

Stigma and discrimination among female sex workers :

Learnings from a pilot project in north Karnataka, India

Technical Report

Karnataka Health Promotion Trust
2015



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Ethical approval

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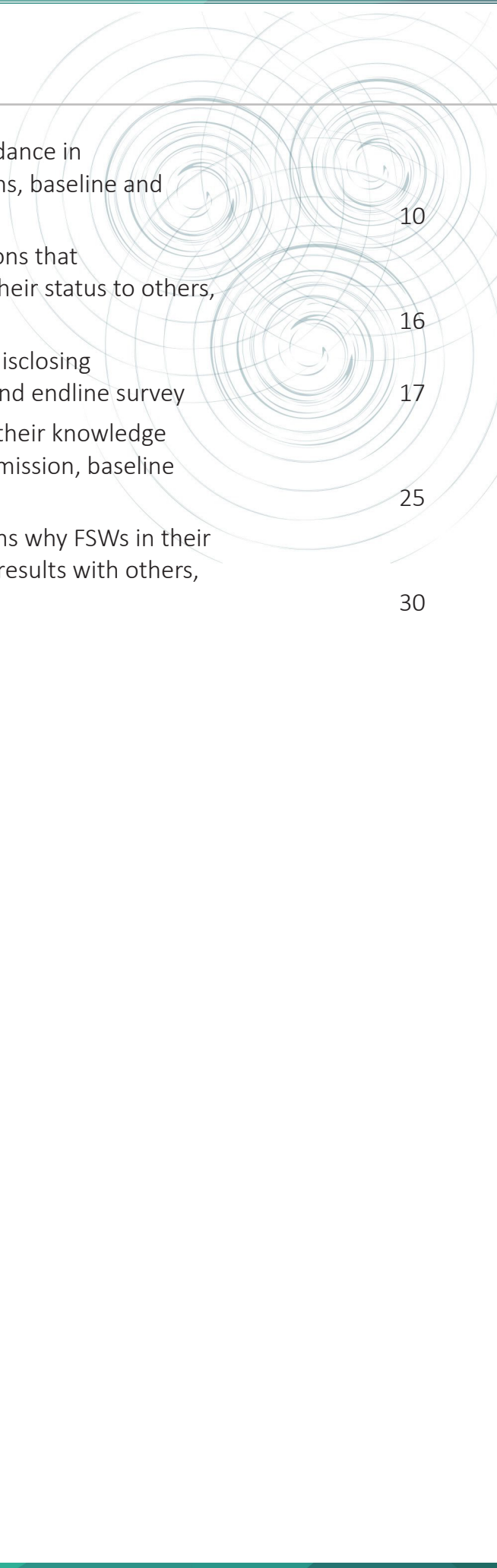
Contents

Tables	iv
Figures	v
Executive summary	1-5
1 Introduction	6
1.1 Background	7-8
1.2 Methodology	8
1.3 Study design and implementation	8
1.4 Inclusion criteria	8
1.5 Sampling design	8-10
1.6 Instruments and measures	10-11
1.7 Data collection	11
1.8 Data management and analysis	11
1.9 Structure of the report	12
2 Findings from female sex workers	13
2.1 Background	14
2.2 Socio-demographic profile of FSWs	14
2.3 Sex work characteristics and condom use	15-17
2.4 Exposure to stigma-reduction and HIV-prevention programme	17-18
2.5 Perception related to non-casual contact with positives (fear associated with HIV infection)	18-19
2.6 Shame and blame associated with HIV-infected person	19-20
2.7 Stigma and discrimination associated with PLHIV	21
2.8 Stigma associated with disclosure of HIV status	21-23
2.9 Stigma and discrimination witnessed by FSWs	24-26
3 Findings from family members of female sex workers	27
3.1 Background	28
3.2 Socio-demographic profile of family members	28
3.3 Household characteristics of family members	29
3.3 Knowledge about modes of HIV transmission	30-31
3.4 Perception related to non-casual contact with positives (fear associated with HIV infection)	32-33
3.5 Shame and blame associated with HIV-infected person	33-34
3.6 Stigma and discrimination associated with PLHIV	34-35
3.7 Willingness to maintain confidentiality about HIV positivity	35-36
3.8 Stigma and discrimination witnessed by family members	36-38
4 Summary and discussion	39
4.1 Background	40
4.2 Summary	40-43
4.3 Discussion	43-45
4.4 Conclusions	45
Annexure 1: Female sex workers (Suppliment tables)	46-58
Annexure 2: Family of female sex workers (Suppliment tables)	59-67

Tables

2.1	Percentage of FSWs by selected socio-demographic characteristics, baseline and endline survey	8
2.2	Percentage of FSWs by selected sex work characteristics and condom use, baseline and endline survey	9
2.3	Percentage of FSWs by their exposure to different HIV-prevention-related intervention activities	11
2.4	Percentage of FSWs by selected statements referring to fear around HIV infection	12
2.5	Percentage of FSWs 'agreed' to the selected shame statements	13
2.6	Percentage of FSWs 'agreed' to the selected blame statements	14
2.7	Percentage of FSWs 'agreed' to the selected stigma and discrimination statements	15
2.8	Percentage of FSWs by stigma associated with disclosing HIV status	16
2.9	Percentage of FSWs witnessed different acts of stigma happening to other positive FSW in last 12 months	18
2.10	Percentage of FSWs witnessed any act of stigma happening to other positive FSW at health facility in last 12 months	19
3.1	Per cent distribution of family members by selected socio-demographic characteristics	22
3.2	Per cent distribution of family members by selected household characteristics	23
3.3	Percentage of family members by correct comprehensive knowledge of HIV	24
3.4	Percentage of family members by selected statements referring fear around HIV infection	26
3.5	Percentage of family members 'agreed' to the selected shame statements	27
3.6	Percentage of family members 'agreed' to the selected blame statements	27
3.7	Percentage of family members 'agreed' to the selected stigma and discrimination statements	28
3.8	Percentage of family members by stigma associated with disclosing HIV status	29
3.9	Percentage of family members reported witnessing different acts of stigma with a FSW in last 12 months	31
3.10	Percentage of family members reported witnessing different acts of stigma with a FSW at health facilities in last 12 months	32

Figures

- 
- 2.1 Adjusted percentage of FSWs by their attendance in stigma-reduction-related counselling sessions, baseline and endline survey 10
 - 2.2 Percentage of FSWs by their perceived reasons that why HIV-positive FSWs should not disclose their status to others, baseline and endline survey 16
 - 2.3 Percentage of FSWs by the reasons for not disclosing their HIV-test results with others, baseline and endline survey 17
 - 3.1 Adjusted percentage of family members by their knowledge about non-sexual (casual) ways of HIV transmission, baseline and endline survey 25
 - 3.2 Percentage of family members by the reasons why FSWs in their community would not disclose the HIV-test results with others, baseline and endline survey 30

Executive Summary

More than three decades into the HIV epidemic, stigma and discrimination continue to hamper efforts to prevent new infections. Numerous studies have linked HIV-related stigma with refusal of HIV testing, with non-disclosure of HIV status to partners, and with poor engagement in biomedical prevention approaches.^{1,2,3} Internalized stigma, meaning the practice whereby people living with HIV impose feelings of difference, inferiority and unworthiness on themselves,^{4,5} interferes with medication adherence.^{6,7} Consequently, stigma reduction has become a priority for international donor organizations and has been included in PEPFAR's Blueprint for Achieving an AIDS-Free Generation and in the UNAIDS HIV investment framework.⁸

In the Indian context, where female sex workers (FSWs) possess a 50-fold greater risk of HIV infection than women in the general population, there is an urgent need for stigma-reduction interventions.⁹ Evidence suggests that stigma and discrimination heighten FSWs' vulnerability to HIV infection by discouraging them from attending clinics for management of sexually transmitted infections (STIs), by diminishing their self-esteem,¹⁰ and by depriving them of impartial medical care.¹¹

Many studies have examined stigma-reduction efforts and their results. Brown and colleagues, in 2003, conducted the first global review of interventions to reduce HIV-related stigma.¹² The authors articulated four intervention categories that remained applicable across different geographies and that had a sustained effect even a decade later. The categories include:

1. information-based approaches (e.g., written information in a brochure),
2. skills building (e.g., participatory learning sessions to reduce negative attitudes),
3. counselling/support (e.g., support groups for people living with HIV, or PLHIV), and
4. contact with affected groups (e.g., interactions between PLHIV and the general public).

¹ Abdool Karim Q, Meyer-Weitz A, Mboyi L, Carrara H, Mahlase G, Frohlich JA, et al. The influence of AIDS stigma and discrimination and social cohesion on HIV testing and willingness to disclose HIV in rural KwaZulu-Natal, South Africa. *Glob Public Health*. 2008;3(4):351–65.

² Brou H, Djohan G, Becquet R, Allou G, Ekouevi DK, Viho I, et al. When do HIV-infected women disclose their HIV status to their male partner and why? A study in a PMTCT programme, Abidjan. *PLoS Med*. 2007;4(12):342.

³ Bwirire LD, Fitzgerald M, Zachariah R, Chikafa V, Massaquoi M, Moens M, et al. Reasons for loss to follow-up among mothers registered in a prevention-of-mother-to-child transmission program in rural Malawi. *Trans Roy Soc Trop Med Hyg*. 2008;102(12):1195–200.

⁴ Corrigan PW, Penn DL. Lessons from social psychology on discrediting psychiatric stigma. *Am Psychol*. 1999;54(9):765.

⁵ Corrigan PW, Watson AC. The paradox of self-stigma and mental illness. *ClinPsychol: SciPract*. 2002;9(1):35–53.

⁶ Rintamaki LS, Davis TC, Skripkauskas S, Bennett CL, Wolf MS. Social stigma concerns and HIV medication adherence. *AIDS Patient Care STDs*. 2006;20: 359–68.

⁷ Rao D, Feldman BJ, Fredericksen RJ, Crane PK, Simoni JM, Kitahata MM, et al. A structural equation model of HIV-related stigma, depressive symptoms, and medication adherence. *AIDS Behav*. 2011;16(3):711–6.

⁸ Schwartlander B, Stover J, Hallett T, Atun R, Avila C, Gouws E, et al. Towards an improved investment approach for an effective response to HIV/AIDS. *Lancet*. 2011;377(9782):2031–41.

⁹ Kerrigan D, Wirtz A, Baral S, et al. 2013. The Global HIV Epidemics among Sex Workers. Washington D. C.: The World Bank. <http://www.worldbank.org/content/dam/Worldbank/document/GlobalHIVEpidemicsAmongSexWorkers.pdf>

¹⁰ Cornish F. Challenging the stigma of sex work in India: Material context and symbolic change. *Journal of Community & Applied Social Psychology*. 2006;16:462–471. doi:10.1002/casp.894

¹¹ Chakrapani V, Newman PA, Shunmugam M, et al. Barriers to free antiretroviral treatment access for female sex workers in Chennai, India. *AIDS Patient Care and STDs*. 2009;23(11):973–980. doi: 10.1089/apc.2009.0035 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2832653/pdf/apc.2009.0035.pdf>

¹² Brown L, Macintyre K, Trujillo L. Interventions to reduce HIV/AIDS stigma: what have we learned? *AIDS Educ Prev*. 2003;15(1):49–69.

The authors also concluded that some stigma-reduction interventions appeared to work in the short term, but that more research was needed to understand the effectiveness of various intervention components, the necessary scale and length of interventions, and the gendered impacts. On the basis of these conclusions, the Karnataka Health Promotion Trust (KHPT) with its consortium partner implemented a two-year intensive stigma-reduction intervention in two northern districts of Karnataka during 2012 and 2013. In these two districts, stigma and discrimination were widely prevalent among FSWs and their family members, and incidents of stigma and discrimination against HIV-positive FSWs in their community and medical settings were reported by a majority of the respondents in the intervention's baseline survey.¹³

The aims of this intervention were to reduce the prevalence of stigmatizing attitudes (i.e., internalized stigma,¹⁴ perceived stigma¹⁵ and experienced stigma¹⁶) faced and possessed by FSWs and to reduce the incidence of FSWs experiencing stigma and discrimination at home and outside of home. The intervention activities were multi-layered. They involved individual counselling to the FSWs on stigma and discrimination; intensive individual counselling with positive female sex workers and their families; group sessions on stigma and discrimination with sex workers in general and with special focus on positive sex workers; group advocacy meetings with family members on types of stigma and its consequences; and special events at the drop-in-centers (DICs) with FSWs on approaches to reduce stigma and discrimination. This report presents findings of an evaluation of the activities' key outcomes for FSWs and their family members—specifically, changes in their fear of and attitudes towards HIV-infection, in their shame associated with having HIV and blame towards people with HIV, and in their fear associated with disclosure of HIV status.

A pre-post test research design, with repeated cross-sectional surveys undertaken prior to the implementation of intervention activities (baseline) and at their conclusion (endline), was used to evaluate the effects of the intervention. Both surveys were conducted by KHPT with the support of members of two community-based organizations (CBOs): Shakti AIDS Tdegattuva Mahila Sangha and Chaitanya AIDS Tdegattuva Mahila Sangha. Respondents included were female sex workers aged 18 and above, and an immediate member of their family (i.e., parent, sibling, or spouse).

Probability sampling methods were employed to select the study population. While FSWs were systematically selected from the list of registered FSWs in the two CBOs after stratifying the list by district and rural-urban distribution, the selection of family members was done systematically from the households in which an FSW had taken part in the survey. The endline survey used the same instruments employed at baseline for FSWs and their family members. Instruments were prepared in English and then translated into the local language. Trained interviewers conducted the interviews, and data collection was overseen by senior researchers of KHPT and consortium partner. Baseline measures were repeated at endline, and each measure was regressed on demographic characteristics, HIV knowledge and exposure to intervention activities.

¹³ Karnataka Health Promotion Trust. 2014. Assessment of stigma and discrimination among female sex workers: findings from the baseline study in north Karnataka, India

¹⁴ Internalized stigma refers to the process whereby people living with HIV impose feelings of difference, inferiority and unworthiness on themselves.

¹⁵ Perceived stigma is the fear of how others would stigmatize oneself, the expected reactions of their surroundings.

¹⁶ Experience of actual discrimination and/or participation restrictions on the part of the person affected.

Findings

In total, 478 FSWs (240 at baseline and 238 at endline) and 306 family members (154 and 152 at the baseline and endline, respectively) participated in the study and responded to all survey questions. Findings from this study were mostly positive and reflected a significant effect of the intervention on reducing stigma and discrimination towards positive sex workers at various levels (i.e., within the family, within the neighbourhood and within the community as a whole).

Profile of the sex workers and family members

The female sex workers who participated in the baseline and endline surveys were mostly similar in their background characteristics; however, they differed from each other in terms of their age and educational attainment. The study also found differences in some of their sex work characteristics, mostly in terms of place of solicitation, age at initiation of sex work, duration of sex work, and weekly client volume. Findings show a significant improvement in HIV testing done in the 6-month period preceding the survey. As far as the characteristics of family members is concerned, family members who took part in both rounds had nearly similar socio-demographic characteristics, except that endline respondents were somewhat younger, had a slightly different occupational pattern, were residing with relatively more people, and had higher family income than baseline respondents.

Overall, about 60 per cent of the FSWs were exposed to at least one of the three stigma-reduction-related activities designed for them. While a majority of the FSWs were covered through group sessions, about 60 per cent of the FSWs received individual counselling on stigma reduction. About half of the FSWs also attended events organised at a DIC focusing on stigma and discrimination-reduction activities.

Knowledge of modes of HIV transmission among family members

When the knowledge of family members about modes of HIV transmission was tested, more than 90 per cent of respondents in both surveys identified unprotected sex, sharing injection equipment, and blood transfusions as modes of transmission. There has been a significant reduction in the proportion of people who hold misconceptions about routes of transmission (e.g., beliefs that HIV is transmitted by mosquitoes or that infection can occur by sharing food with an infected person). More than twice the proportion of endline respondents (48 per cent) than baseline respondents (23 per cent) had correct comprehensive knowledge about HIV, and about half of the participants in the endline, compared to about 12 per cent in the baseline, rejected all other misconceptions (i.e., that HIV can be transmitted by kisses, handshakes, hugs, utensils, toilets, sweat or saliva). Yet, about 23 per cent at endline incorrectly identified kissing as a mode of transmission.

Fears associated with HIV infection

Among FSWs and their family members, the fear associated with HIV infection decreased in the period between baseline and endline, with the reduction among FSWs being larger than among family members. Fear associated with HIV infection was measured by six questions that tested whether respondents wish to avoid contact with PLHIV, such as a desire to isolate people who have HIV; unwillingness to care for a relative infected with HIV; resistance to sharing food, shelter and bed with a positive friend or family member; and prohibiting HIV-positive children from playing with other children. At the endline, 45 per cent of the FSWs and 47 per cent of the

family members disagreed with all six fear statements. A higher proportion of respondents in the endline as compared to baseline disagreed with all six fear statements, indicating a reduction in fear toward HIV prevalence. For example, as compared to about 16 per cent FSWs and 14 per cent family members in the baseline, about 45 per cent FSWs and 47 per cent family members at the endline, respectively, disagreed with all six fear statements towards the HIV infection posed during the survey. Results from the multivariate analysis confirmed these findings and show that, in the endline survey FSWs and their family members were, respectively, three and seven times more likely to reject the six fear statements than their respective counterparts interviewed during the baseline survey ($p < 0.001$).

Shame and blame for HIV

Findings also highlighted a significant reduction in the proportion of respondents who associate shame and blame with HIV infection. FSWs and family members largely shared a high level of agreement with the statements about shame and blame for HIV. The surveys' shame statements tested whether respondents would feel ashamed if someone in their family had HIV/AIDS, and whether respondents felt that PLHIV and their relatives should be ashamed of the infection. The surveys' blame statements tested whether respondents believe that only female sex workers spread HIV in the community, or that people with HIV should be blamed for bringing HIV into the community. Findings suggested that a higher proportion of FSWs in the endline (57%) than in the baseline (14%) disagreed to all the shame statements, (i.e., respondents would be ashamed if someone in their family had HIV/AIDS, and family members of PLHIV and PLHIV themselves should feel ashamed of being infected with HIV). The corresponding figures for family members were 64 per cent at endline and about five per cent at baseline. Similar to the perceptions associated with being ashamed of HIV infection, a significantly higher proportion of FSWs (39%) and their family members (31%) at the endline disagreed with the statements that only FSWs bring HIV infection in the community and PLHIV should be blamed for bringing HIV in the community, as compared to 16 per cent of FSWs and 11 per cent of family members interviewed in the baseline. Although the multivariate analysis could not be conducted for family members due to the small number of cases, findings from FSWs' data suggested that intervention significantly reduced the perceived shame and blame towards PLHIV among FSWs.

Stigma and discrimination towards PLHIV

Perceptions about stigma and discrimination towards PLHIV were probed among FSWs and the family members, and survey findings suggest that the intervention changed their attitudes. Among FSWs and family members, percentages affirming stigmatized attitudes towards PLHIV—such as HIV-positive children should not go to school, PLHIV should stay away from religious functions, and positive sex workers should be treated differently than other positive persons—reduced consistently from baseline to endline and among both the groups. Similar magnitudes of change were observed, with slightly higher reduction among FSWs than the family members (50 vs. 45 percentage point reduction). The multivariate analysis also confirmed that after the effects of other factors were controlled for, these reductions were largely attributable to the intervention activities.

Disclosure of HIV status

The survey assessed the views of FSWs and their family members on two critical issues related to disclosure of HIV status: whether an HIV-positive sex worker should disclose her HIV status to

others and their willingness to share their own test results with others. The family members were also asked whether they think that FSWs in their community would share their HIV status with others. While significantly higher percentages of FSWs at the endline than at the baseline felt that positive sex workers should share their test results with others and that they themselves would reveal their test results in front of others, there was no change in the beliefs of family members that positive sex workers, in general, would share their HIV-test results with others. However, a significantly large proportion of family members interviewed at the endline were sure about their community and mentioned that FSWs in their own community would reveal their HIV-test results to others.

Nearly equal proportions of FSWs at baseline and endline cited fear of verbal abuse and teasing, fear of neglect and isolation, and fear of being bad/immoral or promiscuous in the community as reasons why they would not disclose their HIV test results with anyone else in the community. Fear of neglect from the community in terms of receiving care and support, and fear of death were two other most commonly cited reasons due to which most of the family members perceived that sex workers in their community would choose to keep their HIV status secret.

Stigma and discrimination witnessed by FSWs and family members

The FSWs and family members were asked at baseline and endline whether they had witnessed positive sex workers encountering stigma from family, friends and healthcare providers in the preceding 12 months. Their responses indicated a significant decline in such incidents, irrespective of the type of respondent. While 34 to 78 per cent of the FSWs in the endline reported having witnessed any incident of stigma against positive sex workers by family, friends or healthcare professionals, the same was reported by 90 per cent or more of the FSWs during the baseline. Family member responses indicated a decline similar to that observed among FSWs. These findings indicate that the stigma-reduction activities carried out by the intervention influenced not only individuals' behaviours, but also, to some extent, the attitude of the community as a whole.

