Think Twice

An Individual-Level, Single-Session, Peer Delivered Intervention for MSM
Intervention Overview

• Focuses primarily around commonly used grassroots form of prevention called serosorting (limiting partners to those of same status)

• Uses graphic novel to deliver intervention content
Theory and Evidence

• Think Twice is a theory based behavioral intervention
• It was tested among both White and African American MSM
• Short term outcomes demonstrated substantial reductions in numbers of sexual partners among participants
The Development and Outcomes of an Intervention to Address Serosorting Among HIV Negative Men Who Have Sex with Men

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June 4, 2010

Research funded by NIMH grants R01MH074371 and T32MH074387
Introduction

- Incident HIV prevalence is higher than previously estimated with 56,000 infections
- Men who have sex with men (MSM) are disproportionately affected by HIV
  - Make up half of new infections
  - Make up 2% of male population
What are MSM doing that places them at risk?
Risks for HIV

- Continued high rates of unprotected sex (Osmond, 2007)
  - Safer sex fatigue (Ostrow, 2008)
  - HIV treatment optimism (Schwarcz, 2007)
  - Substance use (Mayer, 2009)
Serosorting

- Limiting unprotected partners to those who are of the same HIV status (Eaton, 2007)
  - Commonly reported among MSM
  - Grassroots form of prevention
  - Alternative to condom use
- In theory, serosorting is effective; in practice, it’s risky
  - Recently infected
  - Modeling of serosorting (Butler & Smith, 2007)
Serosorting

- Accuracy in knowledge of own and partners’ HIV status (Eaton, 2009)
  - HIV testing infrequent
  - Uncertainty of HIV status when engaging in risk behavior
- Acute HIV infection
- Sexually transmitted infections (STI)
How can the risks of serosorting be addressed?
Sexual risk reduction counseling has been shown to be effective.

Consideration must be given to:
- Tailoring
- Feasibility
Single-Session Interventions

- One contact with client

- Evidence for similar efficacy when compared to multiple-session interventions (Jemmott, 2007; Peterson, 1996)
Single-Session Interventions

- Single-session interventions:
  - Reduce risk behavior (Warner, 2008; Choi 1996)
  - Reduce STI (O’Donnel, 1998)

- Reasonable option for health care setting
  - Require fewer resources
  - Can be implemented during routine care
What would a serosorting intervention look like?
Single-session, one-on-one, counselor delivered, brief intervention

Think Twice
- Graphic novel
- Personalized feedback
- Real world, reasonable plan
Intervention

- Conflict Theory of Decision Making (Janis & Mann, 1977)
  - Weigh all options
  - Consider new information
  - Determine best decision
- Allows for informed decision making
Conceptual Model

Final decision made

Thorough review of each decision

Benefits

Positive beliefs about serosorting

Serosorting reduces risks for HIV

Serosorting reduces need for condoms

Costs

Perceptions of risks associated with serosorting

Unprotected sex with an HIV negative man poses no risk for HIV

Testing often for HIV protects me and my partner
# Demographics

## Intervention (n=74) vs Control (n=75)

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
</tr>
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<tbody>
<tr>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td><strong>M</strong></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>28.3</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>14.0</td>
<td>2.0</td>
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<table>
<thead>
<tr>
<th></th>
<th><strong>n</strong></th>
<th><strong>%</strong></th>
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<tbody>
<tr>
<td><strong>DAST-drugs</strong></td>
<td></td>
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<td>percent 3 or higher</td>
<td>44.6%</td>
<td></td>
<td>37.3%</td>
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<tr>
<td><strong>AUDIT-alcohol</strong></td>
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<tr>
<td>percent 7 or higher</td>
<td>39.2%</td>
<td></td>
<td>44.0%</td>
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<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>18</td>
<td>24.0</td>
<td>14</td>
<td>17.9</td>
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<tr>
<td>Black</td>
<td>50</td>
<td>69.3</td>
<td>55</td>
<td>73.1</td>
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<tr>
<td>Hispanic</td>
<td>2</td>
<td>2.7</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>4.0</td>
<td>3</td>
<td>5.1</td>
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<tbody>
<tr>
<td><strong>Have you ever had a sexually transmitted disease (STD)?</strong></td>
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<tr>
<td>Yes</td>
<td>36</td>
<td>48.0</td>
<td>35</td>
<td>47.3</td>
</tr>
<tr>
<td>No</td>
<td>39</td>
<td>52.0</td>
<td>39</td>
<td>52.7</td>
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**Results - Main Outcome**

The graph shows the number of male sexual partners over time, comparing control and intervention groups.

- **Baseline:**
  - Control group: $p = .83$
  - Intervention group: $p < .001$

- **1-Month:**
  - Control group: $p = .11$
  - Intervention group: $p = .05$

- **3-Month:**
  - Control group: $p = .68$
  - Intervention group: $p < .05$
Evidence for reduction in overall risk for HIV
Factors driving change need further investigation
Serosorting intervention could be implemented as a form of HIV counseling during testing
Future Directions

- Blanket messages for risk reduction are not sufficient
- Informed decision making
  - Allows for educated decisions
  - Prepares men for making decisions during potential risk taking