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HETEROSEXUAL ANAL SEX DURING THE YEAR AFTER AN STD CLINIC VISIT

Poster (P-062)

Presented at the 17th International Society for Sexually Transmitted Disease Research (ISSTDR) Meeting, 27 July – 1 August 2007, Seattle, Washington, USA.

ABSTRACT

OBJECTIVES: Describe heterosexual anal sex activities among 3 STD clinic populations and identify factors associated with heterosexual anal sex.

METHODS: Secondary analysis of data from an STI prevention trial (RESPECT- 2) conducted in 3 public STD clinics. Heterosexual participants described sexual behaviors with up to 3 partners during audio computer-assisted interviews every 3-months for a year. We analyzed anal sex behavior among heterosexual participants and partnerships during each 3-month interval and among heterosexual participants who attended all four 3-month interviews. GEE logistic regression models were used to account for within-participant correlation of repeated measurement and to identify factors associated with anal sex.

RESULTS: 2125 heterosexual participants reported on 5364 3-month intervals including 7249 partnerships. Anal sex was reported during 17.2% (926 intervals) of 5364 intervals. For those 926 intervals, the mean number of anal sex episodes was 4.3 (median, 2); and the mean number of vaginal sex episodes was 39.5 (median, 21). In 268 intervals, participants who had anal sex reported both main and causal partners; they had anal sex with main partner (79.5%), causal partner (33.6%) and both (14.2%). Condom use during anal sex was reported to be consistent (26.3%), inconsistent (7.3%), or not used (66.5%). Among 797 participants who returned for all four follow-up interviews, 308 (38.6%) reported having anal sex. These 308 had anal sex in 1 interval (39.3%), 2 intervals (26.3%), 3 intervals (18.8%), or all 4 intervals (15.6%). The numbers of episodes of anal sex over the year were: once (27%), 2-12 times (57.8%), 13-24 times (11%), or 25 times (4.2%). Over the year, condom use during anal sex was consistent (21.4%), inconsistent (22.1%), and not used (56.5%). Participants reporting anal sex were similar to other participants in terms of age, gender, and race, but were more likely to report having 2 or 3 partners versus one (OR=1.8, $p<0.001$), having anal sex with their main partner versus with their causal partner (OR=1.3, $p<0.05$), having sex 50 times (total of vaginal and anal) versus 1-13 times (OR=4.0, $p<0.001$), and having unprotected vaginal sex versus always using a condom for vaginal sex (OR=1.6, $p<0.001$) during the interval.

CONCLUSIONS: Anal sex was commonly practiced among heterosexuals, but is a risk behavior that is often overlooked. Clinician should ask STD clinic heterosexual patients about anal sex, recommend condom use to prevent STD and HIV transmission, and examine and test patients who have had anal sex.

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NEW SEXUALLY TRANSMITTED INFECTIONS AMONG PERSONS WHO DID NOT HAVE SEX: POSSIBLE SOURCES OF ERROR IN A CONTROLLED TRIAL

Poster (P-529)

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ABSTRACT

OBJECTIVE: In a recent large STI prevention trial 64 patients acquired gonorrhea (GC), chlamydia (CT), or trichomonas (TV) during an interval in which they reported having no sex. We wanted to identify errors that led to this paradoxical situation.

METHODS: Prior to data analysis we listed types of errors and how they would influence the data. 1) Test specificities are reportedly 95-99%, so many positives could be false positives and they would be randomly distributed. 2) Errors in sex behavior histories would manifest as infections among persons reporting no sex who have the same characteristics as all infected persons in RESPECT 2 (differences by age, race, infection at baseline). 3) Test sensitivity errors would manifest in the first follow-up interval, and 4) treatment failure would manifest in intervals following treatment; these were not expected to be major contributors. Data were reviewed for evidence of each of these possible sources of error. In RESPECT-2, patients from STD clinics in Newark, Denver, and Long Beach had computer-assisted interviews, exams, and lab tests at baseline, 3, 6, 9, and 12 months. Tests were nucleic acid amplification tests for GC and CT, and culture for TV (women only). This analysis was restricted to participants tested for infections before and after an interval in which they reported having no sex partners. We calculated the incidence of new infections associated with different patient characteristics.

RESULTS: The 64 infections occurred among 668 persons who reported no sex during 1125 three-month intervals. Tests were more likely to be positive for TV (4.0%) than for GC (1.4%, $p<0.01$), or CT (2.4%, $p=0.1$). Although this number of errors is compatible with test specificities of 96-98.6%, the infections were not randomly distributed. Relative risks (RR) for infection among persons who did not have sex and among all persons were: for GC, persons infected vs uninfected at baseline (2.2 [no sex], 3.1 [all persons]), blacks vs whites (4.3, 2.3); for CT, infected vs uninfected at baseline (3.8, 2.1), age <25 vs >25 (3.4, 2.1); and for TV, infected vs uninfected at baseline (4.6, 3.6), blacks vs whites (1.8, 5.3), and women <25 vs >25 (0.3, 0.6). Only gonorrhea was significantly associated with having infection in the previous interval (RR 6.8) but there were only 4 such infections among persons who reported no sex.

CONCLUSIONS: Infections among persons who reported no sex were associated with the same risk factors identified for all study participants, suggesting there were errors their sex histories. False positives also likely occurred, and could have been reduced by confirmatory testing. Treatment failure may have occurred in a few cases.