Published in final edited form as:

J Sex Res. 2009 ; 46(6): 525–534. doi:10.1080/00224490902829590.

Community Reactions to a Syphilis Prevention Campaign for Gay and Bisexual Men in Los Angeles County

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Abstract

“Stop the Sores” (STS), a humor-based syphilis prevention campaign, was implemented in response to increasing syphilis prevalence among gay and bisexual men in Los Angeles County. In 2004, 564 men completed surveys measuring exposure and reactions to the campaign and syphilis testing. Mean age was 39, and men of color comprised a significant proportion of the sample (46.8%). Most men reported being HIV-negative (79.3%). Overall, 7.8% of the sample reported ever having syphilis; HIV-positive men were six times more likely to report this. Over one half of the sample (58.5%) reported exposure to the campaign. Men reporting any recent unprotected anal sex were twice more likely (than those who did not) to see the campaign. Men of color were twice more likely than White men to report wanting to speak to their friends about it. Finally, 39.1% of men exposed to the campaign reported being tested for syphilis as a result. Factors related to higher likelihood to test for syphilis included HIV seropositive status, any recent unprotected anal insertive sex, recent use of methamphetamine, recent use of “poppers,” and recent use of erectile dysfunction drugs. Although STS was somewhat effective, outreach efforts to particular subgroups may need to increase.

The health of many sexually active individuals in the United States continues to be threatened by rising rates of sexually transmitted infections (STIs), particularly syphilis and HIV. From 2000 to 2003, syphilis infection rates in the United States exhibited a 19% increase (Centers for Disease Control and Prevention [CDC], 2003). In fact, from 2002 to 2003, primary and secondary infection cases increased from 2.4 to 2.5 per 100,000 people (4.2%), representing a rise in cases from 6,832 to 7,177. During this same 1-year period, early latent syphilis cases decreased 0.8%, whereas late and late latent cases increased 6.3% (CDC, 2003).

Despite syphilis infection rates decreasing in various groups (e.g., women, African Americans), a resurgence of new infections was occurring among gay and bisexual men and other men who

have sex with men (MSM) throughout the United States. According to national STI clinic data collected by the CDC (2003), within a 4-year period, the proportion of syphilis cases among MSM rose from 4.1% in 1999 to 10.5% in 2003. These numbers are consistent with increases in other STIs, including gonorrhea and HIV.

Syphilis rates also increased in all regions of the United States in 2003, except for the Midwest. The Western region had a 22.7% increase in syphilis contraction rates (2.2 to 2.7 cases per 100,000; CDC, 2003). The state of California experienced a 351.1% increase within a 5-year period, from 282 syphilis cases in 1999 to 1,288 cases in 2003 (California Department of Health Services [CDHS], 2005).

Of all counties in the state of California, Los Angeles (LA) County had the highest rate (449 cases, or 4.8 per 100,000; CDHS, 2005). Over 60% of primary and secondary infection reports in LA in 2003 were among MSM, and HIV-positive MSM accounted for 60% of *these* cases (Los Angeles County Department of Health Services [LACDHS], 2003). In addition, among male neurosyphilis cases reported in LA between 2001 and 2004 ($n = 103$), MSM constituted the majority (68%; Taylor et al., 2008). Epidemiological data suggested a concurrent epidemic of HIV and syphilis among gay and bisexual men in LA and other urban areas of the United States (CDC, 2003); thus, there was much cause for concern.

Decreased condom use, complacency in HIV risk, and the subsequent rise in syphilis cases along with other STIs, including HIV, have been attributed to the availability of HIV antiretroviral medication therapy along with subsequent proclamations (and perceptions) of HIV as a “manageable” disease and “HIV prevention fatigue” (CDC, 2006a; Katz, Schwarcz, & Kellogg, 2002; Stockman et al., 2004). These phenomena have also been linked to relapse into risky sexual behaviors among significant numbers of MSM. Since the late 1990s, increases in unprotected sex among MSM in LA, as well as other parts of the United States, have been also facilitated by drug use, online hookups, and easier access to sex venues (Buchacz, Greenberg, Onorato, & Janssen, 2005; Klausner, Wolf, Fischer-Ponce, Zolt, & Katz, 2000; Taylor et al., 2005).

