The Mpowerment Project: A Community-Level HIV Prevention Intervention for Young Gay Men

Susan M. Kegeles, PhD, Robert B. Hays, PhD, and Thomas J. Coates, PhD

Introduction

Young gay men are engaging in high rates of unsafe sex. Various studies have found that 33% to 43% of young gay men report unprotected anal intercourse in the past 2 to 6 months.1-3 As would be predicted, young gay men are becoming infected with the human immunodeficiency virus (HIV). A seroprevalence study of young gay men in San Francisco found that 17.9% were HIV positive, with an annual seroincidence rate of 2.6%.4 A different study of young gay men in the San Francisco Bay area found that 9.4% were HIV positive.5 The problem extends beyond San Francisco. A sentinel surveillance study of 13 clinics for sexually transmitted diseases around the United States found the median rate of HIV infection among young gay men attending the clinics to be 30.1%.6 Clearly, young gay men are not being effectively reached by HIV prevention efforts.

We developed and evaluated a community-level HIV risk reduction intervention program for young gay men. Community-level preventive interventions have been advocated as an important way to prevent HIV.6-9 There are compelling reasons for using a community-level approach with young gay men: (1) the number of young gay men who must be reached with HIV prevention efforts makes individual-level interventions impractical and prohibitively expensive; (2) individual-level interventions may be less effective in addressing social system contributors, which are likely to be important contributors to risk-taking behavior; (3) community-based organizations report that young gay men rarely seek out acquired immunodeficiency syndrome (AIDS) prevention services.

Prior studies and our preliminary research using interviews and focus groups identified four critical issues for designing this intervention. First, since HIV prevention is not in itself sufficiently motivating or captivating for young gay men, they tend not to seek out HIV prevention services. Thus, a successful HIV prevention intervention needs to relate HIV risk reduction to the satisfaction of other compelling needs. Since social concerns are highly motivating for young gay men, a social focus was adopted as the central theme of the intervention.

A second key issue was the recognition of the power of peer influence for young gay men and the value of developing a peer-based intervention. Research with gay men2,10-14 and heterosexual adolescents15-17 has shown that perceptions of peer norms surrounding sexual risk behavior are strongly associated with one's own sexual behavior. Also, approaches that use peers tap into the enhanced credibility, identification, and normative power of peers as persuasive sources.18

A third critical issue was that the intervention should seek to mobilize and empower the young gay men's community. Providing young gay men with a mechanism for designing and running the intervention activities themselves seemed most likely to foster a personal commitment to HIV prevention, a sense of ownership of the prevention activities.

The authors are with the Center for AIDS Prevention Studies and the Division of General Internal Medicine, Department of Medicine, University of California, San Francisco.

Requests for reprints should be sent to Susan M. Kegeles, PhD, Center for AIDS Prevention Studies, University of California, 74 New Montgomery, Suite 600, San Francisco, CA 94105.

This paper was accepted February 23, 1996.

Editor's Note. See related editorial by Fishbein (p 1075) in this issue.

The Mpowerment Project: A Community-Level HIV Prevention Intervention for Young Gay Men

Susan M. Kegeles, PhD, Robert B. Hays, PhD, and Thomas J. Coates, PhD

Introduction

Young gay men are engaging in high rates of unsafe sex. Various studies have found that 33% to 43% of young gay men report unprotected anal intercourse in the past 2 to 6 months.1-3 As would be predicted, young gay men are becoming infected with the human immunodeficiency virus (HIV). A seroprevalence study of young gay men in San Francisco found that 17.9% were HIV positive, with an annual seroincidence rate of 2.6%.4 A different study of young gay men in the San Francisco Bay area found that 9.4% were HIV positive.5 The problem extends beyond San Francisco. A sentinel surveillance study of 13 clinics for sexually transmitted diseases around the United States found the median rate of HIV infection among young gay men attending the clinics to be 30.1%.6 Clearly, young gay men are not being effectively reached by HIV prevention efforts.

We developed and evaluated a community-level HIV risk reduction intervention program for young gay men. Community-level preventive interventions have been advocated as an important way to prevent HIV.6-9 There are compelling reasons for using a community-level approach with young gay men: (1) the number of young gay men who must be reached with HIV prevention efforts makes individual-level interventions impractical and prohibitively expensive; (2) individual-level interventions may be less effective in addressing social system contributors, which are likely to be important contributors to risk-taking behavior; (3) community-based organizations report that young gay men rarely seek out acquired immunodeficiency syndrome (AIDS) prevention services.

