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Recruitment of men who have sex with men for large HIV intervention trials: Analysis of the EXPLORE Study recruitment effort

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Abstract

Testing HIV prevention strategies requires that researchers recruit participants at high risk of HIV infection. Data from the EXPLORE Study, a behavioral intervention trial involving men who have sex with men, were used to examine the relationship between recruitment strategies and participant characteristics, sexual risk behaviors and HIV incidence. The EXPLORE Study used a wide variety of recruitment strategies; no one strategy accounted for more than 20% of enrolled men. Younger men and men of color were more likely to be recruited through club and bar outreach, friend referral and street outreach. Men reporting ten or more sexual partners were more likely to be recruited through advertising and street outreach. Men reporting unprotected sex were more likely to be recruited through clinic referrals. HIV incidence did not significantly differ by recruitment strategy. Our findings support the need for a wide range of recruitment strategies in attracting MSM at high risk for HIV into clinical studies.

Keywords

gay men; behavioral interventions; HIV; recruitment

Efficacy trials of biomedical or behavioral strategies for preventing HIV infection require large samples of individuals at high risk of HIV infection. When HIV incidence is the primary outcome in such studies, recruitment can be a substantial effort and require sample sizes in the thousands. A limited number of intervention trials have been conducted among

high-risk populations in the United States with HIV incidence as the outcome. Studies involving men who have sex with men (MSM) include two HIV vaccine trials (Harro et al., 2004; Buchbinder et al., 2008), a herpes suppression trial (Celum et al., 2008) and a behavioral intervention trial, the EXPLORE Study (Koblin et al., 2004). Data on recruitment strategies and their relationship to HIV risk behaviors and incidence can provide guidance for future large-scale recruitment efforts.

Other studies have found that recruitment success is optimized by a diverse set of recruitment strategies that complement each other, although few have collected detailed data on recruitment strategies in a manner which allows analysis of associations with risk behaviors and/or HIV incidence (McKee et al., 2006; Harro et al., 2004; Fisher et al., 2006; Parsons & Halkitis, 2002). For example, McKee et al (2006) found that using outreach workers at gay events and venues was a key component to their success, in conjunction with snowball referrals and paid advertising (McKee et al., 2006). They also found that different strategies were more effective in reaching certain subgroups of men than others; e.g., recruiters were more effective in reaching younger men (McKee et al., 2006).

The EXPLORE Study was a multi-site randomized controlled trial to test a behavioral intervention for preventing acquisition of HIV infection among MSM in the United States (Koblin et al., 2004). The recruitment data collected in the EXPLORE Study provide an opportunity to examine the relevant contribution of different recruitment strategies in enrolling a high risk sample of MSM. In this paper, we examined the relationship between different recruitment strategies and demographic data, sexual risk behaviors and HIV incidence.

METHODS

EXPLORE recruitment and study activities took place in six cities in the US: Boston, Chicago, Denver, New York, San Francisco, and Seattle (Koblin et al., 2004). Men were eligible if they were at least 16 years of age, HIV antibody negative at screening, reported at least one instance of anal sex with a male partner in the previous 12 months and were not in a mutually monogamous relationship for two or more years with a known HIV antibody-negative male partner. Eligible men were randomized to either the intervention (consisting of 10 initial counseling sessions delivered over a six month period, followed by quarterly booster sessions) or control arm (HIV testing and counseling based on Project RESPECT) (Chesney et al., 2003).

