Promoting Sexual Health and Stress Management Among HIV+ MSM

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Context for this work

- HIV epidemic has caused tremendous human suffering, loss of life, and economic hardship
- 25 million deaths worldwide since 1981
- Globally: 33 million people living with HIV
- Prevention programs remain central to containing the epidemic
HIV in the United States

- Estimated that > 1 million people living with HIV
- New infections ~ > 56,000 per year
- HAART therapies transformed HIV care
- Growing population of people living with HIV
- Coping and prevention challenges remain
Estimated Number of HIV/AIDS Cases among Adults and Adolescents, by Transmission Category, 1994–2006—25 States

Note. The data have been adjusted for reporting delay and cases without risk factor information were proportionally redistributed.  
*Heterosexual contact with a person known to have, or to be at high risk for, HIV infection. 
†Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.
Stemming the Tide of New Infections

- Targeted prevention with highest risk subgroups
- Secondary prevention with HIV positive people
- Multilevel strategies, community wide mobilization
Our work in Syracuse
Primary Prevention of STDs/HIV

- Project iMPPACCS: 4-city media-based prevention trial: African-American teens
  NIMH Cooperative

- HPV Vaccine Acceptance African-American Teens
  Merck Investigator Initiated

- Risk reduction for STD patients
  (M. Carey, PI; NIMH HIP-R)
Secondary prevention
For HIV+ People

Sexual Risk Reduction for MSM
NIMH (R21)

Coping Intervention for HIV+ Women
NIMH (F31)

Self-Management / Adherence
- Stigma and HIV care
- CAM Use
- Benefit finding
Sexual Risk Reduction for Positives
Prevention for Positives

- Recognized as an urgent public health priority
  - CDC, 2001: “Serostatus Approach to Fighting the HIV Epidemic”
- Broad deployment of “positive” interventions could provide an efficient means of averting new HIV infections
How are we doing with HIV+ prevention?

- 25 years into the epidemic, striking how few intervention trials for HIV+
- Review of 15 RCTs, 11 that included only HIV+ people
- Effect sizes similar in magnitude to primary prevention programs
“...Interventions were successful to the extent that MSM were not included in the sample.”

Johnson, Carey et al.  JAIDS (2006)
## HIV+ Safer Sex Interventions

<table>
<thead>
<tr>
<th>Citation</th>
<th>Approach</th>
<th>Population</th>
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<tbody>
<tr>
<td>Kalichman – SHARE (2001)</td>
<td>6 session group</td>
<td>Adults</td>
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<td>Rotheram-Borus (2001)</td>
<td>26 session group</td>
<td>Teens</td>
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<tr>
<td>Richardson (2004)</td>
<td>Brief, individual, clinic based</td>
<td>Adults</td>
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<td>Fisher – Options (2005)</td>
<td>Brief, individual, physician delivered</td>
<td>Adults</td>
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<td>NIMH Healthy Living Project</td>
<td>Individual, multi-session</td>
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<td>Wingood – WiLLOW (2004)</td>
<td>4 session group</td>
<td>Women specific</td>
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<tr>
<td>CDC SUMMIT Project (2005)</td>
<td>6 session group</td>
<td>MSM specific</td>
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Recent work with HIV+ MSM

- Morin et al. (2008), HLP, subgroup analysis of MSM
  - Finding: decreased risk behavior, possibly mediated by increase in serosorting

- Ongoing work with MSM:
  - Rosser and colleagues
  - Ken Mayer’s group
HIV+ MSM Require Attention

- In 2006, 50% of new infections in the U.S. were among MSM
- Number of HIV infections among MSM is increasing in U.S., Europe, and Australia
- Correlates with a resurgence of sexual risk behavior
Challenges to Success with HIV+ MSM

- Existing programs are time and resource intensive
- Interest in sexual health may be waning
- Need for tailored approach that reflects unique interests and prevention needs of MSM
“Now it seems that it is each man for himself. Missing from all discussion of HIV prevention is any sense of concern for the collective or responsibility for the health of the community… We need leadership… so that the community norm can be of one of balancing what the individual might want against the desire to take care of others.”

What is to be done?

- Need programs that work and that are appealing to MSM
- Melding provider based interventions with more intensive interventions that are tailored to the needs of specific subgroups
- Shift in gay community norms
MPH Project
Men’s Partnership for Health

Peter Vanable, Michael Carey & MPH Team
Syracuse University

Donald Blair, MD
SUNY Upstate Medical University

NIMH R21-MH65865
Primary Aim

- Develop and pilot test a sexual risk reduction intervention for HIV+ MSM
Stages of Research

1. Qualitative research to inform intervention approach
2. Develop intervention
3. Pilot intervention trial ($N=80$)
Qualitative Research Goals

- Salience of sexual health relative to other concerns and challenges
- Motivational, informational and skill-deficits linked to sexual risk
- Suggestions for intervention content and approach
Data Collection and Analyses

- Four focus groups (N=32)
- Qualitative interviews (N = 20)
- Eligibility: MSM, sex in past year ($20)
- Interview guide
- Interviews transcribed, coded using detailed coding manual
Qualitative Participant Characteristics (n = 52)

