

...but will they use it?

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The Importance of “Use”

- **An efficacious microbicide could stop HIV transmission; yet people may refuse to use it.**
- **We need to optimize the chances that a microbicide will be used correctly and consistently.**
- **This is generally referred to as acceptability and adherence.**

Behavioral Sciences Study Human Behavior, i.e. “use”

- **Psychology**
- **Anthropology**
- **Sociology**
- **Demography, Epidemiology**

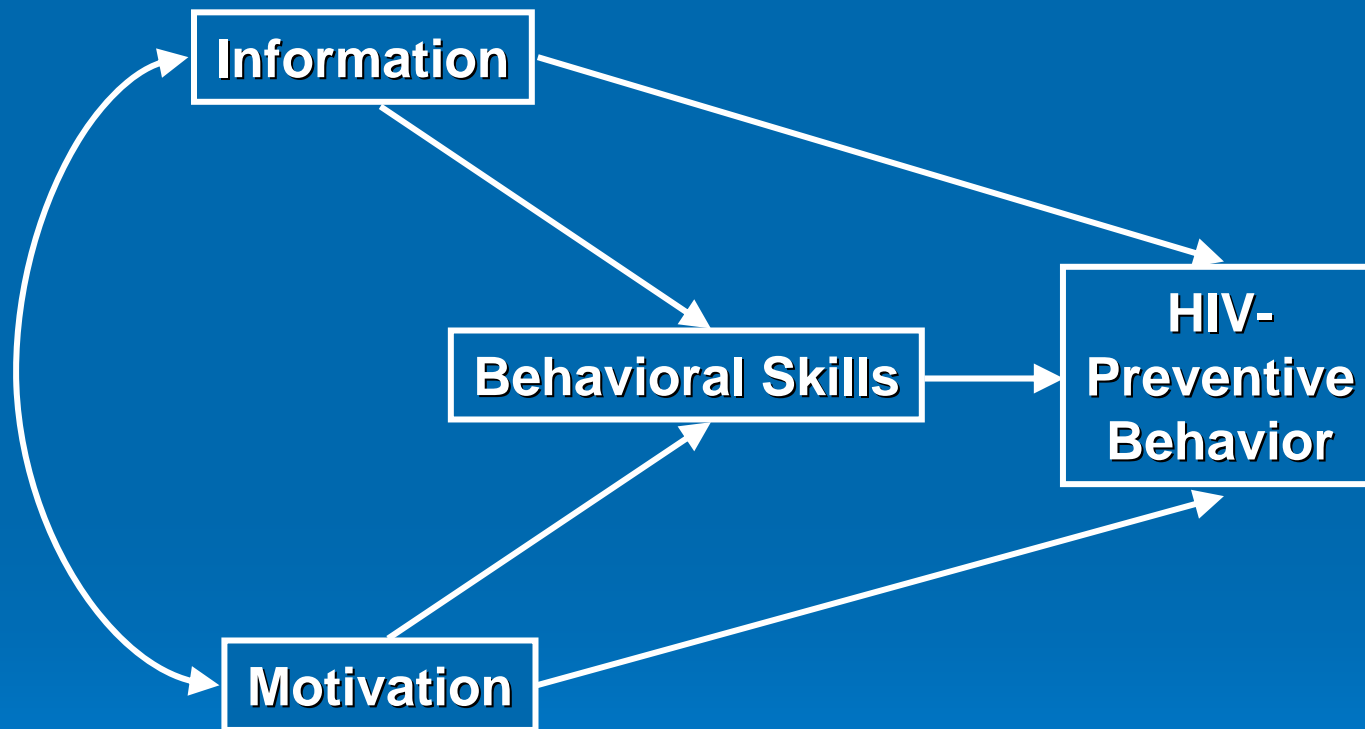
Tools of Behavioral Science to Understand and Improve Use

- **Theories**
- **Measurement**
- **Interventions**

Tools: Theories

- **Blueprints that try to explain a phenomenon.**
- **A good theory is supported by evidence and withstands challenges.**
- **Example: Fisher et al. IMB model**

IMB Model



IMB Applied to Microbicide Use

Information: What a microbicide is, how and when it should be applied (gel), or how frequently it should be taken (pill).

Behavioral Skills: Dexterity to apply the correct amount at the right time in the right place (gel) or take the pill as prescribed.

Motivation: Willingness to use a product consistently.