Conclusion

Although stigma and discrimination were widely prevalent among FSWs and family members in the intervention area, there is evidence that intervention activities brought significant changes in the attitudes and behaviour of sex workers and their family members towards PLHIV, and a reduction in the incidence of stigma and discrimination against PLHIV in the community and in healthcare settings. Though the intervention had slightly higher impact on FSWs than on their family members, noteworthy are the changes that intervention brought in the knowledge and attitude of family members, such as increase in correct knowledge about modes of HIV transmission, reduction in their fear of HIV-infection, reduction in the belief that PLHIV deserve shame and blame, and reduction in overall stigma and discrimination against PLHIV. The analysis did not assess the differential effect of intervention activities independently on various outcomes. However, the findings suggest that multi-layered and multi-faceted interventions are required to achieve behavioural and attitudinal changes pertaining to stigma, shame and blame within a short period of time. Similar intervention activities can be piloted and tested in other settings to ascertain their effect. If found replicable and scalable, the activities can be embedded in national AIDS control and prevention programmes to increase utilization of prevention, treatment and care services.



Introduction

1.1 BACKGROUND

Though stigma and discrimination associated with HIV and AIDS can be reduced through interventions, HIV/AIDS-related stigma and discrimination remain widespread, endangering people who live with the virus and preventing millions of people from coming forward for testing, and for prevention and treatment services.¹⁷ A study of men and women in seven cities in the United States found that the stigma was associated with decreased likelihood of getting tested for HIV.¹⁸ Fear of being stigmatized for a profession or for HIV status can also compromise people's ability to adopt safer behaviours. Some HIV-positive persons may fear that disclosing their HIV status may cause their partner to reject them. Stigma surrounding HIV and sex work make it difficult for sex workers to access HIV-prevention services. Consequently, stigma and discrimination reduction features prominently in recent UNAIDS, UN and PEPFAR political initiatives.¹⁸ In order to incorporate stigma and discrimination reduction into national AIDS control plans, national governments need evidence of strategies that are effective at the individual, community and society levels.

Studies on stigma reduction have concluded that stigma can be reduced,^{19,20} and other studies have included a substantial evidence base for valid measures that capture multiple domains of stigma associated with HIV.^{21,22} The healthcare sector has one of the strongest evidence bases regarding stigma and discrimination measurement and intervention.^{23,24,25} Beyond the healthcare setting, addressing stigma among the general community has been a focus for research, though the degrees of success have varied.²⁶ Much of the work has included community education campaigns associated with HIV testing, including some community mobilization strategies. With regard to stigma measurement among people living with HIV (PLHIV), several measures have been developed,^{27,28} including the PLHIV Stigma Index, which serves as both an assessment and a community engagement and empowerment tool.²⁹ Despite these strides, heterogeneity of stigma- and discrimination-reduction approaches and differences in measurement methods complicate comparison of evaluated interventions.

¹⁷ Grossman CI and Stangl AL. Global action to reduce HIV stigma and discrimination. *Journal of the International AIDS Society* 2013, 16 (Suppl 2):18881

¹⁸ Fortenberry JD, McFarlane M, Bleakley A, et al. Relationships of stigma and shame to gonorrhea and HIV screening. *American Journal of Public Health*.2002; 92:378–381.

¹⁹ Brown L, Macintyre K, Trujillo L. Interventions to reduce HIV/AIDS stigma: what have we learned? *AIDS Education Prevention* 2003, 15(1):49–69.

²⁰ Sengupta S, Banks B, Jonas D, Miles MS, Smith GC. HIV interventions to reduce HIV/AIDS stigma: a systematic review. *AIDS Behaviour* 2011, 15(6):1075–87.

²¹ Earnshaw VA, Chaudoir SR. From conceptualizing to measuring HIV stigma: a review of HIV stigma mechanism measures. *AIDS Behaviour* 2009, 13(6):1160–77.

²² Nyblade L. Measuring HIV stigma: existing knowledge and gaps. *Psychological Health Medicine*. 2006, 11(3):335–45.

²³ Nyblade L, Stangl A, Weiss E, Ashburn K. Combating HIV stigma in health care settings: what works? *Journal of International AIDS Society* 2009, 12(1):15.

²⁴ Uys L, Chirwa M, Kohi T, Greeff M, Naidoo J, Makoe L, et al. Evaluation of a health setting-based stigma intervention in five African countries. *AIDS Patient Care and STDs* 2009, 23(12):1059–66.

²⁵ Li L, Wu Z, Liang LJ, Lin C, Guan J, Jia M, et al. Reducing HIV-related stigma in health care settings: a randomized controlled trial in China. *American Journal of Public Health* 2013, 103(2):286–92.

²⁶ See note 3.

²⁷ Berger BE, Ferrans CE, Lashley FR. Measuring stigma in people with HIV: psychometric assessment of the HIV stigma scale. *Research in Nursing and Health* 2001, 24(6):518–29.

²⁸ Kalichman SC, Simbayi LC, Cloete A, Mthembu P, Mkhonta RN, Ginindza T. Measuring AIDS stigmas in people living with HIV/AIDS: the internalized AIDS-related stigma scale. *AIDS Care* 2009, 21(1):87–93.

²⁹ Zamudio AR, Keovongchith B, Boisson D, Crepey P, Bagshaw K, Phongdeth K, et al. Results of the people living with HIV stigma index in Lao PDR: documenting the HIV stigma and discrimination situation in the country and disentangling the layers of stigma in marginalised populations. *American Public Health Association 141st Annual Meeting*, Boston, MA; 2013.

The Karnataka Health Promotion Trust (KHPT) with its consortium partner—the International Center for Research on Women (ICRW)—implemented one such intervention in northern districts of Karnataka to reduce stigma and discrimination among positive female sex workers (PFSWs) and their families. This innovative intervention included an evidence-based approach whereby intervention activities were linked to the identified domains of stigma where focus was needed. Before the implementation of the intervention, an initial assessment was conducted to understand the forms, contexts and consequences of stigma related to sex work as a profession and to HIV status among female sex workers.³⁰

Findings of that assessment clearly articulated that FSWs were blamed by the community for practicing sex work, were considered immoral, and were also indiscriminately blamed for spreading HIV in the community.³¹ People made false assumptions and gossiped about the FSWs' HIV status, thereby negatively influencing their relationship with family. PFSWs were isolated, neglected and shunned within their family and by other female sex workers in the community. They were given separate eating utensils, clothes, and bed linens; forbidden from performing household chores such as cooking or cleaning; excluded from decision making and family events; and denied emotional support. In extreme cases, they were thrown out of the house and separated from their children.

In addition to loss of livelihood; segregation from family, friends and community; and low self-esteem, there were consequences of perceived stigma on utilization of preventive services. Findings from an initial assessment suggested that perceived stigma prevented PFSWs from seeking treatment and other psycho-social support such as counselling, from visiting public hospitals, or seeking support from family and friends. Because they feared losing their status and being deserted by lovers and partners if their HIV status was revealed, they did not seek treatment, and they isolated themselves from family and friends.³²

After assessing the stigma domains, the intervention focused its' activities to link stigma- and discrimination-reduction activities with HIV-prevention, care and treatment outcomes (e.g., uptake, adherence and retention of ART) through information-based approaches, skills-building, counselling and support, and intensive contact with affected groups. This strengthened the evidence base for stigma and discrimination reduction and indicated effective interventions that could be scaled up by national governments.

³⁰ See note 13.

³¹ See note 13.

³² See note 13.

The KHPT, in collaboration with its consortium partner, conducted a baseline and endline evaluation study to measure the programme's success in terms of the extent to which the intervention reduced the perceived stigma among female sex workers and their family members. This study utilizes the data from two rounds of the survey (baseline and endline) and presents the findings depicting changes in

- prevailing attitudes and perceptions among female sex workers and their families towards HIV-positive female sex workers, and
- stigma associated with HIV/AIDS, expressed as fear, shame, blame, and social isolation associated with HIV-positive female sex workers.

1.2 METHODOLOGY

A pre-post test design with cross-sectional surveys undertaken prior to the implementation of the intervention activities (baseline) and at their conclusion (endline) was used to evaluate their effects. The survey was designed to measure the prevalence of drivers and facilitators of internalized, perceived, and experienced stigma and discrimination during both rounds of investigation. Demographic, occupational, and behavioural characteristics were measured to determine their association with drivers and with the manifestations of stigma. Family members' knowledge about HIV transmission was also measured to examine knowledge's connection with drivers of stigma. The survey investigated respondents' knowledge of incidents of stigma and discrimination against PFSWs to learn the extent and nature of stigma in the community. In the second round of the survey, there was a separate section in the survey tool on exposure to the intervention or to a community-based organization. This section captured information to assess the degree of programme exposure. To achieve the proposed objectives, changes in attitude and in perceived stigma of female sex workers and their family members towards other positive female sex workers were measured in four key domains: fear associated with HIV infection; values and attitudes, including shame, blame, and social isolation; the experience of stigma and discrimination; and disclosure of HIV status.

1.3 STUDY DESIGN AND IMPLEMENTATION

Both the baseline and endline studies were conducted in two Northern Karnataka districts—namely, Bagalkot and Belgaum—where an HIV-prevention programme currently operates and where the stigma-reduction activities were planned and implemented. The study was undertaken in collaboration with two community-based organizations (CBOs)—namely, Shakthi AIDS Tdegattuva Mahila Sangha, in Belgaum, and Chaitanya AIDS Tdegattuva Mahila Sangha, in Bagalkot—under the supervision of a research team from KHPT and the University of Manitoba (UoM). Experienced local staff from existing intervention programmes served as investigators for the study. The baseline study was conducted in July and August 2012, and the endline study in December 2013 and January 2014. Based on the extensive previous research carried out by members of the study team in this region, a cross-sectional survey employing quantitative methods was conducted with female sex workers and their family members. The study design was kept identical across the two rounds of surveys to maintain the comparability of results.

1.4 INCLUSION CRITERIA

Respondents were screened for potential inclusion in the study using the following criteria:

Female sex worker: being a practicing female sex worker (i.e., she has traded sex for money in the last month) above 18 years of age.

Family member: being an immediate family member (i.e., parent, sibling, or spouse) of a practicing female sex worker.

1.5 SAMPLING DESIGN

Female sex workers: Sample size estimates were derived by calculating differences between two proportions. First, the percentage anticipated at the baseline, and, second, the proportion one might expect in a cross-sectional survey of one year of stigma-reduction activities in the FSW community. The following parameters were used to determine the estimated sample size: power, 80 per cent; confidence level, 95 per cent; possible detectable differences between the two samples, 11 to 13 per cent (25% changes) from the assumed value of 50 per cent. Based on these parameters, the sample size was calculated as 250.

Probability sampling methods were employed to obtain the study population from the Karnataka State AIDS Prevention Society targeted intervention (KSAPS TI) FSW registration data (i.e., the sampling frame was the list of FSWs in the study area). The respondents were chosen using systematic random sampling after stratifying the list of FSWs by district and by place of residence, such as rural or urban. In order to maintain the comparability of the two rounds of the data, similar methodology was adopted in both survey rounds.

A total of 280 FSWs were targeted to be covered during the each round of the study. The sample size also included 10 per cent of the oversample accounting for some degree of non-response and disqualification due to set eligibility criteria. Of the total targeted, 240 FSWs in the baseline study and 238 FSWs in the endline were randomly interviewed from the list of registered FSWs available at the TI level. The overall response rate was around 85% in both surveys. The remaining 40–42 FSWs could not participate in the interview due to non-eligibility, not being found after repeated visits, or refusal to participate.

Family members of FSWs: A sample size of 150 was determined to fall between the minimum required size on which statistical tests could be meaningfully conducted and the maximum size that the study resources could support. After adding a component of non-response of about 10 percent, the final sample size turned out to be 165.

Probability sampling methods were employed to select the study population. In order to select family members of FSWs, the study first selected FSWs, and then their immediate family members (i.e., parents, siblings, spouse) were recruited among the selected FSWs. Using the list of FSWs from the KSAPS TI registration data as the sampling frame, the respondents were chosen randomly after stratifying the FSWs by district and place of residence (i.e., rural-urban). A total of 306 family members (154 during the baseline and 152 in endline) participated in the study.

1.6 INSTRUMENTS AND MEASURES

In the field, a standardized structured questionnaire was used. The original core questionnaire was developed by the research team and reviewed and revised by senior research team members of

KHPT and ICRW. There were two different sets of questionnaires—one set for FSWs and one set for their family members. The questionnaires were translated into the local language (Kannada) and independently back-translated and discussed to establish their accuracy, cognitive understanding, and cultural acceptability. It was further verified, discussed, and fine-tuned during interviewers' training and immediately after the mock field practice. These questionnaires included a witnessed oral informed consent form.

The female sex worker questionnaire consisted of 11 sections—one of which measured respondents' exposure to the intervention and to community-based organizations—and included questions on socio-demographic characteristics; sexual behaviour and practice; and attitudes and perceptions towards sex work, HIV/AIDS, and HIV-positive female sex workers.

The family member questionnaire, on the other hand, consisted of nine sections and included questions on household profile, knowledge of HIV/AIDS, perceptions and attitudes towards sex work and HIV/AIDS, and HIV-related stigma and discrimination.

1.7 DATA COLLECTION

Training of the data collection team was conducted for five days and covered the following topics: (1) the study objectives, (2) understanding HIV-related stigma, (3) the research instrument, (4) data collection procedures, and (5) data editing and consistency checks in the questionnaires. Participants studied the survey instrument section by section and question by question through group discussion and mock sessions. A field practice took place in the last two days of training. The pilot areas from Belgaum and Bagalkot were selected far from the study area to avoid contamination.

When the full study was mounted, arrangements were made to ensure that the randomly selected individuals were visited and interviewed. Upon selection of the study participants, interviews were conducted in private. Before each interview, a witnessed oral informed consent was obtained from the respondent, and this was confirmed in writing by the interviewer with a witness. If the selected respondent was not available at the time, plans were scheduled for a maximum of three future visits.

1.8 DATA MANAGEMENT AND ANALYSIS

The field supervisor in the area checked completed questionnaires for errors, inconsistencies, and data gaps. Data entry was carried out using CSPro (version 4.0) software. The data were subjected to routine quality control checks, and inconsistencies were corrected through discussions and cross-verification with original documents. The verified data were used for statistical analysis. Stata 12.0 software was used for data analysis.

Findings have been presented using frequencies and percentages. All the key results are presented in the form of adjusted percentages. The adjustments are done to adjust for the different characteristics of respondents at the baseline and endline surveys, including the differences in exposure to the intervention. Thereafter, test of difference between two proportions (at baseline and endline surveys) has been indicated wherever applicable to show the statistical significance of the observed differences in the outcome estimates over the period. Since no other intervention on stigma reduction was happening in the study area during the same period, the changes observed in the estimate over the two rounds can be attributed only to the effect of

this intervention. However, we caution that, to some extent, the significant change over time in intervention areas may also be due to other counselling activities undertaken as a part of regular targeted intervention (TI) activities under the national HIV-prevention programme. In addition to bivariate analysis, multivariate analysis in the form of linear and logistic regression was done to show the adjusted estimates for some of the major indicators that the programme aimed to change. Adjustments were made to control any variation in age, education, marital status, caste distributions, and selected sex work characteristics of FSWs. In case of family members, the household characteristics were also controlled, in addition to their socio-demographic characteristics.

1.9 STRUCTURE OF THE REPORT

This report is divided into four chapters, including this introductory chapter. Chapter 2 describes the findings pertaining to the female sex workers, such as socio-demographic profile of the respondents, including sex work characteristics and condom use; exposure to HIV-prevention intervention and collective membership; perception of sex work and HIV-related stigma; fears associated with HIV infection; shame and blame associated with HIV-infected person; and willingness to maintain confidentiality about an HIV-positive family member. Chapter 3 highlights background and household characteristics; knowledge about the modes of HIV transmission and views of family members about fears associated with HIV; shame and blame attitudes; and experience of witnessing stigma among female sex workers at various occasions. Chapter 4 summarizes the major findings of this study and highlights the lessons learnt from the intervention.



Findings from female sex workers

2.1 BACKGROUND

This chapter reports the key findings from the surveys of the female sex workers. The chapter begins by comparing the baseline and endline surveys' findings on the FSWs' key background characteristics (socio-demographic and sex work related), and on their exposure to HIV-prevention intervention and the stigma-reduction-related programme. These comparisons were done mainly to enable us to ascertain whether changes observed in indicators pertaining to stigma and discrimination were due to the intervention or to differences in the characteristics of the respondents. The chapter then reports the findings on key programme outcomes, including disclosure of involvement in sex work and perceptions about various aspects of stigma and discrimination associated with HIV-positive sex workers. The findings reported here describe the changes observed in key outcome measures between baseline and endline.

2.2 SOCIO-DEMOGRAPHIC PROFILE OF FSWs

Table 2.1 provides information about the socio-demographic profile of the FSW respondents. Findings suggest that FSWs who participated in the endline survey were somewhat younger than the FSWs who participated in the baseline, and that significant difference existed between the proportions of baseline and endline respondents in the age groups 25-29 and 35-39 years (i.e., percentages of respondents in these two age groups were 22% vs. 32% and 32% vs. 20% in the baseline and endline surveys, respectively). However, no such differences were observed in mean ages, which were about 32 years for the FSW respondents in both surveys. Data from the two rounds of the survey revealed a significant difference in literacy status. Compared to almost 18 per cent of the FSWs interviewed in the baseline, about 29 per cent in the endline reported that they were able to read and write, and this difference was statistically significant ($p < 0.05$).

Despite the baseline and endline respondents' differences in terms of their age and literacy status, most of the other socio-demographic characteristics—such as marital status, caste, Devadasi status, cohabitation, and engagement in an income-generation activity other than sex work—were similar across the two study points. Results suggest that half of the female sex workers were unmarried, while about 70 per cent (74% vs. 69% in baseline and endline, respectively) were currently cohabiting with their partner. In both rounds of the survey, half of the respondents were Devadasi, three-fourths belonged to scheduled caste and scheduled tribe (SC/ST) community, and about two-thirds had a source of income other than sex work.

TABLE 2.1: BACKGROUND CHARACTERISTICS OF FEMALE SEX WORKERS

Indicator: Percentage of FSWs by selected socio-demographic characteristics, baseline (BL) and endline (EL) survey

CHARACTERISTICS	BL	EL	SIGNIFICANCE
Age of FSWs			
<25	9.7	10.1	**
25-29	22.3	32.4	
30-34	23.9	23.5	
35-39	31.5	19.7	
40+	12.6	14.3	
Mean age	32.4	31.8	NS
Can read and write (%)	17.9	28.6	**
Current marital status			
Never married	50.0	51.3	NS
Currently married	29.2	21.4	
Deserted/widowed/separated	20.8	26.9	
Currently cohabiting (%)	73.8	68.9	NS
Caste or tribe			
SC/ST	75.4	78.2	NS
Others	24.6	19.3	
Respondent belongs to Devadasi (%)	50.8	51.3	NS
FSWs with any source of income other than sex work (%)	65.8	68.9	NS
N	240	238	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant

2.3 SEX WORK CHARACTERISTICS AND CONDOM USE

Table 2.2 presents the key sex work characteristics and condom use behaviour of the FSWs interviewed during the baseline and endline surveys. Between these two groups, the results depicted significant differences among the FSWs who solicited their clients in venues other than home/rented rooms or public places. Across the two study periods, about half of the FSWs solicited their clients from home or from rented rooms and about one-third from public places. However, from baseline to endline there was a significant shift from brothel/lodge/dhaba-based solicitation to phone-based solicitation. In the baseline survey, five per cent of the FSWs solicited their clients from brothel/lodge/dhaba, and about five per cent solicited by phone. In the endline survey, about two per cent solicited from brothel/lodge/dhaba, and nearly 11 per cent of respondents solicited by phone.

The sex workers interviewed in the two study periods also differed with respect to age at initiation of sex work, duration in sex work and weekly client volume. FSWs in baseline surveys were somewhat younger when they initiated sex work than those in the endline survey (mean age 19 year and 21years, respectively). As compared to about 86 per cent of the FSWs at baseline, 74 per cent at endline started sex work before the age of 25 years. While FSWs in the baseline survey had an average duration of 13 years in sex work, participants in the endline had done sex work for 11 years. About two-thirds of FSWs (66%) in the baseline were in sex work for 10 or more years compared to 50 per cent of the FSWs interviewed in the endline. Though the FSWs in both surveys had similar average numbers of clients per week, a much larger proportion of FSWs in the endline had 4or fewer clients per week than the respondents in the baseline survey (28% vs. 9%, respectively).

Table 2.2 also presents information on HIV testing and condom use behaviour of FSWs, and similarities and differences in these aspects across two study periods.

TABLE 2.2: SEXUAL BEHAVIOUR AND CONDOM USE AMONG FEMALE SEX WORKERS

Indicator: Percentage of FSWs by selected sex work characteristics and condom use

SEXUAL BEHAVIOUR AND CONDOM USE	BL	EL	SIGNIFICANCE
Place of solicitation			
Home/rented room	51.7	52.5	
Brothel/lodge/dhaba	5.0	1.7	
Public place	31.3	33.2	**
Contacted by phone	5.4	10.5	
Others	6.7	2.1	
Age at start of sex work			
<18 years	43.0	33.2	**
18-24 years	42.6	40.8	
25+ years	14.3	26.1	
Mean age at start of sex work	19.0	20.7	***
Duration in sex work			
<2 years	1.7	2.9	
2-4 years	8.5	15.1	**
5-9 years	24.3	32.4	
10+ years	65.5	49.6	
Mean duration in sex work	13.4	11.1	***
Number of clients per day			
1 client	29.3	28.7	
2 clients	34.7	33.3	NS
3+ clients	36.0	34.2	
Mean clients per day	2.3	2.4	NS
Client volume per week			
<5 clients	9.2	28.3	***
5-9 clients	45.6	37.1	
10+ clients	45.2	34.6	
Mean clients per week	9.6	9.3	NS
R' feel being at risk to be infected with HIV (%)	51.3	47.9	NS
Tested for HIV in last 6 months (%)	79.8	90.5	***
Condom used in last sex with clients (%)	93.3	97.1	*
Condom use in all sex with clients (%)	86.7	95.0	**
N	240	238	
Condom used in last sex with cohabiting partner (%)	54.8	64.6	*
Condom use in all sex with cohabiting partner (%)	29.4	56.1	***
N	177	164	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant; 'R': Respondent

About 50 per cent of the FSWs in both surveys perceived themselves as being at risk of HIV infection. There was a significant increase in HIV testing in the study population over the two surveys. While 80 per cent of the FSWs in the baseline survey reported that they were tested for HIV in the six-months preceding the survey, the same was reported by 91 per cent of the FSWs during endline.

