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# Strategies for recruiting steady male partners of female sex workers for HIV research

Paul J. Fleming<sup>a,b</sup>, Clare Barrington<sup>a,b</sup>, Martha Perez<sup>c</sup>, Yeycy Donastorg<sup>c</sup>, and Deanna Kerrigan<sup>d</sup>

<sup>a</sup>Department of Health Behavior, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, NC, USA

<sup>b</sup>Carolina Population Center, University of North Carolina at Chapel Hill, NC, USA

<sup>c</sup>HIV Vaccine Trials Unit, Instituto Dermatológico y Cirugía de Piel "Dr. Huberto Bogaert Díaz", Santo Domingo, Dominican Republic

<sup>d</sup>Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

## Abstract

Steady male partners of female sex workers (FSW) are a key population for HIV prevention, but researchers face challenges finding and recruiting this population. We conducted forty in-depth interviews with FSW and steady male partners of FSW in Santo Domingo, Dominican Republic about how to engage steady male partners in HIV research. Participants cautioned that male partners might be unwilling to participate because of discomfort disclosing intimate information and cultural norms of masculinity. They recommended inviting male partners to research offices, instead of venue-based recruitment, because it was more private and trust-promoting. Most participants suggested that FSW could refer their partners or men could refer their friends who have FSW partners. Participants emphasized that referrals could break down trust-related barriers that prevent male partners from participating. Establishing an environment of respect and trust in the research setting can aid referral processes as individuals who participate communicate their positive experiences to their networks.

## INTRODUCTION

In most of the world, HIV is primarily transmitted through heterosexual sex and female sex workers (FSW) are considered key populations for stemming the transmission of HIV (1). While HIV surveillance and prevention interventions with FSW are common practice in most national-level prevention efforts (2, 3), male partners have received much less attention for research and intervention.

One reason for this disparity is that FSW are considered easier to reach because they often can be found in specific commercial sex venues, are organized in collectives, or have

**Corresponding Author:** Paul J. Fleming, Department of Health Behavior, Gillings School of Global Public Health, University of North Carolina, 302 Rosenau Hall, Chapel Hill, NC 27599-7440, (tel) 630-777-0160, (fax) 919-966-2921, pfleming@unc.edu.

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frequent contact with a network of other FSW (4–8). Male partners of FSW (both clients and intimate partners) can be more challenging to recruit because they are less easily defined, not a professional group, and typically do not identify as 'male partners of FSW' (9, 10). Male partners are often identified at commercial sex venues (11–15), but researchers can face challenges recruiting in venues (e.g. in Guatemala, half of identified male clients of FSW in a venue refused an invitation to participate in a survey and HIV test (16)). Steady male partners (e.g. repeated/regular clients, boyfriends, husbands) of FSW can be more difficult to reach since they may not go to venues where FSW work, may be unaware their partner is a sex worker, or may be unwilling to identify as a steady male partner of a FSW. Steady partners are a key population for HIV research since research across settings has shown that, compared to new clients, steady male partners of FSW are significantly less likely to use condoms with their FSW partner (13, 17–19).

Some studies have successfully recruited steady male partners of sex workers into sociobehavioral HIV research, primarily using referrals from FSW (20–28). While members of our own study team have successfully recruited this population into socio-behavioral research studies in the Dominican Republic (13, 21, 22, 28), we consistently found that steady male partners were more difficult to reach than FSW, less likely to accept our invitations to participate in research, and more likely to skip a scheduled interview.

In the DR, FSW have been the target of HIV surveillance and prevention efforts since the early days of the epidemic (6, 29–31). However, national-level surveillance of male clients or steady partners has not been implemented. Local NGOs in the DR have intervened with male clients and steady partners (e.g. training male peer educators creating a theater group to perform HIV prevention skits in brothels,), but there has been no scientific evaluation of these efforts. Our previous published studies of male partners in the Dominican Republic have found that the composition and norms of men's social networks influence their HIV risk behaviors (21, 28, 32) and that men's condom use with FSW depends on relationship intimacy (13). To reduce HIV transmission within these partnerships, more research with steady male partners is needed, including surveillance and evaluation of interventions; these efforts will necessarily rely on successful recruitment of steady male partners into HIV research.

Because of steady male partners' role in HIV transmission and their potential participation in HIV prevention, testing, and treatment programs, we sought to better understand how to reach steady male partners and recruit them into socio-behavioral HIV research. In this paper, we aim to improve our understanding of the perspectives of FSW and steady male partners of FSW regarding barriers to male partners' participation in socio-behavioral HIV research and the best strategies for recruiting this population.