Prior studies and our preliminary research using interviews and focus groups identified four critical issues for designing this intervention. First, since HIV prevention is not in itself sufficiently motivating or captivating for young gay men, they tend not to seek out HIV prevention services. Thus, a successful HIV prevention intervention needs to relate HIV risk reduction to the satisfaction of other compelling needs. Since social concerns are highly motivating for young gay men, a social focus was adopted as the central theme of the intervention.

A second key issue was the recognition of the power of peer influence for young gay men and the value of developing a peer-based intervention. Research with gay men2,10-14 and heterosexual adolescents15-17 has shown that perceptions of peer norms surrounding sexual risk behavior are strongly associated with one's own sexual behavior. Also, approaches that use peers tap into the enhanced credibility, identification, and normative power of peers as persuasive sources.18

A third critical issue was that the intervention should seek to mobilize and empower the young gay men's community. Providing young gay men with a mechanism for designing and running the intervention activities themselves seemed most likely to foster a personal commitment to HIV prevention, a sense of ownership of the prevention activities.

The authors are with the Center for AIDS Prevention Studies and the Division of General Internal Medicine, Department of Medicine, University of California, San Francisco.

Requests for reprints should be sent to Susan M. Kegeles, PhD, Center for AIDS Prevention Studies, University of California, 74 New Montgomery, Suite 600, San Francisco, CA 94105.

This paper was accepted February 23, 1996.

Editor's Note. See related editorial by Fishbein (p 1075) in this issue.
and a willingness to carry out the activities.

Finally, following Kelly and colleagues' pioneering research,19,20 the design of this intervention drew from the theory of diffusion of innovations,21 which posits that people are most likely to adopt new behaviors (i.e., safer sex) based on favorable evaluations of the innovation conveyed to them by others who are similar to them and whom they respect. Community change thus comes about through a process of informal communication and modeling by peers within interpersonal networks. Therefore, the intervention sought to develop a process by which young gay men would encourage each other about the need to practice safer sex so that safer sex would become the mutually accepted norm.

Methods

The two communities we chose for study were comparable in numerous ways. Each (1) contains a large state university, (2) attracts young people from the surrounding county, (3) is of similar population size (Eugene, Ore = 113,090; Santa Barbara, Calif = 85,763), (4) had an AIDS community-based organization, with no programs or activities explicitly for young gay men, (5) contains one or two gay bars, (6) is 1 to 2 hours away from a larger community, and (5) has fewer AIDS cases than are found in larger AIDS epicenters.

Using a wait-list control design, we randomly selected Eugene to receive the intervention first; Santa Barbara served as the comparison and received the intervention later. This report describes the results of the program in Eugene. The comparison community received no specific intervention by us, although AIDS prevention posters and brochures were available at the bar, at HIV-antibody test sites, and on campus.

While the intervention was conducted at the community level, we evaluated the outcomes in cohorts at the individual level, a procedure that offers some protection against a sample size inadequate for assessing ecological community-level studies.22,23 Longitudinal cohorts of young gay men (aged 18 through 29) from Eugene and Santa Barbara were recruited independently of the intervention and were assessed pre- and postintervention via mail-back surveys. They were recruited into the cohorts ("The Young Men's Survey") by teams of local young gay men who distributed surveys at settings frequented by young gay men, including bars and university and community settings and through their informal social networks. Follow-up surveys were completed 1 year later by mail. Subjects were paid $10 each time they completed the survey.

The survey assessed a wide variety of topics. For this paper, we examined the following:

1. Demographic information.
2. Sexual behavior. On a checklist of sexual behaviors, respondents were asked to indicate the frequency with which they had engaged in a variety of sexual behaviors during the previous 2 months with boyfriends/lovers and with nonprimary partners. Participants were also asked the number of males with whom they had had sex during the previous 2 months.
3. Psychosexual factors. A series of brief scales (2 to 4 items per scale, rated on 6-point scales ranging from "strongly disagree" to "strongly agree") were used to assess the following HIV-related attitudes: degree of enjoyment of unsafe sex ($\alpha$ (Cronbach's alpha) = .79), sexual communication skills ($\alpha$ = .71), perceived social norms regarding safe sex ($\alpha$ = .61), interpersonal barriers to safe sex ($\alpha$ = .72), and the extent to which friends talk with the respondent about safer sex ($\alpha$ = .61). A single item assessed ability to resist unsafe sex when aroused.
4. Exposure to intervention activities. Participants were asked to indicate if they had heard of the project and, from a checklist of intervention activities, indicate which activities they had participated in during the previous year (e.g., attended a social event, received outreach, dropped by the Center, etc.).