In response to this emerging health disparity and recidivism to risky sexual behaviors, the LACDHS funded the development of a social marketing campaign. Social marketing is a person-centered, research-based approach to increasing awareness on important issues; in the health care sector, it is used to disseminate health promotion messages to affected segments of a population for the purposes of facilitating positive behavior changes (Lamtey & Price, 1998; Kotler, Roberto, & Lee, 2002). (The CDC has recently renamed the approach *health marketing* to emphasize the use of social marketing for health promotion purposes; CDC, 2006b.)

The innovative campaign funded by LACDHS, entitled “Stop the Sores” (STS; www.stopthesores.org), was specifically created for reducing the number of syphilis cases among gay and bisexual men and other MSM in the county. A similar prevention effort, “Healthy Penis,” was implemented in June 2002 in San Francisco during the city’s gay pride celebrations (Montoya, Kent, Rotblatt, McCright, Kerndt, & Klausner, 2005). “Healthy Penis” helped increase syphilis testing rates among gay and bisexual men in that city due to its frank approach and non-threatening, culturally-appropriate imagery (Montoya et al., 2005).

STS was modeled after San Francisco’s “Healthy Penis” campaign but tailored specifically for gay and bisexual men in LA (see Figure 1). As with the “Healthy Penis” campaign, STS was designed by Better World Advertising (BWA), a social marketing firm based in San Francisco (<http://www.socialmarketing.com>). In addition to LA County, the STS campaign has been implemented in Birmingham, AL; Philadelphia, PA; and Portland, OR. AIDS Healthcare Foundation coordinated STS with funding from LADHS and worked with other partners,

including Southern California community-based organizations serving gay and bisexual men, to plan and discuss the concepts that would be portrayed in the campaign.

STS was launched in June 2002 with the specific goals of increasing awareness, testing, and knowledge about syphilis prevention among gay and bisexual men. The campaign continued through June 2005. As with “Healthy Penis,” a social marketing mix was incorporated into the development of STS to ensure program effectiveness. The approach included *branding* of the health behavior (i.e., making syphilis testing an appealing and functional health behavior), *audience segmentation* (i.e., gay and bisexual men in LA County at risk for syphilis), the *price* of adopting the health behavior (i.e., psychosocial and physical consequences of getting tested), *placement* of the syphilis testing messages in venues that were accessed by gay and bisexual men in LA, and *promotion* of syphilis testing through print, television, radio, Internet, and other media. Promotional materials were available in English and Spanish and included advertisements in newspapers, magazines, billboards, and subway or bus placards, as well as palm cards (distributed during outreach events) and stress grips (in the shape of “Phil the Syphilis Sore,” the campaign’s mascot). These materials displayed information on symptoms, transmission, and prevention of syphilis, as well as locations and hours of LA-based STI testing and treatment sites (Montoya et al., 2003). A detailed description of the components of the campaign is described elsewhere (Plant et al., 2008).

Almost 6 months into the campaign, LACDHS evaluated STS by conducting face-to-face interviews with 119 gay and bisexual men in LA approached primarily at coffee shops, sidewalks, strip malls, parks, laundromats, and other venues (Montoya et al., 2003). Data were collected between December 2002 and February 2003. Over sixty percent (61%) of the sample were aware of the campaign. Men who reported seeing STS (from 2002–2003) were three times more likely to get tested for syphilis than those who did not report exposure to the campaign. Over half of the respondents aware of the campaign (57%) underwent syphilis testing as a result of seeing it.

A subsequent evaluation study was conducted by LACDHS between October and December 2004. Of the 297 gay and bisexual men who completed the interview, 71% reported seeing the campaign. Those who saw the campaign were 1.8 times more likely to have received a syphilis test in the last 6 months compared to those who did not see the campaign (Plant, Montoya, Rotblatt, Kent, Mall, & Kerndt, 2006; Plant et al., 2008).

