

Recruiting and retaining couples for an HIV prevention intervention: lessons learned from the PARTNERS project

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Abstract

Intervening with both members of a couple has been recommended as an important strategy for human immunodeficiency virus prevention. Analyses of focus groups and in-depth interviews with project personnel involved in recruitment and retention for the Partners Against Risk-Taking: A Networking and Evaluation Research Study project identified, at the termination of the project, barriers and facilitators to recruiting couples. Barriers included logistical problems of coordinating two people's schedules, sensitivity of the topic and challenges related to recruitment efforts focused on one partner only. Strategies to overcome such barriers were to increase availability of project personnel and recruit both partners simultaneously, with recruitment teams consisting of men and women. Challenges related to recruit-

ing and retaining couples remain significant and should be considered before undertaking couples interventions.

Introduction

Increases in the number of cases of heterosexual transmission of human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) in the United States from 1999 to 2002 suggest the need for effective HIV prevention programs for heterosexuals [1]. Research suggests that couples interventions addressing both partners' motivations for engaging (or not) in safer sexual behaviors may be needed to address the needs of heterosexuals in relationships, particularly for those in close relationships (e.g. those with primary partners) [2–7].

In recognition of this need, investigators have developed and evaluated couples interventions [8, 9]. Despite their promise in promoting safer sexual behaviors [8, 10], couples interventions face recruitment and retention challenges that may limit their impact. Problems in recruiting participants to and retaining them in studies can also limit the generalizability and internal validity of the studies, leaving questions about whether and under what conditions the interventions are effective. Despite a growing body of literature on how to overcome barriers for recruiting individuals, including hard-to-reach populations [11–17], few address the challenges and strategies that are unique to the recruitment and retention of couples [18–20]. In this paper, we describe the recruitment and retention challenges and the lessons we learned

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implementing one couples intervention study in the United States, the Partners Against Risk-Taking: A Networking and Evaluation Research Study (PARTNERS) project.

The PARTNERS project

The PARTNERS project was designed to reduce the risk of acquiring HIV and other sexually transmitted diseases (STDs) and of having an unintended pregnancy among 18–25 year old women and their Primary male Partners. We evaluated the intervention in a randomized comparison trial in which couples were randomized to one of two conditions: the three-session intervention condition or a one-session educational comparison session for couples. Couples were recruited from the Los Angeles, CA, and Oklahoma City, OK, areas. Within several weeks of participating in a baseline interview, couples came to an initial group meeting at which they were randomly assigned to either the comparison or the intervention condition. Both conditions were standardized across the sites with some site-specific tailoring. Three-month follow-up interviews were conducted with women and men, and 6-month follow-up interviews were conducted with women only.

The PARTNERS intervention and comparison sessions

Couples in the one-session comparison condition received information from trained facilitators about HIV transmission and prevention, other STDs and contraception. Facilitators then led a question-and-answer period. All the couples randomized to this session finished the 1.5- to 2-hour session.

Couples in the intervention group participated in three sessions, each lasting 2.5 hours, over 3 consecutive weeks. In addition to reviewing the same information provided in the comparison session, each intervention session included skill-based interactive activities to address psychosocial factors and relationship dynamics designed to improve couple communication and enhance relationships. The first session focused on increasing

perceived vulnerability to HIV and other STDs and on increasing motivation to engage in protective behaviors. The second session focused on building communication and other skills needed for each of the three preventive strategies: abstinence, consistent condom use or mutual monogamy and testing. The last session focused on enhancing couples' communication and making a joint plan for the prevention strategy they would use. More than 90% of the couples assigned to the intervention condition completed all three sessions.

Recruitment and retention of couples in the PARTNERS project

Like most other intervention studies, we used active and passive strategies to recruit women and their partners. In active recruitment sites (e.g. health centers, shopping malls, STD clinics, community colleges, housing projects and universities), recruiters approached women to give them information about the project. The recruiters were women and were often of the same race, ethnicity and age range as potential participants. Information about the project included a description of the intervention and the steps in the research process. Interested women participated in a short screening interview to determine eligibility. For passive recruitment, recruiters placed printed materials (e.g. posters and brochures) that described the project and listed a toll-free number in community locations and advertised in local media. When women called, they received information about the project, including a description of the intervention, and were invited to participate in a screening interview.

