PrEP Implementation: One Perspective

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Controlling the HIV Epidemic with Antiretrovirals: From Consensus to Implementation
London, September 2013

Disclosures

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- For some research studies, medication has been donated by Gilead Sciences.
- I have no other financial conflicts of interest.

After the RCTs, the US FDA, and all the commentary on PrEP, moving to implementation is something like this…

Photo from the post-airport security area, Milwaukee, USA airport

Perspective on PrEP implementation

What are the questions?

What is the interface with ART for prevention?

What are the risks?

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What are the questions?

- The transition from clinical trials to delivery opens up an entirely new set of questions, with new expectations and different approaches to quantify and measure success.

Delivery

Topic	Question
Delivery	How to deliver and how to deliver at scale?

- PrEP demonstration projects suggest some possible models of delivery and various populations (CSW, MSM, couples) but not the totality of how PrEP could be delivered.
- What is the capacity to add PrEP to primary & specialty health services?

Uptake

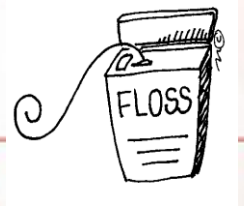
Topic	Question
Uptake	Who/how to prioritize? Do those who might benefit most want it?

- What are tools for providers to identify those appropriate for PrEP?
  - How to ask about risk, how to offer PrEP
  - Objective tools may help – eg couples risk score (Kahle JAIDS 2013)
- Initial data suggest that demand is there *when PrEP is known*:
  - In San Francisco, waiting list of >50 for demo project
  - In Kenya/Uganda, demo project uptake >90%

Adherence

Topic	Question
Adherence	What is the expectation for adherence? How to maximize?

- In contrast to clinical trials, which expected 100% sustained adherence, implementation will focus *on those who continue PrEP interest and return for refills. Arguably:*
  - Those who don't use PrEP won't come back = no benefit but also no programmatic costs. [PrEP takers]
  - Those who use PrEP will achieve prevention benefits (like with every other prevention strategy…) [nontakers]

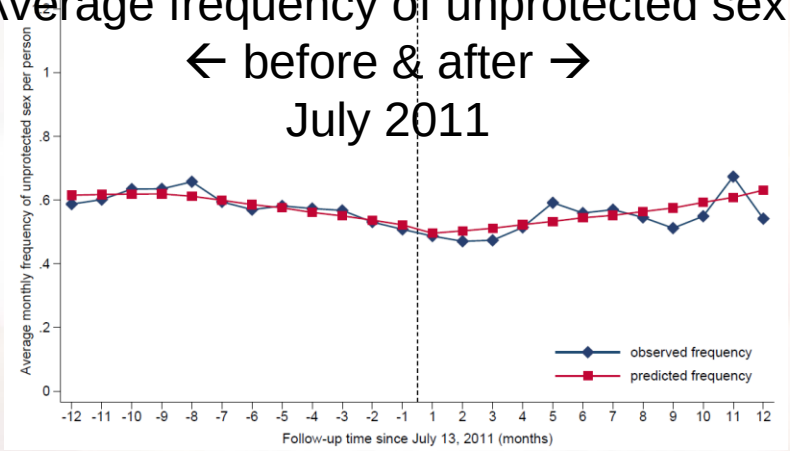


Risks

Topic	Question
Risks	Sexual behavior/STIs? Antiretroviral resistance?

- Empiric data needed much more than hypotheses.
- In Partners PrEP Study, no increase in unprotected sex, pregnancy, STIs after July 2011 (when placebo arm stopped):

Average frequency of unprotected sex,
← before & after →
July 2011



Mugwanya et al., ISSTDR 2013

Impact

Topic	Question
Impact	Programmatic success? HIV incidence? Costs?