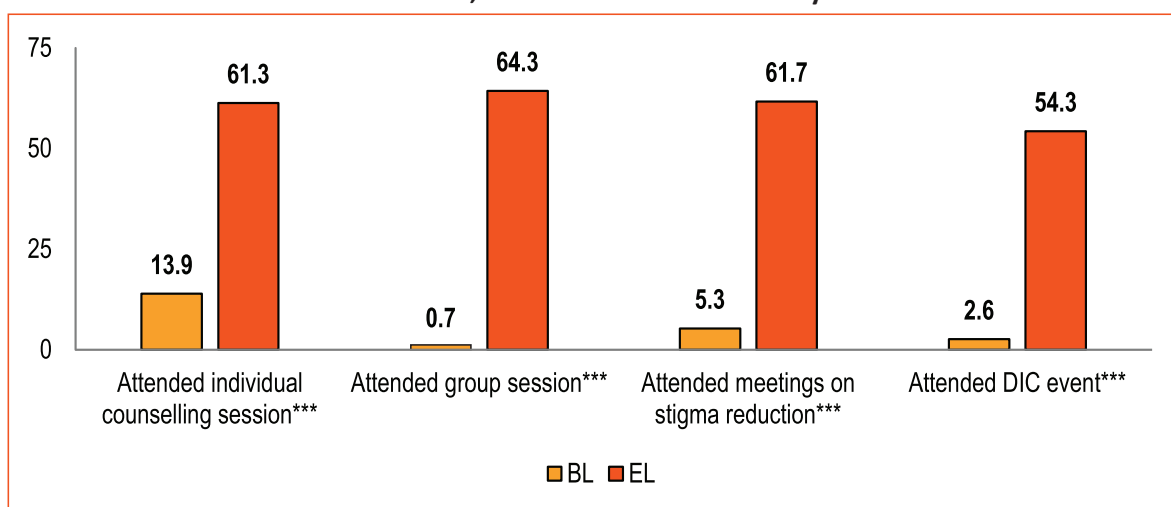
The reported condom use with clients was very high. Ninety-three per cent of the FSWs in baseline and 97 per cent in endline reported condom use during last sex with a client. A significantly higher proportion of women at endline (95%) than at baseline (87%) reported condom use in every sexual encounter with their clients. Comparatively, condom use with cohabiting partners was low, although this showed an increase from baseline to endline. As compared to 55 per cent of the FSWs in the baseline, about 65 per cent in the endline reported condom use in their last sexual encounter with their cohabiting partner. Consistent condom use with cohabiting partner was

reported by just 29 per cent of the FSWs at baseline, whereas it increased significantly to 56 per cent in the endline survey.

2.4 EXPOSURE TO STIGMA REDUCTION AND HIV-PREVENTION PROGRAMME

Analysis was done to understand the exposure of FSWs to the intervention's stigma-reduction counselling sessions and to the components of regular HIV prevention. Findings show a significant increase in exposure to various types of stigma-reduction-related counselling sessions among FSWs interviewed in baseline and endline surveys (Figure 2.1). At endline, more than 60 per cent of the FSWs had attended various counselling sessions on stigma reduction—individual counselling, group sessions and group meetings—and more than half of the FSWs had attended a DIC event on stigma reduction. Among FSWs at baseline, much lower levels of exposure to such stigma-reduction activities were reported. This difference may be attributed to the fact that before this intervention stigma was not adequately addressed in the regular HIV-prevention programme implemented through targeted intervention, and therefore the community was unlikely to have undergone specific counselling sessions to reduce stigma and discrimination.

Figure 2.1: Adjusted percentage of FSWs by their attendance in stigma-reduction-related counselling sessions, baseline and endline survey



Note: Differences between baseline and endline is significant at * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Percentages are adjusted to BL and EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work, and client volume.

Findings presented in Table 2.3 show that FSWs interviewed in the two survey rounds did not differ much in terms of their exposure to HIV-prevention activities conducted under the regular HIV-prevention programme, except that there was a significant increase in the number of times that FSWs were visited by project staff. As compared to 63 per cent of the FSWs in the baseline, 76 per cent in the endline reported five or more contacts with the project staff in the preceding six months. The mean number of times that FSWs were contacted by project staff in the preceding six months was 8 times and 10 times in the baseline and endline surveys, respectively. Since the programme service delivery persons (peer educator and outreach workers) were trained to conduct the counselling sessions on stigma and reduction and were supposed to periodically arrange counselling sessions with the community, an increase in the number of times that FSWs were contacted by the project staff in the six months preceding the endline survey was expected and suggests the presence of project staff in the community.

TABLE 2.3: EXPOSURE TO HIV-PREVENTION INTERVENTIONS

Indicator: Percentage of FSWs by their exposure to different HIV-prevention-related intervention activities			
EXPOSURE TO INTERVENTION	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
First time contacted to PE/ORW within last two years	7.4	10.4	NS
Three or more times contacted with project staff in last one month	30.4	36.1	NS
Five or more times contacted with project staff in last six months	63.3	76.3	**
Became member of sex work collective in last two years	15.5	18.1	NS
Mean values			
Mean duration since first time contacted	5.7	5.6	NS
Mean number of times contacted in last one month	2.0	2.6	NS
Mean number of times contacted in last six months	8.0	10.0	***
Mean duration since part of sex work collective	5.0	5.2	NS
N	240	238	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work and client volume.

2.5 PERCEPTION RELATED TO NON-CASUAL CONTACT WITH PLHIV (FEAR ASSOCIATED WITH HIV INFECTION)

The baseline study conducted during the inception of this intervention recorded FSWs' fears around non-casual contact with PLHIV, which presumably stemmed from the misconception that such contact could cause HIV infection. The counselling sessions organized by project staff under the stigma-reduction intervention primarily focused on eliminating such misconceptions. Changes in FSWs' perception of non-casual contact with PLHIV were assessed by comparing their responses to six discriminatory assertions that were posed during both rounds of the survey. Respondents' reactions to the assertions were recorded on a three-point scale: agreed, somewhat agreed, and disagreed. Table 2.4 presents the percentages of baseline and endline respondents who disagreed with each assertion. It was expected that the intervention would reduce FSWs' anxiety about non-casual contact with PLHIV.

Analysis showed a significant decline from baseline to endline in every dimension of stigma attached to the non-casual contacts with PLHIV among FSWs. For example, just about 14 per cent of the FSWs in the endline reported that people living with HIV should be isolated, compared to 58 per cent of the FSWs in the baseline. A smaller proportion of FSWs in the endline, compared to baseline, reported that one should not take care of a relative if s/he gets sick with HIV (16% vs. 64%), that one should not share or eat food with PLHIV (13% vs. 50%), that one should not live in the same house with PLHIV (13% vs. 40%), and that one should not share a bed with an HIV-positive partner (38% vs. 58%).

TABLE 2.4: FEAR ASSOCIATED WITH HIV INFECTION AMONG FEMALE SEX WORKERS

Indicator: Percentage of FSWs by selected statements referring to fear around HIV infection

FEAR STATEMENTS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
People with HIV should be isolated	57.8	14.3	***
HIV-positive children should not play with other children	23.4	4.7	***
R' would not take care of relative if s/he gets sick with HIV	64.0	16.0	***
One should not share or eat food with an HIV-positive friend/family member	50.4	13.2	***
One should not live in the same house with an HIV-positive friend/ family member	40.1	12.9	***
One should not share bed with an HIV-positive partner	58.2	37.9	**
Did not agree with all six fear statements (%)	16.2	44.8	***
Mean combined score (mean number of fear statements rejected by FSWs)	2.96	4.83	***
[Odds ratio: Did not agree with all six discriminatory statements] (Ref: Baseline)	3.00 (1.62-5.56)		***
N	230	234	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work and client volume, exposure to intervention and stigma-reduction programme

Summary measures of perception related to non-casual contact with PLHIV were generated using the responses to all the six statements mentioned in Table 2.4. The difference between the baseline and endline summary measures indicated the direction and degree of change in FSWs' fear associated with non-casual contacts with PLHIV. Findings show a significant increase in non-discriminatory attitude towards PLHIV among FSWs from baseline to endline. For example, of the FSWs who participated in the baseline survey, just 16 per cent exhibited no fear of contact with PLHIV (i.e., they disagreed with all the six discriminatory statements), compared to 45 per cent of the FSWs in the endline. This difference was statistically significant even after adjusting for the differences observed in the characteristics of the respondents between the two rounds of the surveys. Results from multivariate binary logistic regression analysis suggest that FSWs who participated in the endline survey were three times more likely [OR(95% CI): 3.00 (1.62-5.56)] to reject all the discriminatory statements pertaining to non-casual contact with PLHIV, compared to their counterparts interviewed during baseline survey.

2.6 SHAME AND BLAME ASSOCIATED WITH HIV-INFECTED PERSON

This section presents the distribution of FSWs interviewed in the baseline and endline surveys according to their views about shame and blame for the spread of HIV, adjusted by selected background characteristics (Table 2.5 and 2.6).

From baseline to endline there has been a significant reduction in the proportion of FSWs who believe that they themselves, their family members or a person with HIV/AIDS should be ashamed of being HIV positive. Table 2.5 presents the findings that, as compared to about two-thirds of FSWs in the baseline survey, less than one-fourth in the endline perceived that FSWs or the families of PLHIV should be ashamed if someone in their family is HIV positive. Moreover, a significantly lower proportion of FSWs in the endline (37%), compared to 83 per cent of the FSWs in the baseline, perceived that HIV positives should be blamed for getting the infection.

TABLE 2.5: PERCEIVED SHAME TOWARDS PLHIV

Indicator: Percentage of FSWs 'agreed' to the selected shame statements			
SHAME STATEMENTS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
R' would be ashamed if someone in her family had HIV/AIDS	64.9	20.0	***
Families of people living with HIV/AIDS should be ashamed	65.5	23.0	***
People with HIV/AIDS should be ashamed of themselves	82.7	37.1	***
Did not agree to all three shame statements (%)	13.5	57.4	***
Mean combined score (mean number of shame statements rejected by FSWs)	0.92	2.13	***
[Odds ratio: Disagreed to all three statements] (Ref: Baseline)	7.05 (3.64-13.62)		***
N	230	234	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
 Percentages are adjusted to BL/EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work and client volume, exposure to intervention and stigma-reduction programme

Overall, more than half of the FSWs in the endline perceived that HIV positives and FSWs or their family members (in case someone from their family has HIV) should not feel ashamed, whereas the same was perceived by just above one-tenth of the FSWs interviewed in baseline. Findings from multivariate analysis suggest that, after adjusting for the baseline and endline differences in the selected background characteristics, FSWs in the endline, compared to baseline, were seven times more likely to believe that FSWs should not be ashamed if someone in their family had HIV/AIDS, that families of people living with HIV/AIDS should not be ashamed and, that people with HIV/AIDS should not be ashamed of their bad behaviour.

Table 2.6 shows that there has been a significant reduction in the perception of respondents who believe that FSWs are the main drivers of the HIV epidemic in the community and that HIV-infected persons should be blamed for bring HIV into the community. As compared to 57 per cent and 72 per cent of respondents in the baseline, just about 34 per cent and 41 per cent in the endline, respectively perceived that it is the only female sex workers who spread HIV in the community and that HIV-infected persons should be blamed for bringing HIV into the community. At the overall level, about 39 per cent FSWs in the endline, as compared to just 16 per cent in the baseline disagreed with these two statements, suggesting the fact that there has been a significant reduction in blaming beliefs of participants towards PLHIV, especially the female sex workers, for bringing the HIV infection in the community. Findings from multivariate analysis also support these findings and suggest that the stigma-reduction intervention had positive impact by bringing the changes in beliefs that FSWs are the ones who bring HIV into the community and that HIV positives should be blamed for bringing HIV into the community.

TABLE 2.6: PERCEIVED BLAME TOWARDS PLHIV FOR SPREADING HIV INFECTION

Indicator: Percentage of FSWs 'agreed' to the selected blame statements			
BLAME STATEMENTS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
It is only the female sex workers who spread HIV in the community	57.1	33.7	***
People with HIV/AIDS should be blamed for bringing HIV into the community	72.3	41.2	***
Did not agree with both the blame statements (%)	16.3	38.8	***
Mean combined score (mean number of blame statements rejected by FSWs)	0.72	1.23	***
[Odds ratio: Disagreed to both the blame statements] (Ref: Baseline)	3.14 (1.69-5.83)		***
N	230	234	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
 Percentages are adjusted to BL/EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work and client volume, exposure to intervention and stigma-reduction programme

2.7 STIGMA AND DISCRIMINATION ASSOCIATED WITH PLHIV

This section throws light on FSWs' perceived stigma and discrimination associated with PLHIV, and the impact of the intervention on stigma and discrimination among FSWs, as observed between the two rounds of the survey (Table 2.7).

Results show that, at the overall level there has been a considerable reduction in the stigmatized and discriminatory attitude of FSWs towards PLHIV over the two rounds of the survey. For example, almost one-fifth of the FSWs in the baseline survey reported that HIV-infected children should not go to school, as compared to just six per cent of the FSWs in the endline. Similarly, a large proportion of FSWs in the baseline (24 per cent) reported that HIV positives should stay away from religious functions, whereas the same was affirmed by just eight per cent of the FSWs in the endline. The most significant reduction was observed in the perception that HIV-positive sex workers should be treated differently than other positive persons; compared to 55 per cent of the FSWs at baseline, just 11 per cent affirmed this discriminatory attitude at endline.

In order to show the proportion of respondents who expressed no stigma and discrimination towards PLHIV, the FSWs' responses were analysed to compute a summary measure of perceived stigma and discrimination. Findings show that a higher proportion of FSWs in the endline than in the baseline (82% vs. 31%, respectively) rejected all three discriminatory statements. Results from multivariate analysis also signified that, after adjusting for the effect of selected background characteristics of FSWs interviewed in both the rounds of survey, those surveyed at the endline were seven times more likely [OR (95% CI): 7.37 (3.76-14.44)] to reject all the three statements that demonstrated stigma and discrimination towards PLHIV. In other words, over time the intervention activities brought a positive and significant change in the attitudes of FSWs towards HIV positives.

TABLE 2.7: PERCEIVED STIGMA AND DISCRIMINATION TOWARDS PLHIV

Indicator: Percentage of FSWs 'agreed' to the selected stigma and discrimination statements

DISCRIMINATION STATEMENTS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
HIV infected children should not go to school	18.0	5.8	**
HIV positives should stay away from religious functions	24.2	8.3	***
HIV positive sex workers should be treated differently than other positive persons	55.3	11.0	***
Disagreed to all three statements (%)	30.9	81.7	***
Mean combined score (mean number of statements on stigma and discrimination rejected by FSWs)	1.92	2.63	***
[Odds ratio: Disagreed with all three statements] (Ref: Baseline)	7.37(3.76-14.44)		***
N	230	234	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work and client volume, exposure to intervention and stigma-reduction programme

2.8 STIGMA ASSOCIATED WITH DISCLOSURE OF HIV STATUS

This section presents findings pertaining to the changes observed in perceived stigma associated with the disclosure of HIV status during the baseline and endline surveys. Two questions were asked to assess whether respondents perceived stigma associated with disclosure of HIV status: i) Do you think that positive sex workers should not share their HIV status with others? and ii) Would you share your test results with others? In addition, information was obtained regarding reasons

why FSWs think HIV-positive FSWs should not disclose their status and why FSWs would not share their test result with others if the test result is positive.

Results shown in Table 2.8 suggest that there has been a significant reduction in the perceived stigma associated with disclosure of HIV status. While half of the FSWs in the baseline thought that HIV-positive FSWs should not disclose their status to others, the same was thought by about one-third of the FSWs in the endline ($p < 0.05$). After adjusting the effect of various confounders, the multivariate analysis confirmed these findings. For instance, as compared to the FSWs in the baseline, FSWs interviewed in the endline were less likely to feel that HIV-positive FSWs should not disclose their status to others, thus depicting the positive impact of the intervention on stigma associated with disclosure of HIV status.

The changes in perceived stigma seem to have had some effect on respondents' willingness to share their HIV status. Whereas about 60 per cent of FSWs interviewed at the baseline were reluctant to share their HIV status in the baseline, just about 25 per cent were unwilling to do so at the endline. Table 2.8 shows that, as compared to 42 per cent of the FSWs in the baseline, 74 per cent in the endline reported that they would share their HIV-test results with others. Similar findings were observed in the multivariate analysis. FSWs at endline, compared to baseline, were significantly more likely to disclose their HIV-test results with others [OR (95% CI): 3.96 (2.10-7.47)].

TABLE 2.8: STIGMA ASSOCIATED WITH DISCLOSING HIV STATUS

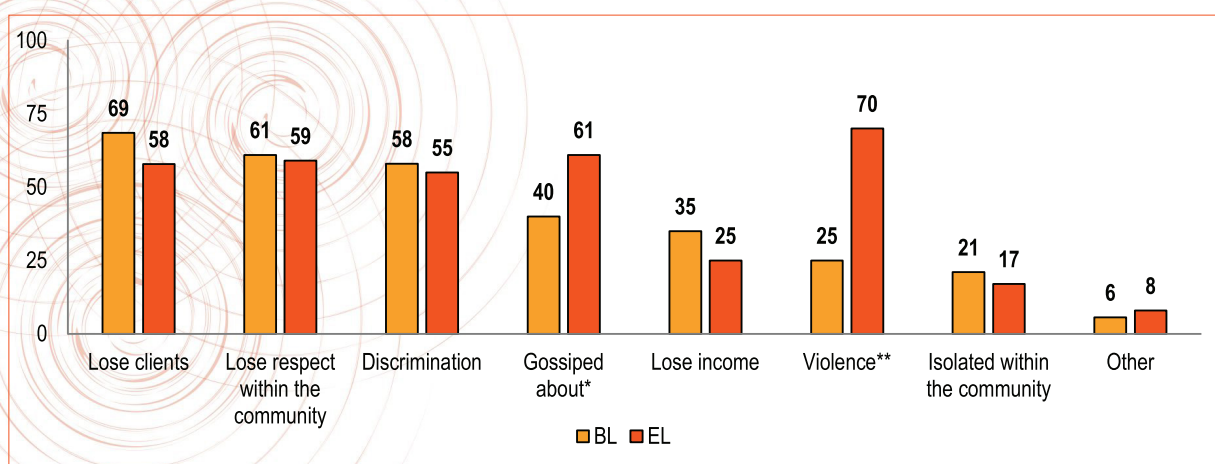
PERCENTAGE OF FSWs	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
Perceived positive sex workers should not share her HIV status with others [Odds ratio: FSW perceived that HIV status should not be shared with others] (Ref: Baseline)	50.2	32.8	**
	0.45 (0.25-0.83)		**
Would share test results with others [Odds ratio: FSWs would share her HIV status with others] (Ref: Baseline)	41.6	74.0	***
	3.96 (2.10-7.47)		***
N	240	238	

Note: Differences between baseline and endline is significant at * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work and client volume, exposure to intervention and stigma-reduction programme

Though the above results were very positive, it is also important to understand whether significant change occurred in the reasons (fears) that deter FSWs from disclosing their HIV-test results. Whereas the results in Figure 2.2 show no significant difference in the prevalence of some fears associated with disclosure, from baseline to endline there were significant increases in the percentage of FSWs who feared that people will gossip (40% vs. 61%, $p < 0.10$), or that interpersonal violence will happen (25% vs. 70%) if HIV-positive FSWs disclose their status.

Despite a significant reduction in stigma associated with disclosing HIV status, many FSWs reported various reasons for believing that FSWs should not divulge their positive status. The most important reasons, as cited by FSWs in the baseline and endline surveys, were losing clients (69% and 58%), loss of respect and standing in the community (61% and 59%), and discrimination faced by positive FSWs (58% and 55%). Other reported reasons inhibiting disclosure were the chance of losing income, the prospect of being isolated within the community, and the above-mentioned gossip and violence. The five types of people with whom FSWs said they would disclose their HIV status were friends, family members, regular partners, husband, and colleagues (result not shown here).