## METHODS

#### Study Setting

Our study population included FSW and men who were steady partners of FSW in Santo Domingo, the capital city of the Dominican Republic with approximately 3 million inhabitants (33). The HIV epidemic in the Dominican Republic is characterized as

concentrated, with a disproportionate burden among specific populations including FSW, men who have sex with men and individuals who use drugs (31, 34, 35). Compared to 0.7% national HIV prevalence among 15–49 year olds, HIV prevalence among FSW ranges from 1.7% to 6.3% (19). Despite lack of reliable HIV prevalence estimates, male clients or steady partners of FSW have also been identified in the DR as a key population for HIV transmission (35).

#### **Recruitment and Data Collection**

We conducted semi-structured in-depth interviews with a convenience sample of twenty FSW and twenty steady male partners of FSW as part of formative research for the development of an HIV research and intervention project with these populations. We decided to conduct twenty interviews with each group based on expert recommendations on in-depth interviews (36–38) and our previous experience conducting in-depth interviews with these populations. We defined a FSW as a woman who exchanged sex for money in the last month and participating FSW included venue-based, street-based, and on-call sex workers (the majority were venue-based). We defined a steady male partner as a man who had sex with the same FSW partner at least four times in the last three months and our population of steady male partners all described themselves as boyfriends, live-in partners, or husbands. We purposefully sampled FSW who were over age 18 with at least one steady male partner. We recruited these FSW through existing contacts with FSW who had previously participated in research with our partners in the DR as well as referrals from our team of peer outreach workers and other participants. Steady partners were referred to the study by non-participating FSW who had previously participated in HIV research at our local research site. We did not obtain any information linking partners.

The interviews were conducted using an interview guide with questions about key themes to be covered in the interview. We first asked men and women about their relationships (e.g. trust dynamics, sexual behaviors, and socioeconomic dependence) and then their opinions about recruiting steady male partners into socio-behavioral HIV research (e.g. barriers to participation, preferred recruitment method, opinions about HIV testing, etc.). When recommending recruitment strategies, male partners were asked to consider their friends who had FSW partners and FSW were asked to consider their own steady male partners. After about fifteen interviews with each group (FSW and steady male partners), we felt that we had reached saturation of themes. A male Dominican and two female Dominicans conducted the interviews (with the exception of one interview with a male partner, all interviewers were sex-matched with the interviewee). All three interviewers are trained in qualitative interviewing techniques, used the same interview guide to conduct the interviews, and have extensive experience working on HIV prevention research with FSW and their male partners. The in-depth interviews, conducted in Spanish, lasted approximately sixty minutes. Participants received a small cash incentive to cover travel costs. The research project was approved by the ethical review boards at Johns Hopkins Bloomberg School of Public Health, the University of North Carolina, and the Instituto Dermatalogico y Cirugia de la Piel Dr. Huberto Bogaert Diaz in Santo Domingo.

#### **Data Analysis**

All interviews were audio-recorded and transcribed verbatim by professional Dominican transcriptionists. The first author led the analysis and regularly consulted with co-authors. After an initial round of reading transcripts, we developed deductive codes derived from the interview guides. The first author coded the transcripts (39) using Atlas.ti 7 (40) and consulted co-authors to discuss interpretation or coding of segments that were unclear. We then used thematic matrices to compare each participant's opinions on barriers to participation in research, HIV testing, and where and how to recruit male partners. We incorporated memo-writing throughout the analysis to aid in exploration of the data and to keep a record of our thoughts and analysis process (41).

## RESULTS

Most participants were in their early 30s (range: 19-52) and most had education limited to primary and/or secondary school. The women reported having a median of 15 sex partners in the previous month (range: 1-60) and the men reported a median of 2 sex partners (range: 1-15). We first report perceptions of barriers to participation in HIV research, and then participant's suggestions for how to recruit male clients and partners.

#### Barriers for men's participation

Nearly all men and women stated that a majority of their male friends or partners would be willing to participate in research. Despite this overall acceptability, participants described several barriers to men's participation in HIV-related research. The most frequently mentioned barrier was that men would not feel comfortable talking about topics related to sexual health. For example, one man described some of the men he knows:

"Not everyone thinks the same way, when someone starts to tell him something, if you talk to him about [sexually transmitted] infections, he's going to immediately get upset, and the first thing they'll tell you is don't talk to me about that stuff."

Other men and women echoed this sentiment by describing that there are certain men who try to avoid talking about topics related to sex and sexual health.

Many women went a step further and said that some men are too "embarrassed" to participate in research about sexual behaviors and HIV. One woman commented about her perceptions of men: "You know, men get very embarrassed, they don't like to get asked too many questions." Various women highlighted that men are less willing than women to participate in research studies and to talk about their personal life. One woman described her perception of the difference between men and women:

"For me, a woman is always more accessible than a man, because the man gets skeptical because of his machista ways, we women are just more curious."