- **Age**
  - Mean: 41 years (range: 24 – 63)

- **Ethnicity**
  - 61% Caucasian (n=31)
  - 33% African-American (n=17)
  - 6% Other (n=4)

- **Health Status**
  - 31% diagnosed with AIDS
  - Years since dx, \( M = 8 \) years
  - 50% undetectable viral load (self-report)
Priorities for Health

- Striking what was **not** a top priority:
  - Few spontaneously mentioned sexual behavior choices as relevant to one’s own health
State of Mind and Behavior Change

- Positive outlook, maintaining balance, sense of humor, reducing stress cited as top priority
- Changing lifestyle: diet, sobriety, decreased drug use
- Complimentary and alternative therapies (CAM)
Stressors

- HIV-related stigma and sexual orientation stress
- Potential health decline due to HIV
- Sexual health and safer sex not described as a major stressor
“...it's just being homosexual, being considered a minority, and being HIV+ with it too.... it's like 3 strikes, bam bam bam, people don't want to associate with that.”

“I can tell you that if you were a person in my house, there would be no clue that I'm either gay or HIV+, because you would never be able to find it, you know, I hide it just as deep in my house, you know my pills and my medicine and everything like that...”
Interest in Sexual Health Interventions

- Only modest interest in workshops focused exclusively on safer sex
  - Don’t preach condom use to us
  - Interest in health promotion programming that is not exclusively focused on safer sex

- Interest in holistic, group-based support
  - Stress management, coping
  - Stigma, sexual orientation, intimacy, disclosure
  - HIV+ gay community building
Some expressed outright negativity regarding efforts to promote safer sex among persons living with HIV.
“I'll be honest, I don't think prevention is worth a damn. I've found that some people just want to practice unsafe sex...short of injecting something into their brain, you could take them to a workshop every hour, and they're not going to hear it. I don't think any number of workshops is going to do it, I just don't.”

We need a vaccine. We're already at a place where we've pissed away millions of dollars on safe sex education and this and that, they aint never gonna touch it.”
Dynamics of Sexual Risk Behavior & Implications for Intervention Content
Relationship Factors

- Concern for partner safety a primary motive for condom use
- BUT: Partners, regardless of HIV status, sometimes express a high desire for sex without a condom.
AIDS Optimism & Reduced Concern about Unprotected Sex

- Highly salient among most participants.

“Because the alarm is not sounding as loudly and the thrill is a little bit more enticing. It used to be that the alarm drowned out the thrill. Cost/benefit is in a different light now. I think that nowadays it's easier to think about the thrill rather than the alarm...”
Viral Load & Perceptions of Reduced Infectivity

- Not Salient to Most Patients

  “If you have it [HIV], you can give it to somebody else. It doesn’t matter how much you’ve got.”
Absence of Supportive HIV+ Gay community

“In the gay community there’s a lot of prejudice, especially with HIV, like if they know someone has HIV, they wouldn’t talk to them. Right here in Syracuse.”
Focus on condom negotiation, disclosure, stigma, and intimacy

“I think you have to learn how to communicate, number one, talking to partners and not being afraid to do that and I have trouble with that myself…”

“Well my sense is that if I went out for a drink and a guy noticed me… all I have to do is mention it [being positive], chances are, it isn't going to happen and if I was interested in being picked up that night for sex, not.”
Costs & Benefits of Serosorting

- “I’m not going to lie. I always think oh well you might as well not bother, he’s positive and just call it a day…I can’t get no more positive. That was the thing and actually I know better, but honestly I don’t use condoms.”

- “I have relationships with people who are HIV+… it’s a personal matter and personal decision at that particular moment, sometimes you may not even care if you reinfect yourself, if you've got the virus, you've got the virus, how much worse can it get?”
Safer sex should be everyone’s responsibility, not just HIV+

- Safer sex to protect one’s own health vs. the health of others
- Sensitivity: feeling blamed for new infections

“You know I’m tired of being responsible for other people’s actions. This society is always looking for somebody to blame…”
Intervention Development
What did we learn?

- Only modest interest in workshops focused exclusively on safer sex
- Interest in group-based support
  - Stress management, stigma, intimacy, disclosure
  - HIV+ gay community building
- Safer sex is everyone’s responsibility, not just HIV+
Design Considerations

- Marketability and “consumer” interests vs. theory-based, research driven approach
- Relatively brief, with option for longer term support
- Combines stress management / coping intervention with sexual risk reduction
- HIV+ MSM facilitators
Intervention Development

- Theoretical foundations
  - Information- Motivation-Behavioral-Skills Model (Fisher & Fisher, 1992)
  - Stress and Coping theory (Lazarus & Folkman, 1984)
  - Coping Effectiveness Training (Chesney, 2006)
Two Intensive Sessions

Session 1

Setting the stage for change
- AIDS optimism vs. realities of HIV
- Role of community
- Challenges of staying healthy

Stress management training
- Elements of CET (Chesney, 2003)
- Changeable / unchangeable stressors
- Social support
- Stigma, adherence, disclosure