Eligibility criteria were designed to identify couples at risk in their relationships. Women were eligible if they were 18–25 years old; had a male partner aged 18 or older, whom they identified as a primary sexual partner (defined as someone 'like a husband or steady boyfriend'); had sex without a condom at least once in the past 3 months and met one or more of the following criteria: (i) engaged in risk behavior in the past (e.g. had other sexual partners in the past year, had an STD and ever used intravenous drugs), (ii) knew or thought their partners brought risk to their relationship (e.g. had

an STD, had other partners in the past year and had sex with men) or (iii) thought they or their partners would have sex with someone else in the next year while they were still together. Women who were pregnant, intended to become pregnant within the year or reported being HIV positive were not eligible. Women in Los Angeles had to self-identify as Latina or Hispanic and women in Oklahoma City could be of any race or ethnicity. A focus on recruiting Latinos in the Los Angeles site was decided for two reasons: first, individuals of Hispanic ethnicity comprise 47% of Los Angeles' total population and, second, Hispanics are heavily affected by AIDS, comprising over one-quarter of Los Angeles County's AIDS cases. In both sites, recruiters asked eligible women to invite their primary partners to participate and both partners had to agree to participate for a couple to be enrolled in the study.

Of the women screened, approximately half (49% in Oklahoma City and 51% in Los Angeles) were eligible. (We cannot estimate the number of women 'contacted' because we do not know how many people saw project materials but did not call for information and because it was not possible for recruiters to document the number of people they talked to at crowded events such as state fairs or bars.) Although almost all eligible women agreed to participate, less than half of eligible women and their partners completed baseline interviews (26% in Oklahoma City and 41% in Los Angeles). Of 435 couples who completed baseline interviews, 301 (69.2%) were randomized to a condition. A total of 249 women and 237 men completed 3-month follow-up interviews (82% of women and 78% of men who were randomized). Two hundred thirty-two (77.1%) of the 301 women completed a 6-month interview.

Despite difficulty in recruiting, we did recruit couples at risk for HIV infection. For instance, almost half of the men and women who completed baseline interviews (45.4% women and 44.4% men) had other sex partners during the past year but only 6% reported 100% condom use for vaginal sex with their primary partners in the past 90 days. In addition, nearly one-fifth (18.4%) of the women

and 11.3% of the men reported that they had an STD during the past year and 13.8% of the women and 7.6% of the men reported having had sex with an injecting drug user.

Methods

To better understand recruitment and retention challenges and how they were addressed, we interviewed PARTNERS project staff from both sites after the intervention phase of the project was complete. Because they made decisions about or implemented recruitment and retention strategies, our sample included recruiters, recruiter helpers (i.e. men who accompanied female recruiters to recruitment sites to talk to potential participants), interviewers, project coordinators and principal investigators (PIs) from both sites. They participated in telephone interviews (PIs, coordinators, recruiter helpers and interviewers) or telephone focus group discussions (recruiters) led by a female moderator who did not work on the project. Telephone interviews and focus groups were conducted to encourage participation. Staff (excluding PIs) who were interviewed worked for the project for just under 2 years (on average) and had previous experience working with the target population or on public health studies.

Each of the 11 interviews and 2 focus groups lasted ~40 min to 2 hours. The moderator used semi-structured guides to ask participants to describe productive recruitment sites, recruitment barriers, effective recruitment strategies and retention barriers and strategies. All interviews were audiotaped and transcribed.

To analyze the data, three of the co-authors of this report independently sorted the data from transcripts using categories based on a conceptual framework to identify barriers and strategies to recruiting couples that had not been documented in the literature [21]. Next they identified the range of responses or main themes (codes). Each transcript was coded independently by two coders who compared and discussed codes until they reached consensus. It should be noted that one of the coders

participated in an interview for this assessment. To reduce the potential for bias, she did not code her own transcript or code any interview or focus group transcript of staff from the site at which she had worked. Analyses presented here focus on barriers to recruiting couples (as opposed to general recruitment barriers) and strategies for overcoming them.