- How is programmatic success defined for PrEP? With the recognition that PrEP is not for everyone and certainly not forever.
- What can be done to define the PrEP cascade:

  HIV testing → linkage to prevention services → initiation and sustained use of PrEP and other prevention options → support for PrEP discontinuation

Implementation questions

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Delivery	How to deliver and how to deliver at scale?
Uptake	Who/how to prioritize? Do those who might benefit most want it?
Adherence	What is the expectation for adherence? How to maximize?
Risks	Sexual behavior/STIs? Antiretroviral resistance?
Impact	Programmatic success? HIV incidence? Costs?

Perspective on PrEP implementation

What are the questions?

What is the interface with ART for prevention?

What are the risks?

Implementation questions
apply to ART and PrEP in similar ways

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Delivery	How to deliver and how to deliver at scale?
Uptake	Who/how to prioritize? Do those who might benefit most want it?
Adherence	How is adherence? How to maximize?
Risks	Sexual behavior/STIs? Antiretroviral resistance?
Impact	Programmatic success? HIV incidence? Costs?

Debate about how to balance ART & PrEP

Uganda rejects HIV prevention tool on moral grounds

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Photo: US Department of Health and Human Services

Antiretroviral drug, Truvada

KAMPALA, 3 September 2013 (IRIN) - Activists in Uganda, where some 400 people are infected with HIV every day, have called on the government to

New HIV policy spells doom for discordant couples – activists

Publish Date: Sep 13, 2013

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Couples who had hoped to benefit from pre-exposure prophylaxis will have to look to other means for protection against HIV
newvision

By Francis Kagolo

The 4,758 HIV sero-discordant couples who participated in a research about Pre-exposure Prophylaxis (PrEP) hoped that the strategy would reduce new infections if adopted.

However, their wishes withered when the health ministry announced last week that it had rejected the HIV prevention strategy citing high costs and fears that it would increase promiscuity.

PrEP & ART: synergy in delivery

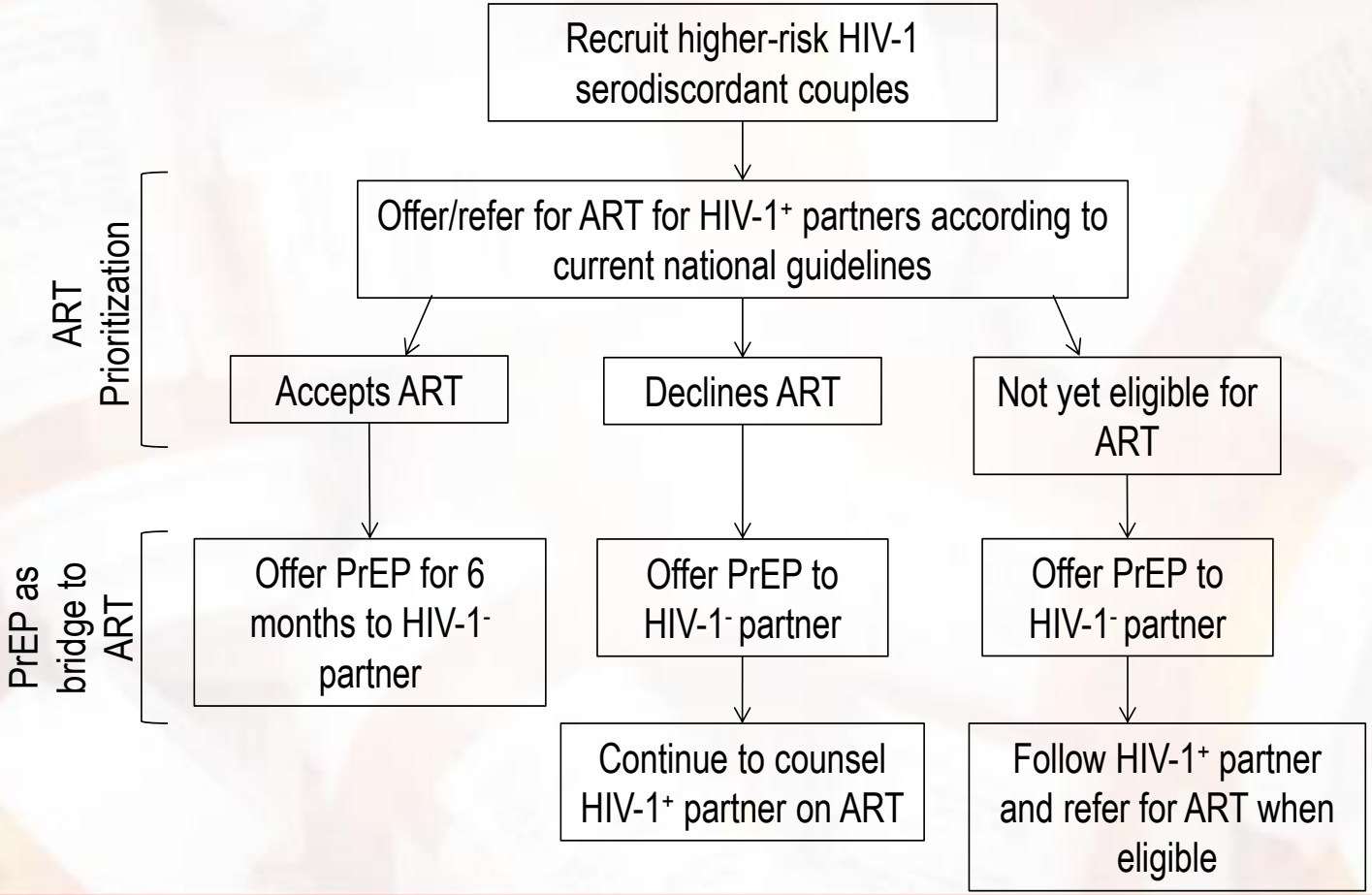
- **For HIV serodiscordant couples:**
  - Not all HIV+ partners will choose to or can start ART immediately and staged use of PrEP, as a bridge to ART, might be effective and cost-effective (Hallett et al. PLoS Med 2011; Mitchell et al. STI World Congress 2013)