EXPLORE recruitment was organized at the local level of each study site. Recruitment strategies included outreach in streets and at clubs and bars, commercial sex venues (e.g., bathhouses, sex clubs, adult video stores), health clubs or gyms, community events and retail business outreach (Wendell et al., 2003; Warwick et al., 2003; Woods et al., 2000a; Woods et al., 2000b). Advertising campaigns were conducted in each city through print media, on billboards, in kiosks and on public transit, with emphasis in the gay media (Garrett et al., 2000; Baigis et al., 2003). Participants also came to the study through internet sites (e.g., EXPLORE web site or study site specific web sites), community forums, and referrals from friends or acquaintances who were study participants, health clinics, community-based organizations, and previous studies (Hughes et al., 1995; Warner et al., 2003). Some cities showed the EXPLORE recruitment video, had public service announcements or sent mailings. Site staff received technical assistance from the UCSF Center for AIDS Prevention Studies, the Statistical Center for HIV/AIDS Research and prevention, and Abt Associates, Inc., including a national web site, ads in national publications, annual meetings of recruiters, and site monitoring and evaluation. Site staff reviewed data reports regularly to assess the relative strength of each recruitment strategy.

Following informed consent at the screening visit, trained interviewers collected information on respondents' demographics and history of sexually transmitted infections. Participants also were asked to indicate one recruitment method they believed was most responsible for their decision to join EXPLORE. Participants then completed an audio-computer-assisted self-interview (ACASI) to collect data on sexual behaviors, alcohol and drug use and psychosocial covariates. Participants were asked about sexual behaviors in the prior six months with partners of each HIV serostatus type (negative, positive, and unknown) (Koblin et al., 2004). After completing the interviews, participants received HIV pre-test counseling and blood specimens were collected for HIV antibody testing. Approximately 2 weeks after being screened, participants underwent post-test counseling to receive their HIV test result. Participants with a positive test result at the baseline were referred for medical and social services. Men who were negative for HIV antibodies at the baseline interview were asked to enroll in the trial.

We categorized subjects into ten groups based on the recruitment method they reported at the screening visit. Using chi-square tests for independence, we examined the relationship between recruitment method and enrollment status (grouped as enrolled, eligible but chose not to enroll, HIV infected and thus ineligible to enroll or not eligible for other reasons). Using global chi-square tests for independence, we also examined the relationship between demographic and sexual risk behaviors restricting the analysis to the top five most prevalent recruitment methods ($n=3,128$ of 4,295), methods for which nearly three-quarters of the study population were recruited. These recruitment methods were: advertising, club or bar outreach, friend or acquaintance referral, clinic referral and street outreach. Finally, we constructed a logistic regression model with recruitment method as the independent variable to assess the influence of the top five recruitment methods on HIV incidence.

RESULTS

Between January 1999 and February 2001, 4,862 men completed a screening visit. Of those, 4,295 enrolled, 421 were eligible but chose not to enroll, 93 were HIV infected and thus not eligible, 53 were ineligible for reasons other than being HIV infected (Table 1). Enrolled men were recruited from advertising (19%), outreach at clubs and bars (19%), friends or acquaintance referrals (14%), clinic referrals (11%), street outreach (11%), previous research study referrals (8%), event or business outreach (5%), community based organization referrals (4%), or outreach at commercial sex venues (3%).

Compared to participants who enrolled, those who were eligible but did not enroll were more likely to have been recruited through a friend or acquaintance (Table 1). Participants who were HIV positive at enrollment were more likely to be recruited through club or bar outreach, through a friend or acquaintance, or at a commercial sex venue than those enrolled. They were less likely to have been recruited by clinic referral and through a previous research study.

Table 2 presents the distribution of the top five most prevalent recruitment methods ($n=3,128$; 72.8% of the total 4,295 participants recruited from all sources) by demographic characteristics of the enrolled participants. Geographic location of enrollment, age, race/ethnicity, educational level and income were all significantly associated with recruitment strategy. The method recruiting the largest proportion of men in San Francisco was street outreach, whereas in Boston and Chicago, it was advertising. In Denver and Seattle, a large proportion was recruited through club and bar outreach and clinic referrals. In New York City, almost equal proportions were recruited through advertising, club and bar outreach, friend referral and street outreach. Older men were most likely to be recruited by advertising and clinical referrals, while younger men were more likely to be recruited by club and bar

outreach, friend referral and street outreach. Men of color were more likely to be recruited by club and bar outreach, street outreach and friend referral, with most of the differences accounted for by recruitment of Latino men. Less educated men were more likely to be recruited by club and bar outreach, street outreach and friend referral. Lower income men were more likely to be recruited by friend referral or clinic referral.