Results

Recruiters and other project staff described the challenges to recruitment and retention that were specific to recruiting and retaining both partners in a couple. Where quotations from interviewees are used, research study site (Oklahoma City, Los Angeles) and project role (e.g. recruiter) are noted.

Identifying and overcoming couple-specific challenges to recruitment and retention

As indicated previously, attrition from screening to baseline interviews was a problem. Participants reported that face-to-face or over-the-phone interactions with potential PARTNERS participants suggested that some recruitment challenges were unique to recruiting couples and determining eligibility through the women and others were complications to general recruitment barriers. Overcoming both types of challenges required ongoing modifications to recruitment strategies.

Recruiting couples through women versus recruiting both partners

A key recruitment barrier for the PARTNERS project resulted from determining couple eligibility by screening the female partner only and thus focusing early recruitment efforts on women, rather than on couples. As a result, women had to introduce the project to and 'recruit' their partners. More specifically, women were required to accurately present information about the project to their partners (that the women only recently learned), determine what aspect of the project would appeal to them and answer their questions to persuade their partners to participate.

I think that's what was the biggest barrier ... the fact that it would depend on the partner ... we're only talking to the women. And, not only is the guy, you know, getting second-hand information because it's whatever she understood from what we said, but it's just, like, whether he's going to want to do it or not anyway. (Los Angeles, recruiter)

Some women were hesitant to talk with their partners about the project because of concerns about their partners' reactions. Recruiters and other staff reported that in follow-up calls, many eligible women said it was difficult to talk to their partners because they judged (sometimes correctly and sometimes not) that their partners 'would never do something like this'. Even when staff talked with male partners first, the same barrier would often arise. This exchange in a focus group for female recruiters from the Oklahoma City site illustrates this point and underscores the benefit of approaching both partners at the same time—a strategy that was adopted in response to women's concerns about talking to their partners about the project:

Recruiter A: I would say the woman was key (to recruiting the couple) because a guy ... might be kind of interested, but he'd say something like, 'I don't know, I have to talk to her', or 'I'd never get my girlfriend to do this'.

Recruiter B: It was the opposite.... If you could get the man to agree, the woman would go along with it.... A lot of times, the women were having a hard time talking their boyfriends into doing it.

To facilitate recruitment in situations where only one partner was approached, both sites hired and trained male recruiter helpers to accompany female recruiters to sites so that they could answer men's questions, 'role play' with women on how to approach their partners or let women know that they could contact or be contacted by male partners at a later time. 'Take-home' materials were also developed and given to women whose partners were not with them so they had something to show their partners and to refer to when talking to them about the project. These materials were designed

to be attractive, easy to read and comprehensive in responding to questions and misconceptions potential participants might hold. All materials were reviewed for acceptability by members of the target audience.

To further address the barrier posed by talking to one partner only, both sites added and focused attention on active recruitment sites where couples were together. According to one of the PIs, they found places they could ‘catch couples together so that [they] could explain the study to both partners at the same time’. Such places included malls, universities and colleges, bars, sports venues and special events (e.g. concerts) and allowed female recruiters and male recruiter helpers to talk to both members of the couple at the same time.

Because ‘couple recruitment sites’ offered more opportunities to talk to both partners together, it was important to find the ‘right time’ to go to the sites to recruit couples.

And another example of rotating [recruitment sites] was the [mall] ... we tried to find good times to go ... near Valentine’s might be a good time because a lot of couples go out and look at things, right? So we tried to find strategic times to go to certain places, particularly in places where we couldn’t be all the time. (Los Angeles, investigator)

At couple recruitment sites, female recruiters and male recruiter helpers had conversations concerning the project with both members of the couple, answering questions and gauging interest.