Consistent & Correct Microbicide Use



The IMB in Context

Contextual Factors

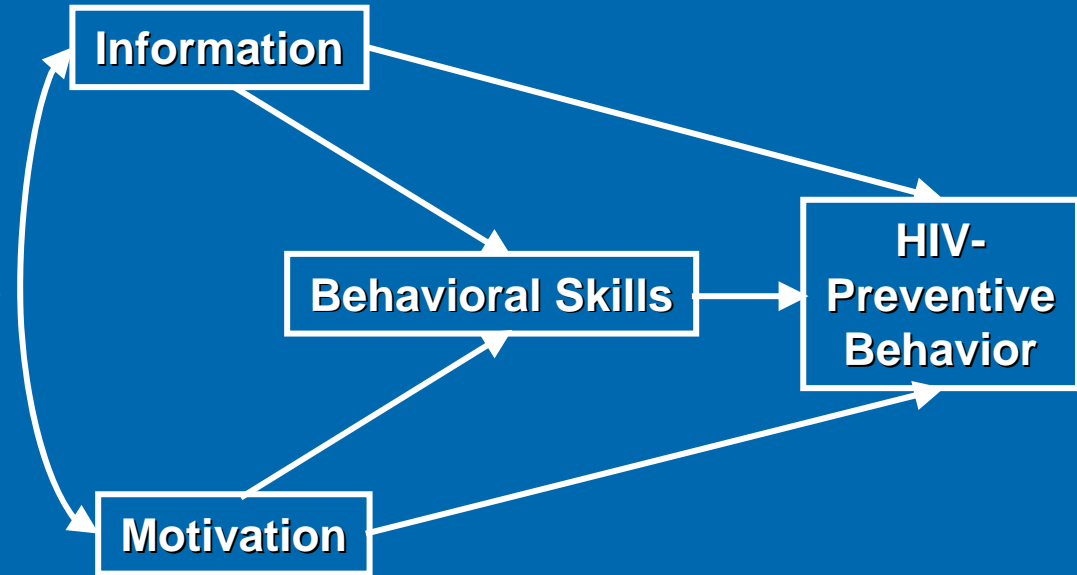
- Interpersonal (partnership dynamics)
- Cultural (dry sex)
- Social (poverty)
- Epidemiological (other STDs)
- Demographic (townships with crowded conditions)

Information

Behavioral Skills

HIV-
Preventive
Behavior

Motivation



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Tools: Measurement

- **Quantitative methods**
 - questionnaires with structured or semi-structured items
- **Qualitative methods**
 - in-depth interviews, focus groups
- **Observation**
 - ethnography

Challenges in measurement (with self reports)

- **Social desirability and embarrassment**
- **Forgetfulness**
- **Deceit**

Decreasing social desirability and embarrassment

- **Carefully formulated questions**
- **Administered by someone other than a “counselor”**
- **Computer Assisted Self-Interviews (CASI)**
- **Web-based CASI**

CASI & Web-based Surveys - MTN 004

Below are 12 statements. Please rank each statement on this list from most important (enter "1") to least important (enter "12").

When I am about to have sex with a guy, the most important issues for me are:

- Not passing a sexually transmitted disease (STD) or infection to my partner (by this we mean and STD other than HIV).
- Having a good time, enjoying sex, and getting sexually satisfied.
- Sexually satisfying my partner.
- Making sure I am on birth control.
- Making sure we have condoms available.
- Not passing HIV to my partner.
- Making sure he wears a condom.
- Not getting HIV.
- Not getting pregnant.
- That my partner will like me.
- Not getting a sexually transmitted disease (STD) or infection (by this, we mean STDs other than HIV).
- Other (specify)

Done

Statements are presented randomly for each participant

Below are 12 statements. Please rank each statement on this list from most important (enter "1") to least important (enter "12").

When I am about to have sex with a guy, the most important issues for me are:

- Sexually satisfying my partner.
- Not passing HIV to my partner.
- Not passing a sexually transmitted disease (STD) or infection to my partner (by this we mean and STD other than HIV).
- That my partner will like me.
- Having a good time, enjoying sex, and getting sexually satisfied.
- Making sure I am on birth control.
- Not getting pregnant.
- Not getting a sexually transmitted disease (STD) or infection (by this, we mean STDs other than HIV).
- Making sure we have condoms available.
- Making sure he wears a condom.
- Not getting HIV.
- Other (specify)


Done Local intranet

CASI & Web-based Surveys

Let's assume in the future there are two new ways to prevent HIV.


1. One method is a **pill** that you would have to take every day.

How likely would you be to take this pill?



2. The other method is a **microbicide gel** that would have to be applied each time you have sex.

How likely would you be to use this gel?



select rating

select rating

1 = Extremely Unlikely

2

3

4

5

6

7

8

9

10 = Extremely Likely

Done Local intranet

Can they be used in the developing world?

