HIV-specific social support predicts discrepancy in reporting sexual behavior with primary partners in a sample of gay male couples

Lynae A. Darbes, PhD; Deepakita Chakravarty, MS; Colleen Hoff, PhD; Torsten B. Neiells, PhD
Center for AIDS Prevention Studies, Global Health Sciences, University of California, San Francisco, Funded by NIMH RO1 #MH65138 and K08 #MH72380

Background

• Most behavioral studies rely on self-reported sexual behavior to identify rates of risk for HIV, e.g., UAI (unprotected anal intercourse). However, no standard for collecting these data currently exists.
• Previous work has shown high potential for discrepancy when both partners report on their own sexual behavior with their partner.
• Factors such as length of relationship, relationship characteristics, and serostatus of couple could influence accuracy of reporting.

Gay Couples Study (GCS)

Objectives of GCS are to:
• Identify relationship characteristics associated with sexual risk-taking among gay male couples.
• Explore the role of partner status and agreements about outside partners impact sexual risk-taking and relationship quality.

HIV-specific social support (HIV-SS)

• Increased HIV-specific SS has been found to be a significant predictor of less sexual risk behavior in gay male couples.
• We hypothesize that HIV-SS captures aspects of both social support regarding HIV and communication about safer sex.

Study Design

• Recruitment: Couples were recruited via modified targeted sampling as well as venue-based recruitment in San Francisco, California, USA, from June 2005–February 2007.
• Eligibility: Eligible couples were in a committed relationship of three months or more, at least 18 years old, and knew their own and their partner’s HIV serostatus.
• Survey: Couples completed a computer-administered survey on a wide variety of topics including HIV risk behavior (with primary and non-primary partners), relationship dynamics, and psychosocial variables.

Sample Characteristics

• N = 378 gay male couples
• Race/ethnicity of couple:
  – Mixed/Interracial: 31%
  – White: 41%
  – Black: 5%
  – Hispanic: 3%
  – Asian/Pacific Islander: 1%
• Length of primary relationship:
  – Mean: 4 years, 9 months (Range = 3 months to 35 years)
• Couples HIV Serostatus:
  – 57% HIV-negative
  – 23% HIV-positive
  – 20% Serodiscordant
• Couples Agreement Type:
  – Closed (no outside partners) 48%
  – Open (allowed outside partners) 52%
• Although the total sample is comprised of 566 couples, this analytic set equals the sum of the absolute value of both partners' individual HIV-SS scores to obtain the couple’s mean HIV-SS.

Results

• We hypothesized that HIV-SS captures aspects of both social support regarding HIV and communication about safer sex.
• Factors such as couple serostatus and length of relationship could be crucial for determining whether assessments of sexual risk behavior are accurate in research and programmatic endeavors.

Conclusions

• Though not statistically significant, couples with longer relationships reported less discrepancy in UAI with each other.
• For 69% of couples, the total discrepancy in reported UAI with each other ranged from 1–42; the remaining 11% had discrepancies higher than 42.
• Couples with higher HIV-SS had significantly lower discrepancies in UAI with each other than sero-discordant couples (p < 0.0001) for each unit increase in the couples’ HIV-specific social support score, their discrepancy in reporting UAI with each other decreased 59%.
• The discrepancy scores of sero-discordant couples were 87% lower than sero-concordant couples’ (p = 0.0001) for UAI with their primary partner.
• There was no significant difference between couples with open and closed agreements with regard to discrepancy in reporting UAI with their primary partner.
• Though not statistically significant, couples with longer relationships reported less discrepancy in UAI with each other.

Methods

• We focused on the number of episodes of UAI (with or without ejaculation) with one’s PRIMARY partner over the previous 5 months.
• We created a “discrepancy score” for each couple that equaled the sum of the absolute value of both partners’ discrepancy scores of reporting UAI.

For example, we had Partner 1’s report of how many times he was the insertive partner compared to how many times Partner 2 reported being receptive, Example: P1: insertive (12); P2 receptive (15)

• We also had Partner 2’s report of how many times he was the insertive partner, when Partner 1 reported being receptive, Example: P2 insertive (4), P1 receptive (3)

The two discrepancy scores from each instance were then added together. Total discrepancy = 1 + 3 + 4

• We averaged both partners’ individual HIV-SS scores to obtain the couple’s mean HIV-SS.

• Hypothesis: “increased HIV-specific SS has been found to be a significant predictor of less sexual risk behavior in gay male couples.

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<th>p</th>
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<tr>
<td>Length of relationship</td>
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<tr>
<td>Open</td>
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<td>HIV-SS mean</td>
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Conclusions

• Studying both partners allows for more accurate estimate of actual sexual risk behavior.
• Discrepancy in reporting suggests an important issue in collecting sexual behavior data, as it indicates the presence of either under- or over-estimating risk behavior.
• Given the high amount of discrepancy found, it is important to obtain sexual behavior reports from both partners, whenever possible, in reports of UAI.
• Serodiscordant couples reported significantly fewer discrepancies, possibly due to the occurrence of UAI being a more salient event for these couples.
• HIV-specific social support is possibly capturing an important dynamic within gay male couples given its associations with both partners’ agreement type (open/closed), serostatus of couple (concordant/discordant), and within-couple discrepancies, possibly due to the occurrence of UAI being a less salient event for these couples.

• Type of agreement (open or closed) was not related to discrepancy in reporting UAI with within-couples, indicating that accuracy of recall with primary partner is not influenced by the presence of outside partners.
• Factors such as couple serostatus and length of relationship could be crucial for determining whether assessments of sexual risk behavior are accurate in research and programmatic endeavors.

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