The percent of men recruited by each of the top five recruitment strategies for reported sexual risk behaviors is presented in Table 3. Men reporting 10 or more male partners in the prior 6 months were more likely to be recruited through advertising and street outreach. Unprotected anal intercourse and unprotected anal intercourse with serodiscordant partners were more likely to be reported by those recruited through clinic referrals. There was no significant association between HIV incidence and recruitment strategy: hazard ratio (HR) with advertising as reference: club or bar outreach: HR = 1.00 (95% CI: 0.65, 1.53); friend referral: HR = 1.11 (95% CI: 0.71, 1.72); street outreach: HR = 1.05 (95% CI: 0.65, 1.69); clinic referral: HR = 1.45 (95% CI: 0.90, 2.33).

DISCUSSION

EXPLORE used a number of diverse venues and strategies to recruit one of the largest cohorts of high-risk MSM in the United States. As reported previously, the overall HIV incidence in the cohort was 2.1 per 100 person-years (Koblin et al., 2004). Our analysis reveals the need to cast a wide net to attract enough high-risk participants. There were differences in the combination of methods producing the most participants in each city. However, for the entire cohort, three strategies recruited 50% of the cohort (advertising, clubs and bar outreach, friend referral), an additional one-third came from three other methods (clinic referral, street outreach, and previous research study referral). The remaining twenty percent of participants came by way of all other recruitment strategies.

Overall, our analysis also illustrates significant associations between risk behavior and specific recruitment strategies. This cohort of men was at high risk of HIV infection, with two-thirds reporting unprotected anal intercourse at baseline. Men with ten or more partners were more likely to be recruited through advertising and street outreach, while men reporting unprotected sex were more likely to be recruited by clinic referral. For clinics, the recruitment of higher risk men is likely due to that patients at clinics were probably seeking treatment for a sexually transmitted infection having recently engaged in some risky sex. Furthermore, we believe that clinics were associated with the recruitment of risk-taking men because each clinic had strong ties to the study site and staff were prepared to take a few moments to explain EXPLORE in the clinic setting. Although the EXPLORE cohort also experienced a high incidence of HIV infection during follow-up (Koblin et al., 2004), we were unable to demonstrate an association of HIV incidence with a particular recruitment strategy. These results underline the importance of utilizing a wide range of methods of recruitment for high-risk men, emphasizing approaches that may be accessing high-risk men, as well as the need for careful documentation of recruitment strategies to guide future studies.

There are a number of limitations to these data. First, the recruitment for the EXPLORE Study occurred between 1999 and 2001. Some shifts in the epidemic may have occurred among MSM in the United States in relation to those groups at highest risk of HIV infection. For example, there is increasing awareness of the impact of the epidemic among Black MSM, with at least a third of new HIV infections reported among Black MSM (Hall et al., 2008). However, this disproportionate effect of HIV among Black MSM has been occurring throughout the epidemic (Koblin et al., 1996; Koblin et al., 2000). A larger representation of men of color in the EXPLORE Study would have helped to further understand the role of

recruitment strategies in recruiting this important subgroup. Second, the recruitment method identified was based on the participant's self-report of the method most responsible for bringing them to the study site. It is likely, however, that participants were exposed to multiple strategies, such as advertising and approaches by outreach workers.