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Rwandan health ministry workers can keep electronic track of

POLICY FORUM

The Policy Forum allows health policy makers around the world to discuss challenges and opportunities for improving health care in their societies.

Opportunities for Providing Web-Based Interventions to Prevent Sexually Transmitted Infections in Peru

Walter H. Curioso*, Magaly M. Blas, Bobbi Nodell, Isaac E. Alva, Ann E. Kurth

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Decreasing Forgetfulness

- **Diaries**
- **Computer assisted diaries (e.g. MEMS caps)**
- **Reward system tied to computer assisted diary**

Phone Diary from ATN 062

*mock phone diary.sav [DataSet3] - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help

27 : condstudy

	ID	lang	date	gel	prob	douche	vagsex	vagfirst	condom	condstudy	gelwsex	partknow	partcomp
1	101	English	06-FEB-2007 12:00	1	No	No	No	.	.	.	.	.	.
2	101	English	06-FEB-2007 23:30	2	No	No	Yes	Yes	Yes	Yes	Yes	No	.
3	101	English	07-FEB-2007 20:00	2	No	Yes	Yes	No	Yes	Yes	Yes	No	.
4	101	English	08-FEB-2007 08:00	1	Yes	No	No	.	.	.	.	.	.
5	101	English	08-FEB-2007 21:30	2	No	No	No	.	.	.	.	.	.
6	101	English	09-FEB-2007 12:00	0	No	No	No	.	.	.	.	.	.
7	101	English	11-FEB-2007 00:00	.	.	.	.	.	.	.	.	.	.
8	101	English	12-FEB-2007 20:00	1	No	No	No	.	.	.	.	.	.
9	101	English	12-FEB-2007 20:00	2	No	No	No	.	.	.	.	.	.
10	101	English	13-FEB-2007 19:00	1	No	Yes	Yes	No	Yes	Yes	No	.	.
11	101	English	14-FEB-2007 07:30	1	No	No	No	.	.	.	.	.	.

Can they be used in the developing world? (cont'd)



The New York Times

Cell phone frenzy in Africa, world's top growth market

By Sharon LaFraniere
NEW YORK TIMES NEWS SERVICE

August 26, 2005

Cell phone boom in rural Africa

Companies adapt to emerging market — sell short airtime, shared phones



Mike Hutchings / Reuters file

A township resident chats on his mobile phone in Hout Bay near Cape Town. Mobile operators are scrambling to gain a foothold in Africa, where cell phone penetration hovers at just 15 percent.

Decreasing Deceit

- **Know your study participants**
- **Have key informants in the community**
- **Flag and investigate suspicious phenomena (e.g., sudden surge in recruitment)**

Teleconferences of ATN 062



HIV CENTER for Clinical and Behavioral Studies
At the New York State Psychiatric Institute and Columbia University

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TellJuliana@gmail.com

TELL JULIANA

If you are eligible to enroll in the microbicide study MTN 004, you will be automatically eligible to enroll in a second study. Tell Juliana is a study of young women's opinions about microbicide use.

If you enroll, this is what you'll be doing:

1. You'll meet Juliana via a web-cam live teleconference, and she will show you how to use a phone diary.
2. You will use a phone diary for 14 days and receive \$2 per call, up to \$80.
3. You will be able to send email-messages to Juliana telling her anything you want about your experiences using the microbicide.
4. On day 14 of the trial, you will have a private teleconference with Juliana to discuss your opinions in more detail. You will receive \$25 for that interview.
5. On day 21 of the trial, you will have a final teleconference with Juliana about your experiences using the web and the phone diary during the trial. You will receive an additional \$25 for completing the teleconference.

You can receive up to \$130 participating in this study.

HIV Center for Clinical and Behavioral Studies
1051 Riverside Drive, Unit 15, New York, NY 10032
(212) 543-5969 | Fax (212) 543-6003



Cross-validation

- **Compare results obtained by different means**
 - Self-reports + biomarkers (blood level absorption of the product) + tracking tools (MEMS caps, pill counts, weighing applicators) + observations
- **Be aware of how different measurement procedures affect each other**
 - Using the phone diary may increase more accurate recall of use at the end of the trial
- **Be ready to admit both the limitations of your favorite tool and that the whole is bigger than the parts**

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Interventions

Need to include Behavioral Scientists from the very onset of study design to improve trials and optimize chances for adherence and acceptability.

- **Product and Applicator Design: Awareness of problems and issues that need to be improved**
- **Sample Selection:**
 - Motivations to participate in trial
 - Alleviate fears of loss of benefits if product is disliked or not used
- **Study Design:**
 - Flexibility to allow for product use that is closer to the real thing
 - Requirements & mandates (e.g., condom use)
 - Overall study burden

Thank you!
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