Health promotion messages centered on sexual health issues of gay and bisexual men can be effectively disseminated through social marketing campaigns like “Healthy Penis” and STS. This approach can be cost-effective for increasing awareness of important health and psychosocial issues. The Gay and Lesbian Medical Association (GLMA, 2001) stressed that dissemination of health promotion messages via social marketing can be effective when the messages are circulated in a culturally competent manner with language and images that community members can understand and feel are relevant to their lives.

Despite the results from the LACDHS evaluations, no data have been reported regarding psychosocial and other behavioral factors (e.g., drug use) related to being exposed to the campaign and receiving a syphilis test. This study sought to address this issue by assessing additional factors related to HIV and STI prevention. The study’s objectives were to utilize a larger sample of MSM (a) to determine community awareness of the STS campaign, (b) to measure reactions to the campaign, and (c) to explore demographic and psychosocial or behavioral factors associated with being exposed to the campaign and getting tested as a result. It was hoped that a more complete picture of the campaign’s impact and a better psychosocial and behavioral profile of the campaign’s intended audience (i.e., gay and bisexual men and other MSM in LA) could be determined by conducting this study.

This study was conducted by independent researchers not affiliated with LACDHS, BWA, or any community partners. The investigators are based in New York City. Research was conducted in LA to collect data on a different urban-based sample of gay and bisexual men, allowing for reports with comparisons by city and urban area.

Method

Participants and Procedures

As part of the Sex and Love v3.0 Survey Project in September 2004, surveys were distributed to 800 gay and bisexual male attendees of two large-scale gay, lesbian, and bisexual (GLB) community events in LA using a cross-sectional brief street-intercept survey method (Miller, Wilder, Stillman, & Becker, 1997). This data collection approach has been used in several studies (Carey, Braaten, Jaworski, Durant, & Forsyth, 1999; Kalichman & Simbaya, 2004a, 2004b), including those focused on GLB persons (Benotsch, Kalichman, & Cage, 2002; Chen et al., 2002; Kalichman et al., 2001), and has been shown to provide data that are comparable to those obtained from other more methodologically rigorous approaches. The two events required paid admission to gain entry. The institutional review board of the fourth author's home institution approved the survey (Halkitis & Parsons, 2002).

At both 2-day events, the research team hosted a booth, and outreach staff trained in survey administration and working with the GLB community actively approached each person who passed by the booth. Potential participants were provided with information about the project and offered the opportunity to participate. The response rate was high, with 93% of individuals consenting to participate. Those who consented and completed the 15- to 20-minute survey were provided with a voucher for free admission to a movie theater as an incentive. To help ensure their confidentiality, participants were given the survey on a clipboard so that they could step away from others to complete the questionnaire. In addition, upon completion, participants deposited their own survey into a secure box at the booth.

Complete surveys were obtained from 637 gay and bisexual men over the age of 18. The data analyzed for this study are based on the 88.5% of the men in the sample who provided LA metropolitan area zip codes (i.e., those numbered between 90000 and 90900 as well as 91000 and 93600; resulting $N = 564$). These zip codes represent the residence areas of respondents who were potentially exposed to the STS campaign.

Measures

The larger Sex and Love Survey contained over 100 items assessing a broad range of substance-use behaviors, physical health issues, sexual behaviors, and a series of scales related to psychological health and well-being. The researchers focused on specific scales from the survey to produce and analyze the data reported in this article.

Demographic items were included on the survey. Respondents were asked to indicate their age (using an open-ended item), sexual identity (using a forced-choice scheme including "gay," "bisexual," and "straight/MSM,"), and race or ethnicity by checking all that apply. Response categories for race or ethnicity included "European/White," "African American/Black," "Asian/Pacific Islander," "Hispanic/Latino," and "Other (Specify)." The latter four categories comprise the new category, "MSM of color," which was used in data analysis.

Unprotected sexual behavior was measured with items asking whether the respondent participated in unprotected anal sex (insertive [UAI] or receptive). Partner's HIV status was also ascertained. The survey also asked for history of STIs, including items asking for history of syphilis (using a dichotomous "yes/no" response scheme) and for HIV status (i.e., positive, negative, never tested). In addition, respondents were also asked to report any recent use of

methamphetamine (“meth”), nitrate inhalants (“poppers”), and recent use of erectile dysfunction (ED) medications (i.e., namely, sildenafil citrate, tadalafil, and vardenafil HCl).

