

HIV+ Males' Quantity of Sex Partners: Social Support and Depression

According to the Center for Disease Control (CDC) risky sexual behavior (e.g., sex without a condom or having multiple sexual partners) is cited as the predominant mode of transmission of HIV, and accounts for 80-90% of infections worldwide. A disproportionate number of these cases are male (CDC, 2003). One reason might be that males tend to engage in more risky behaviors than females, and males who are HIV-positive are significantly more likely to engage in risky sexual behavior than males who are HIV-negative (Forti, Kassab, & Koch, 2000). Additionally males who are HIV-positive have unique stressors such as the stigma associated with being seropositive, the disfigurement associated with the virus and treatment of HIV, and the decimation of entire social networks within the gay community due to HIV; all of which may contribute to more risky sexual behavior. Both perceived and received types of social support have been linked to risky sexual behavior, but little research examines differential effects (type and source) of received social support on risky sexual behavior (Mays, et. al., 2004).

This study examined the relationship of received social support, medical symptoms, depression, and risky sexual behaviors in males with HIV/AIDS. For the purposes of this study, risky behavior is defined simply as the number of sex partners one has over a three-month period. We hypothesized that both social support and depression would significantly account for substantial portions of variance in the number of sex partners reported.

Participants (N = 125 males; 51% African American, 37% Caucasian, and 12% Latino) were recruited at community AIDS service organizations in the Dallas/Fort Worth area. Fifty-six percent of the sample reported being gay, 22% bisexual, and 22% straight. Average age was 42 (range= 26 to 68). Average education was 12 years (range= 6 to 20) and 63% reported household incomes of less than \$10,000. Sixty percent of participants reported a comorbid sexually transmitted disease. Average duration of HIV since diagnosis was 8.5 years (SD=5.5), and average recent CD4 count was 410 (SD=265).

All data were collected at one point in time. Participants completed self-report measures on demographic information, risky sexual behavior, depression, social support, and medical information regarding duration of illness, symptom load, and use of antiretroviral medication. An exploratory hierarchical multiple regression analysis was conducted to evaluate factors associated with the total variance in the number of sex partners an individual has over a three-month period. This hierarchical regression analysis was conducted to determine to what degree demographic variables (ethnicity & income), AIDS-related variables (duration of illness, severity of symptoms, taking anti-retroviral medication, & number of STDs), & psychosocial variables (depression and received social support) accounted for variance in the number of sex partners. Demographic and AIDS-related variables were entered simultaneously to control for these variables in our final model. The psychosocial variables of depression and social support were entered stepwise forward as they were the independent variables of

theoretical interest. Only those variables of interest significantly related to the dependent variable were included in the final model.

Results suggest that both social support and depression are associated with number of sexual partners but in a more complex manner than we had thought. Received social support factors were associated with the number of sex partners differentially: social support that included informational support received from friends ($t= 3.36, p<.001$) and familial stress ($t=2.69, p<.00$) were positively associated with our outcome variable whereas an inverse relationship existed for emotional support received from partners ($t= -4.51, p<.001$), and informational support received from family ($t=-2.20, p<.05$). Additionally depression ($t=-2.83, p<.01$) was inversely associated with risky behavior. Only one demographic variable was significantly associated with number of sex partners: Hispanic ($t=3.34, p<.001$). Overall, our model accounted for 20% of the variance in the number of sex partners one had (Adjusted R Square = .20, $F(12,126)=3.66, p<.001$).

The findings suggested that a differential relationship does exist between type and source of received social support and the number of sex partners. Specifically, emotional support from partners, informational support from friends, informational support from family, depression, and family stress are significant predictors of risky sexual behaviors in males. HIV+ males who receive emotional support from partners and informational support from their family, appear to engage in less risky sexual behavior, whereas Informational support or advice from friends is related to an increase in risky sexual behavior. One reason for this finding might be that informational support/advice is not a well-received type of support and thus not related to the number of sex partners one has. One last dimension of social support, family stress, is related to increased risky sexual behavior. Lastly, males who endorse less depression appear to engage higher rates of risky sexual behavior. One plausible reason for the finding in this study may simply be that, as levels of depression decrease, individuals are less likely to isolate themselves and more likely to be in social situations that may lead to sex.

Our study is limited in the causal inferences that can be drawn due to the cross-sectional, correlational design used, however our results clearly demonstrate that a relationship does exist between social support, level of depression and number of sex partners for men. Further investigation is needed to determine how received social support may reduce/increase individual's number of sex partners. Clinical interventions that focus on particular aspects of received social support may be useful with male clients who exhibit high levels of risky behavior.