Andhra Pradesh (AP) is the state with the highest estimated HIV prevalence in India. Data from patients with sexually transmitted infections (STI) in the state show that HIV prevalence has increased from 16.4 percent in 2004 to 22.8 percent in 2005, and average HIV prevalence among women attending antenatal clinics is equal to or greater than 1 percent in 17 out of 23 districts (NACO 2006). Although the epidemic is moving into the general population, it still remains concentrated among key and marginalized populations such as female sex workers (FSWs) and men who have sex with men (MSM). Building social capital among these populations is critical for preventing the further spread of HIV. In this study social capital includes civic participation in groups and associations; and trust, solidarity, and reciprocal support within and across key populations and other groups. Findings from a project in Sonagachi indicate that building social capital can help empower sex workers to practice HIV preventive behaviors by eliminating social and political barriers to behavior change (Jana et al. 2004; Basu et al. 2004).

In 2002 the International HIV/AIDS Alliance, with funding from the Bill and Melinda Gates Foundation, initiated the Frontiers Prevention Project (FPP) in 40 sites in AP. The project is focused on carrying out a range of community-based interventions, including the building of social capital among members of key populations (e.g., FSWs, MSM, and people living with HIV). An integral part of the FPP is a rigorous evaluation that includes various interlock-
ing and reinforcing components (for more details see George et al. 2005). One component is a quantitative survey with FSWs and MSM in the 40 sites. Another component is a nested qualitative study (funded by the Horizons Program) among the key populations in a sub-set of the 40 sites (see Samuels, Verma, and George 2006). Both the quantitative survey and the qualitative study include questions and probes about social capital, stigma and discrimination, and HIV risk perception and behaviors.

This research update presents data from the two components—the quantitative survey and qualitative study—with a view to generating greater insights into the constructs of social capital and how they relate to HIV risk behavior.¹

**Methods, Data Sets, and Definitions**

The quantitative survey was administered at baseline to 6,648 FSWs and to 6,661 MSM in 40 sites in AP. Focus group discussions (FGDs) and in-depth interviews (IDIs) were carried out prior to developing the questionnaire in order to ensure the appropriateness of the survey’s language and content. The survey collected data from respondents on sociodemographics, sexual behavior, sexual partners, condom use, knowledge of HIV/AIDS and STIs, attitudes toward people living with HIV, and social support. The data were entered and analyzed in STATA v8.1.

The nested qualitative study was conducted in 8 of the 40 FPP sites. A total of 118 IDIs were conducted: 32 with FSWs, 32 with MSM, 16 with people living with HIV, 24 with gatekeepers who interact with key populations, and 14 with NGO staff working in the sites. In addition to the interviews, 32 FGDs across the 8 sites were conducted—16 with FSWs and 16 with MSM. The qualitative study focused on issues of social capital, stigma and discrimination, and key populations’ perceptions of the service environment. Interviews were transcribed, translated, and entered into ATLAS.ti. This research update highlights data from only the IDIs with FSWs and MSM.

In these data sets, social capital is defined in terms of three main constructs:

1. **Group cohesion**: faith and participation in support groups, valuation or belief in working together as peers.
2. **Social support**: where an individual can go when in need, being able to count on someone in times of need.
3. **Self-efficacy**: confidence in decision-making and control of one’s life situation.

In the quantitative survey, for each theme there was a set of questions that were grouped to form an index. Respondents’ scores for each index were trichotomized into high, medium, and low categories. Those who scored high on an index were deemed to have greater social capital than those who scored in the medium or low range.

¹For a detailed analysis of the triangulation of the quantitative and qualitative data, see Pelto 2006.
Respondent Characteristics

The FSWs who participated in the IDIs ranged in age from 18 to 40. The majority were between the ages of 20 and 30, illiterate, married, and street-based sex workers. The sample of MSM were between the ages of 18 and 52; most were under the age of 30 and were literate. A significant number of the men (26 out of 32) were sex workers. The majority of respondents over the age of 30 were married, while most who were younger were unmarried. Most respondents identified themselves as kothis or “feminized men”—namely men who are sexually penetrated by their male partners (referred to by kothis and others as panthis or “real men”). About half of the kothis exhibited feminine characteristics and some of them self-identified as transgender.

In the quantitative survey, 75 percent of the FSWs were street-based, 23 percent were home-based, and only 2 percent were brothel-based. Three-fourths of the FSWs were between the ages of 20 and 34, with the mean age being 27 years. Forty-one percent of the FSWs were currently married and 43 percent were either separated, divorced, or widowed. Nearly two-thirds (62 percent) of the FSWs were illiterate.

Among the MSM sample, 46 percent identified themselves as kothis, 43 percent as panthis, and 11 percent as double-deckers (both receiving and penetrating). More than half (57 percent) of MSM were between the ages of 20 and 29 years, with a mean age of 28 years. Slightly less than half of the MSM were married (42 percent) and 6 percent said they were currently living with a male sex partner. Nearly a third (31 percent) of MSM had no formal education.

