>Program staff n = 3 FGDs</td>
<td>Program staff n = 3 FGDs</td>
<td>Program staff n = 9 FGDs</td>
</tr>
<tr>
<td></td>
<td>Policymakers n = 21 IDIs</td>
<td></td>
<td>Facilitators n = 18 FGDs</td>
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<tr>
<td></td>
<td>Parents / guardians n = 4 FGDs</td>
<td></td>
<td>Men living with HIV n = 4 FGDs</td>
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<td></td>
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<tr>
<td></td>
<td>MP of AGYW n = 16 IDIs</td>
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<td>16 IDIs</td>
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</table>
Expanding the evidence base on HIV prevention

- 10 peer-reviewed publications (with 8 more under review)
- 14 theme or country focused research briefs
- 65 presentations for global stakeholders
- 47 presentations for country stakeholders

For more information: knowledgecommons.popcouncil.org/series_dreams
Upcoming contributions to global literature

• Examples of themes:
  – PrEP cascade for AGYW
  – Differential unit costs of delivering AGYW programming
  – Effects of layered programming for AGYW
  – Men’s common exposure to trauma and negative outcomes
  – Future directions for engaging men in HIV prevention
  – Financial agency, gender dynamics, and HIV risk

• Special issue in high-impact journal *AIDS* with papers from Population Council, PEPFAR, and London School of Hygiene and Tropical Medicine

• Supporting special issue in the journal *Tropical Medicine and Infectious Disease* focused on solutions for HIV prevention
Successful research uptake acknowledges different stakeholder perspectives

RESEARCH
- Controlled
- Empirical
- Objective

UTILIZATION
- Highlights context
- Engages stakeholders
- Supports use of findings
- Builds ownership

PROGRAM
- Practical
- Urgent
- Action-Oriented

POLICY
- Prioritizing
- Compromising
- Champions
How effective is the multi-sectoral community-based HIV prevention programming?
Need to sustain significant improvements in HIV knowledge, self-efficacy, & HIV testing.

***p<0.001
Note: similar results in Kenya and Zambia
Need to sustain reductions in experience of sexual violence from partners and non-partners over time

<table>
<thead>
<tr>
<th>Experience of violence in the past 12 months</th>
<th>Kenya (n=736)</th>
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<tbody>
<tr>
<td></td>
<td>Round 1</td>
</tr>
<tr>
<td>Among sexually active</td>
<td></td>
</tr>
<tr>
<td>Sexual violence from partners</td>
<td>20</td>
</tr>
<tr>
<td>Among all AGYW</td>
<td></td>
</tr>
<tr>
<td>Sexual violence from non-partners</td>
<td>26</td>
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</tbody>
</table>

- Regressions confirm that AGYW are less likely to experience sexual violence from partners (Adj. IRR 0.43 (0.31–0.59)) and from non-partners (0.65 (0.53–0.81)) over time.

Note: similar results in Malawi & Zambia

Need to redouble efforts on supporting HIV risk avoidance during key life transitions

Zambia (n=885)

Getting married & leaving school contributed to these declines

- 2+ sexual partners in the last year: 11 to 9
- Consistent condom use: 42 to 35
- Condom use at last sex: 55 to 49
- Started/stayed in partnership for material gain: 8 to 8
- Transactional sex with casual partner: 2 to 5

Note: similar results in Kenya & Malawi

What pathways reduced likelihood of transactional sex?

15–19 years
- Schooling support

20–24 years
- Parenting program
- Youth fund program

Study sites: Kenya, (n=736), CART analysis

Distinct subgroups of men found, who should be targeted differently with programming

- Not just older high-risk men, younger men have high HIV risk profiles too.

- Risk profiles of older and younger men don’t look the same.

- Distinguishing variables include type of employment, gender attitudes, alcohol use, number of partners, etc.

- Higher-risk profiles were less or no more likely to use HIV services than lower-risk profiles.

Study site: South Africa, n=1,665 (Eswatini findings similar)

Male partners of DREAMS AGYW described benefits

- Learning about social/gender norms from partners, and own direct participation
- Commonly cited impacts included:
  - Improved couple communication & conflict resolution
  - Reducing/eliminating side partners
  - More impetus to link to HIV services

[We] now know how to communicate with each other... we no longer have arguments over simple things....
—Male partner, Mukono

The meeting taught me, as a person, to be safe, and practice self-control.... Have one partner [and] stop admiring other women....
—Male partner, Sembabule

Study site: Uganda; similar findings in Eswatini and South Africa
How do you successfully implement a comprehensive HIV prevention program for AGYW?
Early engagement of stakeholders

• 1st study in Tanzania to assess feasibility & acceptability of oral PrEP for young women outside of a clinical setting

• Engaged stakeholders to gather input into key questions before data collection

• Stakeholders engaged in data interpretation/study implications and provided insights on potential challenges & strategies for PrEP roll-out in Tanzania
Reaching the most-at-risk AGYW

- Vulnerability was assessed through several phases (e.g., community mapping, OVC rosters) and a range of criteria (e.g., living next to a hotspot, victim of violence).
- Community leaders helped identify the most vulnerable girls.
- Yet, early findings showed that DREAMS was still missing some AGYW.