The Prevention Program

The program in Eugene was conducted for 8 months. Four young gay men were employed part time as project coordinators.

Structure of the Program

The program was run by a Core Group and a Community Advisory Board.

Core Group. The Core Group consisted of 12 to 15 young gay men and served as the project's decision-making body. The Core Group decided the project's name, logo, and image; how to conduct outreach at bars, community events, and the project's social events; and what social events would be created. The group also designed outreach materials. The Core Group chose "The Mpowerment Project" as the name of the program. The logo the members chose (see Figure 1) was used on all project materials and was designed to be attractive, interesting, and not identifiable as gay; it became popular to wear this on T-shirts and buttons.

Community Advisory Board. This group of "community elders" (men and women from AIDS, gay and lesbian, public health, and the university communities) provided advice and information to the Core Group during monthly meetings.

Components of the Program

Peer outreach. Outreach, conducted by young men who spoke with their peers and encouraged them to engage in safer sex, had two purposes: (1) to diffuse the safer sex message throughout their community and (2) to recruit additional men into the project. It was intended that once men joined the project (by engaging in any project activity), they would diffuse the safer sex message and recruit more peers to the project. Our goal was to set up a self-perpetuating process, whereby men would come to the project, learn about and adopt the safer sex message, and then return to their social networks and diffuse the safer sex message as well as encourage their friends to become involved with the project. Two types of outreach were conducted: formal outreach and informal outreach.

In formal outreach, young gay men went to locations frequented by young gay men to communicate with and encourage others about the need for safer sex. This Outreach Team distributed interesting, appealing safer sex materials developed by other volunteers and invited young gay men to attend other project activities.

August 1996, Vol. 86, No. 8
(including small groups) and join the Outreach Team. The team used entertaining, fun approaches (involving performances and/or costumes) and conducted outreach at bars, at community events, and at social events we created.

Since few social settings for young gay men existed in these communities, a major aspect of formal outreach was to create new settings and events that would attract young gay men and at which safer sex could be promoted and through which young gay men could be recruited into other project activities. A particularly important setting was the Mpowerment Center, which had regular weekly events (small groups, the Core Group meeting, video parties, rap groups, and drop-in hours) where men could meet and socialize. The program sponsored a wide variety of social events designed to appeal to different segments of the young gay men's community. These events were created by the Core Group and other volunteers and ranged from the weekly events to large dance parties, open-house parties, picnics, hikes, and bicycle rides. All events included activities that were designed and performed by the Outreach Team to promote safer sex. The social activities were very strong draws for young gay men, and we estimate that at least 500 young gay men in Eugene attended one or more of the project activities.

Informal outreach consisted of young men communicating with their friends in casual conversations about the need to engage in safer sex. In many respects, informal outreach is similar to the work of Kelly and colleagues in that it attempts to develop a process of social diffusion that promotes safer sex among gay men in the community. When attending the small groups, young men learned how to conduct informal outreach. They were also asked to give their friends safer sex promotional materials, condoms, and invitations to attend a small group and join the project.

Small groups. These peer-led one-time meetings were called "M-Groups." Lasting 3 hours, they were attended by 8 to 10 young gay men. M-Groups focused on factors we had found in prior research to contribute to unsafe sex among young gay men, including misperceptions about safer sex, the attitude that safer sex is not enjoyable, having poor sexual communication skills, and interpersonal issues. The group's format was developed through focus groups in a different midsize community and was designed to be fun and interactive. M-Groups were promoted in outreach materials as a fun way for young gay men to meet other young men, find out about the project, and hear how other young men are dealing with issues of importance to them, such as sex, dating, and relationships. Men who were interested in the project were encouraged to attend a group as an entry into the project. The M-Group outline was as follows:

1. Introduction. Ground rules were presented and participants engaged in an icebreaker exercise. The first role play (issues in meeting other young men) was not HIV related, but it was fun and provided a context for discussing the topics that followed.
2. Clearing up misconceptions about safer sex. The group discussed questions they had about safer sex guidelines.
3. Eroticizing safer sex. The group performed an exercise to help them think more creatively about safer sex.
4. Promoting condom use. The group learned about the correct use of a condom by practicing with various dildos and humorous, phallic-shaped objects. Participants received gift packages filled with an assortment of condoms and lubricants.
5. Verbal and nonverbal safer sex strategies. The group focused on strategies for orchestrating safer sex with partners. Scenarios with casual partners and with boyfriends were included.
6. Informal outreach. This section was intended to motivate and train participants to conduct informal outreach with their friends on the need for consistently engaging in safer sex. Participants role-played encouraging their friends to have safer sex. Participants were asked to commit themselves to invite several friends to an M-Group and receive invitations and safer sex packages to give to friends. Participants were given buttons with the Mpowerment Project logo; they were asked to wear the buttons to show their support for the project and its mission. It was hoped that wearing the buttons might trigger conversations among their acquaintances about the project and also serve to remind the young men in the community about the norm for safer sex that the project was seeking to establish (similar to the technique used by Kelly and colleagues). Our goal was to recruit 15% to 20% of the estimated number of young gay men into the small groups, since according to diffusion theory, this proportion of a population adopts an innovation, then the innovation can be conveyed through natural social networks and cause a communitywide change. Thus, group participants were seen as potential change agents. In Eugene, 168 men attended groups; this represented 15% of the estimated young gay men in the county (the estimate was based on census data and research by Fay and colleagues). Publicity campaign. Within the gay community, we conducted a small ongoing publicity campaign that included articles and advertisements in the gay newspaper, outreach materials distributed in settings frequented by young gay men, and the use of word-of-mouth among Core Group members and within their informal social networks. The aims of the publicity campaign were to spread an awareness of the program and establish its legitimacy, invite young men to become involved with the program, and provide a continual reminder of the norm for safer sex within the young gay men's community.

Results

Sample Description

The mean age of the men in the cohort was 23.4 years; the median education level was "some college"; 81% of men were White, 6% Latino, 4% African American, 7% Asian or Pacific Islander, and 2% "other." Most men (86%) self-identified as gay and 14% as bisexual.

Before the intervention, we found no significant differences between men in the intervention and in comparison communities with respect to age, sexual orientation, education, relationship status, level of unprotected anal intercourse (with men in general, with boyfriends/lovers, or with nonprimary partners), number of sex partners in the last 2 months, or frequency of attendance at bars and public sex environments. There was a higher proportion of non-White men in Santa Barbara (25%) than in Eugene (13%, P = .007), representing the greater ethnic and racial diversity of Santa Barbara County, California, than Lane County, Oregon. Among the Santa Barbara men, there were no significant differences between White and non-White men in terms of sexual risk behavior.

The preintervention assessment included 191 men in Eugene and 109 men in Santa Barbara. Thirty-two men moved from Eugene before the intervention was implemented and were therefore not included in these analyses (we continue to
track them for other research purposes). Of the rest of the sample who completed preintervention assessments, 65% (n = 103) completed postintervention surveys. Of men who completed initial surveys in Santa Barbara, 81% (n = 88) completed follow-up surveys. As is seen in Table 1, the intervention community men who were lost to follow-up were less likely to have sex in public sex environments (P = .04), but were not different at the preintervention assessment from those who remained in the study on any other variables under study. The comparison community men who were lost to follow-up had significantly fewer sex partners in the previous 2 months than the men maintained in the study (P = .02), but were not significantly different from those who remained in this study on any other variables. We tested for interactions between site and the loss to follow-up using linear and logistic regression models for baseline characteristics. One significant interaction effect was obtained (P = .03), with respect to the number of partners: noncompleters had significantly fewer partners than completers in Santa Barbara, whereas the two groups did not differ on this measure in Eugene. Although loss to follow-up appears to have been nondifferential, it was nonetheless considerable, especially in Eugene. Thus, as a further validation of our findings, we carried out Rubin’s multiple imputation procedure\(^2\) for each of the three main study outcomes. To summarize briefly, we fit logistic models predicting follow-up study outcomes from baseline variables, using data for subjects with both interviews. For each of 100 iterations, we used the fitted logistic model to impute follow-up outcomes for subjects with only a baseline interview and then carried out the analyses reported in the paper using the “completed” data. Finally, multiple imputation estimates of the study effects and their standard errors were calculated according to Rubin, essentially by averaging results from each of the 100 data sets completed by random imputation. Further details are available from the authors upon request. The size, direction, and significance of our findings (see below) were essentially unchanged when the data were reanalyzed by this method.