To assess community reactions to the STS campaign, we asked the following five questions on the survey: “These ads made me ... 1) think about sexual behavior that may put me at risk for syphilis; 2) want to learn more about how to protect myself from syphilis; 3) want to be more selective about my sexual partners; 4) think about getting tested for syphilis; and 5) want to talk to my friends about syphilis.” In addition, a picture of the campaign mascot, Phil the Syphilis Sore (i.e., the cartoon character representing syphilis in Figure 1), was provided as additional assurance that survey participants were clear about which campaign the survey items were asking about. These survey items tested the diffusion of messages disseminated by the campaign. Responses were coded on a Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). One item with a dichotomous yes/no response scheme was used to assess syphilis testing behavior as a result of seeing the campaign ads (“These ads made me get tested for syphilis”). (Although the phrasing of these items seems to suggest cause-and-effect, they were only intended to measure the respondent’s *perception* of how the campaign affected their thoughts and behaviors.)

Analysis

We proposed the following research questions in the study:

RQ1: What proportion of the sample was exposed to the campaign (i.e., saw campaign advertisements)?

RQ2: How did exposure to the campaign differ by race or data collection site?

RQ3: What were the gay male community’s reactions to the campaign (as determined by the 5 questions previously mentioned)?

RQ4: How did reactions to the campaign differ by HIV serostatus, self-reported unprotected sexual behavior, and self-reported substance use (including illicit substances and prescription drugs)?

RQ5: What proportion of the sample reported syphilis testing as a result of exposure to the campaign?

RQ6: How did syphilis testing (after campaign exposure) differ by HIV serostatus, self-reported sexual behavior, and self-reported substance use (including illicit substances and prescription drugs)?

Data were entered into an SPSS database. Project staff, for accuracy, subsequently verified these data. Routine frequency distributions were determined for demographic variables and to determine proportions who were exposed and who reacted to the campaign, as well as who received syphilis testing after campaign exposure. Logistic regressions were conducted to test relationships between demographics and exposure or reaction variables, including testing for syphilis; chi-square coefficients with relevant odds ratios (ORs) were determined in these analyses. Because there were no differences in key variables by the two recruitment events, the data for this study were combined for all analyses.

Results

Most men in the sample identified as gay (94.5%; $n = 533$); the remainder identified as bisexual. Mean age was almost 40 ($M = 39.4$, $SD = 10.3$; range = 18–74). Most self-reported being HIV-negative¹ (79.3%; $n = 447$). HIV-positive men comprised 13.9% of the sample ($n = 78$),

¹Of the HIV-negative men, 69.8% reported HIV testing within the last year.

whereas HIV status was unknown or unreported for 7.5% of the sample ($n = 42$). Sample characteristics, including education, race or ethnicity, and income, are presented in Table 1. Although the majority of the sample was White (53.2%), men of color represented the remainder of the sample, with Hispanics–Latinos (23.8%) and Asians (10.8%) fairly well-represented. Nearly eight percent (7.8%) reported *ever* having syphilis. HIV-positive men in this sample were almost six times more likely to have had syphilis during their lives than HIV-negative men (24.3% vs. 5.5%; confidence interval [CI] = 2.87–10.79; OR = 5.6; $p < .001$).

Exposure and Reactions to STS

A total of 58.5% of the sample ($n = 330$) reported being exposed to the STS campaign (i.e., seeing any of the campaign advertisements). No differences were observed in campaign exposure in terms of data collection site or race. HIV-positive men were almost twice more likely than HIV-negative men to have reported seeing the campaign (73% vs. 59.6%; CI = 1.06–3.16; OR = 1.83; $p < .05$). Regardless of HIV status, men reporting any recent unprotected anal sex (i.e., in the last 3 months) were twice more likely to have reported seeing the campaign than men not reporting any unprotected anal sex (75.5% vs. 57.9%; CI = 1.39–3.60; OR = 2.24; $p < .001$).