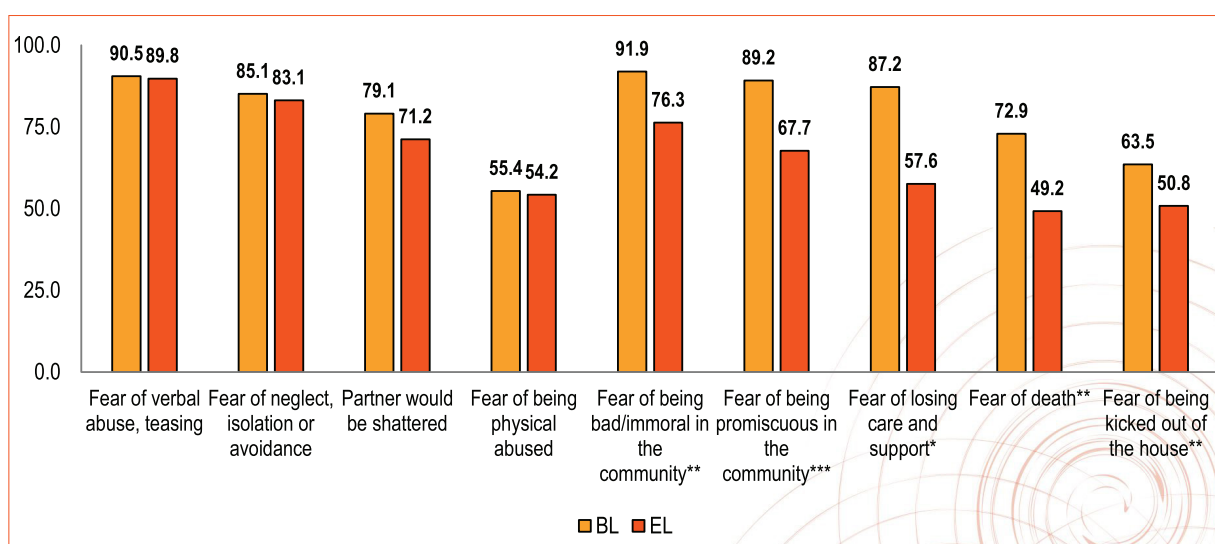
Figure 2.2: Percentage of FSWs by their perceived reasons that HIV-positive FSWs should not disclose their status to others, baseline and endline survey



Note: Differences between baseline and endline is significant at * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Figure 2.3 shows the percentage of FSWs by the reasons why they felt that they would not divulge their HIV-test results to others. Some reasons were reported by similar proportions of FSWs across two surveys. For example, fear of verbal abuse and teasing (approx. 90%), fear of neglect and isolation (approx. 84%), fear that partner would become distraught (more than 70%), and fear of physical abuse (about 54%) were the reasons mentioned by similar proportions of FSWs during the baseline and endline surveys. Other reasons, however, were reported by significantly smaller proportions of FSWs at endline than at baseline.

Figure 2.3: Percentage of FSWs by the reasons for not disclosing their HIV-test results with others, baseline and endline survey



Note: Differences between baseline and endline is significant at * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

There was a significant reduction in some of the fears that inhibit FSWs from sharing their HIV-test results with others. These were fear of being bad/immoral or promiscuous in the community, fear of not receiving care or support, fear of being kicked out of the house, and fear of death. These findings, to some extent, indicate a reduction in some of the fears associated with disclosure of HIV-status as a result of intensive stigma-reduction efforts.

2.9 STIGMA AND DISCRIMINATION WITNESSED BY FSWs

This section presents respondents' reported knowledge of other FSWs who have faced stigma and discrimination in general (Table 2.9) and at healthcare facilities (Table 2.10) due to their HIV status. The baseline and endline surveys asked respondents whether they had witnessed any other FSW facing stigma and discrimination due to their HIV status in the 12 months preceding the survey. Questions were asked to differentiate stigmatized acts done by agents such as family members, friends, relatives, neighbours, other members of the community, and healthcare providers.

Findings show a significant reduction from baseline to endline in reports of FSWs who faced stigma and discrimination due to their HIV status in the 12 months preceding the survey. Whereas 87per cent of the FSWs during baseline reported that they had witnessed other positive FSWs experiencing stigma and discrimination at the hands of family and friends in the 12 months preceding the survey, at endline only 34per cent of the FSWs reported having witnessed such incidents($p<0.001$). About 40 per cent or more of the FSWs at baseline reported having witnessed FSWs enduring other types of stigmatizing experiences, including isolation within the household (69%), reduced frequency of visit by family members and friends (56%), and rejection from homes (41%) and from peer groups (40%). However, such cases were reported by fewer than one-fifth of the respondents during the endline. These differences were statistically significant even after adjusting for the differences in selected background characteristics of respondents in the two study periods. Results from multivariate analysis suggest that FSWs from the endline were less likely to report witnessing other FSWs who faced stigma and discrimination due to their HIV status in the past one year [OR (95% CI): 0.68 (0.03-0.14)].

TABLE 2.9: STIGMA WITNESSED BY FSWs IN PAST 12 MONTHS

Indicator: Percentage of FSWs witnessed different acts of stigma happening to other positive FSWs in last 12 months			
RESPONDENT WITNESSED THE FOLLOWING HAPPENING TO OTHER FSW IN LAST 12 MONTHS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
A. ISOLATION FROM FAMILY/FRIENDS	87.0	34.4	***
Excluded from a social gathering	16.9	4.9	**
No longer visited, or visited less frequently by family and friends	55.8	20.4	***
Isolated within the household	69.1	15.6	***
Faced ejection from their homes by their families	41.3	10.2	***
Faced rejection from their peers	39.9	6.1	***
B. EXPERIENCE OF OTHER ACTS OF STIGMA AND DISCRIMINATION	96.6	77.6	***
Had property taken away	22.0	6.0	***
Abandoned by spouse/partner	66.9	31.2	***
Abandoned by family/relatives	45.6	10.6	***
Teased or sworn at	74.3	49.6	**
Lost respect/standing within the family and/or community	62.6	33.6	***
Gossiped about	78.6	50.7	***
Faced neglect from their family	63.2	41.4	**
Faced physical abuse	46.1	11.2	***
Faced verbal abuse	60.2	31.0	***
[Odds ratio: FSWs witnessed other FSW isolated herself from family/friends in last 12 months] (Ref: Baseline)	0.68 (0.03-0.14)		***
[Odds ratio: FSWs witnessed other FSW experienced stigma and discrimination at different places in last 12 months] (Ref: Baseline)	0.12 (0.05-0.27)		***
N	230	234	

Note: Differences between baseline and endline is significant at * $p<0.10$; ** $p<0.05$; *** $p<0.01$; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work and client volume, exposure to intervention and stigma-reduction programme

FSWs who participated in the study witnessed stigmatized and discriminatory behaviour happening to positive sex workers not only at the level of family or friends but also at the larger community level. However, an important point to note is the reduction in such reports at endline in comparison to baseline (78% vs. 97%, respectively). Less than 50 per cent of the FSWs in endline, as compared to 60 per cent or more at baseline, cited incidents of positive female sex workers being gossiped about, teased or sworn at, being abandoned by their spouse or partner, facing isolation and neglect from the family, and being verbally abused. Moreover, though just 11 per cent of the FSWs at the endline had witnessed physical abuse and abandonment by families of HIV-positive sex workers, the same was reported by 46 per cent of respondents at the baseline. There was also a significant reduction from baseline to endline in the proportion of FSWs who reported knowing about PFSWs losing property (22% vs. 6%, respectively). Findings of multivariate logistic regression analysis supported the aforementioned results and suggested that women in the endline survey were significantly less likely than those in the baseline to witness stigma and discrimination happening to PFSWs at the larger community level in the 12 months preceding the survey [OR (95% CI): 0.12 (0.05-0.27)].

Though a significant reduction has been noticed in stigma and discrimination against positive sex workers, many were subjected to such behaviour at healthcare facilities. Over 90 per cent of the FSWs in the baseline survey and 64 per cent of the FSWs in the endline survey had witnessed at least one act of stigmatized behaviour against a PFSW at a healthcare facility (Table 2.10).

TABLE 2.10: STIGMA WITNESSED BY FSWs AT THE HEALTHCARE FACILITY IN PAST 12 MONTHS

Indicator: Percentage of FSWs witnessed any act of stigma happening to other positive FSW at health facility in last 12 months			
RESPONDENT WITNESSED STIGMATIZED ACT HAPPENING TO OTHER FSW AT HEALTH FACILITY IN LAST 12 MONTHS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
Witnessed any act of stigma at health facility in last 12 months (%)	91.9	64.3	***
Health provider refused to attend to her	33.6	15.8	**
Discharged her too early	43.9	15.3	***
Making her wait longer to attend	63.5	29.2	***
Unnecessarily referred to another health provider in the same facility or referred to another facility	53.1	30.1	**
Denied treatment, surgery or relevant tests/investigations	48.2	22.1	***
Tested for HIV without her informed consent	22.8	3.6	***
Disclosed HIV status to her family without her consent	29.5	6.0	***
Health provider used derogatory language or scolded or blame	48.1	17.0	***
Bed pans or bed clothes were not changed as needed/as often, compared to other patients	43.4	15.5	***
Given less care/attention than other patients	69.1	41.2	***
[Odds ratio: FSW witnessed any act of stigma with other FSW at health facility in last 12 months] (Ref: Baseline)	0.17 (0.09-0.34)		***
N	230	234	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, marital status, education, caste, other source of income, typology, duration in sex work and client volume, exposure to intervention and stigma-reduction programme

Findings also show that while more than 50 per cent of respondents in the baseline survey said that positive female sex workers were given less care or attention than other patients (69%), made to wait longer (64%), and unnecessarily referred to another healthcare provider (53%), smaller proportions of respondents reported such mistreatment in the endline (41%, 29% and 30%, respectively). About 20 per cent or less of respondents in the endline indicated that they

had witnessed positive sex workers being denied treatment (22%); healthcare providers using derogatory language, scolding and blaming positive sex workers (17%); PFSWs discharged too early; and bed pans and clothes not being changed as often as for other patients (both 15%), whereas such mistreatment was reported by 40 per cent or more of the FSWs in the baseline.

Although healthcare providers should not discriminate against PFSWs, between one-fifth and one-third of the FSWs in the baseline survey reported that during the preceding 12 months healthcare providers had refused to treat positive sex workers (34%), that PFSWs' HIV status was disclosed to their family members without consent (30%), and that PFSWs were tested for HIV without their consent (22%). The endline survey, however, recorded a significant reduction in instances of such stigma and discrimination. Only 16 per cent of the FSWs at the endline reported that they witnessed a healthcare provider refusing to treat a positive sex worker, about six per cent witnessed a healthcare provider disclosing a PFSW's HIV status to family members without consent, and only four per cent reported that PFSWs were tested for HIV without their consent. Multivariate analysis revealed that FSWs in the endline survey were 83 per cent less likely to report cases of positive FSWs facing stigma and discrimination at a healthcare facility than their counterparts in the baseline survey [OR (95% CI): 0.17 (0.09-0.34)]. This result was statistically significant even after adjusting for the effects of confounding variables.



Findings from family members of female sex workers

3.1 BACKGROUND

In addition to the FSWs, immediate family members (i.e., parent, sibling, or spouse) of practicing female sex workers were interviewed at baseline and endline to indirectly assess the extent of stigma and discrimination towards HIV-positives at the community level. Information was obtained on respondents' household characteristics to understand their socio-economic situation. Questions were also asked to assess the amount and accuracy of family members' knowledge about modes and prevention of HIV transmission. The questions in both rounds of the survey were identical and therefore provide an opportunity to directly compare the differences between baseline and endline in perceived as well as in actual stigmatized and discriminatory behaviour of family members towards PLHIV. The percentages presented on the key indicators have been adjusted for differences observed in the selected background characteristics of the family member respondents. Therefore, the significant differences in some of the key measures of interest can be attributed largely to the stigma-reduction intervention activities, which were implemented in the absence of any other such intervention in the study area during the same period. This chapter describes some of the key findings that emerged from the data collected from the family members.

3.2 SOCIO-DEMOGRAPHIC PROFILE OF FAMILY MEMBERS

Table 3.1 presents the per cent distribution of family members by the selected socio-demographic characteristics. A total of 256 family members (154 at baseline and 152 at endline) were interviewed across two rounds of the survey. Overall, more than 80 per cent family member respondents were female, with a slightly higher proportion in the endline survey than in the baseline survey (88% vs. 81%). Though the mean age of the respondents ranged from 37 to 38 years, endline respondents were somewhat younger than those at baseline. As compared to 16 per cent of baseline respondents, 25 per cent of endline respondents were below age 25. Moreover, a relatively higher proportion of endline respondents (36%) could read and write than those in the baseline (27%). Participants in both rounds of the survey had slightly different occupational patterns. While a majority of the family members were working as agricultural labourers across the two study periods, a significantly lower proportion of family members in the endline (5%) than in the baseline (18%) reported their occupation as sex work. More than one-fifth of the respondents in both surveys were unemployed.

So far as their other socio-demographic characteristics are concerned, family members in both survey rounds were similar. For instance, the majority of the respondents were currently married (42%), 36 per cent never married, and 22 per cent were divorced, separated, widowed, or deserted. Most respondents belonged to a scheduled caste or tribe (77% at baseline and 81% at endline), and about 60 per cent belonged to the Devadasi community.

TABLE 3.1: BACKGROUND CHARACTERISTICS OF FAMILY MEMBERS

Indicator: Per cent distribution of family members by selected socio-demographic characteristics			
CHARACTERISTICS	BL	EL	SIGNIFICANCE
Sex of the respondents			
Male	19.5	11.8	*
Female	80.5	88.2	
Age of the respondents			
<25	15.6	25.0	*
25-34	22.7	27.0	
35-44	27.3	18.4	
45+	34.4	29.6	
Mean age	38.2	36.5	NS
Can read and write (%)	26.6	36.2	*
Current marital status			
Never married	35.7	36.8	NS
Currently married	42.2	40.8	
Deserted/widowed/separated	22.1	22.4	
Caste or tribe			
SC/ST	76.6	80.9	NS
Others	23.4	19.1	
Respondent belongs to Devadasi family (%)	58.4	61.2	NS
Occupation			
Agricultural labourer	40.9	37.5	**
Sex work	17.5	4.6	
Others	20.8	30.9	
Not working/ unemployed	20.8	27.0	
N	154	152	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant.

3.3 HOUSEHOLD CHARACTERISTICS OF FAMILY MEMBERS

Table 3.2 presents the per cent distribution of family members by the selected household characteristics. Similar to the socio-demographic profile of the family members, there were similarities as well as differences in the household characteristics of the respondents across the two surveys. On an average, households had five to six members: endline households had six, and baseline households had five. There was a vast difference in monthly household income. The average monthly household income was Rs. 6396 in the endline, almost double the income of participants in the baseline. While the majority of baseline respondents' families earned from Rs. 1500 to Rs. 2499 per month (37%), about two-thirds of the respondents in the endline declared their family income as Rs. 5000 or above. Findings also showed that a relatively larger proportion of family members who participated in the endline resided in pucca (permanent, as opposed to kachcha, or impermanent) houses, compared to their counterparts in the baseline (45% vs. 30%, respectively). Though these two results suggest that families represented in the endline were somewhat economically better-off than families in the baseline, a significantly higher proportion of respondents in the endline reported having debt than those in the baseline.

TABLE 3.2: BACKGROUND CHARACTERISTICS OF HOUSEHOLD

Indicator: Per cent distribution of family members by selected household characteristics

CHARACTERISTICS	BL	EL	SIGNIFICANCE
Household size			
<4 members	31.2	16.4	***
4-5 members	35.1	27.6	
>5 members	33.8	55.9	
Mean number of HH members	5.0	6.4	***
Monthly HH income			
Rs.<1500	18.8	0.7	
Rs. 1500 to <2500	37.0	6.6	***
Rs. 2500 to <5000	28.6	27.6	
Rs. 5000+	15.6	65.1	
Mean income of HH	2923	6396	***
Type of house			
Pucca	30.0	44.9	***
Semi-pucca	43.3	50.3	
Kachcha	26.7	4.8	
Household have own house (%)	88.2	84.0	NS
Household have agricultural land (%)	24.8	26.7	NS
Household with family debt (%)	28.8	42.0	**
Household have bank account (%)	68.6	72.7	NS
N	154	152	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant.

Between the rounds, some household characteristics were similar. At baseline and endline, similar proportions of respondents reported that their family owned their home (84% or more), owned agricultural land (about 25-26%), and had a bank account (about 69% or more).

3.3 KNOWLEDGE ABOUT MODES OF HIV TRANSMISSION

Analysis was done of family members' knowledge about the modes of HIV transmission. Table 3.3 shows that between baseline and endline there was no significant difference in family members' knowledge about the correct modes of HIV transmission, as almost all participants in the baseline and almost as many in the endline knew that HIV can be transmitted through unprotected sex with an infected partner, by sharing infected needles and syringes, and through transfusion of infected blood.

Recognition of misconceptions, however, was not so even. A significantly higher proportion of family members in the endline than in the baseline rejected the common misconceptions that HIV can be transmitted through mosquito bites and that HIV can spread when an HIV-positive person shares food. Therefore, between the baseline and endline respondents there was a significant difference in the proportions who had correct comprehensive knowledge about HIV/AIDS—defined as awareness that HIV can be transmitted through unprotected sex, by sharing infected syringes/needles, and by infected blood transfusion; and that it cannot be transmitted through mosquito bites or by sharing food with an infected person. Nearly half of endline respondents (49%) but less than a quarter of baseline respondents (22%) reported correct comprehensive knowledge about HIV. Results of multivariate logistic regression analysis confirmed that the intervention brought positive change in the correct comprehensive knowledge about HIV among family members. After adjusting for differences in the

selected socio-demographic characteristics of the baseline and endline respondents, family members in the endline survey were three times more likely to have correct comprehensive knowledge about HIV than their counterparts in the baseline survey.

TABLE 3.3: KNOWLEDGE ABOUT HIV/AIDS

Indicator: Percentage of family members by correct comprehensive knowledge of HIV			
MODES OF HIV TRANSMISSION	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
HIV can be transmitted through			
Unprotected sex without condom	95.7	88.2	**
Sharing infected injection/needles	98.7	96.4	NS
Infected blood transfusion	96.7	92.7	NS
HIV cannot be transmitted through			
Mosquito bites	35.7	63.2	***
Sharing food with infected person	52.9	85.0	***
Correct comprehensive knowledge about HIV ¹	22.1	48.6	***
[Odds ratio: Have correct comprehensive knowledge about HIV] (Ref: Baseline)	3.47 (1.82-6.59)		***
N	154	152	

¹Correct comprehensive knowledge is defined as knowing that HIV can be transmitted through unprotected sex without condom, by sharing infected injection/needles and by infected blood transfusion, and that it cannot be transmitted through mosquito bites and sharing food with infected person.

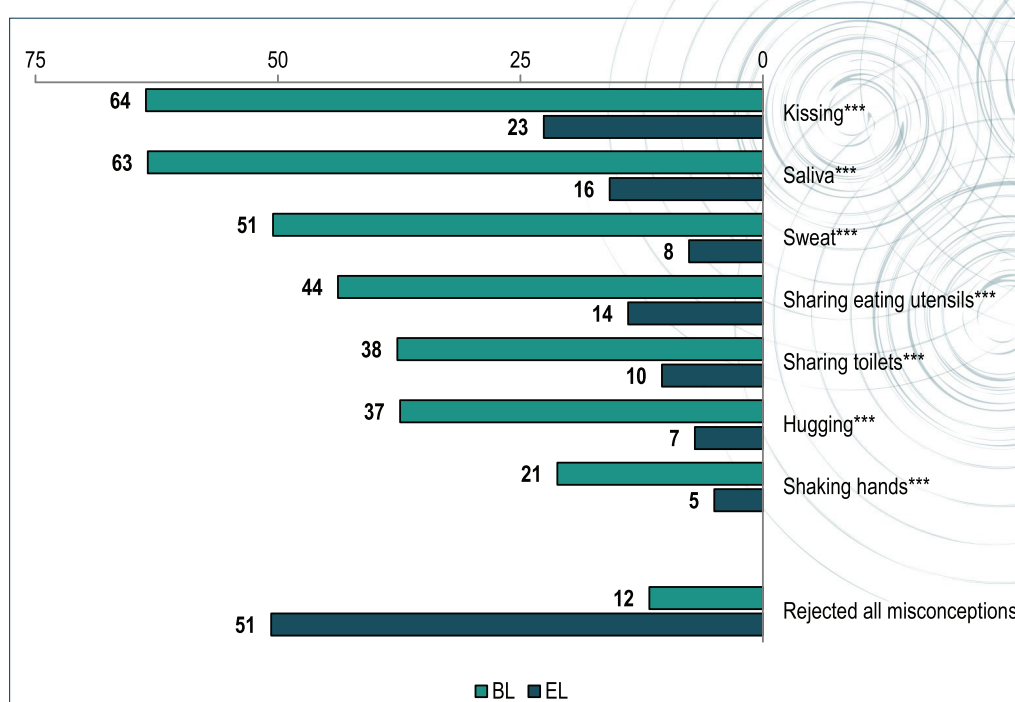
Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant.

Percentages are adjusted to BL/EL differences in age, sex, education, occupation, household size and monthly household income.

The other misconceptions around non-sexual routes of transmission, such as HIV spreading through kisses, hugs, handshakes, utensils, toilets, sweat or saliva, were reported by significantly smaller proportions of respondents at endline than baseline. Figure 3.1 shows the adjusted percentage of family members by their knowledge about non-sexual ways of HIV transmission across the two survey rounds. Results suggest that between 20 and 65 per cent of the respondents in the baseline acknowledged these as potential modes of HIV transmission, whereas the same was reported by between five and 25 per cent of participants in the endline.

A summary measure of reduction in the proportion of respondents who held misconceptions about the non-sexual routes of HIV transmission was created. This indicator showed the percentage of family members who rejected all the misconceptions that HIV can be transmitted through kissing, saliva, sweat, sharing eating utensils, toilets, hugging and shaking hands. While just 12 per cent of family members during the baseline survey rejected all these routes of HIV transmission, about half of the family members in the endline survey did so. The result of multivariate analysis also suggested that family members in the endline survey were eight times more likely [OR (95% CI): 8.25 (3.89-17.53)] to reject many of the common misconceptions about the modes of HIV transmission than those interviewed in the baseline survey (results are not shown in the table).