### Sexual Risk Behavior

As is shown in Table 2, after the intervention, there were significant reductions in the proportions of men in the intervention community reporting unprotected anal intercourse in the past 2 months with men in general, with boyfriends, and with secondary partners. There were no significant changes in unprotected anal intercourse in the comparison community during the same time period. McNemar tests were used when the same subjects were used in both pre- and postintervention (i.e., repeated measures) analyses. In the two-sample generalization of McNemar’s test,\(^2\) the change in unprotected anal intercourse with men in general was significantly larger in

---

**Table 1—Characteristics of Young Gay Men Who Did and Did Not Complete Follow-Up Surveys**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Eugene</th>
<th>Santa Barbara</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Follow-Up (n = 103)</td>
<td>No Follow-Up* (n = 88)</td>
</tr>
<tr>
<td></td>
<td>Difference</td>
<td>SE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographic variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age, mean</td>
<td>23.99</td>
<td>24.38</td>
</tr>
<tr>
<td>Racial/ethnic minority, %</td>
<td>13.6</td>
<td>11.4</td>
</tr>
<tr>
<td>Student, %</td>
<td>47.6</td>
<td>39.8</td>
</tr>
<tr>
<td>Had boyfriend, %</td>
<td>35.9</td>
<td>40.9</td>
</tr>
<tr>
<td></td>
<td>-39</td>
<td>-5.0</td>
</tr>
<tr>
<td></td>
<td>.39</td>
<td>7.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Had unprotected anal sex last 2 mo, %</td>
<td>40.2</td>
<td>36.9</td>
</tr>
<tr>
<td>No. sex partners last 2 mo, mean</td>
<td>2.69</td>
<td>3.06</td>
</tr>
<tr>
<td>Had sex in public sex environments, %</td>
<td>28.7</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>12.4*</td>
<td>6.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychosexual variables(^b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyment of unsafe sex, mean score</td>
<td>3.36</td>
<td>3.22</td>
</tr>
<tr>
<td>Sexual communication skills, mean score</td>
<td>4.56</td>
<td>4.76</td>
</tr>
<tr>
<td>Social norms favoring safer sex, mean score</td>
<td>4.54</td>
<td>4.55</td>
</tr>
<tr>
<td>Interpersonal barriers, mean score</td>
<td>2.09</td>
<td>1.84</td>
</tr>
<tr>
<td>Friends talk about safer sex, mean score</td>
<td>3.99</td>
<td>3.78</td>
</tr>
<tr>
<td></td>
<td>.21</td>
<td>.19</td>
</tr>
</tbody>
</table>

*The Eugene noncompleters consist of two categories of study participants: men who moved from the intervention community before the intervention was implemented and are therefore not included in analyses of the effectiveness of the intervention (n = 32, 17% of the original sample) and men who were lost to attrition or who returned surveys many months late (n = 56, 29% of the original sample).

*bScores are from brief (2-4 items) scales ranging from 1 ("strongly disagree") to 6 ("strongly agree").

*P < .05.
Eugene than in Santa Barbara (z = 1.75, P < .03). With respect to secondary partners, findings indicating that the changes were larger in Eugene than in Santa Barbara were less strong (z = 1.05, P < .15). Analyses examining unprotected anal intercourse with boyfriends/lovers included only respondents involved in a primary relationship at that particular assessment (i.e., we examined the proportion of respondents who had unprotected intercourse with their boyfriend). Some men had boyfriends at both pre- and postintervention assessments, whereas other men had boyfriends only at one assessment. As a result, a repeated measures approach could not be used. Instead, we used confidence intervals with standard errors that took into account partial overlap to examine for differences in proportions. In comparing the changes in unprotected anal sex with boyfriends in the two communities, we found a trend for the change to be larger in Eugene than in Santa Barbara (z = 1.41, P < .08).

