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Rectal Self-Sampling in Non-Clinical Venues for Detection of Sexually Transmitted Infections (STI) among Behaviorally Bisexual Men

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Abstract

Rectal sexually transmitted infections (STI) are a common health concern for men who have sex with men (MSM) but little is known about these infections among men who had sex with both men and women (MSMW). Self-obtained rectal specimens were collected from a diverse sample of behaviorally bisexual men. From a total sample of 75 bisexual men, 58 collected specimens. A relatively high prevalence of rectal *C. trachomatis* infection was found. Participants who collected specimens reported overall acceptability and comfort with self-sampling. Future efforts are needed focusing on increasing awareness of and options for rectal STI testing among bisexual men.

Objectives

Rectal sexually transmitted infections (STI) are a significant health issue for men who have sex with men (MSM) (1). Studies have not yet determined the significance of these pathogens among men who have sex with both men and women (MSMW). Self-sampling for rectal STI outside clinical settings is not currently a widespread option for men (2). This study aimed to explore the feasibility of self-sampling for rectal STI among behaviorally bisexual men in non-clinical venues in the Midwestern United States

Method

Between January and June of 2009, qualitative and quantitative interview data and self-obtained rectal specimens were collected from a diverse sample of 75 bisexual men in Indianapolis, Indiana, USA. As seen in Table 1, bisexual men reported engaging in a wide variety of sexual behaviors with both male and female partners; indeed, nearly one third (32%) had never engaged in receptive anal sex. Upon completion of the behavioral interview and rectal self-sampling, each participant provided information regarding their

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overall experience with the process. Samples were delivered via trained couriers to the Indiana University Infectious Diseases laboratory for chlamydia and gonorrhea diagnostics using DNA-based technology [Amplicor CT/NG, Roche Diagnostics, Indianapolis].

Results

From a total sample of 75 bisexual men, 58 participants provided self-obtained rectal samples. A prevalence (10.3%) of *C. trachomatis* infection was found among these men. Additionally, of the number of men who reported engaging in receptive anal sex (n = 51), the prevalence number was even higher (16%). Participants who collected specimens reported overall acceptability and comfort with the self-sampling process, even those who had never engaged in receptive anal sex. Privacy was the most commonly reported concern. Of the men who did not collect a specimen, the most common reason was having been tested in the recent past. Of concern, most participants in our study indicated an overall lack of knowledge regarding rectal STI. For example, many were unaware that rectal infections could not be detected using a urine sample. Limited access to screening services resulted in some individuals having never had their rectum tested for STI.

Conclusions

This study provides unique insights into the experiences of self-sampling for rectal STI among bisexual men in the Midwestern United States. We found a relatively high prevalence of *C. trachomatis* rectal infection in our sample that was recruited primarily through non-clinical venues. Our rates are notably more elevated than the prevalence of chlamydia in nationally representative surveys of heterosexual population in the U. S. (3). Given this high infection rate, these findings suggest that improved education and access for bisexual men are a critical for increasing knowledge and improving uptake of services for rectal STI.

Researchers have highlighted the number of infections that would be undiagnosed by routine testing practice common to many settings. Therefore, public health STI control programs that provide services to behaviorally bisexual men should facilitate routine rectal screening for chlamydia and gonorrhea. The need to increase screening in order to understand the prevalence of disease in vulnerable populations is also critical in order to more effectively target outreach programs. Further investigations are needed to ascertain which combinations of STI testing and treatment methods are most appropriate for diverse groups of bisexual men. Additionally, multiple intervention strategies are needed if we are to have a significant impact on the burden of these diseases in bisexual men. We must improve our ability to reach out to this population that is often marginalized from both hetero- and homosexual groups (4). Interventions are urgently needed that are appropriate to the specific risk behaviors and sexual health needs of bisexual men (5). Such interventions must include an education/counseling component as well as improved access to sexual health care. This should involve provider education, to work toward reducing the stigma associated with bisexuality, as well as access to non-clinical testing opportunities to encourage self-driven monitoring of sexual health status.

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Table 1

Bisexual Men's Lifetime Sexual Behaviors (N = 75)

Recency of Reported Behavior	**Never Done**		**Past 30 Days**		**Past 90 Days**		**Past Year**		**Over A Year**	
Sexual Behaviors	n	%	n	%	n	%	n	%	n	%
Solo Masturbation	0	0	68	90.7	1	1.3	2	2.7	4	5.3
Partnered Masturbation with Male	12	16.0	29	38.7	19	25.3	10	13.3	5	6.7
Partnered Masturbation with Female	18	24.0	19	25.3	16	21.3	17	22.7	5	6.7
Received Oral Sex from Male	3	4.0	43	57.3	18	24.0	9	12.0	2	2.7
Received Oral Sex from Female	1	1.3	33	44.0	16	21.3	19	25.3	6	8.0
Gave Oral Sex to Male	19	25.3	35	46.7	13	17.3	6	8.0	2	2.7
Gave Oral Sex to Female	5	6.7	21	28.0	17	22.7	21	28.0	10	13.3
Vaginal Sex	1	1.3	36	48.0	20	26.7	18	24.0	0	0.0
Insertive Anal Sex	8	10.7	33	44.0	13	17.3	16	21.3	5	6.7
Receptive Anal Sex	24	32.0	15	20.0	10	13.3	11	14.7	15	20.0
Sex Online	47	62.7	11	14.7	8	10.7	1	1.3	8	10.7
Gave Something for Sex with Male	63	84.0	6	8.0	2	2.7	3	4.0	1	1.3
Gave Something for Sex with Female	60	80.0	2	2.7	3	4.0	3	4.0	6	1.3
Received Something for Sex with Male	60	80.0	4	5.3	2	2.7	2	2.7	7	9.3
Received Something for Sex with Female	65	86.7	4	5.3	2	2.7	0	0.0	4	5.3