### Kenya

<table>
<thead>
<tr>
<th></th>
<th>DREAMS (n=914)</th>
<th>Non-DREAMS (n=864)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently in school</td>
<td>58</td>
<td>27</td>
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</table>

Note: similar results in Malawi & Zambia.
Even in HIV prevalence contexts, differences in HIV vulnerability

Multiple characteristics synergistically define high vulnerability

<table>
<thead>
<tr>
<th></th>
<th>Kenya (n=1,014)</th>
<th>Malawi (n=1,652)</th>
<th>Zambia (n=846)</th>
</tr>
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<tbody>
<tr>
<td>Higher HIV vulnerability</td>
<td>32%</td>
<td>53%</td>
<td>51%</td>
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<tr>
<td>Moderate HH wealth</td>
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<tr>
<td>Lack of adult supervision</td>
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<tr>
<td>Sometimes/often hungry</td>
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<tr>
<td>No comprehensive knowledge of HIV</td>
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<td></td>
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<tr>
<td>No comprehensive knowledge of condoms</td>
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<tr>
<td>Lower support for equitable gender norms</td>
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AGYW’s motivations for program engagement differ by age group

• AG more receptive to knowledge, skills, building social networks, and engage in social opportunities (e.g., sport activities)

• YW keen to access skills, training, and tangible resources or options to enhance their livelihoods
Educational support & economic interventions helped retain AGYW in programming

I do feel it has changed the lives of other girls...it has changed them because some of them have got school fees that they can pay and... The DREAMS have also cared for them very well....

— AG, Kenya

DREAMS has changed the lives of other girls and in community. ...They have created different programs that keep young women busy like they have opened salon, barber shop, tailoring, and computer courses too that keeps them busy so that it cannot make them to idle around....

— YW, Kenya
Mentors were key for effective program implementation

86%

Felt comfortable seeking advice or referral from mentor

They could come and ask if there is any problem that they have. They are free to come so I feel like there is that relationship between me and the AGYWs because I am very open to every AGYW I have in my safe space. So I like it. It is like my family has grown bigger now.

—Mentor, Zambia

Malawi (n=1,295), similar results in Kenya and Zambia
# Mentor challenges and support needed to address them

<table>
<thead>
<tr>
<th>Challenges experienced</th>
<th>Support needed</th>
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<tbody>
<tr>
<td>Doubts about mentors’ ability to teach/lead sessions</td>
<td>Desire for additional training and workshops to reinforce/practice skills (e.g., GBV, PrEP, HIV prevention, skillful parenting)</td>
</tr>
<tr>
<td>Workload &amp; material support</td>
<td>Salary or increased monetary support (e.g., increased stipend, airtime and transportation)</td>
</tr>
<tr>
<td>Parents/partner hesitancy</td>
<td>Engaging local leadership for program buy-in; Components for parents and partners</td>
</tr>
</tbody>
</table>

"...I wish if there were programs that we can engage these male sexual partners...because we teach these girls, practically they learn...but when they go back home it is different...."

—Mentor, Kenya
Many DREAMS implementing partners organically incorporated men

...we mobilize men to receive HTC...after that, they are given information on VMMC. But we have encouraged [our CBOs] to engage men further...[for example] we trained some men as male peers in Stepping Stones, to be able to do behavior change among men.

—Implementing partner, Mukono, Uganda

Study site: Uganda; similar findings in Eswatini and South Africa
Program implementers need support too

- Tools to map AGYW in program community, and assess community resources that AGYW have access to
- Tools to strengthen skills/capacities of program mentors
- Training and partnerships to strengthen non-health components of the program
- Identify male partners of AGYW
- Use of program data to assess program effects
- Time to establish effective coordination across the multiple implementing partners and program components
- Periodic opportunities for connecting and learning from other DREAMS implementing teams
Why is addressing gender dynamics/norms central to HIV prevention?
HIV risk, relationship power & violence

Having relationship power strongly associated with:

- Less sexual/physical violence
- More condom use at last sex
- More knowledge of partner’s HIV status

AGYW who experienced sexual violence were 2x as likely to report an STI symptom, and anxiety and depression