Figure 3.1: Adjusted percentage of family members by their knowledge about non-sexual (casual) ways of HIV transmission, baseline and endline survey



Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01

Percentages are adjusted to BL and EL differences in age, sex, education, occupation, household size and monthly household income.

3.4 PERCEPTION RELATED TO NON-CASUAL CONTACT WITH POSITIVES (FEAR ASSOCIATED WITH HIV INFECTION)

As with FSWs, their family members were asked questions to assess their fear of HIV. Through their answers, more than half of the respondents at baseline exhibited such fear through their readiness to isolate people who have HIV (65%), refusal to care for a relative infected with HIV (63%), and resistance to sharing food (53%) or shelter (48%) with a positive friend or family member. However, results in the endline (Table 3.4) show that less than 20 per cent of the family members expressed these sentiments. Furthermore, whereas 60 per cent of respondents at baseline believed that one should not share a bed with an HIV-positive person, and about one-third held that HIV-positive children should not play with other children, at endline these views were held by just 45 per cent and 10 per cent of respondents, respectively.

TABLE 3.4: FEAR ASSOCIATED WITH HIV INFECTION AMONG FAMILY MEMBERS

Indicator: Percentage of family members by selected statements referring fear around HIV infection

FEAR STATEMENTS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
People with HIV should be isolated	64.5	19.8	***
HIV positive children should not play with other children	32.6	9.7	***
R' would not take care of relative if he/she get sick with HIV	63.4	16.6	***
One should not share or eat food with HIV positive friend/family member	48.3	17.2	***
One should not live in the same house with HIV positive friend/ family member	50.9	17.1	***
One should not share bed with HIV positive partner	60.6	45.3	**
Did not agree to all six fear statements (%)	14.1	46.6	***
Mean combined score (mean number of fear statements rejected by participants)	2.80	4.70	***
[Odds ratio: Rejected to all six statements] (Ref: Baseline)	7.28 (3.37-15.68)		***
N	154	152	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, sex, education, occupation, household size and monthly household income.

A summary measure of the fear around HIV infection, generated by calculating the proportion of respondents who rejected all six statements revealed significant decline in the fear associated with HIV infection among family members. As compared to 14 per cent of baseline participants, about 47 per cent of endline participants disputed all the fear statements, indicating that the intervention contributed to reducing family members' fear associated with HIV infection. This has been further supported by the multivariate analysis, which found that endline participants were about seven times more likely than baseline participants to reject all six fear statements advocating exclusion and avoidance of HIV-positives.

3.5 SHAME AND BLAME ASSOCIATED WITH HIV-INFECTED PERSON

This section presents the distribution of family members interviewed in baseline and endline surveys according to their views about shame and blame toward HIV-infected individuals and their families, adjusted for differences in respondents' background characteristics (Table 3.5 and 3.6).

More than two-thirds of baseline respondents believed that people with HIV/AIDS should be ashamed of themselves (87%), that families of people living with HIV/AIDS should be ashamed (75%) and that they themselves (the respondent) (72%) should be ashamed if a family member were infected with HIV. However, the corresponding percentages in the endline survey of 35 percent, 21 per cent and 24 per cent indicated a significant decline over the period, even after adjusting for some of the individual and household characteristics of family members. A summary measure indicating the extent of perceived shame among family members towards PLHIV suggested that while less than five per cent of baseline participants rejected all three perceived shame statements, the same were rejected by almost two-thirds (64%) of endline respondents ($p < 0.001$). The multivariate analysis could not be performed due to the small number of cases in the baseline who rejected all shame statements. The adjusted percentages, however, indicated that, among family members, the intervention decreased the association of shame with HIV infection.

TABLE 3.5: PERCEIVED SHAME TOWARDS PLHIV

Indicator: Percentage of family members 'agreed' to the selected shame statements			
SHAME STATEMENTS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
R' would be ashamed if someone in her family had HIV/AIDS	72.1	23.8	***
Families of people living with HIV/AIDS should be ashamed	75.0	21.0	***
People with HIV/AIDS should be ashamed of themselves	86.8	35.0	***
Did not agree to all three shame statements (%)	4.5	63.8	***
Mean combined score (mean number of shame statements rejected by participants)	0.70	2.20	***
[Odds ratio: Disagreed to all three statements] (Ref: Baseline)	NA		
N	154	152	

Note: Differences between baseline and endline is significant at * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, sex, education, occupation, household size and monthly household income.
NA: Odds ratio is not estimated due to small number of cases in baseline.

Table 3.6 shows the percentages of family members who blamed HIV-positives for bringing HIV into the community and FSWs exclusively for spreading the disease. Whereas the majority of baseline respondents (75%) blamed FSWs and PLHIV, about half of endline respondents blamed FSWs and PLHIV (46% and 51%, respectively). Findings of both bivariate and multivariate analyses

revealed that participants in the endline were three times more likely than baseline respondents to disagree with the assertions that only FSWs spread HIV in the community and that positive people should be blamed for bringing HIV into the community.

TABLE 3.6: PERCEIVED BLAME TOWARDS PLHIV FOR SPREADING HIV INFECTION

Indicator: Percentage of family members 'agreed' to the selected blame statements

BLAME STATEMENTS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
It is only the female sex workers who spread HIV in the community	75.1	51.0	***
People with HIV/AIDS should be blamed for bringing HIV into community	74.4	46.0	***
Did not agree with both the blame statements (%)	10.8	31.2	***
Mean combined score (mean number of blame statements rejected by participants)	0.50	1.03	***
[Odds ratio: Disagreed to both the blame statements] (Ref: Baseline)	3.58 (1.61-7.93)		**
N	154	152	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, sex, education, occupation, household size and monthly household income.

3.6 STIGMA AND DISCRIMINATION ASSOCIATED WITH PLHIV

This section throws light on family members' stigma and discrimination associated with PLHIV, and on the intervention's impact on stigma and discrimination among family members, as observed between the two rounds of the survey (Table 3.7).

TABLE 3.7: DISCRIMINATION TOWARDS PLHIV

Indicator: Percentage of family members who 'agreed' to the selected discrimination statements

DISCRIMINATION STATEMENTS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
Children with HIV should not go to school	34.8	7.6	***
HIV-positive people should stay away from religious functions	37.7	15.7	**
HIV-positive sex workers should be treated differently than other positive persons	44.9	18.9	***
Disagreed with all three statements (%)	24.9	69.6	***
Mean combined score (mean number of statements on stigma and discrimination rejected by participants)	1.81	2.56	***
[Odds ratio: Disagreed with all three statements] (Ref: Baseline)	8.89 (4.49-17.6)		***
N	154	152	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, sex, education, occupation, household size and monthly household income.

Similar to the findings from the FSWs' baseline and endline responses, family members' responses suggested that between the two rounds of the survey there was considerable reduction in the stigmatized and discriminatory attitude of family members towards PLHIV. For example, though about one-third of family members who participated in the baseline survey felt that HIV-infected children should not go to school and that PLHIV should stay away from religious functions, the same was felt by just eight per cent and 16 per cent of family-member respondents, respectively, at endline. The most significant reduction was observed in the belief that HIV-positive sex workers should be treated differently than other positive persons; compared to 45 per cent of participants at baseline, less than one-fifth (19%) at endline felt that HIV-positive sex workers should be treated differently than other positive persons.

In order to assess the level of stigma and discrimination towards PLHIV among family members, responses were analysed to reveal the percentage of respondents who disagreed with all three

discriminatory assertions. Findings show that more than twice the proportion of participants at endline than at baseline (70% vs. 25%, respectively) rejected all of the discriminatory statements that represent stigma and discrimination towards PLHIV. Results from multivariate analysis also signified that, after adjusting for the effect of selected socio-demographic and household characteristics, participants in the endline were more than eight times more likely [OR (95% CI): 8.89 (4.49-17.6)] to reject all the three statements that demonstrated stigma and discrimination among family members towards HIV-positives. In other words, over the period of time, the intervention activities brought a positive and significant change in the stigmatized and discriminatory attitude of sex workers' family members who participated in the study.

3.7 WILLINGNESS TO MAINTAIN CONFIDENTIALITY ABOUT HIV POSITIVITY

This section describes findings pertaining to changes in the prevalence of respondents who feel that FSWs should not share their HIV-test result with others, and of respondents who believe that FSWs would disclose their HIV-test results with others. At baseline and endline, two questions were asked to elicit respondents' views: i) Do you think that positive sex workers, in general, should not disclose their HIV status to others? and ii) Would sex workers in your community disclose their test results with others? In addition to these questions, respondents were asked why FSWs in their community would not share their test result with others if the test result is positive.

Results shown in Table 3.8 suggest that, although there has not been significant change in prevalence of the view that HIV-positives should not share their HIV status with others, a significantly higher proportion of participants at endline believed that sex workers in their community would disclose their HIV status. Compared to 36 per cent of family members in the baseline, 54 per cent in the endline were confident that FSWs in their community would reveal their HIV status to others. Similar findings were also observed in the multivariate analysis. Family members in the endline, compared to baseline, were more than two times more likely to believe that FSWs in their community would disclose their HIV-test results with others [OR (95% CI): 2.26 (1.26-4.05)].

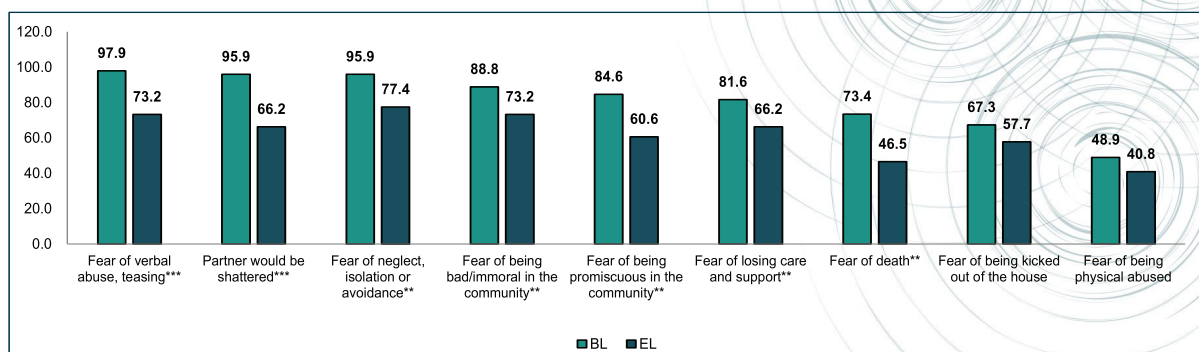
TABLE 3.8: FEAR ASSOCIATED WITH DISCLOSING HIV STATUS

PERCENTAGE OF FAMILY MEMBERS PERCEIVED THAT	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
Positive sex workers should not share their HIV status with others	36.5	33.4	NS
[Odds ratio: Family member felt that HIV status should not be shared] (Ref: Baseline)	0.84 (0.46-1.52)		NS
Sex worker in their community would share test results with others	35.5	53.7	**
[Odds ratio: Family members in community would share her HIV status with others] (Ref: Baseline)	2.26 (1.26-4.05)		**
N	154	152	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, sex, education, occupation, household size and monthly income.

Figure 3.2 presents the reasons provided by family members at baseline and endline to explain why they believed that FSWs in their community would not share their HIV-test results with others. Whereas a few reasons were reported by nearly similar proportions of family members in the endline and in the baseline, the majority of the reasons were much less common at endline than at baseline.

Figure 3.2: Percentage of family members by the reasons why FSWs in their community would not disclose the HIV-test results with others, baseline and endline survey



Note: Differences between baseline and endline is significant at * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

3.8 STIGMA AND DISCRIMINATION WITNESSED BY FAMILY MEMBERS

This section presents respondents' reported knowledge of FSWs who have faced stigma and discrimination in general (Table 3.9) and at healthcare facilities (Table 3.10) due to their HIV status. The baseline and endline surveys asked respondents whether they had witnessed any FSW facing stigma and discrimination due to their HIV status in the 12 months preceding the survey. Specific questions were asked to differentiate the stigmatized acts done by agents such as family members, friends, relatives, neighbors, other members of the community, or the healthcare providers. These questions were similar to the questions asked to FSWs regarding witnessed acts of stigma.

The endline survey observed a significant reduction in family members' reports of stigma and discrimination against FSWs. More than 80 per cent of baseline respondents reported that they witnessed at least one FSW in the 12 months preceding the survey experiencing stigma by family members, but just 21 per cent of endline respondents witnessed any such act during the preceding 12 months ($p < 0.001$). As compared to about one-tenth or less of the family members interviewed in the endline survey, more than 40 per cent of respondents at the baseline knew an FSW who had been isolated in the household (67%), less frequently visited by family or friends (58%), thrown out of the house by their family (44%), rejected by their peers (39%), and excluded from a social gathering (19%).

The endline survey also recorded a significant decline in the percentage of family members knowing an FSW who experienced stigma and discrimination at the larger community level in the 12 months preceding the survey (89% vs. 68% respectively in baseline and endline). A significantly lower proportion of participants at the endline as compared to baseline reported that in the last 12 months they had witnessed FSWs who were gossiped about (54% vs. 75%), teased or sworn at (51% vs. 67%), abandoned by her spouse or partner (14% vs. 60%), neglected by family (28% vs. 58%), verbally abused (34% vs. 58%), or disrespected by family or community (32% vs. 57%). Other acts of stigma against sex workers—such as loss of property (3% vs. 30%), abandonment by family member or relatives (10% vs. 38%), or physical abuse (8% vs. 30%)—were also witnessed by much smaller proportions of respondents at endline than at baseline. All these differences were statistically significant.

TABLE 3.9: STIGMA WITNESSED BY FAMILY MEMBERS IN PAST 12 MONTHS

Indicator: Percentage of family members reported witnessing different acts of stigma with a FSW in last 12 months

RESPONDENT WITNESSED FOLLOWING HAPPENING WITH A FSW IN LAST 12 MONTHS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
A. ISOLATION FROM FAMILY/FRIENDS	83.6	21.1	***
Excluded from a social gathering	18.9	2.3	***
No longer or less frequently visited by family and friends	58.4	12.9	***
Isolated within the household	67.4	11.8	***
Faced eviction from their homes by their families	44.2	5.7	***
Faced rejection from their peers	39.0	2.8	***
B. EXPERIENCE OF STIGMA AND DISCRIMINATION AT DIFFERENT LEVELS	89.3	68.4	**
Had property taken away	30.2	3.3	***
Abandoned by spouse/partner	59.9	14.0	***
Abandoned by family/relatives	38.4	9.9	***
Teased or sworn at	66.8	50.7	**
Lost respect/standing within the family and/or community	56.9	31.7	**
Gossiped about	74.5	53.8	**
Faced neglect from their family	58.0	28.2	***
Faced physical abuse	29.8	7.5	***
Faced verbal abuse	57.8	34.4	**
[Odds ratio: Participants witnessed an FSW isolated herself from family/friends in last 12 months] (Ref: Baseline)	0.07(0.03-0.15)		***
[Odds ratio: Participants witnessed an FSW who experienced stigma and discrimination at different places in last 12 months] (Ref: Baseline)	0.38 (0.18-0.81)		**
N	154	152	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant
Percentages are adjusted to BL/EL differences in age, sex, education, occupation, household size and monthly household income.

Results of multivariate analysis also suggested that, after adjusting for baseline and endline differences in respondents' socio-demographic and household characteristics, family members were less likely to witness any act of stigma done to FSWs in the 12 months preceding the endline survey.

Similar to the reduction in stigma at the family, friend and community level, the family members also reported fewer incidents of stigma happening to PFSWs at the healthcare facility from baseline to endline survey. While 80 per cent of family members during the baseline witnessed stigma happening to a positive sex worker at a healthcare facility in the 12 months preceding the survey, the same was observed by about half of the participants in the endline.

TABLE 3.10: STIGMA WITNESSED BY FAMILY MEMBERS AT HEALTH FACILITY IN PAST 12 MONTHS

Indicator: Percentage of family members reported witnessing different acts of stigma with a FSW at health facilities in last 12 months			
RESPONDENT WITNESSED STIGMATIZED ACT HAPPENING TO AN FSW AT HEALTH FACILITY IN LAST 12 MONTHS	ADJUSTED (%)		
	BL	EL	SIGNIFICANCE
Health provider refused to attend her	50.7	11.7	***
Discharged her too early	50.7	10.8	***
Making her wait longer to attend	57.6	22.8	***
Unnecessarily referred to another health provider in the same facility or referred to another facility	41.7	23.0	**
Denied treatment, surgery or relevant tests/investigations	35.2	19.7	**
Tested for HIV without her informed consent	27.1	2.5	***
Disclosed HIV status to her family without her consent	30.7	1.5	***
Health provider used derogatory language or scolded or blame	44.1	17.5	***
Bed pans or bed clothes were not changed as needed/as often compared to other patients	50.4	6.0	***
Given less care/attention than other patients	63.6	23.3	***
Witnessed any act of stigma to an FSW at health facility in last 12 months (%)	80.4	49.3	***
[Odds ratio: Respondent witnessed any act of stigma to an FSW at health facility in last 12 months] (Ref: Baseline)	0.28 (0.14-0.54)		***
N	154	152	

Note: Differences between baseline and endline is significant at *p<0.10; **p<0.05; ***p<0.01; NS: Not Significant

Findings show that, as compared to more than 50 per cent of respondents at baseline, less than 25 per cent at endline reported that they were aware of a positive sex worker who has been given less care than other patients, made to wait longer (both 23%), discharged prematurely (11%) or declined attention by a healthcare provider (12%) due to their HIV status. At endline, very few participants had witnessed a positive sex worker tested for HIV without her consent (3%), a PFSW's HIV status disclosed to family members without her consent (2%), or a PFSW's bed pans or bed clothes not changed as per need compared to other patients (6%).

Multivariate analysis found that, after adjusting for socio-demographic and household characteristics of the respondents, family members in the endline survey were significantly less likely to have witnessed a positive sex worker experience stigma and discrimination at a healthcare facility during the 12 months prior to the survey [OR (95% CI): 0.28 (0.14-0.54)].



Summary and discussion

4.1 BACKGROUND

This chapter summarizes the key findings of baseline and endline surveys that were carried out among female sex workers and their selected family members as part of an intervention to reduce stigma and discrimination against HIV-positive sex workers. The intervention was implemented in two northern districts of Karnataka, namely, Belgaum and Bagalkot. Findings from this study were mostly positive, showing a significant reduction of stigma and discrimination towards positive sex workers at various levels (i.e., within the family, within the neighbourhood and within the community as a whole).

4.2 SUMMARY

HIV-related stigma and discrimination continue to hamper efforts to prevent new infections and to engage people in HIV treatment, care and support programmes. Identification of scalable interventions to reduce stigma and discrimination is crucial to the success of the global AIDS response. As elsewhere, HIV stigma and discrimination remain a major issue affecting HIV-positive people in northern districts of Karnataka. A two-year project was implemented to address HIV stigma and discrimination within communities with multi-layered activities: (1) individual counselling for FSWs on stigma and discrimination and intensive individual counselling with positive female sex workers and their families; (2) group sessions on stigma with sex workers in general, with a particular focus on positive sex workers; (3) group advocacy meetings with family members on types of stigma and stigma's consequences; and (4) special events at drop-in centers for FSWs on approaches to reduce stigma and discrimination. This study evaluates the effect of the intervention's activities on HIV-related stigma and discrimination towards HIV-positive sex workers.

A repeated cross-sectional survey design was developed to measure changes in prevailing stigma and discrimination among FSWs towards positive sex workers, and in HIV knowledge and HIV-related stigma domains among family members exposed to the project. Cross-sectional surveys were implemented at baseline (respondent n=240) and endline (respondent n=238). T-tests were employed to assess changes on three stigma domains: fear of HIV infection through day-to-day interaction, shame associated with having HIV and blame towards people living with HIV, and fear associated with disclosure of HIV status. Baseline measures were re-measured at endline, and each measure was regressed on demographic characteristics, HIV knowledge and exposure to intervention activities.

The female sex workers who participated in the baseline and endline surveys were similar in most characteristics; however, they differed in some socio-demographic characteristics, such as age and literacy status. Baseline and endline respondents also differed in some of their sex work characteristics, primarily in terms of their place of solicitation, age at initiation of sex work, and duration of sex work.

Findings showed a significant improvement from baseline to endline in HIV testing. Progress was also apparent with respect to FSWs' view of consistent condom use; half of FSW respondents at endline (versus 63% at baseline) felt that consistent condom use with cohabiting or regular partners may not always be feasible.

Overall, about 60 per cent of the FSWs were exposed to at least one stigma-reduction-related activity of three activities designed for them. While a majority of the FSWs participated in group sessions, about 60 per cent of the FSWs received individual counselling on stigma reduction. About

half of the FSWs also attended events organised at DICs, focusing on stigma- and discrimination-reduction activities.

After adjusting for differences observed in socio-demographic and sex-work-related characteristics, and in exposure to different stigma-reduction activities, FSWs who participated in the endline had less HIV-related stigma and fear than baseline participants. As evident from the findings, disapproval of isolation of PLHIV and willingness to care for, reside with, share or eat food with an HIV-infected relative or friend, or share a bed with a positive partner, were more prevalent among FSWs at endline than at baseline.

Findings also suggested a reduction in shame and blame attached to acquiring and living with HIV. Most FSWs at endline believed that PLHIV and their families should not feel ashamed. Compared to endline, a larger proportion of FSWs at baseline viewed promiscuous men as the vectors of the disease, believed HIV/AIDS to be a social evil, and blamed PLHIV for bringing the infection into the community.