In conclusion, we found that a full range of strategies employed concurrently for a sustained duration was required to recruit this high-risk cohort, including advertising and recruiters stationed at venues frequented by the sample sought. Specifically, the EXPLORE sites indicated that not only are multiple methods needed but continuous presence at community events, on the street and at local venues supports the overall recruitment efforts. Advertising, often viewed as the least staff intensive approach, could not be relied upon solely for success. The more staff/resource intensive methods of venue-based, consistent, and individualized recruiter contact were essential. Staff with multiple functions from recruitment through in-take at the study site provided a sense of continuity for potential participants. Collaboration with clinics also provided important strategies for referrals of high-risk men. Monitoring data throughout recruitment allowed sites to focus on those strategies that yielded better results, while collaboration across sites provided new ideas for sites to consider and implement during the study.. Strong ties to local clinics and organizations which provided about 15% of the study participants but even more at certain sites, were indispensable. And, most importantly, satisfied participants should not be overlooked as naturally occurring key opinion leaders who can invite friends and acquaintances to screen for important studies.

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Reference List

- Baigis J, Francis ME, Hoffman M. Cost-effectiveness analysis of recruitment strategies in a community-based intervention study of HIV-infected persons. *AIDS Care*. 2003; 15:717–728. [PubMed: 12959823]

- Buchbinder SP, Mehrotra DV, Duerr A, Fitzgerald DW, Mogg R, Li D, et al. Efficacy assessment of a cell-mediated immunity HIV-1 vaccine (the Step Study): a double-blind, randomised, placebo-controlled, test-of-concept trial. *Lancet*. 2008; 372:1881–1893. [PubMed: 19012954]
- Celum C, Wald A, Hughes J, Sanchez J, Reid S, any-Moretlwe S, et al. Effect of aciclovir on HIV-1 acquisition in herpes simplex virus 2 seropositive women and men who have sex with men: a randomised, double-blind, placebo-controlled trial. *Lancet*. 2008; 371:2109–2119. [PubMed: 18572080]
- Chesney MA, Koblin BA, Barresi PJ, Husnik MJ, Celum CL, Colfax G, et al. An individually tailored intervention for HIV prevention: baseline data from the EXPLORE Study. *Am J Public Health*. 2003; 93:933–938. [PubMed: 12773358]
- Fisher HH, Purcell DW, Hoff CC, Parsons JT, O'Leary A. Recruitment source and behavioral risk patterns of HIV-positive men who have sex with men. *AIDS Behav*. 2006; 10:553–561. [PubMed: 16761116]
- Garrett SK, Thomas AP, Cicuttini F, Silagy C, Taylor HR, McNeil JJ. Community-based recruitment strategies for a longitudinal interventional study: the VECAT experience. *J Clin Epidemiol*. 2000; 53:541–548. [PubMed: 10812328]
- Hall HI, Song R, Rhodes P, Prejean J, An Q, Lee LM, et al. Estimation of HIV incidence in the United States. *JAMA*. 2008; 300:520–529. [PubMed: 18677024]
- Harro CD, Judson FN, Gorse GJ, Mayer KH, Kostman JR, Brown SJ, et al. Recruitment and baseline epidemiologic profile of participants in the first phase 3 HIV vaccine efficacy trial. *J Acquir Immune Defic Syndr*. 2004; 37:1385–1392. [PubMed: 15483468]
- Hughes AO, Fenton S, Hine CE, Pilgrim S, Tibbs N. Strategies for sampling black and ethnic minority populations. *J Public Health Med*. 1995; 17:187–192. [PubMed: 7576802]
- Koblin B, Chesney M, Coates T. Effects of a behavioural intervention to reduce acquisition of HIV infection among men who have sex with men: the EXPLORE randomised controlled study. *Lancet*. 2004; 364:41–50. [PubMed: 15234855]
- Koblin BA, Heagerty P, Sheon A, Buchbinder S, Celum C, Douglas JM, et al. Readiness of high-risk populations in the HIV Network for Prevention Trials to participate in HIV vaccine efficacy trials in the United States. *AIDS*. 1998; 12:785–793. [PubMed: 9619811]
- Koblin BA, Taylor PE, Avrett S, Stevens CE. The feasibility of HIV-1 vaccine efficacy trials among gay/bisexual men in New York City: Project ACHIEVE. *AIDS Community Health Initiative Enroute to the Vaccine Effort*. *AIDS*. 1996; 10:1555–1561. [PubMed: 8931792]
- Koblin BA, Torian LV, Guilin V, Ren L, MacKellar DA, Valleroy LA. High prevalence of HIV infection among young men who have sex with men in New York City. *AIDS*. 2000; 14:1793–1800. [PubMed: 10985317]
- McKee MB, Picciano JF, Roffman RA, Swanson F, Kalichman SC. Marketing the 'Sex Check': evaluating recruitment strategies for a telephone-based HIV prevention project for gay and bisexual men. *AIDS Educ Prev*. 2006; 18:116–131. [PubMed: 16649957]
- Parsons JT, Halkitis PN. Sexual and drug-using practices of HIV-positive men who frequent public and commercial sex environments. *AIDS Care*. 2002; 14:815–826. [PubMed: 12511214]
- Vollmer WM, Svetkey LP, Appel LJ, Obarzanek E, Reams P, Kennedy B, et al. Recruitment and retention of minority participants in the DASH controlled feeding trial. *DASH Collaborative Research Group*. *Dietary Approaches to Stop Hypertension*. *Ethn Dis*. 1998; 8:198–208. [PubMed: 9681285]
- Warner JP, Wright L, Blanchardx M, King M. The psychological health and quality of life of older lesbians and gay men: a snowball sampling pilot survey. *Int J Geriatr Psychiatry*. 2003; 18:754–755. [PubMed: 12891645]
- Warwick I, Douglas N, Aggleton P, Boyce P. Context matters: the educational potential of gay bars revisited. *AIDS Educ Prev*. 2003; 15:320–333. [PubMed: 14516017]
- Wendell DA, Cohen DA, LeSage D, Farley TA. Street outreach for HIV prevention: effectiveness of a state-wide programme. *Int J STD AIDS*. 2003; 14:334–340. [PubMed: 12803941]
- Woods WJ, Binson DK, Mayne TJ, Gore LR, Rebchook GM. HIV/sexually transmitted disease education and prevention in US bathhouse and sex club environments. *AIDS*. 2000a; 14:625–626. [PubMed: 10780731]