Chronological age was transformed into categorical age ranges (i.e., 18–30, 31–40, 41–49, and 50+). For conducting logistic regressions, the two largest age categories (i.e., 31–40 and 40–49) were collapsed into one (i.e., 31–49). This process facilitated comparisons by age group. Analyses revealed that men between the ages of 31 and 49 were twice more likely to have been exposed to the campaign compared to those aged 18 to 30 and those aged 50 and over (69.1% vs. 47.3%; CI = 1.72–3.58; OR = 2.48; $p < .001$).

The proportions of the sample that answered in the affirmative for each of the five items regarding the campaigns are presented in Table 2. Over 60% agreed that the campaign advertisements made them think about syphilis risk behavior, want to learn more about syphilis prevention, want to be more selective about sex partners, and think about getting a syphilis test. Forty percent of men agreed that the advertisements made them want to talk with their friends about syphilis, with men of color having been almost twice more likely to have agreed with this statement than White men (48.5% vs. 32.5%; CI = 1.22–3.15; OR = 1.96; $p < .01$). No other significant differences were reported among the various racial or ethnic groups for these items.

No significant differences were observed on any demographic factors in the total score of the evaluation questions ($M = 13.98$, $SD = 4.37$; range = 5–20). Only one behavioral difference was observed in the evaluation score: Men who reported any unprotected sex with casual partners evaluated the campaign more positively than those who did not report this behavior (14.82 vs. 13.57), $F(1, 239) = 3.88$, $p = .05$.

Among the 330 men who reported campaign exposure, 39.1% indicated syphilis testing after seeing the ads. Although men aged 31 to 49 were more likely to have seen the campaign, among those exposed, no significant age differences in syphilis testing were observed. However, several other demographic and behavioral factors were significantly related to syphilis testing after campaign exposure, as shown in Table 3. Men in the sample who were HIV-positive, reported any recent UAI sex, recent use of meth, recent use of poppers, or recent use of ED drugs were two to almost five times more likely to have gotten tested for syphilis as a result of exposure to the prevention campaign, compared to HIV-negative men and those who did not report any of these behaviors ($p < .05$). Data on men reporting any recent unprotected anal *receptive* sex did not reach statistical significance at the .05 level.

Discussion

Men in the sample who were more likely to be exposed to STS were HIV-positive, White, and ages 31 to 49. Most felt the ads made them aware of risk, how to protect themselves, partner selection, and think about getting tested. Most did *not* report wanting to talk to friends about syphilis, yet men of color (i.e., African American–Black, Latino, Asian, and other) were more likely to talk to their friends about syphilis than were White men.

Although it does not constitute a majority, a significant proportion of the sample (40%) reported wanting to speak with friends about syphilis as a result of the campaign. Some experts may perceive this result as an indication that STS was successful as a social marketing effort. Health education and social marketing professionals agree that influencing peer norms and behavior change is not an easy task (Dearing et al., 1996).

No known documented evidence exists showing that gay and bisexual men of color can be influenced by social marketing campaigns to speak with their peers and their partners; on the other hand, it has been reported that young gay and bisexual men of color with good sexual communication skills may be less likely to contract HIV (Seal et al., 2000). Recent research has suggested that HIV prevention efforts should address discussions that incorporate sexual safety, including disclosure of HIV status (Rietmeijer, Lloyd, & McLean, 2006). Similar results were found in a study assessing reactions to gay male-focused crystal meth prevention campaigns in New York City. (Nanin, Parsons, Bimbi, Grov, & Brown, 2006).

Apart from the fact that this study included a more detailed psychosocial assessment, one major difference between this and the evaluation studies by Montoya and colleagues (2003) and Plant and colleagues (2008) concerns sample size. This study's sample size was almost five times more than the Montoya et al. (2003) study and almost twice more than the Plant et al. study (564 vs. 119 vs. 297, respectively). However, despite this difference, some results are comparable across this study and the other studies. A similar proportion of the study samples were exposed to the campaign (61% in Montoya et al.'s, 2003, study vs. 58.5% in this study). Plant et al.'s study reported 71% of the sample exposed to the campaign; it was conducted in the Fall of 2004, similar to this study. The 13% difference between this study and Plant et al.'s study may be a function of the larger sample size and the survey-based data collection method of this study. Regardless, the fact that data from all three studies show over one half of the samples being reached by this campaign is a respectable achievement considering how challenging it is to disseminate sexual health messages to a majority of at-risk individuals (Dearing et al., 1996).