At baseline, the majority of FSWs were reluctant to disclose HIV status due to stigma, shame, and blame, and the majority of them preferred to keep the HIV-positive status of a family member secret. However, this was not the case with the participants in the endline. As compared to 42 per cent of the FSWs in baseline, 74 per cent at endline expressed that they would share their HIV-test results with others ($p < 0.001$). Though these findings indicate a positive impact of the intervention on stigma related to HIV disclosure, considerable work must be done to reduce perceived stigma among FSWs around the issue of disclosure of HIV status. Findings also revealed that even in the endline many participants believed that fears of blame of the extended family, of verbal abuse and teasing about HIV status, and of the positive family member being neglected, isolated, and avoided were possible reasons why they would keep a family member's HIV infection secret. Physical abuse of family members, children being unable to attend school, and family members being disallowed to work or visit religious and public places were reasons that FSWs would not disclose a family member's HIV-status to others. Loss of clients, loss of respect within the community, fear of discrimination, and gossip were cited as the other most common reasons that discouraged FSWs from disclosing their HIV status.

Information was also obtained from FSWs about incidents they had witnessed of FSWs being subjected to stigma and discrimination in the 12 months preceding the survey. Respondents were asked which type of stigmatized action they had witnessed. Many of the respondents had witnessed HIV-positive FSWs being subjected to gossip, teased or cursed, or verbally abused. Respondents also knew FSWs who had lost clients or their job. HIV-positive FSWs were reportedly abandoned by their spouse or partners, and isolated and neglected by their family. Their family and friends visited less often, subjected them to physical abuse, and threw them out of their homes. Though a considerable proportion of FSWs in the endline survey reported this happening to other FSWs in the 12 months preceding the survey, the volume of such reports was significantly lower than the baseline. This indicates a reduction in stigma and discrimination at various levels.

HIV-related stigma was also found to be prevalent in healthcare settings. Positive sex workers were given less care or attention, made to wait longer, unnecessarily referred to another healthcare provider, and denied treatment. Healthcare providers used derogatory language, scolded and blamed them, and provided unequal care. Respondents knew cases of positive FSWs being discharged too early, being denied care, and having had their positive status disclosed to their family without their consent. Though there was substantial reduction of such reports from baseline

to endline, about 64 per cent of endline respondents (compared to 92 per cent at baseline) had witnessed an HIV-positive FSW encounter stigma and discrimination at a health facility.

Immediate family members of FSWs were also interviewed in both rounds of the survey. The purpose of the interviews was to assess the extent to which the group meeting conducted with family members brought changes in their perceived stigma and discrimination towards HIV-positives. A total of 256 family members (154 in baseline and 152 in endline) were interviewed across two rounds of the survey, with the majority of them being female. Family members who took part in both rounds of the survey had similar socio-demographic characteristics, except that family members in the endline survey were somewhat younger, had a slightly different occupational pattern, were residing with relatively more people, and had higher family income than those who participated in the baseline.

The family members exhibited considerable knowledge about modes of HIV transmission. Most of the participants in the two rounds of the survey identified all potential routes of transmission, with over 95 per cent at baseline and at least 88 per cent at endline recognizing unprotected sex, contaminated syringes/needles, and blood transfusions as modes of transmission. There was a significant reduction in the prevalence of misconceptions around routes of transmission, such as HIV can be transmitted through mosquito bites and by sharing food with an infected person. The proportion of participants who had correct comprehensive knowledge about HIV—defined as awareness that HIV can be transmitted through unprotected sex, by sharing infected syringes/needles, and by infected blood transfusion; and that it cannot be transmitted through mosquito bites or by sharing food with an infected person—more than doubled from baseline to endline. Moreover, about half of the participants in the endline, compared to about 12 per cent in the baseline, rejected the misconceptions that HIV can be transmitted through kisses, handshakes, hugs, utensils, toilets, sweat, or saliva. However, at endline a significant proportion (23%) still wrongly acknowledged kissing as one of the modes of transmission, indicating the need for further awareness.

As with the FSWs, among the family members there was a significant reduction in the fears associated with HIV infection. This was evident from the decrease between baseline and endline in the proportions of family members who believed that PLHIV should be isolated, who would not care for an HIV-positive relative, and who objected to sharing food or shelter with positive infected friend or relative. However, about half of the family members in the endline still opposed sharing a bed with a positive partner.

There has been a significant change in the views of family members related to shame and blame associated with HIV-infected persons. After adjusting for differences between the baseline and endline background characteristics of the participants, significantly lower proportions of family members in the endline believed that they would be ashamed if a family member had HIV, and that families of PLHIV and PLHIV themselves should be ashamed of the infection. Also, significantly lower proportions of respondents in the endline survey believed that only female sex workers spread HIV in the community and that PLHIV should be blamed for bringing the infection into the community.

Significant reductions were also observed in stigma and discrimination associated with PLHIV among the family members. At endline, a significantly higher proportion of family members disagreed with all three statements that indicated stigmatizing and discriminatory attitudes towards PLHIV. Compared to about one-fourth of participants in the baseline, about 70 per cent

in the endline rejected all three assertions that children with HIV should not go to school, that HIV-positives should stay away from religious functions, and that positive sex workers should be treated differently than other positive persons.

Intervention also brought changes in family members' perceptions of sex workers' willingness to disclose their HIV-status in the community. Compared to 36 of per cent family members in the baseline, about 54 per cent in the endline believed that a sex worker in their community would share her HIV-test result with others. However, they were not sure about other sex workers in general (i.e., those outside their community). Almost one-third of participants in both the rounds indicated that positive sex workers should not share her HIV status with others. The main fears cited as reasons for maintaining secrecy included fear of verbal abuse and teasing; fear of neglect, isolation, and avoidance; fear of negative impact on family members' ability to continue work or attend school; fear of repercussions on their access to care and treatment; fear of blame; and fear of being denied entry into public places. Fear of death and of being thrown out of the house were also cited as strong reasons for secrecy around an FSW's positivity. To a lesser extent, respondents also stated that FSWs feared physical abuse if their HIV status were disclosed.

Though the project brought a significant change in respondents' attitudes around shame, blame and stigma around HIV-positives, the same was not evident at the larger community level. A high proportion of family members at the endline said that they knew FSWs who had experienced stigma because of HIV or AIDS. The forms of stigma included having been gossiped about, teased or cursed, verbally abused or disrespected within the family or community. On the other hand, there has been a significant reduction in the reporting of stigma happening at the friend or family level. Smaller proportions of participants at endline than at baseline had witnessed positive sex workers being excluded from social gatherings, being evicted from homes or rejected by their peers; or being isolated, neglected, visited less frequently, or no longer visited at all by family and friends.

Fewer respondents reported stigma happening to positive sex workers at a health facility at the endline than at baseline. However, almost one-fourth of respondents witnessed a PLHIV being unnecessarily referred to another healthcare provider within the same or different facility, being made to wait longer to meet a caregiver, or being given less care or attention than other patients.

4.3 DISCUSSION

The results of this study demonstrate that FSWs' and family members' participation in and exposure to project activities were associated with declines in fear of HIV infection and in social stigmas attached to PLHIV. While incremental changes in the outcome could not be measured for each additional exposure due to the fact that similar proportions of FSWs were exposed to the intervention activities, three interventions were identified as necessary for addressing fear of HIV infection and social stigmas in the districts selected for the study. Interventions such as group and intensive individual counselling, and stigma-reduction events that provided information about stigmatizing actions and behaviours, information about the consequences of stigma experienced by a person living with HIV, resources for treatment and care, and methods to prevent transmission, among other information, seem to be effective. The intervention imparted this information through various modes, including counselling sessions that created opportunities for community members to receive answers to questions and alleviate doubts, personal interactions with PLHIV during intensive counselling, and hosted events that engaged the community in fun

activities, including role-plays that addressed risks and vulnerability issues pertaining to HIV/AIDS. As documented elsewhere and revealed in this study, the intervention offered individuals several opportunities to be exposed to HIV stigma-reduction exercises. This approach resulted in reduced fear of HIV transmission and fewer stigmatizing attitudes.

Findings clearly demonstrated that although family members had considerable knowledge about the modes of HIV transmission, and although there was significant reduction of certain misconceptions, there is still much work to be done to improve their knowledge about HIV/AIDS. Roughly one in four individuals in the endline sample did not know that HIV cannot be transmitted through skin contact such as kissing, and roughly one in five individuals did not know that HIV cannot be transmitted through saliva or by sharing eating utensils. Increasing knowledge about correct modes of HIV transmission appears to be an initial stage of addressing fear of HIV transmission and stigmatizing attitudes. The links between the increase in HIV knowledge and decrease in fear, and increase in HIV knowledge and decrease in negative attitudes, have been demonstrated in previous studies.^{33,34,35,36} Once individuals possess correct information about how HIV can and cannot be transmitted, fears of HIV infection in daily interactions with PLHIV tend to diminish.

Perceived stigma prevented PSWs from seeking treatment and other psycho-social support such as counselling, and from seeking support from family and friends, because they feared that the disclosure of their HIV status would result in a loss of status for them and their family, and in desertion by lovers and partners. Perceived stigma also prevented PLHIV from seeking treatment from public hospitals, and caused them to isolate themselves from family and friends.³⁷

Similar to previous studies,^{38, 39} this study found that HIV-positive FSWs encountered stigma at healthcare facilities. Experience of stigma in a healthcare setting can also discourage sex workers from accessing regular HIV testing and subsequent referral to care. HIV-positive sex workers may not disclose their status to a care provider or may delay going to a care provider because of experienced stigma. Experiences of stigma and discrimination related to HIV may also decrease

³³ See note 13.

³⁴ Jain A et al. Community-based interventions that work to reduce HIV stigma and discrimination: results of an evaluation study in Thailand. *Journal of the International AIDS Society* 2013, 16(Suppl 2):18711

³⁵ Boer H, Emons P. Accurate and inaccurate HIV transmission beliefs, stigmatizing and HIV protection motivation in northern Thailand. *AIDS Care*. 2004;16(2):167–76.

³⁶ Lifson A, Demissie W, Tadesse A, Ketema K, May R, Yakob B, et al. HIV/AIDS stigma-associated attitudes in a rural Ethiopian community: characteristics, correlation with HIV knowledge and other factors, and implications for community intervention. *BMC Int Health Hum Right*. 2012;12(1):6.

³⁷ Pillai P, Bhattacharjee P, Raghavendra T. 2012. Understanding stigma together: Workshop with sex workers on HIV-related stigma and discrimination. Bangalore: Karnataka Health Promotion Trust.
http://strive.lshtm.ac.uk/system/files/attachments/Understanding%20Stigma%20Together_0.pdf

³⁸ Reidpath DD, Chan KY. HIV discrimination: integrating the results from a six-country situational analysis in the Asia Pacific. *AIDS Care*. 2005;17(Suppl 2):S195–204.

³⁹ Thanh DC, Moland KM, Fylkesnes K. Persisting stigma reduces the utilization of HIV-related care and support services in Viet Nam. *BMC Health Serv Res*. 2012;25(12):428.

the motivation of HIV-positive people to stay healthy. A study among HIV-positive men and women found that those who had experienced stigma were more likely to miss HIV clinic appointments and lapse adherence to their medication.⁴⁰ Fear of stigma can also impede prevention. A study conducted among HIV-positive sex workers in Northern Karnataka found that only 12 per cent of them reported consistent condoms use with their husband/cohabiting partner when their HIV status is not known to their partners.⁴¹

4.4 CONCLUSIONS

Given the necessity of reducing HIV-related stigma and discrimination for achieving an AIDS-free generation, this report presents the effects of an intensive stigma-reduction intervention implemented for female sex workers and their families in two northern districts of Karnataka. The purpose of this study was to determine changes in HIV knowledge and negative attitudes towards PLHIV among FSWs and their families exposed to the stigma-reduction intervention implemented by KHPT in collaboration with its consortium partner, the ICRW.

The results of this study suggest that programmes that focus on HIV-related stigma reduction need to address the issue in multiple ways. Intervening at various levels—individual and family level through counselling sessions and focused events—increased knowledge and changed attitudes associated with fear of HIV and shame. Programmes also need to address multiple domains of stigma—knowledge, fear, shame and blame—simultaneously, recognizing the fact that shame and blame are harder prejudices to reduce. Since social stigma tends to be deeply rooted in the society, a longer intervention period may be needed to bring enduring change.

The findings of this study offer evidence that providing information and correcting misconceptions about HIV transmission can reduce stigma to a large extent. For sex workers, keeping them involved in the prevention and care programmes and providing space for them to meet in groups and support each other can also be constructive programmatic strategies for eliminating stigma and discrimination towards people living with HIV/AIDS. This study's findings also highlight the need for specific approaches to reduce stigma and discrimination in the healthcare setting.

There are a few limitations to consider while interpreting this study's results. First, no control communities were included in the original design of the study. Therefore, it is not possible to conclude that the interventions are entirely responsible for the observed changes in HIV-related stigma. However, efforts were made to adjust for the potentially confounding differences in the characteristics of the respondents across two time periods, including their exposure to other HIV messaging that might have coincided with the intervention activities. Second, the analysis does not reflect the level of participation in interventions or intensity of exposure. Finally, the results may also have been affected by social desirability bias, given that this topic is highly sensitive. These findings could under-represent the actual levels of fear and shame if respondents were unwilling to express stigmatizing attitudes in one-on-one interviews.

⁴⁰ Kang E, Rapkin BD, Remien RH, et al., Multiple dimensions of HIV stigma and psychological distress among Asians and Pacific Islanders living with HIV illness. *AIDS Behav.* 2005; 9(2):145-54.

⁴¹ Jadhav A, Bhattacharjee P, Raghavendra T, et al., Risky behaviours among HIV positive female sex workers in Northern Karnataka, India. *AIDS Research and Treatment.* 2013; 2013, Article ID 878151. <http://dx.doi.org/10.1155/2013/878151>

ANNEXURE1: Female sex workers (Suppliment tables)

Table A2.1: Percentage of FSWs who disclosed their sex work profession to others, baseline and endline survey

INDICATORS	BL	EL	SIGNIFICANCE
FSWs who disclosed their sex work profession to others (%)	35.8	79.8	***
N	240	238	
Persons to whom disclosed their sex work profession¹			
Husband	0.0	0.5	NS
Lover	8.1	13.2	NS
Parents	30.2	25.8	NS
Children	2.3	3.2	NS
Other Family Members	24.4	17.9	NS
Neighbours	14.0	17.4	NS
Friends	82.6	67.9	**
Permanent Partner	3.5	3.2	NS
Others (majority of others referred to here are project or TI staff)	1.2	25.8	***
N	86	190	

¹Among those who disclosed their sex work profession

Table A2.2: Percentage of FSWs who disclosed their sex work profession to others by selected background characteristics

INDICATORS	BL		EL	
	%	N	%	N
Age group of respondent				
<25	34.8	23	87.5	24
25-29	32.1	53	77.9	77
30-34	31.6	57	75.0	56
35-39	44.0	75	83.0	47
40+	26.7	30	82.4	34
Can read and write				
No	34.5	197	79.4	170
Yes	41.9	43	80.9	68
Current marital status				
Never Married	51.7	120	84.4	122
Currently Married	17.1	70	68.6	51
Deserted/Separated/Divorced/Widow	24.0	50	79.7	64
Caste or tribe				
SC/ST	40.3	181	82.8	186
Others	22.0	59	71.7	46
Respondent belong Devadasi				
No	17.0	112	73.9	115
Yes	51.6	122	85.2	122
Currently cohabiting with a male partner				
No	53.2	62	75.7	74
Yes	29.9	177	81.7	164
Any source of income other than sex work				
No	42.7	82	83.8	74
Yes	32.3	158	78.0	164
Place of solicitation				
Home/Rented Room	43.5	124	84.0	125
Public Places	26.7	75	75.9	79
Others	29.3	41	73.5	34
Age at start of sex work				
<18 years	47.1	102	89.9	79
18-24 years	29.7	101	75.3	97
25+ years	17.6	34	74.2	62
Duration in sex work				
<5 years	33.3	24	72.1	43
5-9 years	26.3	57	79.2	77
10+ years	38.3	154	83.1	118
Clients per day				
One client	21.4	70	63.2	68
Two clients	25.3	83	88.6	79
3+ clients	58.1	86	85.2	81
Client volume per week				
<5 clients	13.6	22	65.7	67
5-9 clients	23.9	109	87.5	88
10+ clients	52.8	108	82.9	82
Total	35.8	240	79.8	238

Table A2.3: Percentage of FSWs who disclosed their sex work profession to others by exposure to intervention

INDICATORS	BL		EL	
	%	N	%	N
Duration since first time contacted by NGO/TI Staff				
<3 years	12.5	24	72.2	36
3-5 years	31.6	98	72.8	92
>5 years	42.6	115	89.0	109
Number of times contact by PE/ORW in past one month				
Not contacted	33.9	59	82.4	17
1-2 times	28.3	99	75.8	132
3 or more times	46.2	78	86.2	87
Number of times contact by PE/ORW in past six months				
<3 times	56.5	23	83.3	12
3-5 times	53.6	69	75.0	40
>5 times	23.6	144	80.4	179
Number of times visited DIC in past six months				
Not visited	31.3	48	75.7	70
1 time	45.8	24	76.2	21
2 times	35.1	37	81.3	32
3 times	25.6	39	79.5	39
4+ times	30.9	68	84.2	76
Duration since member of a collective				
<3 years	40.0	30	80.0	40
3-5 years	38.9	72	76.5	85
>5 years	36.4	77	88.7	71
Not a member	29.5	61	71.4	42
Exposure to stigma-reduction programme in the past six months				
Attended individual counselling on stigma & discrimination				
No	34.1	205	76.6	94
Yes	45.7	35	81.9	144
Attended group sessions on stigma & discrimination				
No	35.3	238	70.0	90
Yes	(100.0)	2	85.8	148
Attended meetings on stigma & discrimination				
No	35.8	226	68.1	94
Yes	(35.7)	14	87.5	144
Attended DIC events on stigma & discrimination				
No	35.9	231	77.8	117
Yes	(33.3)	9	81.8	121
N	35.8	240	79.8	238
Percentages in parenthesis are based on less than 25 cases.				

Table A2.4: Perception of sex work and HIV related stigma by selected background characteristics

	N		Sex work and HIV						Sex work and HIV Stigma								
			All sex workers are prone to HIV		Women can't use condom consistently		Women with multiple partners always get HIV		Positive women should not do sex work		Sex work is immoral		I should inform everybody if I know any positive		I feel ashamed to be a sex worker		
			BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	
Age																	
<25	23	24	87.0	70.8	52.2	45.8	91.3	62.5	52.2	41.7	34.8	45.8	34.8	50.0	30.4	20.8	
25-29	53	77	79.2	50.6	62.3	45.5	86.8	48.1	50.9	48.1	49.1	55.8	43.4	29.9	60.4	29.9	
30-34	57	56	87.7	58.9	71.9	48.2	91.2	57.1	50.9	35.7	59.6	35.7	54.4	33.9	59.6	26.8	
35-39	75	47	89.3	68.1	60.0	59.6	92.0	70.2	61.3	59.6	54.7	57.4	66.7	34.0	46.7	36.2	
40+	30	34	76.7	64.7	63.3	44.1	86.7	64.7	63.3	44.1	53.3	73.5	56.7	38.2	46.7	29.4	
Can read and write																	
No	197	170	84.3	57.6	64.5	47.6	90.4	54.1	54.3	48.8	52.3	53.5	54.3	36.5	52.8	29.4	
Yes	43	68	86.0	66.2	58.1	51.5	88.4	69.1	60.5	39.7	51.2	51.5	51.2	30.9	44.2	29.4	
Marital Status																	
Never Married	120	122	90.8	57.4	58.3	41.8	92.5	50.8	44.2	46.7	46.7	50.8	47.5	38.5	35.0	21.3	
Currently Married	70	51	77.1	64.7	65.7	68.6	88.6	74.5	64.3	54.9	54.3	51.0	51.4	31.4	65.7	41.2	
Deserted/Separated/Divorced/ Widow	50	64	80.0	60.9	72.0	45.3	86.0	59.4	70.0	37.5	62.0	57.8	72.0	31.3	70.0	34.4	
Cohabiting status																	
No	62	74	87.1	60.8	38.7	41.9	95.2	59.5	41.9	47.3	51.6	52.7	45.2	43.2	30.6	35.1	
Yes	177	164	83.6	59.8	71.8	51.8	88.1	57.9	60.5	45.7	52.0	53.0	57.1	31.1	58.2	26.8	
Place of Solicitation																	
Home/Rented Room	124	125	88.7	59.2	56.5	50.4	90.3	51.2	41.9	45.6	41.9	58.4	47.6	39.2	32.3	26.4	
Public Places	75	79	78.7	64.6	65.3	48.1	88.0	70.9	72.0	48.1	62.7	51.9	57.3	31.6	83.3	38.0	
Others	41	34	82.9	52.9	80.5	44.1	92.7	55.9	65.9	44.1	63.4	35.3	65.9	26.5	66.7	20.6	
Weekly client volume																	
<5 clients	22	67	68.2	68.7	59.1	49.3	86.4	61.2	77.3	58.2	36.4	65.7	59.1	31.3	63.6	35.8	
5-9 clients	109	88	86.2	53.4	74.3	46.6	89.9	61.4	58.7	44.3	60.6	48.9	55.0	35.2	65.1	33.0	
10+ clients	108	82	87.0	61.0	53.7	50.0	90.7	52.4	47.2	39.0	46.3	46.3	50.9	36.6	34.3	20.7	
Duration in sex work																	
<5 years	24	43	75.0	51.2	66.7	58.1	95.8	65.1	50.0	41.9	50.0	48.8	37.5	23.3	54.2	30.2	
5-9 years	57	77	84.2	61.0	71.9	40.3	89.5	58.4	64.9	50.6	56.1	53.2	56.1	35.1	66.7	28.6	
10+ years	154	118	87.0	62.7	60.4	50.8	89.0	55.9	53.9	44.9	51.9	54.2	56.5	39.0	44.8	29.7	
District																	
Bagalkot	122	121	91.0	57.9	52.5	45.5	91.0	50.4	41.0	47.1	41.8	55.4	49.2	43.8	25.4	23.1	
Belgaum	118	117	78.0	62.4	74.6	52.1	89.0	66.7	70.3	45.3	62.7	50.4	58.5	25.6	78.0	35.9	
Rural-Urban																	
Rural	117	118	83.8	55.1	66.7	48.3	92.3	55.1	56.4	49.2	52.1	55.1	54.7	33.9	52.1	34.7	
Urban	123	120	85.4	65.0	60.2	49.2	87.8	61.7	54.5	43.3	52.0	50.8	52.8	35.8	50.4	24.2	
N	240	238	84.6	60.1	63.3	48.7	90.0	58.4	55.4	46.2	52.1	52.9	53.8	34.9	51.2	29.4	