- Woods WJ, Sabatino J, Bauer PL, Adler B, Dilley JW, Binson D. HIV testing in gay sex clubs. *Int J STD AIDS*. 2000b; 11:173–175. [PubMed: 10726941]
- Wragg JA, Robinson EJ, Lilford RJ. Information presentation and decisions to enter clinical trials: a hypothetical trial of hormone replacement therapy. *Soc Sci Med*. 2000; 51:453–462. [PubMed: 10855931]

Table 1

Recruitment strategy at screening and enrollment, EXPLORE, 1999–2001

Recruitment strategy	Enrolled		Not Enrolled			
			Eligible, Not Enrolled*		HIV Positive**	
	n	%	n	%	n	%
Advertising	811	18.9	80	19.0	19	20.4
Club or bar outreach	797	18.6	95	22.6	25	26.9
Friend or acquaintance referral	592	13.8	72	17.1	21	22.6
Clinic referral	469	10.9	41	9.7	0	0.0
Street outreach	459	10.7	52	12.4	9	9.7
Previous research study referral	359	8.4	29	6.9	2	2.2
Event or business outreach	214	5.0	18	4.3	3	3.2
Community organization referral	173	4.0	15	3.6	3	3.2
Commercial sex venue	138	3.2	6	1.4	8	8.6
Other~	283	6.6	13	3.1	3	3.3
Total	4295	100.0	421	100.0	93	100.0

* p < 0.05,

** p < 0.01

~ Other = Health club or gym Recruitment video, public service announcement, web sites, community forum, mailing or other sources