- **For populations:**
  - Risk-targeted PrEP adds to ART (Ying et al. STI World Congress 2013)
  - Demonstration projects delivering both PrEP + maximal push for ART must be prioritized: MSM (e.g., with syphilis), FSW, others

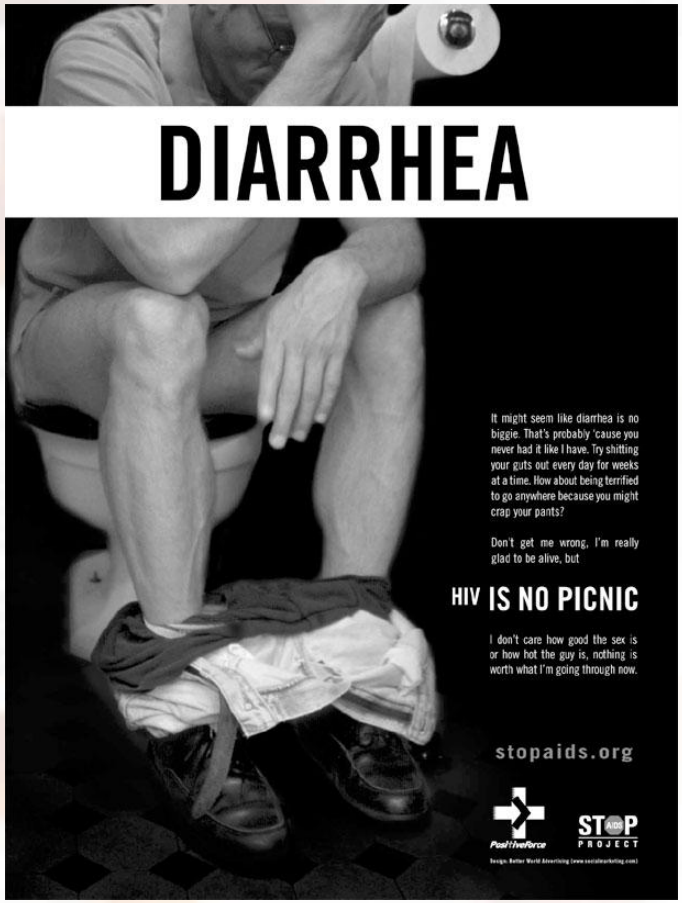
Partners Demonstration Project

- **Goal:** to understand prevention preferences, uptake of ART and PrEP, adherence, & risk behavior among high risk HIV serodiscordant couples
- **Design:** Prospective observational study of 1000 HIV serodiscordant couples in Kenya and Uganda with quarterly follow up for 2 years
- **Setting:** Kenyan and Ugandan HIV care centers
- **Delivery:** PrEP is offered as a 'bridge' to ART use
  - PrEP discontinuation recommended after 6 months of sustained ART use the HIV infected partner

Partners Demonstration Project: optimizing PrEP & ART for couples



Changing the conversation



How do we talk about the benefits for ART and PrEP?

(after years of telling people not to get HIV because antiretrovirals are awful)

'If I am given antiretrovirals I will think I am nearing the grave': Kenyan HIV serodiscordant couples' attitudes regarding early initiation of antiretroviral therapy

Kathryn Curran[a,b], Kenneth Ngure[b,e,f], Bettina Shell-Duncan[b,c], Sophie Vusha[f], Nelly R. Mugo[b,g], Renee Heffron[b], Connie Celum[a,b,f] and Jared M. Baeten[a,b,d]

Message synergy

- **ART**

  Treatment is health-preserving and not reflecting late-stage sickness.

- **PrEP**

  PrEP is health-preserving, use is not life-long – months/years of greatest risk (“seasons of PrEP” – like contraception) might avoid 40+ years of ART

- **Both ART and PrEP**

  We need messages that have fewer academic caveats and that better respond to patient needs.

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Looking back…

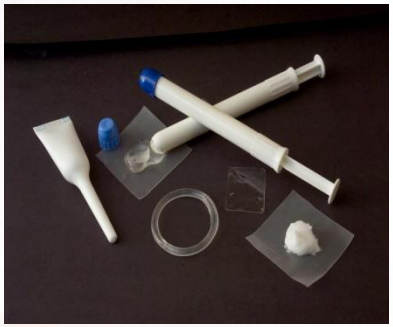
"The potential short term gains … may be far outweighed …. In Africa, a higher proportion of patients are likely to fall into the category of potential poor adherers unless resource intensive adherence programmes are available."

Stevens et al. BMJ 2004

Pre-determining failure (in this case, for ART roll-out) has not been productive in the past…