Two-tailed Wilcoxon matched-pair tests showed a decline in the frequency with which men reported unprotected anal intercourse with nonprimary partners in the intervention community (z = -2.35, P = .019, n = 97), but no significant change in the comparison community (z = -.45, P = .65, n = 85). There was also a decline in the frequency of unprotected anal intercourse with boyfriends in the intervention community (z = -1.72, P = .086, n = 17), but no significant change in the comparison community (z = -.84, P = .40, n = 9).

**Mediating Variables**

Repeated measure analyses of variance were performed on psychosexual variables theorized to contribute to sexual risk-taking behaviors to determine if they showed improvements following the intervention. After the program, intervention community men reported experiencing fewer problems resisting unsafe sex when aroused (from mean = 3.33 to 2.94), whereas comparison community men were less able to resist unsafe sex (from mean = 3.49 to 3.67; F[1,187] = 5.00, P = .027). There was a trend for intervention community men to report enjoying unsafe sex less after the intervention than before (from mean = 3.39 to 3.13), whereas comparison community men enjoyed unprotected anal intercourse more over time (from mean = 3.36 to 3.56; F[1,187] = 3.31, P = .07). There was also a trend for intervention community men to increase in sexual communication skills after the intervention (from mean = 4.56 to 4.63), whereas comparison community men declined in communication abilities (from mean = 4.71 to 4.50, F[1,187] = 2.91, P = .09). There were no differential effects in the two communities over time with respect to the perception of social norms, the frequency with which friends talked with the respondent about safer sex, or perceptions of interpersonal barriers to having safer sex.

**Whom Did the Mpowerment Project Reach?**

At the postintervention assessment, most men (87%) in the intervention sample had heard of the Mpowerment Project. A great majority (77%) had experienced at least two project activities, an indication that the program reached widely through the young gay men’s community. The program did not differentially reach students, nonstudents, or different ethnic and racial groups. A marginally larger proportion of single men (82%) than men with boyfriends/lovers (68%) were reached by some component of the program (P = .10). The program was more likely to reach frequent bar goers than men who did not attend the bars as often (t = -2.73, df = 101, P = .008), as would be expected given the extent of outreach conducted in the bars.
Which Project Activities Reached High Risk-Taking Men?

We examined which program activities reached cohort participants who had engaged in unprotected anal intercourse prior to the intervention (see Figure 2). Most high risk–taking men had heard of the Mpowerment Project, and high proportions had experienced formal outreach activities at various venues and had dropped by the Center. Substantial proportions were given safer sex materials and invitations to attend an M-Group by a friend. But as predicted, high risk–taking men were less likely to attend small groups, volunteer with the Outreach Team, or be a member of the Core Group.

Discussion

Innovative prevention approaches must be developed and implemented quickly if we are to prevent the loss of yet another generation of gay men. To our knowledge, this is the first report of a controlled study evaluating an HIV prevention program specifically for young gay men. The Mpowerment Project led to substantial reductions in unprotected anal intercourse, the sexual behavior most risky for HIV transmission. The magnitude of changes in unprotected anal intercourse that result from this program compare well with the only other experimentally evaluated community-level intervention for gay men.20,21 Over a 2-month period following Kelly and colleagues’ intervention, the mean percentage of gay men who engaged in unprotected anal intercourse declined between −15% to −24% from the mean baseline in the three communities. By comparison, we found a 27% reduction in unprotected anal intercourse from the baseline for men in general, a 45% reduction in unprotected anal intercourse from baseline levels with nonprimary partners, and a 24% reduction in unprotected anal intercourse from baseline levels with boyfriends/lovers (Kelly et al. did not distinguish between different types of partners).

Using peers to support and encourage friends about safer sex appears to be an effective way to diffuse the HIV prevention message throughout young gay men’s social networks. This strategy goes beyond typical peer counselor approaches, in which a small proportion of the population at risk is trained to be peer counselors and the extent to which the volunteers are peers is unknown.28–31 Our strategy differs in a critical respect: we included as many young gay men as possible as sources of outreach. Every man who volunteered with the project in any capacity or who attended small groups was seen as a potential agent of change. Thus, our strategy was to involve the entire social system so that its members would encourage and support each other about the need for safer sex.