Table 2

Participant Characteristics by Recruitment Strategy: EXPLORE, 1999–2001

Characteristic	Recruitment Strategy					
	Ads		Club/Bar outreach		Friend referral	
	%	%	%	%	%	%
Geographic Location *						
Boston (n=526)	37.5	29.5	18.8	12.0	2.3	
Chicago (n=438)	34.7	20.6	18.0	21.0	5.7	
Denver (n=495)	11.7	31.7	24.0	31.1	1.4	
New York (n=532)	25.2	22.2	26.1	1.3	25.2	
San Francisco (n=608)	29.9	15.0	9.2	2.1	43.8	
Seattle (n=529)	16.6	35.2	18.9	26.5	2.8	
Age *						
16–19 (n=71)	15.5	21.1	25.4	12.7	25.4	
20–25 (n=592)	17.7	31.6	24.5	12.2	14.0	
26–30 (n=693)	19.8	30.0	20.9	14.4	14.9	
31–35 (n=658)	22.6	27.2	18.2	16.1	15.8	
36–40 (n=521)	30.3	20.5	19.6	14.4	15.2	
>40 (n=593)	42.3	17.0	10.5	18.0	12.1	
Race/Ethnicity *						
White, Not Hispanic (n=2237)	26.6	24.5	18.3	16.9	13.8	
Black, Not Hispanic (n=204)	30.4	24.0	18.1	11.8	15.7	
Hispanic (n=502)	20.7	29.1	22.5	10.8	16.9	
Asian/Pacific Islander (n=87)	23.0	29.9	16.1	8.1	23.0	
Native American (n=21)	23.8	57.1	14.3	4.8	0.0	
Other (n=77)	33.8	22.1	19.5	6.5	18.2	
Education *						
High School Degree or Less (n=322)	17.1	29.8	23.0	12.4	17.7	
Some College (n=851)	21.4	29.1	18.8	17.5	13.2	
College Degree (n=1122)	25.7	26.5	19.2	13.6	15.1	

Characteristic	Recruitment Strategy					
	Ads	Club/Bar outreach	Friend referral	Clinic referral	Street outreach	
	%	%	%	%	%	%
Post College (n=831)	34.3	18.7	17.2	15.3		14.6
Employment Status						
Full-Time (n=2364)	25.2	26.4	18.8	15.1		14.5
Part-Time (n=305)	25.3	23.3	22.3	14.4		14.8
Unemployed (n=325)	28.0	24.0	17.5	14.8		15.7
Other (n=134)	35.1	17.9	16.4	15.7		14.9
Household Income *						
<\$12,000 (n=424)	27.1	20.3	19.3	17.7		15.6
\$12,000 – \$29,999 (n=850)	24.2	27.8	20.9	15.8		11.3
\$30,000 – \$59,999 (n=1206)	24.5	27.0	18.9	14.8		14.7
\$60,000 + (n=644)	30.0	23.1	16.0	12.4		18.5

*
p < 0.0001

Table 3
Participant Sexual Risk Behaviors by Recruitment Strategy: EXPLORE, 1999–2001

Risk Behavior	Ads	Recruitment strategy			
		Club/Bar outreach	Friend referral	Clinic referral	Street outreach
	%	%	%	%	%
10+ male partners*					
No (n=1843)	23.6	28.1	20.3	14.6	13.5
Yes (n=1282)	29.4	21.6	17.0	15.6	16.4
Unprotected anal intercourse**					
No (n=945)	27.1	27.5	18.0	11.6	15.8
Yes (n=2137)	25.4	24.5	19.1	16.7	14.3
Unprotected anal intercourse with HIV+ or unknown status partner*					
No (n=1607)	26.0	27.3	19.0	12.3	15.6
Yes (n=1502)	26.0	23.5	18.7	18.1	13.7
Unprotected receptive anal intercourse with HIV+ or unknown status partner					
No (n=2219)	25.9	25.6	19.2	14.1	15.2
Yes (n=889)	26.1	24.9	18.0	17.7	13.4

* p < 0.0001,

** p < 0.005