Key Findings

Street-based sex workers have the lowest levels of social capital.

On all the indices of social capital, street-based FSWs scored lower than brothel-based and home-based sex workers. For the entire survey sample (all 40 sites), street-based sex workers had the lowest belief in the value of peer group cohesion, the lowest expectations of being able to count on support in time of need, and the lowest levels of self-efficacy (Figure 1). Brothel-based FSWs reported the highest levels of social capital, but the differences between them and home-based sex workers were not as marked.

Overall only one in four FSWs strongly believed that participating in a peer group could empower them. More than twice as many brothel-based sex workers felt this way compared to street-based sex workers (47 percent vs. 20 percent). Similarly, perceptions of social support among the entire sample were low: only 15 percent of sex workers scored in the high category on this index.

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2 Street-based, female sex workers solicit clients on the street, but sex takes place in a rented place, a lodge, or an abandoned structure on the street. Home-based and brothel-based female sex workers, on the other hand, offer sexual services at home and in the brothel, respectively.

3 For a description of different categories of men who have sex with men in India, please see Asthana and Osstgoevels 2001; Chakrapani et al. 2002; Verma and Mahendra 2006; Samuels, Verma, and George 2006.
Female sex workers tend to have small peer groups, but are augmented by other sources of social support.

Many of the FSWs participating in IDIs spoke about being with a group of friends during working hours, but having one friend from whom they can expect special support in times of need (e.g., loaning money, giving emotional support). Many also noted having one or two “best friends” who accompanied them in seeking clients, and with whom they shared their problems. According to a 22-year-old woman from Badrachalam:

Interviewer: Who do you trust most among your friends circle?
Respondent: Kavitha [pseudonym].
Interviewer: Why?
Respondent: We share our secrets.
Interviewer: Do you help your friends?
Respondent: Yes I do.
Interviewer: What sort of help?
Respondent: If they have customers I give them my house and go out. If they tell me that they cannot do it at their place then I help them by giving them my house.
Interviewer: What else?
Respondent: I don’t give financial help as I don’t have. But I just give some information.
Interviewer: What help does your friend Kavitha do?
Respondent: If I have to meet someone she keeps a watch so that nobody gets to know of it.

What emerged strongly in the qualitative study was the variety of sources of support aside from peers. Several FSWs spoke of support from males; a few of those were regular partners, while others were “friends” who sometimes loaned money and/or gave emotional support. For example, a 26-year-old woman in Sangareddy said that she gets social support from some of her regular clients:
Interviewer: Do you have clients whom you trust?
Respondent: Yes. There are two clients. They come once in a month. I will do sex work if my health is ok; otherwise I won’t do.
Interviewer: How much do they pay you?
Respondent: I beg money from them whenever I don’t have. I will not insist on payment. If I am running short of rice, I will go to them and beg. When I fall sick they will take me to the hospital. That’s why I will not persuade them for money.
Interviewer: Do you trust them because they are giving you money and taking you to the doctor?
Respondent: Yes.

Social capital among female sex workers varies by geographic area.

There were wide differences by geographic area in the levels of social capital among survey respondents as measured by the three indexes. For example, only 30 percent of street-based sex workers in Gooty district scored in the high end of the self-efficacy index compared to 58 percent of street-based sex workers in Kurnool and 61 percent in Tirupathi. These may reflect local variations in the social environments, including attitudes of the police and other authorities toward sex work, as well as the degree of overt stigmatization of sex workers in the community. For example, in one or two of the sites, informants said that they experienced few problems from police, whereas in other sites, informants considered the police to be a major problem. Regardless of the variations from one district or region to another, in practically all localities, on all the social capital indices, street-based sex workers had lower levels of social capital than their counterparts who work in brothels or from their home.

Kothis place the greatest value on group cohesion, but they have the lowest expectations of social support and the lowest self-efficacy levels.

As shown in Figure 2, kothis placed a greater value on group cohesion than panthis and double-deckers. However, only 22 percent of kothis are in the high category for being able to count on someone for support compared to 33 percent of panthis and 38 percent of double-deckers. Kothis also had the lowest scores on the self-efficacy index.

Panthis are often the clients of kothis, and as the seekers of sexual services they are generally highly secretive about their same-sex activities. Therefore it is not surprising that they placed less emphasis on group cohesion. Double-deckers, on the other hand, seem to be in some ways more closely associated with the kothis. For example, 16 percent reported receiving money from men for sex.

Kothis are connected to networks of fellow kothis who refer to each other with kinship terms.4

The following are notes from an interview with a kothi who is an outreach worker at a nongovernmental organization.

4The actual kin terms used are almost always Telegu words such as amma and akka.
Rajesh [name changed] is an MSM and appears very feminine, and he is very pleased to have a new feminine name that he likes very much. He has a bindi on his forehead just like a woman, and has applied kajal (eye liner), and painted his long fingernails. According to him, his small family organization consists of a guru or a “mummy,” akka (older sister), and chelli (disciples). They developed these informal connections based on their rishta (relationships). These MSM meet once weekly. They have celebrations that include…marriages, birthdays, and others…. The small group consists of 10 or 15 members…some older person is usually the leader.