Session 2

Healthy and Relationships
- Sex & intimacy challenges
- Facts to live by
- Goal setting for sexual health
- Risk perceptions
- Coping with “hot thoughts”
- Trigger management/ self-management strategies
- Partner communication & disclosure
- DVD-based Assertiveness training

+ Twice Monthly Poz Talk
Dual theme: Promoting own health and that of the community
Coping Effectiveness Training (CET)  
*Chesney, M.*

- General Stressor
- Specific Stressor
  - Changeable Aspects
    - Problem Focused Strategies
    - Problem-solving Negotiation skills
  - Unchangeable Aspects
    - Emotion Focused Strategies
    - Relaxation
    - Reframing
    - Physical Activity
- Coping Effectiveness Training (CET)
Phase 2

- Randomized pilot intervention trial
  - Feasibility and acceptability data
  - Preliminary efficacy data
- Lagged treatment control group design
141 Screened

- 35 Not Eligible (no sex)
- 27 Eligible but declined participation

80 Randomized

- Immediate Intervention (N = 40)
- Delayed Intervention (N = 40)
Participant Characteristics ($N = 79$)

- $M$ Age = 40.6 ($SD = 8.0$)
- Ethnicity
  - 63% Caucasian
  - 26% African-American
  - 11% multiracial / other
- 49% unemployed; Monthly income ~ $1,167
- Health Status
  - 46% undetectable viral load (self-report)
  - 28% with AIDS
  - Years since dx, $M = 9$ years ($SD = 5.6$)
Participant Recruitment & Eligibility

- **Recruitment**: Outpatient visits at University-based Infectious Disease Clinic
  - “…new health promotion program for HIV+ men helps them to deal effectively with daily stress and to have healthy, safe, and rewarding relationships.”

- **Eligibility**: Sex with man during the last year

- **Exclusion criteria**:
  - Severe cognitive impairment or mental illness
  - Unable to read or speak English
Intervention Format

- Two HIV+ MSM facilitators
  - Past (relevant) work experience in HIV
- Two group sessions, 4 hours
- Twice monthly “Poz Talk” support groups
- Groups of up to 10 participants
Measures
Sexual Risk Behavior Antecedents

- **HIV+ Health Knowledge Scale** (Vanable et al., in press)
- **Self-Efficacy** (adapted from Kalichman, 2002 & Murphy, 2001)
  - Disclose HIV status to partner (\( = .74 \) )
  - Discuss condom use with partner (\( \alpha = .65 \) )
  - Convince partner to use condoms (\( \alpha = .78 \) )
- **Condom Attitudes** (adapted from Sacco, 1991) \( \alpha = .74 \)
- **Intention to refuse unprotected sex** (Carey et al., 1997)
Sexual Risk Behavior

- Self-report of behaviors during past three months
- Counts of unprotected sex occasions
- Anal sex only / anal + oral sex
Stress Management Outcomes

• **Coping Self-Efficacy** (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006)
  – Confidence to manage stressful situations during the past month
  – 15-items
  – $\alpha = .80$

• **Social Support** (Cutrona & Russell, 1987)
  – Degree of social support
  – 18-items
  – $\alpha = .93$

• **Perceived Stress** (Cohen, Kamarck, & Mermelstein, 1983)
  – Level of perceived everyday life stress during the past month
  – 10-items
  – $\alpha = .85$
Measures: Acceptability

- Intervention Acceptability:
  - Degree to which participants enjoyed the intervention
  - Usefulness of intervention content

- Intervention Facilitators:
  - Satisfaction with the intervention facilitators
Intervention Acceptability

- High participant satisfaction ($M=3.8/4$)
- Excellent retention (91% at 3 months)
- Moderately strong attendance for intervention sessions (72%)
Sexual Risk Behavior Antecedents
HIV Health Knowledge

\[ F(1, 68) = 18.7, \ p < .001 \]
Intentions to Refuse Unprotected Sex

\[ F (1, 68) = 3.9, \ p < .05 \]
Self-Efficacy to Disclose HIV Status

\[ F (1, 68) = 8.7, \ p < .005 \]
Self-Efficacy, Condom Negotiations

$F (1, 68) = .95, \ ns$
Condom Attitudes

Condom Attitude Score

Baseline Follow-Up
Assessment Point

Condom Attitude Score

Immediate
Delayed

ns
Sexual Risk Behavior Outcomes
Unprotected Anal Sex

ns
Unprotected Anal or Oral Sex

$F (1, 67) = 4.7, p < .05$
Psychosocial Outcomes
Perceived Stress

$F(1, 68) = 5.0, p < .05$
Social Support

ns
Coping Self-Efficacy

$F (1, 68) = 9.6, p < .005$
Summary

- Proof of concept: Two session model, combined with ongoing support
  - Approach was well received
  - Evidence of change on relevant coping and sexual behavior indices
Conclusions

- Brief, tailored intervention for MSM is feasible, promising findings
- Multilevel strategies essential
  - Effective clinic / provider based prevention as part of routine care
  - Intensive- tailored interventions
  - Community-wide: promoting collective responsibility for health among MSM
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Thank you!