

**Relational Determinants of the Similarity in Condom Use among Adolescents and  
Young Adults:  
Analysis of Close Same-Gender Friends and Bridged Heterosexual Relationships**

**Michiyo Yamazaki, Ph.D.**

**Johns Hopkins University Medical School, Department of Pediatrics**

**Jonathan Ellen, MD**

**Johns Hopkins University Medical School, Department of Pediatrics**

## **Abstract**

Same-gender friends have been considered to be influential on adolescent's risk taking behaviors, and having sexually experienced friends is one important determinant of the timing of sexual debut, sexual risk behaviors, and contraceptive practices among adolescents. This study examines potential relational determinants of the homogeneity in adolescents' condom use. The objectives of this study were to compare self-reported condom use at last sex between adolescents and their close same-gender friends, and to explore the condom use of same-gender individuals who reported having sex with the same opposite-sex partner in the three months prior to participations in the baseline and 1 year follow-up surveys.

Data were obtained from the Bayview Network Study (CA), designed to examine the prevalence of STI risk behaviors and transmission patterns among adolescents between July 2000 and October 2001. The analysis of similarity in condom use included 46 female same-gender friend-dyads and 31 male same-gender friend-dyads. The pairwise odds ratio (OR) and age-adjusted OR were 2.6 (95% CI: 0.7, 10) and 3.0 (95% CI: 0.8, 11) comparing female adolescents' reporting condom use when their same-gender friends reported condom use relative to when their same-gender friends did not. Permutation-based p-values for the pairwise and age-adjusted ORs were 0.02 and 0.05 respectively, suggesting significant positive same-gender friends' effect on condom use among female adolescents. The pairwise and age-adjusted ORs for male adolescents were 2.3 (95% CI: 0.2, 18) and 1.0 (95% CI: 0.1, 8.0). Corresponding permutation-based p-values suggested no same-gender friends' effect among male adolescents.

This study also explored condom uses of two groups of individuals who reported having sex with the same opposite-sex partners in the three months prior to participation in the surveys. The odds for reporting condom use of individuals in the baseline cohort were not different when the other females, who reported having sex with the same male partner, reported using condoms compared to when the other females did not (age adjusted OR=0.3, 95%CI: 0.03, 2.8, frequency of sex adjusted OR=0.5, 95%CI: 0.05, 5.9). The same association was observed for two groups of males who reported having sex with the same female sex partner. The ORs of reporting condom uses for individuals whose partner nomination were unidirectional were 3.5 (95%CI: 1.1-11) for females and 1.7 (95%CI: 0.22-12) for males compared to the other same-gender individuals whose partner nominations were reciprocal.

This study provided strong support for clustering in condom use among adolescent females and their friends; however, there was no such evidence among male friends. Counseling for STIs among same-gender friends may be more efficient in notifying and enrolling adolescents than couple counseling and treatment, or it may enhance such interventions.