As previously reported, gay and bisexual men exposed to STS were three times more likely to get tested for syphilis (Montoya et al., 2003). Plant et al. (2008) reported that members of a similar sample were almost twice more likely to do the same. HIV-positive men and White men in this study were three times and almost twice more likely, respectively, than their counterparts to get tested. The campaign may have been successful in making syphilis testing salient in the lives of these men, but it seems to have struggled in connecting with HIV-negative men and men of color. It is possible that the latter groups of men did not find the messages in the campaign as relevant to their lives as the former groups of men did. Developers of STI prevention campaigns like STS should take note: STI prevention education needs to be culturally relevant and appropriate for *all* men who may be at risk. This statement recalls a similar issue acknowledged over a decade ago by Stall (1994) in which HIV prevention experts were called on to ensure that prevention messages reach men of color and others at risk who had been neglected by such efforts because the messages were not culturally relevant.

One other difference between the evaluation studies is related to findings on HIV status and syphilis testing. Montoya and colleagues (2003) did not find significant differences in syphilis

testing between HIV-positive men and HIV-negative men. As reported in the aforementioned results, this study revealed that HIV-positive men in the sample were more than twice as likely as HIV-negative men to get tested for syphilis. The latter result is important to highlight because high co-infection rates among gay and bisexual men in LA and other areas of the United States have been challenging STI and HIV prevention efforts (CDC, 2006a, 2007).

LA health officials had reported a high syphilis morbidity rate among gay and bisexual men aged 25 and 45 (LACDHS, 2003). This study found that gay and bisexual men between the ages of 31 to 49 were more likely than both younger and older men, as an aggregate, to have been exposed to this campaign. This was a highly desirable result considering that the campaign was, in essence, targeting this subgroup of men (J. A. Montoya, personal communication, October 25, 2006).

Men who have unprotected sex with casual partners seemed more pleased with the campaign. This should be considered a positive result of the campaign; STS seems to have reached men that were at *most* risk. Furthermore, among study participants who self-reported undergoing syphilis testing as a result of seeing the campaign advertisements, most of them were HIV-positive, White, and the insertive partner in unprotected sex (regardless of HIV serostatus). Men reporting recent use of crystal meth, poppers, and ED drugs were also among this select group. The campaign was more effective in motivating these subgroups of gay and bisexual men to get tested. Considering that men who report many of these behaviors are at high risk for HIV and other STIs (Nanin & Parsons, 2006), this is another welcomed result.

The campaign may not have been as effective in influencing the behaviors of other men, however. It is possible that HIV-negative men, men of color, and receptive unprotected anal sex partners may not have perceived themselves at enough risk for syphilis or have enough information about symptoms of syphilis to warrant getting tested. Because of situations like this existing over the years, due to lack of access to prevention messages and information as previously reported, the CDC has urged public health officials and health service personnel to take action in reducing STI rates among gay and bisexual men, including HIV and syphilis, by increasing prevention-based outreach to HIV-negative men, addressing racism and homophobia in their prevention programs, and contextualizing prevention efforts arounding the concepts of gay male health (CDC, 2001).

There are limitations to this study. Data were self-reported, and surveys were completed in public areas on clipboards, leading to possible socially desirable responses. These data should not be extrapolated to all gay and bisexual men in LA, as access to these events were limited to those who worked in the event facility, as well as exhibitors, payers of the admission fee, and recipients of complimentary or discounted tickets. Although a variety of incomes and zip codes were reported, the majority of the study sample reported residing in an urban setting. The survey contained items that asked respondents to recall seeing the STS campaign sometime in the past and whether they had participated in specific behaviors in the past. Lastly, the study did not assess which specific advertisements, messages, or materials most effectively impacted syphilis testing among the men in the sample.

Implications

The humorous, non-threatening approach of the STS campaign was effective on several levels in reaching its intended audience and conveying health-enhancing messages. Given the sensitive nature of topics like STI and HIV transmission, humor can be used in influencing people on threatening topics (e.g., STIs), especially in promoting healthy behaviors (Conway & Dube, 2002; Parsons, 2005). This may be important to use with populations of interest with whom other approaches (e.g., fear-based approaches) may not have been as effective.