Recruiter A: [W]hen it comes to ... the couple itself, sometimes when we were at the colleges, we would see couples walking by. Or, even at the mall we see couples walking by. And we’d talk to both.

Recruiter B: I think that made it easier because they both got first-hand information. (Los Angeles, recruiters)

It was always easier right there in one spiel. Then you can ... get them both brought into it ... ‘you guys look like you’d be perfect for this.’ ... So if

one’s on the fence, then ... maybe a little bit of enthusiasm ... the other one might see that’s going to push the other one into it. (Oklahoma City, recruiter helper)

Talking to both members of the couple during recruitment was also helpful because it enabled the recruiters to emphasize different types of incentives for participating, in addition to providing basic information about the project. For example, improving the relationship through communication was considered an incentive for some, as was learning about effective safer sex strategies. Some recruiters felt there was a clear divide between what made men and women ‘tick’ in this regard, but others said that both sexes could be equally enticed by each incentive. In the end, recruiters had to determine which incentive would be more appealing, recognizing that both partners may be drawn by different things.

Sensitivity to the topic and making participants feel comfortable

Although there were benefits to adding couple recruitment sites, there were some problems as well. Specifically, discussion of and references to sexual behavior and condoms were considered taboo or inappropriate in some settings. For example, although malls were identified as good venues for approaching couples together, many had rules about what was appropriate and what could and could not (i.e. condoms) be displayed so as not to offend patrons.

[W]e had an area designated for recruitment and we couldn’t go out of that area because ... we had to be respectful to all the people at the mall and it was more like ‘...If they approach you it’s okay, but we don’t want you guys to really bother these people who are here.’ (Los Angeles, female project coordinator)

To maintain access to such locations and the couples who went there, the sites followed the rules they were given.

[T]hat barrier, we overcame it ... We were careful what we put on our table. We didn’t hang things

[project posters] around. We did exactly what they asked of us and we still were able to recruit a lot of people there. (Los Angeles, investigator)

In addition, many of the couple recruitment sites had problems because of the nature of the activities or the characteristics of the sites. For instance, bars and special events were not conducive to long conversations about the project. In some cases noise was a problem (e.g. sporting events) and in other cases the nature of the activities was a problem (e.g. bars).

This was a typical college town bar ... the bars are to go out and hang out and drink. And so, you know, some people were getting buzzed and ... I don't know how effective my message was with recruiting. It didn't stop me from doing my thing.... In the bars, you have to be pretty quick about it. Just say 'Here, take it [print materials].' (Oklahoma City, female recruiter)

These kinds of recruitment sites were compared with places like Planned Parenthood centers where the audience (mostly women) was 'captive' and where there was usually enough privacy to discuss the project.

To some extent, almost all couple recruitment sites lacked privacy. In some sites, however, recruiters were able to 'carve out' a significant degree of privacy so that they could talk to couples in more detail about the project. Malls and college campuses were places where this was more likely to occur. Recruiters often mentioned trying to talk to couples away from the 'main path' or away from the recruitment table or booth in order to create some privacy.

Other complications of recruiting and retaining couples

Some recruitment barriers faced by most studies were more complicated in this study because we were recruiting couples. For example, recruiters and other staff noted problems for couples due to concerns about confidentiality, sensitivity to the topic and logistical barriers.

Complications due to confidentiality and sensitivity to the topic took two forms. First, many

eligible women were found in STD clinics. However, because many had just received an STD diagnosis, they considered discussion of relationship issues too sensitive or private. The fact that women were often there because their partners may have given them an STD left some women very upset with their partners and unwilling to talk to them about the project despite the potential relevance of the program:

Depending on people's reactions to [test] results.... For example, someone who got results back that they had an STD ... there [were] some women that would come and talk to me afterwards and there was a lot of anger and frustration with their partner.... So, it was really dependent on whether or not they felt open enough to talk, or they just needed to be angry. (Oklahoma City, recruiter)

Other women at STD clinics were reluctant to participate in the project because they believed that everyone in the group sessions or the research staff would know they had an STD.