Table A2.5: Perception of sex work and HIV-related stigma by exposure to intervention

	N	Sex work and HIV						Sex work and HIV Stigma					
		All sex workers are prone to HIV			Women can't use condom consistently			Women with multiple partners always get HIV			Positive women should not do sex work		
		BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Duration of exposure to TI program	<3 years	24	36	75.0	52.8	79.2	44.4	95.8	61.1	62.5	47.2	69.4	36.1
	3-5 years	98	92	85.7	60.9	76.5	43.5	88.8	62.0	66.3	50.0	54.1	53.1
	>5 years	115	109	85.2	61.5	48.7	55.0	89.6	54.1	45.2	42.2	50.5	53.0
Number of times contacted by PE/ORW in past six months	<3 times	23	12	95.7	50.0	26.1	41.7	100.0	66.7	47.8	50.0	52.2	65.2
	3-5 times	69	40	88.4	67.5	50.7	47.5	85.5	70.0	43.5	52.5	40.6	50.7
	>5 times	144	179	81.3	58.7	76.4	50.3	91.7	54.7	63.2	45.3	58.3	53.5
Number of times visited DIC in past six months	Not visited	48	70	91.7	54.3	83.3	41.4	97.9	58.6	45.8	57.1	45.8	45.8
	1 time	24	21	83.3	71.4	66.7	52.4	100.0	42.9	33.3	57.1	50.0	54.2
	2 times	37	32	86.5	43.8	59.5	43.8	91.9	43.8	62.2	50.0	56.8	62.2
Member of a FSW collective	3 times	39	39	89.7	69.2	46.2	59.0	92.3	71.8	61.5	41.0	56.4	66.7
	4+ times	68	76	77.9	64.5	72.1	51.3	82.4	61.8	66.2	34.2	57.4	45.6
Exposure to stigma-reduction programme in past six months	Not visited	65	54	84.6	68.5	75.4	51.9	93.8	72.2	61.5	46.3	53.8	55.4
	1 time	175	184	84.6	57.6	58.9	47.8	88.6	54.3	53.1	46.2	51.4	53.1
	2 times												
Attended individual counselling on stigma & discrimination	Not visited	205	94	86.3	51.1	60.5	41.5	88.8	60.6	54.1	52.1	49.8	55.1
	1 time	35	144	74.3	66.0	80.0	53.5	97.1	56.9	62.9	42.4	65.7	45.7
	2 times												
Attended group sessions on stigma & discrimination	Not visited	238	90	84.5	63.3	63.0	47.8	89.9	65.6	55.5	51.1	52.1	54.2
	1 time	2	148	(100.0)	58.1	(100.0)	49.3	(100.0)	54.1	(50.0)	43.2	(50.0)	(0.0)
	2 times												
Attended meetings on stigma & discrimination	Not visited	226	94	85.4	62.8	64.2	40.4	89.8	63.8	54.4	43.6	53.1	53.1
	1 time	14	144	(71.4)	58.3	(50.0)	54.2	(92.9)	54.9	(71.4)	47.9	(35.7)	(64.3)
	2 times												
Attended DIC events on stigma & discrimination	Not visited	231	117	84.4	61.5	63.2	44.4	89.6	59.0	55.0	53.8	52.4	53.7
	1 time	9	121	(88.9)	58.7	(66.7)	52.9	(100.0)	57.9	(66.7)	38.8	(44.4)	(55.6)
	2 times												
Total		240	238	84.6	60.1	63.3	48.7	90.0	58.4	55.4	46.2	52.1	53.8

Percentages in parenthesis are based on less than 25 cases.

Table A.2.6: Fear and social isolation associated with HIV infection among FSWs by selected background characteristics

	N		People who have HIV should be isolated		Children with HIV should not go to school		Children with HIV should not play with others		Willingness to care in own household if a relative becomes sick with HIV		No food sharing with HIV positive friend/family member		No stay together with HIV positive friend/family member		No bed sharing with HIV positive partner		HIV positive should stay away from religious function		HIV positive sex workers should be treated differently than other HIV positive persons	
	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Age	23	24	69.6	4.2	17.4	0.0	17.4	0.0	78.3	4.2	60.9	4.2	56.5	4.2	73.9	45.8	17.4	0.0	65.2	16.7
	53	77	62.3	15.6	17.0	5.2	24.5	5.2	58.5	15.6	45.3	16.9	40.4	13.0	47.2	34.2	24.5	9.1	43.4	16.9
	57	56	57.9	8.9	15.8	7.1	17.5	12.5	68.4	17.9	50.9	12.5	45.6	16.1	66.7	32.1	40.4	7.1	51.8	14.3
	75	47	66.7	25.5	30.7	12.8	33.3	12.8	66.7	25.5	46.7	10.6	46.7	10.6	65.3	29.8	41.3	12.8	58.1	25.5
	30	34	63.3	11.8	43.3	2.9	50.0	2.9	56.7	26.5	56.7	23.5	48.3	26.5	53.3	41.2	56.7	11.8	43.3	14.7
Can read and write	197	170	66.0	16.5	26.9	6.5	30.5	9.4	69.5	18.2	53.8	15.9	46.2	16.5	60.9	35.5	37.6	8.2	51.8	18.2
	43	68	53.5	8.8	11.6	5.9	16.3	2.9	46.5	19.1	34.9	10.3	46.5	8.8	60.5	33.8	32.6	10.3	53.5	16.2
Marital Status	120	122	52.5	12.3	18.3	4.9	21.7	5.7	71.7	16.4	45.0	13.9	39.2	13.1	58.3	35.2	40.8	6.6	56.7	18.0
	70	51	72.9	17.6	21.4	9.8	30.0	11.8	55.7	23.5	52.9	13.7	53.6	15.7	62.9	37.3	34.3	13.7	47.1	21.6
	50	64	78.0	15.6	42.0	6.3	40.0	7.8	64.0	18.8	60.0	15.6	53.1	15.6	64.0	32.8	30.0	9.4	47.9	14.1
	62	74	46.8	21.6	19.4	10.8	24.2	12.2	58.1	14.9	33.9	14.9	33.9	16.2	56.5	38.4	43.5	13.5	58.1	18.9
Cohabiting status	177	164	69.5	11.0	26.0	4.3	28.8	5.5	67.8	20.1	55.9	14.0	50.3	13.4	62.1	33.5	34.5	6.7	49.7	17.1
	124	125	55.6	13.6	16.9	7.2	20.2	8.8	69.4	18.4	46.0	19.2	35.5	16.8	53.2	39.5	35.5	8.0	54.0	20.0
Place of Solicitation	75	79	69.3	19.0	30.7	6.3	40.0	7.6	56.0	21.5	54.7	10.1	54.8	12.7	66.7	26.6	40.0	11.4	47.9	15.2
	41	34	78.0	5.9	34.1	2.9	29.3	2.9	70.7	11.8	56.1	5.9	63.4	8.8	73.2	38.2	34.1	5.9	53.7	14.7
Weekly client volume	22	67	63.6	17.9	13.6	3.0	9.1	7.5	40.9	16.4	40.9	13.4	45.5	11.9	50.0	35.8	13.6	10.4	40.9	22.4
	109	88	72.5	19.3	30.3	11.4	36.7	10.2	57.8	23.9	52.3	18.2	47.2	18.2	61.5	39.8	33.9	9.1	42.6	15.9
	108	82	54.6	6.1	19.4	3.7	22.2	4.9	77.8	14.6	50.0	11.0	44.9	12.2	62.0	29.6	43.5	7.3	63.6	15.9
Duration in sex work	24	43	70.8	9.3	16.7	2.3	25.0	2.3	70.8	20.9	66.7	14.0	58.3	9.3	58.3	34.9	12.5	7.0	66.7	4.7
	57	77	70.2	16.9	28.1	3.9	29.8	6.5	61.4	10.4	52.6	11.7	51.8	9.1	66.7	33.8	28.1	5.2	41.1	15.6
	154	118	61.0	14.4	24.7	9.3	28.6	10.2	66.9	22.9	47.4	16.1	43.1	19.5	59.7	35.9	44.8	11.9	54.2	23.7
District	122	121	53.3	11.6	15.6	4.1	19.7	5.0	76.2	14.9	47.5	13.2	39.3	11.6	56.6	35.8	43.4	5.8	59.0	18.2
	118	117	74.6	17.1	33.1	8.5	36.4	10.3	54.2	22.2	53.4	15.4	53.4	17.1	65.3	34.2	29.7	12.0	44.8	17.1
Rural-Urban	117	118	69.2	17.8	27.4	5.9	29.1	6.8	62.4	14.4	55.6	11.9	44.4	12.7	60.7	32.2	35.9	5.9	47.0	15.3
	123	120	58.5	10.8	21.1	6.7	26.8	8.3	68.3	22.5	45.5	16.7	47.9	15.8	61.0	37.8	37.4	11.7	57.0	20.0
	240	238	63.8	14.3	24.2	6.3	27.9	7.6	65.4	18.5	50.4	14.3	46.2	14.3	60.8	35.0	36.7	8.8	52.1	17.6

Table A.2.7: Fear and social isolation associated with HIV infection among FSWs by exposure to intervention

	N		People who have HIV should be isolated		Children with HIV should not go to school		Children with HIV should not play with others		Willingness to care in own household if a relative becomes sick with HIV		No food sharing with HIV positive friend/family member		No stay together with HIV positive friend/family member		No bed sharing with HIV positive partner		HIV positive should stay away from religious function		HIV positive sex workers should be treated differently than other HIV positive	
	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Duration of exposure to TI Program																				
<3 years	24	36	70.8	27.8	25.0	8.3	41.7	5.6	58.3	27.8	50.0	13.9	58.3	11.1	62.5	38.9	29.2	13.9	54.2	22.2
3-5 years	98	92	67.3	18.5	29.6	5.4	31.6	7.6	67.3	19.6	53.1	16.3	51.5	20.7	67.3	35.9	34.7	9.8	50.0	19.6
>5 years	115	109	59.1	6.4	19.1	6.4	21.7	8.3	65.2	13.8	47.8	12.8	38.6	10.1	54.8	32.4	39.1	6.4	52.2	14.7
Number of times contact by PE/ORW in past six months																				
<3 times	23	12	47.8	25.0	30.4	8.3	30.4	8.3	78.3	25.0	43.5	25.0	65.2	25.0	73.9	50.0	56.5	8.3	78.3	8.3
3-5 times	69	40	52.2	10.0	13.0	7.5	15.9	10.0	75.4	25.0	42.0	15.0	37.7	20.0	52.2	30.0	50.7	10.0	60.9	30.0
>5 times	144	179	72.2	14.0	28.5	6.1	33.3	7.3	59.0	16.8	55.6	14.0	47.2	11.7	63.2	36.0	25.7	8.4	43.0	15.1
Number of times visited DIC in past six months																				
Not visited	48	70	66.7	21.4	14.6	5.7	20.8	8.6	79.2	20.0	62.5	10.0	33.3	11.4	54.2	37.7	18.8	8.6	37.5	22.9
1 time	24	21	58.3	9.5	20.8	9.5	33.3	4.8	62.5	19.0	50.0	23.8	39.1	23.8	54.2	42.9	37.5	19.0	58.3	23.8
2 times	37	32	70.3	9.4	29.7	3.1	37.8	6.3	62.2	9.4	40.5	12.5	51.4	9.4	70.3	28.1	45.9	3.1	56.8	9.4
3 times	39	39	61.5	15.4	35.9	7.7	28.2	12.8	69.2	20.5	59.0	25.6	69.2	23.1	69.2	38.5	48.7	7.7	64.1	23.1
4+ times	68	76	66.2	10.5	20.6	6.6	26.5	5.3	52.9	19.7	42.6	10.5	40.3	11.8	58.8	31.6	26.5	9.2	43.9	11.8
Member of an FSW collective																				
No	65	54	75.4	22.2	33.8	5.6	38.5	3.7	72.3	20.4	66.2	11.1	62.5	11.1	75.4	48.1	32.3	11.1	69.2	11.1
Yes	175	184	59.4	12.0	20.6	6.5	24.0	8.7	62.9	17.9	44.6	15.2	40.2	15.2	55.4	31.1	38.3	8.2	45.7	19.6
Exposure to stigma-reduction programme in the past six months																				
Attended individual counselling on stigma & discrimination																				
No	205	94	63.4	18.1	23.4	5.3	28.3	7.4	69.3	17.0	52.7	11.7	48.8	10.6	60.5	37.2	38.0	8.5	52.2	9.6
Yes	35	144	65.7	11.8	28.6	6.9	25.7	7.6	42.9	19.4	37.1	16.0	31.4	16.7	62.9	33.6	28.6	9.0	51.4	22.9
Attended group sessions on stigma & discrimination																				
No	238	90	64.3	20.0	24.4	7.8	28.2	7.8	66.0	16.7	50.8	11.1	46.6	13.3	60.9	40.0	37.0	13.3	52.1	10.0
Yes	2	148	0.0	10.8	0.0	5.4	0.0	7.4	0.0	19.6	0.0	16.2	0.0	14.9	50.0	32.0	0.0	6.1	50.0	22.3
Attended meetings on stigma & discrimination																				
No	226	94	65.0	20.2	23.9	8.5	27.9	9.6	67.3	19.1	51.8	9.6	46.9	11.7	62.4	37.2	37.2	12.8	53.6	18.1
Yes	14	144	42.9	10.4	28.6	4.9	28.6	6.3	35.7	18.1	28.6	17.4	35.7	16.0	35.7	33.6	28.6	6.3	28.6	17.4
Attended DIC events on stigma & discrimination																				
No	231	117	63.6	17.1	23.8	6.8	27.7	7.7	66.2	17.1	51.5	12.8	46.3	12.0	60.2	39.7	37.2	9.4	52.4	18.8
Yes	9	121	66.7	11.6	33.3	5.8	33.3	7.4	44.4	19.8	22.2	15.7	44.4	16.5	77.8	30.6	22.2	8.3	44.4	16.5
Total	240	238	63.8	14.3	24.2	6.3	27.9	7.6	65.4	18.5	50.4	14.3	46.2	14.3	60.8	35.0	36.7	8.8	52.1	17.6

Table A.2.8: Shame and blame associated with person infected with HIV among FSWs by selected background characteristics

	N		I would be ashamed if someone in my family had HIV / AIDS		Families with PLHIV should be ashamed		People with HIV/AIDS should be ashamed of themselves		It is the female sex worker who brings HIV in community		HIV/AIDS is a punishment from God		Promiscuous men spread HIV in our community		Men should not be blamed if become promiscuous sexual behavior		PLHA should bear the consequences of their bad behavior		Women should not be blamed if become HIV positive through promiscuous sexual behavior		HIV/AIDS is a social evil		People with HIV/AIDS are to blame for bringing HIV into community		
	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	
Age	<25	23	24	56.5	12.5	60.9	12.5	73.9	20.8	47.8	20.8	73.9	54.2	87.0	87.5	26.1	45.8	91.3	87.5	34.8	50.0	87.0	82.6	69.6	58.3
	25-29	53	77	64.2	23.7	60.4	24.7	75.5	33.8	52.8	27.3	50.9	66.2	92.5	69.7	43.4	44.7	94.3	76.6	49.1	51.9	90.6	72.7	62.3	46.8
	30-34	57	56	73.2	16.1	69.6	17.9	87.5	36.4	58.9	26.8	75.0	63.6	85.7	83.6	48.2	39.3	87.5	82.1	40.0	44.6	85.7	75.0	66.7	37.5
	35-39	75	47	60.0	21.3	69.3	27.7	85.3	48.9	58.7	53.2	69.3	63.8	86.7	74.5	44.0	34.0	90.5	87.2	50.7	40.4	86.3	53.2	77.3	31.9
	40+	30	34	70.0	35.3	70.0	34.4	76.7	38.2	63.3	44.1	90.0	81.8	80.0	67.6	40.0	44.1	86.7	85.3	40.0	41.2	83.3	64.7	70.0	50.0
Can read and write	No	197	170	68.4	20.7	69.4	22.6	83.2	35.5	57.7	31.2	72.3	69.6	87.2	73.8	41.8	41.4	91.3	81.8	42.3	45.9	88.1	65.9	71.6	44.1
	Yes	43	68	48.8	25.0	55.8	26.5	74.4	39.7	51.2	41.2	58.1	57.4	86.0	79.4	44.2	41.2	83.7	83.8	54.8	47.1	81.4	77.6	62.8	41.2
Marital Status	Never married	120	122	54.2	19.0	55.8	20.0	75.0	30.6	40.8	25.4	67.2	68.3	83.3	67.5	32.5	41.0	84.0	77.0	37.5	41.8	81.5	63.1	65.8	52.5
	Currently married	70	51	73.9	39.2	75.4	35.3	87.0	41.2	71.0	47.1	76.8	70.6	89.9	80.4	50.7	40.0	94.2	84.3	45.6	56.9	92.6	76.5	74.3	33.3
	Deserted/separated/ Divorced/ widow	50	64	78.0	14.1	82.0	20.3	90.0	43.8	74.0	40.6	66.0	59.4	92.0	87.5	54.0	43.8	98.0	90.6	60.0	45.3	92.0	74.6	74.0	32.8
Cohabiting status	No	62	74	50.0	20.5	48.4	23.6	72.6	42.5	43.5	32.4	62.9	62.2	82.3	76.4	33.9	47.3	83.6	90.5	38.7	48.6	77.0	64.9	59.7	40.5
	Yes	177	164	69.9	22.6	73.3	23.8	84.7	34.1	60.8	34.8	72.0	67.9	88.6	75.0	44.9	38.7	92.0	78.7	46.3	45.1	90.3	71.2	73.4	44.5
Place of Solicitation	Home/Rented Room	124	125	51.6	24.0	58.1	25.0	74.2	36.3	39.5	34.4	66.7	67.7	83.1	74.0	32.3	39.2	83.7	78.4	34.7	40.8	82.1	63.7	65.3	50.4
	Public Places	75	79	74.3	21.8	71.6	25.3	87.8	39.2	70.3	39.2	71.6	67.1	89.2	73.4	54.1	48.7	95.9	89.9	56.8	54.4	94.6	81.0	69.3	30.4
	Others	41	34	87.8	14.7	85.4	15.2	92.7	32.4	82.9	20.6	75.6	57.6	95.1	85.3	51.2	32.4	97.6	79.4	52.5	47.1	87.5	61.8	85.4	47.1
	Weekly client volume																								
<5 clients	22	67	61.9	26.9	61.9	27.3	76.2	44.8	61.9	37.3	76.2	67.7	85.7	79.1	52.4	37.3	95.2	85.1	55.0	38.8	95.2	68.7	54.5	46.3	
5-9 clients	109	88	75.2	22.7	76.1	23.9	89.0	37.5	60.6	35.2	73.1	65.9	91.7	80.5	40.4	36.8	90.8	81.8	42.2	45.5	97.2	75.9	76.1	31.8	
10+ clients	108	82	54.6	17.3	58.3	21.0	75.0	29.6	50.9	30.5	64.8	64.6	82.4	66.7	42.6	48.8	87.9	81.7	45.4	53.7	74.8	63.4	66.7	53.7	
Duration in sex work																									
	<5 years	24	43	70.8	23.3	79.2	20.9	79.2	39.5	70.8	34.9	66.7	55.8	91.7	81.4	37.5	40.5	91.7	86.0	50.0	44.2	91.7	88.4	66.7	32.6
	5-9 years	57	77	73.7	19.7	70.2	20.8	84.2	27.3	59.6	29.9	70.2	67.5	87.7	81.6	49.1	45.5	98.2	81.8	48.2	51.9	96.5	72.4	75.4	41.6
	10+ years	154	118	60.8	22.9	64.1	26.7	81.0	41.9	54.9	36.4	69.3	69.0	85.6	69.2	41.2	39.0	86.8	81.4	41.8	43.2	82.1	60.2	68.8	48.3
District																									
	Bagalkot	122	121	49.2	18.3	55.7	21.0	73.8	33.3	36.1	26.4	64.5	67.2	82.0	68.9	30.3	42.1	84.3	76.9	31.1	44.6	76.9	65.0	64.8	55.4
Belgaum	118	117	81.2	25.6	78.6	26.5	89.7	40.2	77.8	41.9	75.2	65.0	92.3	82.1	54.7	40.5	95.7	88.0	58.6	47.9	97.4	73.5	75.4	30.8	
Rural-Urban																									
	Rural	117	118	71.6	21.2	70.7	23.9	86.2	35.0	57.8	29.7	70.4	78.4	89.7	70.9	37.1	42.4	92.2	80.5	34.5	46.6	91.3	71.8	69.2	34.7
	Urban	123	120	58.5	22.7	63.4	23.5	77.2	38.3	55.3	38.3	69.1	54.2	84.6	79.8	47.2	40.3	87.7	84.2	54.1	45.8	82.8	66.7	70.7	51.7
Total	240	238	64.9	21.9	66.9	23.7	81.6	36.7	56.5	34.0	69.7	66.1	87.0	75.4	42.3	41.4	89.9	82.4	44.5	46.2	86.9	69.2	70.0	43.3	