A 25-year-old, married kothi from Sangareddy described the quasi-kinship structure he encountered when he began to associate with a local group:

*Earlier, I was interacting only with my partners. Now after I met the kothis and started spending time with them, I got to know their relations. They address each other as mummy, daddy, daughter, or wife. One mummy will have five daughters and they abide whatever she says. They work in the limits set by the mummy and go to sites as per her instructions, do professional sex work, and make money. They will not be scared of others. Daddy is a caretaker for them.*

Membership and meeting patterns are flexible, affected by individual mobility and local movements. The quasi-kinship groups of the kothis can have significant ritual aspects, as well as obligations of mutual support and aid.

The qualitative data also revealed a wide range of helping behaviors and other manifestations of social support among the kothi groups. The following is a typical account:

**Interviewer:** Do you people help each other?
**Respondent:** Yes madam, in our group we will help each other.
**Interviewer:** What type of help?
**Respondent:** Money help. If anybody needs money we will give them, madam.

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**Figure 2** Percentage of men who have sex with men who scored in the highest category on the indices measuring self-efficacy, social support, and benefits of group cohesion

- Self-efficacy
  - Double-deckers: 37%
  - Panthis: 29%
  - Kothis: 27%
- Social support
  - Double-deckers: 38%
  - Panthis: 33%
  - Kothis: 22%
- Group cohesion
  - Double-deckers: 34%
  - Panthis: 36%
  - Kothis: 24%

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Interviewer: For what situations do you need help?
Respondent: Family problems and children school fee problems.
36-year-old wage laborer, married, with three children

But negative responses were also common:

Interviewer: So you don’t go to your group members.
Respondent: No I don’t because they don’t help me.
Interviewer: Why?
Respondent: Because they are jealous of me and my business.
Interviewer: Do you help anyone?
Respondent: No I did not.
Interviewer: You did not help anyone?
Respondent: I do only if someone is sick.

Aside from the existence of quasi-kinship peer groups, kothis overall appeared to be the most vulnerable category of MSM. They were less educated than panthis and double-deckers, had fewer economic resources, and experienced much greater harassment and social stigmatization because of their (often) overt feminized behaviors and for many, their dependence on sex work for their livelihoods.

Condom use is uneven among FSWs and MSM.

Nearly all respondents in the qualitative study shared the opinion that condoms are the best preventive measure against HIV. However, this was not translated into practice, as overall usage was inconsistent. Both FSWs and MSM reported selective use of condoms, using them with some partners but not with lovers, husbands, or boyfriends. Reasons for not using condoms included non-consensual sex, liking and trusting certain clients/partners, and confidence in one’s own negative HIV status.

Some respondents spoke about insisting on condom use with clients; this insistence consisted of explaining, negotiating, and demonstrating to clients the use of condoms. But some spoke about violent ramifications from insisting on condom use or about having sex without a condom when one was not available.

Sometimes we don’t use them [condoms]. If there are some good people they might use the condom. If they are drunk, they ask us what disease they have and start hitting us. If we tell him to wear he wears. If he does not like it, he beats us up.

Male who has sex with men

I don’t use condoms with everyone. Some of them would not bring them. In case they don’t bring it we will have sex without a condom.

Female sex worker

Consistent condom use as measured in the quantitative survey by asking whether a condom was used with the past three clients was low among street-based sex workers (36 percent) and high among brothel-based sex workers (83 percent); home-based sex workers were in between the two
groups (60 percent). More than a third (35 percent) of MSM had never used a condom and 36 percent had used a condom with their last three clients.

**Higher levels of social capital are associated with consistent condom use among female sex workers and men who have sex with men.**

In the quantitative survey, 76 percent of FSWs who had the greatest belief in the benefits of group cohesion had used a condom with their last three clients compared to only 33 percent of those who had the lowest belief in the benefits of groups. Similarly, the data show that among the women with the highest level of self-efficacy, 82 percent reported condom use with their three most recent clients compared to only 12 percent of those with the lowest level of self-efficacy (Figure 3).

![Figure 3 Relationship between social capital measures and consistent condom use among female sex workers](image)

*p < .0001

Similar to the pattern among FSWs, higher levels of perceived social support and self-efficacy were strongly related to consistent condom use amongst MSM. There was little difference between kothis, panthis, and double-deckers.

**Conclusions**

Much variation in measures of social capital exists between different categories of FSWs and MSM; hence interventions need to take these differences into consideration.

- Variations in contexts and settings among different categories of FSWs and MSMs also need to be taken into consideration when developing interventions.
• Consideration must be given to building social capital by harnessing existing sources of support among these key populations, including quasi-kinship structures among kothis, and peers and regular partners among FSWs.
• The positive association between measures of social capital and consistent condom use supports the idea of developing interventions to increase social capital as an HIV prevention strategy among these populations. Further research to be undertaken by FPP will contribute to a better understanding of the effectiveness of this strategy.

References


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