The only site I think that was probably the hardest was ... the crew from the STD clinic ... because they knew we were recruiting from an STD clinic, they probably felt like everyone who was going to be in the group had an STD.... They didn't realize all the places that we were recruiting from ... So they just assumed, yeah, everybody's going to know. (Oklahoma City, recruiter)

In some cases, recruiters successfully pointed out the potential benefits (e.g. more open communication) of participating in the intervention or stressed that they recruited from a variety of sites to help overcome concerns about confidentiality and topic sensitivity.

I would have a lot of women who would be excited about the idea ... to communicate with their partner and all these kind of exciting things that you could learn in the [intervention] sessions. (Oklahoma City, recruiter)

Confidentiality was also important in another way. Sensitive relationship and sexual information,

which partners may not have shared or have been ready to share with each other, was asked about in baseline interviews. We had a strategy in place to address some of these concerns at the outset. Specifically, male and female partners were simultaneously interviewed by separate interviewers to instill confidence that the partner would not be able to find out what had been said. Throughout the project, we developed additional strategies to respond to concerns about confidentiality. Print materials that included responses to 'frequently asked questions' detailed what would not be required during the intervention (e.g. facilitators would not ask questions about participants' sexual behavior) and we asked past program participants to participate in recruitment activities to answer questions about what did and did not occur in the interviews and intervention sessions.

Finally, practical barriers, including lack of time and child care needs, were multiplied by needing to accommodate two people. Strategies used to address these issues, such as flexible staff schedules to accommodate both partners' schedules and providing staff contact information so couples could reschedule interviews when necessary, helped facilitate the continued participation of both members of the couple. In addition, recruiters reported the need for even greater persistence in contacting couples to remind them of upcoming events (e.g. interviews and intervention sessions) and to try to find times when both partners could attend events to ensure that couples joined and stayed in the study. This required regular contact by phone and frequent updating of participant contact information. Finally, in addition to reimbursing for child care and transportation costs incurred by participants, additional staff members were also often available on site to accommodate last minute child care needs.

Discussion

Our experience with the PARTNERS project indicates that it is possible to recruit and retain at-risk heterosexual couples for intervention research studies. Recruiting and retaining couples did, however,

take substantial amounts of time, effort and resources. Despite early efforts to address known barriers to recruitment and retention, difficulties in recruiting couples required that we identify and understand couple-specific barriers in order to modify our recruitment efforts during the project. Specifically, we targeted both members of the couple (as opposed to women only), addressed couple-specific concerns regarding participation and increased staff availability and persistence to enhance recruitment.

Identifying and reaching out to both members of a couple reduced the burden on women of recruiting their partners and provided an opportunity to provide both with accurate information about the project, answer their questions and identify and appeal to their potentially different interests in participating in the project. Through this strategy, we could also address concerns regarding issues of trust in the project and trust in the relationship. For instance, by addressing both members of the couple, female recruiters and male recruiter helpers could talk directly to women and men in community settings to allay their fears about participating in the research and to assure them that the intervention focused on things such as communication and relationships (and thus might not raise questions of trust between the partners).

Although targeting both members of the couple was considered to be a successful modification to recruitment strategies for this project, it is worth noting that McMahon *et al.* [19] report that recruiting couples through the women only may provide protection to women in potentially abusive relationships, giving them the authority to refuse participation without consulting their partner. Although we lack the data to comment on experience of abuse within current relationships of PARTNERS participants, all eligible women were given the option to privately refuse participation as a part of the screening process, regardless of if they had been approached individually or as a couple. Including an option for the woman to 'opt out' in private may be one way to retain the woman's authority to refuse participation on behalf of the couple (due to fear of abuse or other reasons) while approaching couples together. In addition,

providing take-home materials to address questions and facilitate communication between partners about the project is another important strategy we adopted that supports women in negotiations with their partners regarding participation without approaching both partners together.