Study sites: Kenya and Zambia

Levels of empowerment can differ across AGYW age groups

My partner has more say than I do about important decisions that affect us*

- 15–17 years: 42%
- 18–20 years: 51%
- 21–24 years: 49%

If my partner wants to have sex, he would expect me to agree*

- 15–17 years: 44%
- 18–20 years: 54%
- 21–24 years: 68%

When partner and I disagree, he gets his way most of the time*

- 15–17 years: 33%
- 18–20 years: 35%
- 21–24 years: 46%

*p<0.05

Study site: Kenya

Financial autonomy can support empowerment, but only for some

- Financial independence can afford power to reject unwanted or violent relationships
- Women’s agency greater in non-marital vs. marital relationships
  - Despite more support for joint household decision-making, married women’s agency still heavily influenced by cultural/religious norms of male dominance

When you use his money, you would feel guilt and fail to refuse when he asks for sex.
—20-year-old single student

Study site: Zambia

Men think about their relationships in transactional terms

- Men see money and gifts as the only way of establishing and maintaining relationships with women.
- Men see most young women as active agents in pursuing transactional sex and mainly seeking material goods.
- Many men intentionally seek young women because they are more compliant (i.e., power dynamics).

Study sites: Uganda & Eswatini

A man without money get a wife or sexual partner? It doesn’t exist in our community.
—Man from Uganda

The young women listen and cooperate all the time, yet older women argue.
—Man from Eswatini

What are the facilitators and barriers to PrEP use among AGYW?
PrEP provision requires multi-level considerations

While nearly all AGYW were eligible for PrEP, more need access to it.

Study site: Kenya

Barrier to use: HIV-related stigma

When the peers of my age see a person taking PrEP, they will think that the person has AIDS, or they are very unfaithful hanging out with many partners. They will speak many things and I will be considered as a bad person in the community, a misbehaving person.

—YW, Tanzania

The bad thing about PrEP, it is embarrassing to swallow when you are among people who do not know that it exists because the majority know that the tablets are for people who have the [HIV] virus.

—YW, PrEP user (12 mo), Uganda

https://doi.org/10.1371/journal.pone.0246717

 Barrier to use: Relationship conflict

- Covert PrEP use by AGYW could seed mistrust within the relationship

Our relationship will be affected if he is not informed, but if I briefly explain it to him, he will understand I am using PrEP so as to protect myself from HIV infections...if he understands me properly, he can decide to accompany me and begin to take PrEP as well. But if I don’t tell him and he finds them on his own, that is where the problem steps in.

—YW, Tanzania

...he [partner] came across those drugs, and he got out of control...when he found the drugs he became disturbed, furious, threw them, asked me whether I am a commercial sex worker, whether am infected, if I had infected him. I told him the drugs are not for HIV, fearing to explain further, he would discover what I used to do.... he saw them and became furious. He poured them. He beat me to tell him the truth.... He beat me and we seriously fought....

—YW, PrEP user (8mo), Uganda
Provider perspectives on AGYW’s access to PrEP

Factors associated with providers’ willingness to prescribe PrEP (n=316)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Adj. IRR(^1) (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative attitudes toward AGYW sexuality</td>
<td>0.81 (0.66–0.99)*</td>
</tr>
<tr>
<td>Behavioral Disinhibition scale</td>
<td>0.89 (0.79–0.99)*</td>
</tr>
<tr>
<td>Sufficiently trained to provide HIV services</td>
<td>1.13 (1.02–1.24)*</td>
</tr>
<tr>
<td>Patient-centered care</td>
<td>1.19 (0.98–1.45)(^+)</td>
</tr>
</tbody>
</table>

\(^1\) Adjusted for provider demographics, prior PrEP knowledge, other facility factors (e.g., stockouts)

\(+p<0.10; *p<0.05\)

Facilitators of PrEP use among young women

- Perceived efficacy of PrEP for HIV risk reduction
- Perceived agency over own HIV risk
- Social support from peers and parents
- Ready-access to PrEP and supportive counseling
- Access to health care services for personal well-being

Study site: Uganda (n=55 YW FSWs)
Considerations for MPTs/new biomedical technologies

Wrap Up
Key takeaways

Layering health and non-health interventions worked in many cases.

The “ideal” combinations of activities differed by age group and context.

Mentored safe spaces provided a unique and effective platform.

Addressing gender norms/partner dynamics and engaging men is critical.

Successful biomedical product introduction requires nuanced understandings.

Implementing partners needed to work in new ways to implement DREAMS.

Continuous application of research key for course-correction, program refinement.
Some remaining evidence gaps

Adapting the package for different contexts/geographies. Unpack what elements of layering worked well/not well, what to emphasize, and what it costs.

Tackling long-standing inequitable gender and social norms. Critical examination of the design and intensity of programs.

Sustaining program effects. Rigorous assessments to ensure that investments are achieving the desired health/development outcomes.

Bridging the evidence to use gap. Support global and country stakeholders to interpret available evidence and align programs and policies.

Developing prevention products that people want to use. Investigate product, provider, and end-user characteristics to inform development and introduction.
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