Looking ahead…

Pill



Gel

Vaginal film

Vaginal ring

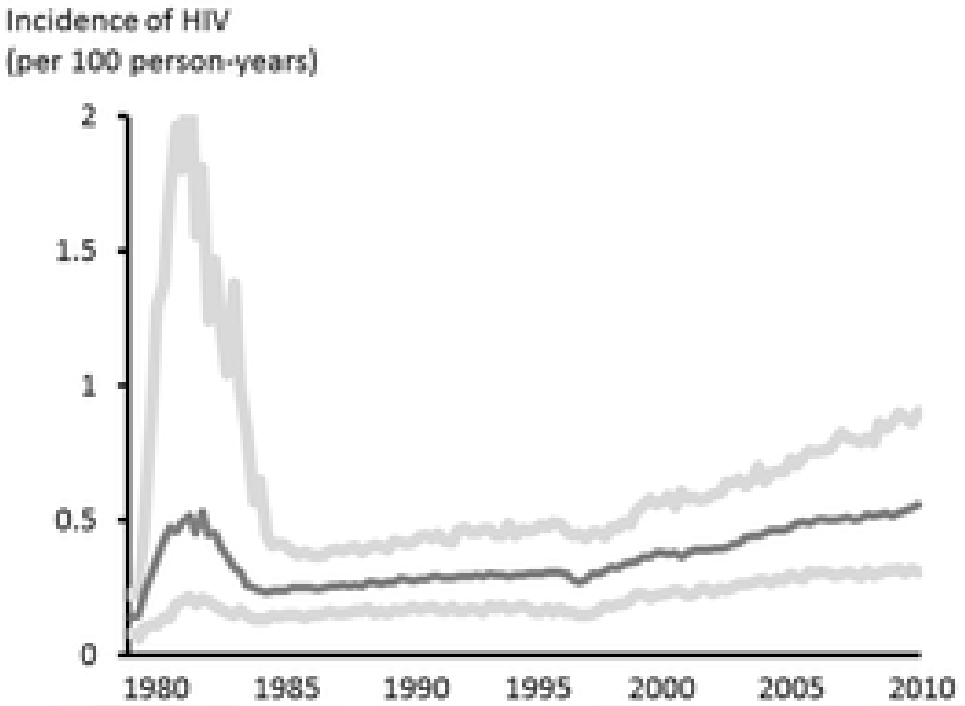
Injectable

New options may be on the horizon…

… Or, they may be a long way off

The risk: doing, but not enough

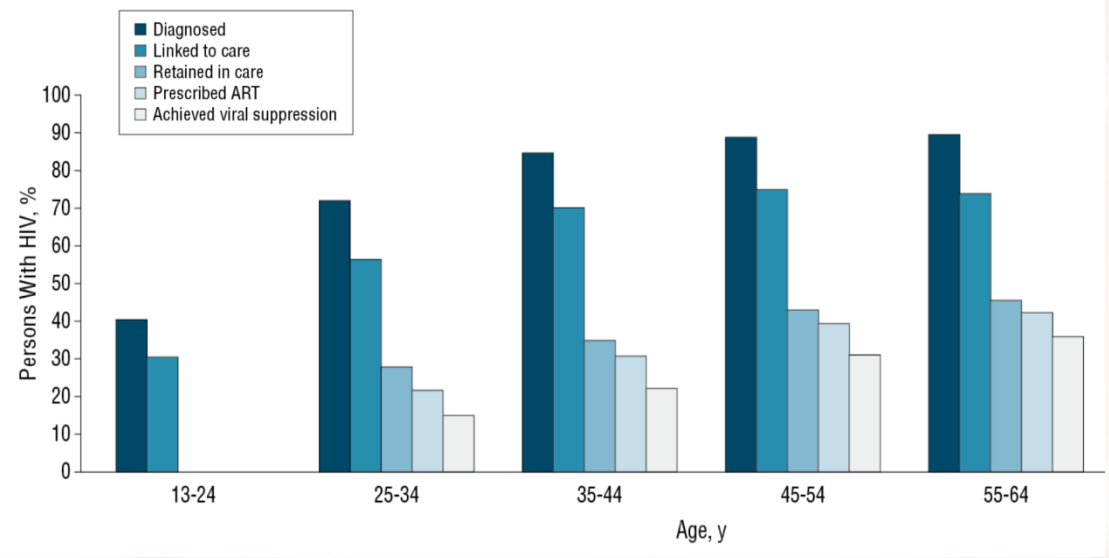
- Persistent / *increasing* HIV incidence in the era of high ART access in high income settings (example from UK below) illustrate that standard approaches are not enough.



