

Biomedical technologies for prevention of sexual transmission

Research priorities??

Why ask an economist?

Top priority

- Circumcision: Economic modeling
- Microbicides: Economic modeling
- HSV-2 treatment: Economic modeling
- Female barrier: Economic modeling
- PREP: Economic modeling
- Tx of index case: Economic modeling

Circumcision

- OR – acceptability, community issues
- OR – service delivery
- New surgical & non-surgical methods to reduce risk of procedure, esp. for adults

HSV-2 treatment

- Wait & see what the trials tell us
- If efficacious
 - Long-term, easy compliance therapy
 - Differential efficacy due to biology/adherence between people with recurrent, symptomatic infection and those with sub-clinical infection
 - Modeling for targeting with stratification
 - Acquisition vs transmission
 - HIV prevalence among partners
 - Symptomatic/recurrent vs. subclinical
 - Level of risk behavior

Microbicides

- Delivery technologies
 - Long-acting, rings, etc
 - More fun/acceptable formulations
- Animal models and other standard protocols to prioritize promising agents given limited clinical trial opportunities
- Planning for OR, learning from trials, qualitative research – adherence, risk stratification, male partner concerns, rectal use, etc.

Female barrier methods

- Female condom
 - Need for marketing trials to disprove concept that this is a product for a small niche market
 - Increased pleasure for men – think of it more as a preference issue than a stealth technology
 - Re-use = lower price; get Clinton, China involved...
 - New/better/sexier product development (where are the French tickler female condoms?)
- Diaphragm
 - If trial shows efficacy → tweak technology
 - If not, stop

PREP

- Non-tenofovir trials
- Trials of PREP to prevent vaginal transmission in more sites/populations
- OR, regulatory, OTC
 - i.e. how & for whom?

ART Tx of Index Case

- Impact on risk behavior of HIV(-) or HIV(?)
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- Ongoing research needed to optimize ART initiation criteria in different settings
 - driven primarily by clinical benefit to index case and CE, not by prevention impact

Other

- Contraception for HIV+ parents
 - OR
 - Safety of hormonal methods in HIV+
- HPV-vaccine
 - potential impact on HIV acquisition/transmission?
 - depends on whether vaccine protects against vaginal warts?
 - Increased cervical ca benefits in HIV+ women