The findings of this study indicate a need for public health officials to focus their social marketing efforts on gay and bisexual men of color to encourage more syphilis testing, as well as HIV testing. Researchers should further investigate the social mechanisms and other contexts of prevention communication among samples of gay and bisexual men of color, as well as samples of White gay and bisexual men for comparison purposes. Assessing the impact of social contextual factors (e.g., social proximity, social status, sexual and other social relationships) on sexual risk behaviors could be important to the development of more appropriate interventions to effectively enhance the sexual health of these men. Social network analyses may also provide a mechanism to better understand social relationships and how these relationships impact individual and group behavior (Valente, Gallaher, & Mouttapa, 2004). Studies focused on networks that include HIV-negative and receptive male partners may also be necessary so that they can be approached with more tailored messages about syphilis and HIV prevention.

Syphilis and HIV prevention efforts should be conducted in an integrated manner to better reach those who risk being co-infected and those with multiple risk factors (Buchacz, Greenberg, Onorato, & Janssen, 2005). Knowledge of trends in risk and protective behaviors among gay and bisexual men can guide the formation of effective sexual health marketing and other social marketing campaigns (Dodds, Mercey, Parry, & Johnson, 2004). These efforts may help facilitate the reduction of sexual health disparities among gay and bisexual men, including those of color, as outlined by *Healthy People 2010 LGBT Compendium* (U.S. Department of Health, 2000; see also GLMA, 2001). Implementing campaign programs promoting positive sexual health messages also addresses the right to sexual health care that all individuals, including gay and bisexual men and other MSM, inherently have (World Association for Sexual Health [WAS], 1999).

Sexual health disparities among gay and bisexual men are emerging due to several factors, including reported crystal meth and other drug use (Grov, Bimbi, Parsons, & Nanin, 2006; Nanin & Parsons, 2006). It is imperative that syphilis prevention efforts integrate other prevention messages (e.g., prevention of crystal meth use, misuse of ED medications) given that simultaneous use can produce higher chances of infection with HIV and STIs and can be very hazardous to one's physical and mental health (Buchacz et al., 2005; Wong, Chaw, Kent, & Klausner, 2005). As part of a broader sexual health promotion strategy that incorporates the sexual potentials that all individuals may have, public health officials, health educators, and other service providers should adopt strategies for educating their clients about more creative sexual practices that do not involve the transmission of infectious body fluids (also known as *specialized sexual behaviors*) as alternatives to risky sexual behaviors (Nanin, Bimbi, Brown, Severino, & Parsons, 2005). It would behoove sexologists to conduct research studies on the feasibility and effectiveness of these sexual behaviors as safer sex options. Because the transmission of syphilis occurs via unprotected sex, a behavioral factor related to exposure to the STS campaign, adoption of more creative, and sometimes kinky, behaviors may help many gay and bisexual men and other MSM achieve maximum pleasure with minimal risk, allowing for individuals to express their rights to sexual safety and sexual freedom (WAS, 1999).

Conclusion

The STS campaign has already been considered successful by LACDHS in increasing syphilis testing, awareness, and knowledge among samples of gay and bisexual men in LA (Montoya et al., 2003; Plant et al., 2008). Unlike previous evaluations of this campaign that were conducted by its developers, this study was conducted by independent researchers and used a larger sample. This study also utilized a self-administered survey (vs. face-to-face interviews) and assessed psychosocial and behavioral factors that were not measured in the other evaluations (e.g., drug use, use of ED medications, and sex with casual partners, among others).

As a result, a more detailed profile of gay and bisexual men exposed to STS is provided by this study.

Results of this study provide further evidence of the need for targeted social marketing campaigns for gay and bisexual men. Public health is dependent not only on how the *public* reacts to the messages being conveyed to them but also on *how* and to *whom* the conveyors deliver these messages. In addition, the promotion of *sexual health* is vital to achieving optimal public health. Study findings show how a properly developed and properly disseminated public health campaign can have some significant impact on the sexual health behaviors of a segment of the population at risk for syphilis—namely, gay and bisexual men.