Phillips et al. PLoS ONE 2012

The risk: doing, but not enough

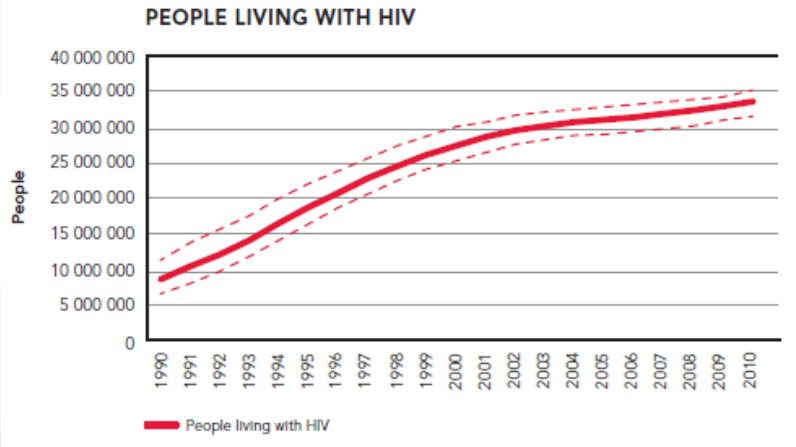
- Persistent / *increasing* HIV incidence in the era of high ART access in high income settings (example from UK below) illustrate that standard approaches are not enough.
- Accepting cascades of lost opportunities in treatment and prevention (or recreating in new settings) cannot happen



Hall et al. JAMA Intern Med 2013

The risk: doing, but not enough

- Persistent / *increasing* HIV incidence in the era of high ART access in high income settings (example from UK below) illustrate that standard approaches are not enough.
- Accepting cascades of lost opportunities in treatment and prevention (or recreating in new settings) cannot happen
- Risk is an ever-increasing treatment need, without turning off the tap of new infections.



UNAIDS 2011

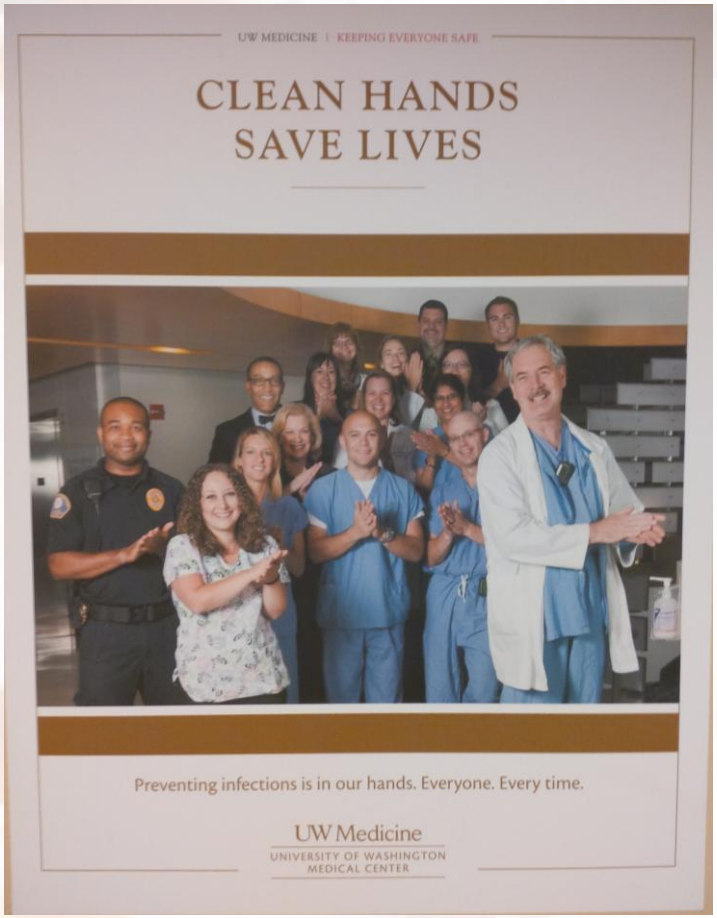
In summary: PrEP implementation

New/different questions

Parallels and synergies with ART for prevention

There are risks in doing, but real risks in not doing enough

Change does not happen instantly…



Diffusion of innovation is a process.

Good science, clear messages, cross-cutting advocacy, and a strong public health focus may help accelerate change in this field.

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