This woman connected men's potential unwillingness to be interviewed to cultural concepts of *machismo* that limit men's comfort to express emotions and talk about relationships (42). A few women felt that men's potential embarrassment could also be related to having to

admit to other people that their partner is involved in sex work since it could be considered shameful and emasculating for a man's partner to have sex with men other than himself (42).

HIV testing was never mentioned as a barrier for male partners to participate in HIV research and there was no indication that men would perceive an HIV test in a research setting differently than receiving an HIV test elsewhere. However, men and women did report that some of their friends/partners may be reluctant to get tested generally and these barriers could apply to research studies providing HIV tests. A few men and women believed that some of their friends/partners would fear getting tested because they would rather not know if they are living with HIV. As one man states, "There's some people that screw around out there and still don't want to get tested for HIV because they know their FSW partner gets tested regularly. Finally, a few women highlighted potential embarrassment as a reason that men would not be tested. For these women, men's refusal to test was caused by gender-related differences in openness to HIV tests.

#### Where and how to access male partners

Most men and women felt that FSW referring their steady partners would work best, as was done in the current study. The participants mentioned that the office where we conducted interviews was a trusting environment and steady male partners would only participate if the environment was trust-promoting. They said that referrals from FSW partners who were already participating in a research study was a good option because the FSW partner could explain the process to the man and what would be required of him.

This recommendation was based on the trust that existed in the relationship between FSW and their steady partners. Men primarily described their trust in the woman as being based on emotional intimacy. For example, one man knew that his partner had other sexual partners in the streets but said:

"A trusted partner is when a person is honest with the other person, they tell them the truth and everything they feel for that person. . . when you need her, she'll help you out."

The fact that she fulfilled his emotional needs allowed him to trust her. Other men trusted their partners based on perceived safe sexual behaviors. Some men described their trust in the woman because they felt that the woman used protection with other partners or because they were unaware their partners had other sexual partners ("I've never known any other boyfriends or anything, she's never had anyone else"). Since all female partners were active FSW, sometimes the trust a man had in a woman was based on a lie or hiding the truth. However, this trust was built over time as men felt that they knew and understood the woman.

The women were willing to recruit their partners into research and help him overcome barriers to participate, especially barriers related to trust. One woman described how she would convince her partner to participate: "You've got to tell them, 'look my love,' talk with them, explain it to them, sit with them, caress them...so that they understand what researchers do and they have more trust in them [researchers]."

This highlights the apprehension that some male partners might have participating in HIV research and how their trusted partners could potentially foment trust between the men and the researcher.

While most were willing to refer their partners, a few women expressed that they would be unwilling to refer their steady partners because the partner is unaware of their involvement in sex work and they felt that recruiting their partner could potentially expose their profession. For example, one woman described:

"He'd be my steady partner until you invite him, once you invite him it'd all be over...as he doesn't know what I do...he has another idea of who I am."

This sensitivity to women's FSW status could present a potential barrier to women's successful referral of their steady male partners.

Without any prompting from the interviewer, about half of the men offered the idea that male partners could also refer each other. Men, like women, felt that they could recruit their own friends (and were often eager to do so) in a way that could address any barriers their friends might feel about participating. One man was enthusiastic to invite his own friends:

"I could send you some guys, [I'd say] 'Look there's an interview in such and such place, and such and such floor,' and I'll explain what kind of interview they had with me so that those guys will feel relaxed or I'll say what the questions were and they'd definitely accept. They'll come and give you the information."

The men who suggested referring their own friends emphasized that by conveying the trusting environment of the research setting, their friends would feel more comfortable to participate.

Most men and all women interviewed said their friends/partners would prefer to have their FSW partners refer them to a research office instead of being recruited into an HIV research study at commercial sex venues (e.g. bars, brothels, or other drinking establishments). Some men said that researchers entering a bar to find male partners would not garner the trust necessary for recruitment. One man even said that if he were approached in a bar by a researcher he would lie about his eligibility:

"If you would've come to a venue where I'm drinking and asked me these questions, I wouldn't have answered....I would've said: 'I don't have any women like that' or 'I don't sleep with these women.""

This man highlights the potential problems a researcher could face while recruiting in venues. The minority of participants who did think venues were good locations for recruitment mentioned that men could be informed about the study in a venue but that actual interviews should be conducted in a more discrete location. The idea was that men would have the opportunity to meet the research team and then with that information could decide whether they felt comfortable enough to participate. But, these sentiments were the minority

among men and women. Most felt that venues were places where men went to have fun and would not want to be bothered by a research study.