There were no reported increases in syphilis cases in 2003, the year after the first phase of the campaign was implemented (AIDS Healthcare Foundation, 2006). However, LACDHS surveillance estimates for 2005 showed a significant 40% increase in syphilis rates from the previous year (i.e., from 865 cases in 2004 to 1,217 cases in 2005); the majority (66.4%) of the cases in 2005 were reported among gay and bisexual men. Community-based AIDS service organizations in LA attribute this rate increase to reduced funding for syphilis prevention programs (AIDS Healthcare Foundation, 2006). Increased municipal, state, and federal funding, as well as private donations, are needed for the development and *maintenance* of effective sexual health marketing campaigns. More importantly, these types of campaigns can help foster the adoption of protective sexual health behaviors among communities at risk, like gay and bisexual men in urban settings. It is important to note that sexual health is “not just the absence of disease or dysfunction, but includes the *ability to understand and weigh the risks, responsibilities, outcomes, and impacts of sexual behavior* [italics added]” (Ross, 2002, p. 8).

Acknowledgments

The Sex and Love v3.0 Project was supported by the Hunter College Center for HIV Educational Studies and Training under the direction of Jeffrey T. Parsons. We acknowledge the contributions of the Sex and Love Study v3.0 team and Justin Brown for their valuable feedback. In addition, we give special thanks to Jorge A. Montoya, PhD, Director of Communications & Program Evaluation, and Harlan Rotblatt, Contract Monitor for “Stop the Sores!,” both at the STD Program, Department of Health Services of the County of Los Angeles.

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Figure 1.

Examples of images from “Stop the Sores” syphilis prevention campaign. *Note.* Courtesy of Los Angeles County Department of Health Services (LACDHS). © 2004 LACDHS.

Table 1**Participant Demographics**

Sample Characteristics (N = 564)	%	n
<i>Race or ethnicity</i>		
African American/Black	8.2	46
European/White	53.2	300
Hispanic/Latino	23.8	134
Asian/Pacific Islander	10.8	61
Other	4.0	23
<i>Age</i>		
18–30	20.4	115
31–40	35.0	197
41–49	28.5	161
50+	16.1	91
<i>HIV status</i>		
Positive	13.8	78
Negative	78.7	444
Unreported	7.5	42
<i>Education (n = 561)</i>		
Less than bachelor's degree	40.0	224
Bachelor's degree	32.4	182
More than bachelor's degree	27.6	155
<i>Relationship status</i>		
Single	53.0	299
Partnered, non-monogamous	20.6	116
Partnered, monogamous	26.4	149
<i>Income (n = 557)</i>		
Less than \$20,000	15.8	88
\$20,000–\$40,000	25.0	139
\$40,000–\$60,000	24.6	137
\$60,000–\$80,000	14.4	80
More than \$80,000	20.2	113

Table 2

Proportions of Affirmative Responses to Campaign Exposure Statements (n = 330)

These ads made me ...	Those Who Agreed (%)
1. Think about sexual behavior that may put me at risk for syphilis	73.1
2. Want to learn more about how to protect myself from syphilis	61.6
3. Want to be more selective about my sexual partners	61.6
4. Think about getting tested for syphilis	62.1
5. Want to talk to my friends about syphilis	40.0

Table 3

Demographic and Behavioral Differences in Syphilis Testing After Campaign Exposure (n = 129)

Groups Compared	Those Who Reported Testing	Odds Ratio	Confidence Interval
HIV-positive versus HIV-negative *	21.7% versus 10.4%	2.38	1.21–4.7
Any recent unprotected anal insertive versus none *	31.7% versus 17.3%	2.23	1.24–3.98
Any recent unprotected anal receptive versus none **	19.5% versus 11.6%	1.85	0.931–3.67
Recent use of methamphetamine versus none *	11.9% versus 2.9%	4.6	1.48–14.24
Recent use of nitrate inhalants (poppers) versus none *	26.2% versus 13.4%	2.29	1.21–4.34
Recent use of erectile dysfunction drugs versus none *	24.2% versus 9.6%	3.02	1.49–6.11

*
 $p < .05$.**
 $p < .10$.