To most effectively reach young gay men who are engaging in high-risk activities, it is necessary to go beyond traditional health education. Instead, HIV prevention activities need to be embedded in the satisfaction of more personally compelling needs. Young men were attracted to the program (and then became change agents) because it focused on issues of importance to them. A particularly effective component of the program was the creation of fun social events to attract young men so that formal outreach could be conducted with them and so that they could be recruited into various program activities. Through this approach, we were able to reach risk-taking men who did not attend the small groups. Yet the small groups served an important role, since young men who attended the groups learned about personal HIV risk reduction and, through their informal outreach efforts with friends, could communicate their new knowledge and skills to others. Another difference in our approach to HIV prevention was our emphasis on empowering the young men to consider this program—and therefore, the HIV prevention message—to be their own. As the young men became more invested in the program, they increasingly seemed to adopt the safer sex message as their own, and this may have led to greater commitment to diffuse the safer sex message throughout their own community.

Several limitations to this field study should be noted. There was a large loss to follow-up between the pre- and posttest assessments, and although comparisons of dropouts with retained subjects showed few biases, it is possible that there were additional unspecified biases in respondents retained versus not retained. Also, there was a larger loss to follow-up in Eugene than in Santa Barbara. The higher rate of attrition in Eugene may be because there are fewer employment...
opportunities in Eugene than in Santa Barbara, and many cohort members (both those known to have moved and those we were unable to track) may have left to seek work. In addition, young gay men may consider Santa Barbara an extremely desirable place to settle (e.g., because of weather, physical environment) and may therefore stay there longer than young men stay in Eugene. An additional problem is that this study had low statistical power, which interfered with our ability to conduct other potentially interesting analyses and meant that some statistical analyses show “trends” rather than reach statistical significance. This difficulty was encountered because of the impossibility of recruiting a large cohort of young gay men from midsized communities. In addition, as in most AIDS behavioral research, this study relied on self-reported behavior. While various studies have established the reliability and validity of self-report procedures, an effect of the intervention may have been to increase respondents’ desire to answer questions in socially desirable ways. Future research should include measures of social desirability.

It is important to gain a better sense of the mechanisms through which this program led to behavioral changes. To change behavioral norms to favor increased precautionary behavior, we tried to increase the extent to which men spoke about and encouraged their friends to have safer sex. However, changes were not obtained on measures of perceived social norms or in the frequency with which young men reported their friends talking about safer sex. There are several plausible explanations for this. First, behavioral changes may have been mediated through other variables. Second, measurement error may explain the lack of changes in the variables. Finally, it is possible that the prevention program influenced the perception of injunctive norms how you think most others believe you should believe, which we did not measure, rather than descriptive norms (how you think most others actually behave), which we measured.

Although peer outreach and a focus on HIV prevention within the context of broader issues of importance to young gay men appear to be promising HIV prevention strategies, many young gay men in the intervention community continue to engage in risky behavior. Additional research is needed to determine how to bolster outreach efforts. Specifically, we need to learn how to increase peer support for safe sex (e.g., how to increase young gay men’s motivation to speak with and encourage each other), how to develop social networks so that there are more pathways through which supportive conversations can occur, and how to increase the persuasiveness of formal and informal outreach efforts. In addition, more attention must be focused on reducing risky sexual behavior within the context of boyfriend relationships. Although this program successfully led to a sizable decline in unprotected anal intercourse with boyfriends, risk-taking behavior with lovers remains at unacceptably high levels.

Since new young men will continue to come out as gay each year, it is critical that there be an ongoing system to socialize them about the need for safer sex. This intervention developed a mechanism to socialize young gay men to safer sex. Since this intervention relies primarily on volunteers, it is relatively inexpensive for communities to maintain. In this way, the project can survive so as to be available for future waves of young gay men.

Acknowledgments

This work was funded by grant no. MH46816 and center grant no. MH42459 from the National Institute of Mental Health.

Portions of this paper were presented at the Ninth International Conference on AIDS, Berlin, Germany, June 1993, and the Tenth International Conference on AIDS, Yokohama, Japan, August 1994. We are grateful for the enormous assistance of Larry Osborn in all facets of this work and for the extensive statistical assistance of Lance Pollack, PhD. We are also grateful for the help provided by Esther S. Hudes, PhD, in developing the standard error formula, for the help given by Katherine Haynes Sanstad, MBA, in presenting these findings for us at the Ninth International Conference on AIDS in Berlin, Germany, and for the help provided by Eric Vittinghoff, PhD, in addressing issues regarding potential attrition biases and conducting the multiple imputation procedures.

References