Greater attention to logistical barriers complicated by coordinating schedules for two partners was also required. Although logistical barriers were offset by providing transportation, child care and payment for participation in project activities, this type of compensation was not always sufficient for couples. Staff flexibility (e.g. nights and weekend hours) and frequent personal contact with participants throughout the course of their participation not only addressed complicated logistical barriers but also demonstrated our interest in and commitment to the participants.

Mid-term changes to recruitment and retention strategies appear to have improved our ability to enroll couples into the PARTNERS project. Due to a continuous process of assessing and addressing barriers to recruitment and retention, it was not possible to assess the effectiveness of each specific change in improving recruitment and retention. Increases over time, however, in both the number of groups scheduled and the number of participants per group suggest that improvements may have resulted from changes to recruitment efforts. In addition, the reputation of the program in the community and experience of project personnel, which developed over time, likely facilitated improved recruitment and retention; however, recruitment and retention of couples remained a challenge and an important focus throughout the course of the project.

An increased recognition of the need to address relationship factors in interventions and to intervene with both members of a couple reflects a relatively new direction in HIV prevention efforts, one that has not been fully explored. Difficulties in recruiting and retaining couples at risk for HIV and other STDs are evident in reports from El-Bassel *et al.* [8] as well as from the PARTNERS project. These challenges suggest several implications for future HIV intervention research with couples.

First, although efforts to recruit and retain at-risk couples can be successful, researchers must acknowledge and budget for the increased costs necessary to work with couples. Although it may be easier to recruit couples for interventions than for intervention research studies (e.g. no need to commit to and schedule interviews), it may still be difficult to convince couples to participate in an intervention unless issues of trust are addressed and logistical barriers are reduced. The former may require personal contact from both male and female recruiters, and the latter may require financial resources (e.g. child care and transportation allowance).

Next, despite improvements in recruiting and retaining couples, questions regarding the generalizability of our findings inevitably arise given the large percentage (over half) of eligible women who reported a willingness to participate but who did not enroll in the study. Unfortunately, PARTNERS screening data are insufficient to adequately comment on differences between couples who participated and those who did not. Further, we have no data on those who were exposed to project information but chose not to receive additional information or be screened. This limits our ability to adequately discuss selectivity bias that may have been introduced.

Even without this information, however, we might reasonably speculate bias based on demographic and risk characteristics, as identified by Wu *et al.* [20] in their evaluation of enrollment characteristics of women and their partners recruited for a couples intervention. In addition, our sample may further reflect bias based on relationship characteristics. For example, it is likely that couples in more stable relationships, who may have an easier time communicating about topics relevant to HIV prevention, were more easily recruited to participate. Likewise, couples who were not already motivated to change may have declined to participate, leaving couples in both study conditions already motivated to make the changes we suggested. Alternatively, women in new or less stable relationships may have been uncomfortable talking to their partners about the study or may have been unsuccessful in persuading them to join the study.

Unfortunately, we do not have data to address whether less stable or less motivated couples were less likely to participate or whether the intervention would have had different effects on them. Qualitative research and focus groups with young couples may be useful in providing additional insight regarding what motivates different types of couples (e.g. more or less stable) to participate in such programs.

Finally, findings from the couple intervention study by El-Bassel *et al.* [8] suggest that an intervention focusing on relationship factors may be just as effective when implemented with one partner as with both partners. This is an intriguing finding because it suggests that it may be possible to benefit from addressing relationship factors while minimizing recruitment barriers. Unfortunately, the PARTNERS project design did not enable us to assess the trade-offs between recruiting and intervening with one partner and recruiting and intervening with a couple. The question of whether a relationship-based intervention for one partner may be equally effective as a relationship-based couples intervention deserves additional research that addresses questions of recruitment and retention as well as effectiveness.

In conclusion, issues related to intervening with both members of a couple for HIV prevention are complex and require additional attention. Our ability to uncover and address many of the barriers related to recruiting and retaining couples was only possible through a review and discussion of tracking data with project staff. Reviewing the data, discussing reasons for the patterns and talking with potential participants are critical for ensuring recruitment success and addressing future couples intervention efforts.

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Conflict of interest statement

None declared.

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