

HIV INTERNET SEX (HINTS)

Best Evidence – Risk Reduction

INTERVENTION DESCRIPTION

Goals of Intervention

- Reduce condomless anal sex (CAS) with all male partners and especially with serodiscordant (i.e., HIV-negative or status unknown) partners
- Increase serostatus disclosure to potential sex partners

Target Population

- Sexual minority (gay and bisexual) men with HIV/AIDS

Brief Description

HIV Internet Sex (HINTS) is an internet-based, four-session, group-level intervention that includes a combination of voice and typed chat with two facilitators. In each session, facilitators present information, motivational skills, and behavioral strategies related to a specific topic relevant to online partner seeking and HIV transmission risk reduction. Session 1 highlights the possibility that potential sex partners might misrepresent their personal information (including serostatus) online. Session 2 focuses on enhancing motivation and behavioral strategies for engaging in a productive dialogue about HIV serostatus. Session 3 focuses on increasing motivation and learning behavioral skills to effectively engage sex partners in using condoms. Session 4 reinforces the topics presented in earlier sessions and focuses on how to more safely put them into practice in real-life settings.

Theoretical Basis

- Information Motivation Behavioral Skills (IMB) Model

Intervention Duration

- Four, 45-minute group sessions delivered in sequential order twice per week over two consecutive weeks

Intervention Settings

- Internet

Deliverer

- Two clinical psychology graduate students and two community-based counselors with specialized training for working with populations affected by HIV; all deliverers were females

Delivery Methods

- Assignments
- Group discussion
- Online interactive polls
- Video/typed chat
- Video clips

Structural Components

There are no structural components reported for this study.

INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. Please contact **Dean G. Cruess**, University of Connecticut, Psychological Sciences Department, Bousfield Psychology Building, 406 Babbidge Road, Unit 1020, Storrs, CT 06269.

Email: dean.cruess@uconn.edu for details on intervention materials.

EVALUATION STUDY AND RESULTS**Study Location**

The original evaluation study was conducted in the United States between May 2012 and January 2014.

Key Intervention Effects

- Reduced condomless anal sex (CAS) with serodiscordant partners

Recruitment Settings

Online and offline; recruitment ads

Eligibility Criteria

Men self-identifying as gay or bisexual who are at least 18 years old, living with HIV/AIDS, reporting at least one instance of using the Internet to meet a potential sex partner, and at least one instance of CAS with a male partner.

Study Sample

The baseline study sample of 167 men is characterized by the following:

- *58% white; 25% black/African American; 14% Hispanic/Latino; 2% Asian/Pacific Islander; 2% biracial/mixed ethnicity*
- *99% male gender identification; 1% transgender*
- *92% gay or homosexual; 8% bisexual*
- *Mean age of 44.7 years*
- *83% completed beyond high school; 17% completed high school or less*
- *93% currently taking HIV medications*
- *74% undetectable viral load*

Assignment Method

Men (N = 167) were randomized to 1 of 2 study arms: HINTS Intervention (n = 85) or a Healthy Living Control (n = 82).

Comparison

The Healthy Living Control comparison condition followed the same format as the intervention. Facilitators presented information, motivational skills, and behavioral skills strategies, but sessions were tailored to

address nonsexual health-related topics relevant to individuals living with HIV such as of (a) nutrition and healthy eating, (b) portion control, (c) exercise and staying active, and (d) stress reduction to maintain health. Sessions were adapted from a similar control condition implemented in previous studies. As with the intervention sessions, videos and poll questions were integrated to stimulate discussion during the groups. All control sessions were time-matched with the intervention group sessions.

Relevant Outcomes Measured

- Sex behaviors (including number of male sex partners, male partner serostatus, and number of condomless anal sex [CAS] episodes with partners in each serostatus category during the past 6 months) were measured at 6 months post-baseline which translates to 5.5 months after intervention completion.

Participant Retention

- Overall study sample
 - HINTS
 - 82% retained at 6 months post-baseline
 - Healthy Living Control
 - 85% retained at 6 months post-baseline

Significant Findings on Relevant Outcomes

- Participation in HINTS was significantly associated with reduced incidence of condomless anal sex (CAS) with serodiscordant partners at follow-up (Incident Rate Ratio [IRR]=0.373, 95% CI: 0.207-0.672, p = 0.001).* Intervention participants were 62.7% less likely to engage in CAS with a serodiscordant partner at follow-up than men assigned to the control.

Considerations

Significant positive findings on non-relevant outcomes

- None reported

Non-significant findings on relevant outcomes

- There was no intervention effect on condomless anal sex (CAS) with all partners at 6 months post-baseline (5.5 months after intervention) *

Negative findings

- Intervention participants reported significantly more male sex partners than control participants at 6 months post-baseline (5.5 months after intervention) controlling for baseline number of partners (Incident Rate Ratio IRR:1.81, 95% CI: 1.23–2.68; p = 0.003).

Note: Although intervention participants reported more male sex partners, they also reported less CAS with serodiscordant partners and more CAS with seroconcordant partners (see below), suggesting they may have been practicing serosorting. Serosorting is the practice of limiting condomless sexual encounters to partners believed to be of the same serostatus and is perceived to reduce HIV transmission.

Other related findings

- Intervention participants were more than twice as likely to engage in condomless anal sex (CAS) with seroconcordant partners as comparison participants at 6 months post-baseline (5.5 months after intervention) (IRR=2.142, 95% CI:1.268-3.617, p = 0.004). *

Implementation research-related findings

- None reported

Process/study execution-related findings

- Group facilitators were trained together on delivery of the HINTS and control interventions. Group sessions were recorded and reviewed by the principal investigator, a licensed psychologist, and the project manager, a licensed social worker, to monitor intervention fidelity. The study team also met weekly for supervision to discuss any pertinent issues regarding intervention delivery.

Adverse events

- None Reported

**Analysis controlled for age, depression, alcohol use, and baseline sexual risk.*

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REFERENCES AND CONTACT INFORMATION

Cruess, D. G., Burnham, K. E., Finitis, D. J., Goshe, B. M., Strainge, L., Kalichman, M., Grebler, T., Cherry, C., & Kalichman, S. C. (2018). [A randomized clinical trial of a brief internet-based group intervention to reduce sexual transmission risk behavior among HIV-positive gay and bisexual men](#). *Annals of Behavioral Medicine*, 52(2), 116–129.

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