When we asked where men would feel most comfortable being tested for HIV (either a mobile clinic where men live/work/play or in a research office), men and women again said that a research office would be preferable. The participants were interviewed at a medical office for this study and one man compared potentially getting tested there or in a mobile clinic:

"Better that they come here, here is better because there [mobile clinic] they wouldn't be able to talk...because of the privacy, if its something near my house I wouldn't talk, because if its not one neighbor that's listening, it'd be the other, the people around here are always looking and listening, [they say] 'what's this all about? What's going on?"

For this man, he could avoid community gossip by testing at a research office. Those who thought men would prefer a mobile clinic said that men would find it more convenient and some women said that men's feelings of embarrassment to participate could be exacerbated if they had to show up at a medical office. Nonetheless, most participants felt that a research office would be the most confidential and men would feel more comfortable participating in research and HIV testing.

#### DISCUSSION

Our data provide useful and insightful opinions from FSW and steady male partners about how to recruit steady male partners to participate in HIV-related research. First, we found that while men and women believe that most steady male partners of FSW are willing to participate in HIV research, there are various barriers, often related to trust, for researchers to overcome. Second, we found that referrals by FSW or male friends could be an acceptable and effective recruitment strategy for overcoming some of the identified barriers to recruiting men. Finally, we found that most men and women believe that male partners would prefer to be invited to a research office for interviews and HIV testing, rather than be recruited at a venue or within their community.

A potential barrier to male partners' participation was their embarrassment or their unwillingness to disclose personal aspects of their lives. While ensuring trust, privacy, and confidentiality are best practices for any research study, effectively communicating and emphasizing these characteristics may be crucial to recruitment efforts with male partners. According to our participants' opinions, men need to feel this trust before they are willing to engage in the research process. It is necessary but insufficient for researchers and a research setting to practice ethical standards of maintaining confidentiality and non-judgment; potential participants must be convinced that those standards will be met *before* they are willing to consider engaging in the research process (i.e. during recruitment and prior to the formal informed consent process). For this reason, referrals can be an especially promising approach. When FSW refer their partners (and possibly those male partners refer their friends), they can share their own experiences and answer questions to ensure the men that the research setting and researchers have the requisite trust, privacy, and confidentiality.

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This approach builds on the existing trust between male partners and their FSW partners and is similar to snowball sampling for hard to reach populations. Our own research team and other researchers have used partner referrals from FSW in various studies with relative success (including in the current study) (20–22, 28). To our knowledge, no study has attempted to recruit male partners through referrals from friends, but our results suggest this could be a promising strategy.

Our participants, especially the women, emphasized men's "embarrassment" to talk about their sexual behaviors with researchers or to get tested for HIV. Some participants directly contrasted men's embarrassment to women's relative openness. Though talking about sex is common among men in the DR (21), our participants highlighted that participating in a survey or interview about their sexual behaviors or relationships is perceived differently than casual talk with friends. Men may perceive the idea of discussing their intimate sexual relationships with other people as uncomfortable because of cultural notions of masculinity that restrict men's sharing of emotions (42). Men in the Dominican Republic, and most cultures globally, are socialized to limit their expression of emotions in front of other people (42–44). When possible, researchers should consider using data collection methods, such as audio computer assisted self-interview (ACASI), that are designed to make participants feel more comfortable sharing personal details.

Men's embarrassment and lack of comfort may also be due to their unfamiliarity with clinical settings. Men worldwide visit health professionals or seek health care less often than women (45). While this is in part due to women's additional reproductive health needs (46), various studies have also shown that men seek health care less than women because of gender norms that discourage men from admitting weakness or asking for help (47–49). Researchers need to consider the help-seeking disparity and masculine gender norms when attempting to recruit men into research. Male partners of FSW may have little experience in their adult lives going to a medical office or research office, which could contribute to their feelings of discomfort in participating. HIV researchers, especially those in clinical settings, should consider how to make the experience of visiting or scheduling appointments as simple and comfortable to the participant as possible (50).

#### Limitations

Our findings should be interpreted in the context of certain limitations including the crosssectional study design. Additionally, our findings may not be generalizable given our purposeful sampling approach and focus on a single country; nevertheless, we believe the key themes could be transferable starting points across settings. Our sample of males also only included *steady* male partners of FSW, and male *client* partners may have recommended different strategies. Finally, our participants, who were recruited through referrals to a research office, may have been biased by the recruitment strategies and location of our particular research study.

## CONCLUSIONS

Recruiting steady male partners of FSW into HIV research is a critical component of reducing HIV transmission within these partnerships. Focusing on overcoming concerns

about trust and confidentiality may be the most fruitful for investigators seeking to recruit male partners. Researchers who attempt to recruit male partners need to share their successes and challenges so that others can learn from them. Focusing solely on FSW misses half of the transmission equation and effectively recruiting male partners into HIV research can potentially identify new and innovative prevention strategies for this key population.

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