Table A.2.9: Shame and blame associated with person infected with HIV among FSWs by exposure to intervention

N	I would be ashamed if someone in my family had HIV / AIDS		Families with PLHIV should be ashamed		People with HIV/AIDS should be ashamed of themselves		It is the female sex worker who brings HIV in community		HIV/AIDS is a punishment from God		Promiscuous men spread HIV in our community		Men should not be blamed if become positive by promiscuous sexual behavior		PLHIV should bear the consequences of their bad behavior		Women should not be blamed if become HIV positive through promiscuous sexual behavior		HIV/AIDS is a social evil		People with HIV/AIDS are to blame for bringing HIV into community	
	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Duration of exposure to TI Program																						
<3 years	24	36	70.8	36.1	75.0	36.1	75.0	44.4	41.7	75.0	66.7	83.3	72.2	45.8	48.6	91.7	86.1	39.1	55.6	95.8	72.2	33.3
3-5 years	98	92	76.5	20.9	73.5	24.2	86.7	41.3	37.0	75.3	67.0	90.8	82.6	45.9	38.0	91.8	82.6	51.0	45.7	90.7	72.5	31.5
>5 years	115	109	54.4	17.4	59.6	18.5	78.9	29.6	28.4	65.8	64.8	84.2	70.1	38.6	42.2	88.5	80.7	40.4	44.0	82.3	65.1	56.0
Number of times contact by PE/ORW in past six months																						
<3 times	23	12	60.9	33.3	65.2	33.3	95.7	58.3	33.3	69.6	83.3	73.9	66.7	39.1	41.7	87.0	100	47.8	41.7	72.7	66.7	41.7
3-5 times	69	40	42.0	27.5	46.4	30.0	65.2	45.0	32.5	63.8	65.0	85.5	80.0	37.7	32.5	83.8	82.5	39.1	42.5	75.4	72.5	50.0
>5 times	144	179	77.6	20.2	77.6	21.5	88.1	33.7	34.1	73.9	63.8	90.9	75.7	44.8	43.3	93.7	82.1	46.5	47.5	95.8	69.1	41.9
Number of times visited DIC in past six months																						
Not visited	48	70	70.8	18.6	72.9	23.2	85.4	38.6	33.3	83.0	82.6	85.4	75.4	10.4	35.7	87.5	82.9	10.4	41.4	97.9	75.4	44.3
1 time	24	21	62.5	33.3	66.7	33.3	87.5	47.6	45.8	62.5	66.7	87.5	76.2	58.3	52.4	91.3	76.2	60.9	52.4	87.5	61.9	52.4
2 times	37	32	64.9	25.0	73.0	28.1	91.9	25.8	59.5	70.3	78.1	83.8	71.9	40.5	46.9	89.2	78.1	45.9	56.3	88.9	50.0	53.1
3 times	39	39	69.2	35.9	69.2	34.2	79.5	53.8	33.3	74.4	52.6	89.7	78.9	53.8	36.8	89.7	82.1	56.4	43.6	78.9	69.2	35.9
4+ times	68	76	68.7	13.3	64.2	14.5	79.1	27.6	32.9	59.7	52.6	88.1	75.0	49.3	43.4	91.0	85.5	50.7	46.1	88.1	73.7	39.5
Member of an FSW collective																						
No	65	54	67.7	28.3	78.5	32.1	83.1	50.9	44.4	83.1	74.1	92.3	75.9	49.2	43.4	87.7	87.0	51.6	46.3	90.8	83.3	44.4
Yes	175	184	63.8	20.1	62.6	21.3	81.0	32.6	31.0	64.7	63.7	85.1	75.3	39.7	40.8	90.8	81.0	42.0	46.2	85.5	65.0	42.9
Exposure to stigma-reduction programme in the past six months																						
Attended Individual Counselling on stigma & discrimination																						
No	205	94	63.2	17.0	65.7	18.3	79.9	29.8	37.2	70.4	74.5	85.3	80.4	44.1	37.2	90.1	76.6	45.8	43.6	86.7	76.6	29.8
Yes	35	144	74.3	25.2	74.3	27.3	91.4	41.3	31.9	65.7	60.6	97.1	72.2	31.4	44.1	88.6	86.1	37.1	47.9	88.2	64.3	52.1
Attended Group Sessions on stigma & discrimination																						
No	238	90	65.0	24.7	67.1	25.8	81.9	37.8	33.3	69.9	72.2	86.9	75.3	42.6	43.8	89.8	86.7	44.9	50.0	87.2	74.4	36.7
Yes	2	148	50.0	20.3	50.0	22.4	50.0	36.1	34.5	50.0	62.3	100	75.5	0.0	39.9	100	79.7	0.0	43.9	50.0	66.0	47.3
Attended Meetings on stigma & discrimination																						
No	226	94	65.8	26.9	68.0	29.0	83.6	44.7	30.9	71.0	77.7	88.4	74.2	40.9	44.1	89.7	80.9	42.9	52.1	87.0	69.1	33.0
Yes	14	144	50.0	18.8	50.0	20.3	50.0	31.5	36.1	50.0	58.5	64.3	76.2	64.3	39.6	92.9	83.3	71.4	42.4	85.7	69.2	50.0
Attended DIC events on stigma & discrimination																						
No	231	117	64.3	24.1	66.5	25.9	81.3	41.9	35.0	69.4	73.3	87.0	73.0	41.7	42.7	89.5	83.8	43.7	50.4	86.4	75.0	41.0
Yes	9	121	77.8	19.8	77.8	21.7	88.9	31.7	33.1	77.8	59.2	88.9	77.7	55.6	40.0	100	81.0	66.7	42.1	100	63.6	45.5
Total	240	238	64.9	21.9	66.9	23.7	81.6	36.7	34.0	69.7	66.1	87.0	75.4	42.3	41.4	89.9	82.4	44.5	46.2	86.9	69.2	43.3

Table A.2.10: FSWs who would maintain confidentiality of family members' HIV status by selected background characteristics

	BL		EL	
	N	%	N	%
Age				
<25	23	73.9	24	33.3
25-29	53	81.1	77	42.9
30-34	57	84.2	56	50.0
35-39	75	68.0	47	51.1
40+	30	60.0	34	44.1
Can read and write				
No	197	72.6	170	42.9
Yes	43	81.4	68	51.5
Marital status				
Never married	120	67.5	122	37.7
Currently married	70	80.0	51	54.9
Deserted/separated/ divorced/ widow	50	82.0	64	53.1
Cohabiting status				
No	62	71.0	74	44.6
Yes	177	75.1	164	45.7
Place of solicitation				
Home/Rented Room	124	66.9	125	43.2
Public Places	75	74.7	79	50.6
Others	41	95.1	34	41.2
Weekly client volume				
<5 clients	22	77.3	67	49.3
5-9 clients	109	74.3	88	38.6
10+ clients	108	73.1	82	48.8
Duration in sex work				
<5 years	24	83.3	43	51.2
5-9 years	57	89.5	77	50.6
10+ years	154	67.5	118	39.8
District				
Bagalkot	122	63.9	121	39.7
Belgaum	118	84.7	117	51.3
Rural-Urban				
Rural	117	69.2	118	39.0
Urban	123	78.9	120	51.7
Total	240	74.2	238	45.4

Table A.2.11: FSWs who would maintain confidentiality of family members' HIV status by their exposure to intervention

	BL		EL	
	N	%	N	%
Duration of exposure to TI Program				
<3 years	24	75.0	36	38.9
3-5 years	98	78.6	92	51.1
>5 years	115	69.6	109	42.2
Number of times contact by PE/ORW in past six months				
<3 times	23	56.5	12	25.0
3-5 times	69	62.3	40	50.0
>5 times	144	82.6	179	45.8
Number of times visited DIC in past six months				
Not visited	48	70.8	70	40.0
1 time	24	79.2	21	28.6
2 times	37	70.3	32	28.1
3 times	39	74.4	39	61.5
4+ times	68	77.9	76	53.9
Member of an FSW collective				
No	65	72.3	54	63.0
Yes	175	74.9	184	40.2
Exposure to stigma-reduction programme in the past six months				
Attended individual counselling on stigma & discrimination				
No	205	73.2	94	51.1
Yes	35	80.0	144	41.7
Attended group sessions on stigma & discrimination				
No	238	73.9	90	46.7
Yes	2	100.0	148	44.6
Attended meetings on stigma & discrimination				
No	226	75.2	94	43.6
Yes	14	57.1	144	46.5
Attended DIC events on stigma & discrimination				
No	231	74.9	117	47.0
Yes	9	55.6	121	43.8
Total	240	74.2	238	45.4

Table A.2.12: Reasons behind keeping family member's HIV/AIDS status secret

Reasons	Spontaneous (%)		Spontaneous + Prompted (%)	
	BL	EL	BL	EL
Family members would be blamed	60.1	66.7	87.6	85.2
Family member would find it difficult to get access to care & treatment	37.1	5.6	84.3	47.2
Family member would be neglected, isolated, avoided	50.0	55.6	90.4	88.0
Family member would be verbally abused, teased	51.7	61.1	94.9	83.3
Family members would be physically abused	21.3	5.6	58.4	28.7
Family members would not be allowed to go to work/school	22.5	4.6	79.8	54.6
Family members would not be allowed to go to temple/ mosque/ church	10.1	8.3	53.9	41.7
Family members would not be allowed to be in public places	11.2	6.5	70.2	40.7
N	178	108	178	108

Table A.2.13: Stigma associated with disclosure of HIV status among FSWs by selected background characteristics

	N		FSWs are hesitant to take HIV testing due to the fear of people's reaction if the test result is positive for HIV		FSWs should not share their HIV status with others		FSW would not share their test results with others if they get tested positive for HIV	
	BL	EL	BL	EL	BL	EL	BL	EL
Age								
<25	23	24	73.9	41.7	56.5	33.3	60.9	20.8
25-29	53	77	64.2	36.4	47.2	37.7	52.8	22.1
30-34	57	56	70.2	48.2	56.1	19.6	73.7	28.6
35-39	75	47	76.0	59.6	50.7	29.8	57.3	23.4
40+	30	34	70.0	55.9	53.3	41.2	66.7	29.4
Can read and write								
No	197	170	72.6	43.5	54.8	32.4	63.5	24.1
Yes	43	68	65.1	55.9	37.2	30.9	53.5	26.5
Marital status								
Never married	120	122	76.7	45.1	52.5	35.2	55.0	22.1
Currently married	70	51	57.1	51.0	48.6	37.3	68.6	37.3
Deserted/separated/ divorced/ Widow	50	64	78.0	48.4	54.0	21.9	68.0	20.3
Cohabiting status								
No	62	74	72.6	40.5	38.7	29.7	37.1	18.9
Yes	177	164	70.6	50.0	56.5	32.9	70.1	27.4
Place of solicitation								
Home/Rented Room	124	125	78.2	52.0	50.0	33.6	52.4	24.0
Public Places	75	79	64.0	38.0	52.0	31.6	69.3	26.6
Others	41	34	63.4	50.0	56.1	26.5	75.6	23.5
Weekly client volume								
<5 clients	22	67	40.9	53.7	36.4	31.3	63.6	28.4
5-9 clients	109	88	68.8	47.7	56.0	23.9	73.4	21.6
10+ clients	108	82	79.6	40.2	50.0	41.5	49.1	25.6
Duration in sex work								
<5 years	24	43	66.7	39.5	54.2	41.9	70.8	37.2
5-9 years	57	77	73.7	40.3	52.6	26.0	63.2	20.8
10+ years	154	118	70.8	54.2	52.6	32.2	60.4	22.9
District								
Bagalkot	122	121	79.5	46.3	50.0	36.4	49.2	24.0
Belgaum	118	117	62.7	47.9	53.4	27.4	74.6	25.6
Rural-Urban								
Rural	117	118	69.2	39.8	57.3	30.5	65.0	23.7
Urban	123	120	73.2	54.2	46.3	33.3	58.5	25.8
Total	240	238	71.3	47.1	51.7	31.9	61.7	24.8

Table A.2.14: Stigma associated with disclosure of HIV status by exposure to intervention

	N		FSWs are hesitant to take HIV testing due to the fear of people's reaction if the test result is positive for HIV		FSWs should not share their HIV status with others		FSW would not share their test results with others if they get tested positive for HIV	
	BL	EL	BL	EL	BL	EL	BL	EL
Duration of exposure to TI Program								
<3 years	24	36	66.7	36.1	58.3	36.1	70.8	27.8
3-5 years	98	92	72.4	53.3	55.1	28.3	70.4	25.0
>5 years	115	109	71.3	45.0	47.0	33.0	52.2	22.9
Number of times contact by PE/ORW in past six months								
<3 times	23	12	78.3	50.0	39.1	33.3	34.8	41.7
3-5 times	69	40	69.6	42.5	39.1	32.5	39.1	25.0
>5 times	144	179	70.8	45.8	59.7	32.4	76.4	23.5
Number of times visited DIC in past six months								
Not visited	48	70	87.5	54.3	66.7	20.0	70.8	17.1
1 time	24	21	83.3	33.3	45.8	52.4	58.3	33.3
2 times	37	32	67.6	40.6	62.2	40.6	70.3	31.3
3 times	39	39	61.5	48.7	48.7	33.3	59.0	30.8
4+ times	68	76	63.2	46.1	41.2	32.9	58.8	23.7
Member of an FSW collective								
No	65	54	78.5	48.1	53.8	29.6	66.2	33.3
Yes	175	184	68.6	46.7	50.9	32.6	60.0	22.3
Exposure to stigma-reduction programme in the past six months								
Attended individual counselling on stigma & discrimination								
No	205	94	72.2	46.8	47.8	30.9	57.6	26.6
Yes	35	144	65.7	47.2	74.3	32.6	85.7	23.6
Attended group sessions on stigma & discrimination								
No	238	90	71.4	46.7	51.3	34.4	61.3	32.2
Yes	2	148	50.0	47.3	100.0	30.4	100.0	20.3
Attended meetings on stigma & discrimination								
No	226	94	73.9	46.8	52.2	31.9	61.9	28.7
Yes	14	144	28.6	47.2	42.9	31.9	57.1	22.2
Attended DIC events on stigma & discrimination								
No	231	117	71.4	51.3	51.5	33.3	61.0	29.1
Yes	9	121	66.7	43.0	55.6	30.6	77.8	20.7
Total	240	238	71.3	47.1	51.7	31.9	61.7	24.8

ANNEXURE 2: Family of female sex workers (Suppliment tables)

Table A.3.1: Perception of sex work and HIV-related stigma among family members of FSWs by selected background characteristics

	N		Sex work and HIV						Sex work and HIV Stigma					
			All sex workers are prone to HIV		Women don't / can't use condom every time during sex work		Women with multiple sex partners always get infected with HIV		Women who have HIV should not practice sex work		Sex work is immoral		I should inform everyone if come to know about a PFSW	
	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Sex														
Male	30	18	96.7	77.8	46.7	27.8	96.7	77.8	93.3	77.8	90.0	94.4	83.3	44.4
Female	124	134	79.8	63.4	66.1	41.0	89.5	72.4	73.4	59.7	78.2	79.1	75.8	25.4
Age of respondent														
<25	24	38	70.8	63.2	58.3	39.5	95.8	73.7	79.2	65.8	83.3	89.5	75.0	31.6
25-34	35	41	80.0	58.5	48.6	34.1	85.7	70.7	68.6	61.0	82.9	68.3	71.4	17.1
35-44	42	28	83.3	71.4	66.7	53.6	85.7	75.0	78.6	57.1	76.2	82.1	71.4	32.1
45+	53	45	90.6	68.9	69.8	35.6	96.2	73.3	81.1	62.2	81.1	84.4	86.8	31.1
Marital status														
Never married	55	56	78.2	64.3	70.9	41.1	89.1	66.1	67.3	55.4	76.4	75.0	61.8	23.2
Currently married	65	62	84.6	71.0	61.5	35.5	90.8	77.4	83.1	72.6	87.7	85.5	84.6	37.1
Divorce/ separated/ deserted/ widow(d)	34	34	88.2	55.9	50.0	44.1	94.1	76.5	82.4	52.9	73.5	82.4	88.2	17.6
Literacy														
Illiterate	113	97	86.7	64.9	61.9	40.2	90.3	73.2	76.1	63.9	80.5	80.4	78.8	27.8
Literate	41	55	73.2	65.5	63.4	38.2	92.7	72.7	80.5	58.2	80.5	81.8	73.2	27.3
Occupation														
Agricultural labourer	63	57	87.3	64.9	58.7	45.6	90.5	70.2	84.1	63.2	87.3	84.2	71.4	31.6
Others	59	54	76.3	59.3	61.0	37.0	88.1	72.2	74.6	59.3	78.0	79.6	81.4	22.2
Not working	32	41	87.5	73.2	71.9	34.1	96.9	78.0	68.8	63.4	71.9	78.0	81.3	29.3
Caste														
SC/ST	118	123	80.5	69.1	61.9	39.0	88.1	74.8	72.9	63.4	76.3	82.9	73.7	27.6
Others	36	29	91.7	48.3	63.9	41.4	100	65.5	91.7	55.2	94.4	72.4	88.9	27.6
Belong to Devadasi family														
No	64	59	85.9	54.2	53.1	47.5	93.8	72.9	90.6	59.3	90.6	81.4	82.8	25.4
Yes	90	93	81.1	72.0	68.9	34.4	88.9	73.1	67.8	63.4	73.3	80.6	73.3	29.0
Number of members in household														
<4	48	25	79.2	64.0	66.7	36.0	91.7	80.0	70.8	68.0	77.1	80.0	70.8	24.0
4-5	54	42	88.9	61.9	53.7	38.1	88.9	66.7	83.3	64.3	77.8	83.3	81.5	28.6
>5	52	85	80.8	67.1	67.3	41.2	92.3	74.1	76.9	58.8	86.5	80.0	78.8	28.2
Own a house														
No	19	26	89.5	50.0	68.4	30.8	89.5	69.2	94.7	53.8	89.5	76.9	89.5	26.9
Yes	135	126	82.2	68.3	61.5	41.3	91.1	73.8	74.8	63.5	79.3	81.7	75.6	27.8
Own agricultural land														
No	116	112	81.9	60.7	62.1	40.2	92.2	73.2	78.4	58.0	79.3	80.4	77.6	26.8
Yes	38	40	86.8	77.5	63.2	37.5	86.8	72.5	73.7	72.5	84.2	82.5	76.3	30.0
Rural-Urban														
Rural	73	72	79.5	65.3	50.7	44.4	89.0	79.2	82.2	61.1	82.2	80.6	78.1	29.2
Urban	81	80	86.4	65.0	72.8	35.0	92.6	67.5	72.8	62.5	79.0	81.3	76.5	26.3
District														
Bagalkot	75	76	81.3	72.4	65.3	32.9	89.3	68.4	68.0	63.2	76.0	80.3	72.0	32.9
Belgaum	79	76	84.8	57.9	59.5	46.1	92.4	77.6	86.1	60.5	84.8	81.6	82.3	22.4
Total	154	152	83.1	65.1	62.3	39.5	90.9	73.0	77.3	61.8	80.5	80.9	77.3	27.6

Table A.3.2: Self-perceived risk of being infected with HIV and HIV testing among family members by selected background characteristics

	N		Self-perceived risk of being infected with HIV / AIDS		Ever tested for HIV / AIDS		Tested for HIV / AIDS in past six months	
	BL	EL	BL	EL	BL	EL	BL	EL
Sex								
Male	30	18	26.7	11.1	40.0	22.2	16.7	11.1
Female	124	134	37.9	24.6	68.5	70.1	56.5	50.7
Age of respondent								
<25	24	38	37.5	15.8	58.3	47.4	45.8	34.2
25-34	35	41	51.4	26.8	65.7	82.9	57.1	65.9
35-44	42	28	33.3	25.0	66.7	78.6	45.2	53.6
45+	53	45	26.4	24.4	60.4	53.3	47.2	33.3
Marital status								
Never married	55	56	47.3	26.8	69.1	78.6	58.2	57.1
Currently married	65	62	26.2	17.7	55.4	56.5	44.6	40.3
Divorce/ separated/ deserted/ widow(d)	34	34	35.3	26.5	67.6	55.9	41.2	38.2
Literacy								
Illiterate	113	97	34.5	24.7	62.8	64.9	46.9	46.4
Literate	41	55	39.0	20.0	63.4	63.6	53.7	45.5
Occupation								
Agricultural labourer	63	57	31.7	24.6	68.3	59.6	49.2	38.6
Others	59	54	40.7	20.4	62.7	64.8	50.8	55.6
Not working	32	41	34.4	24.4	53.1	70.7	43.8	43.9
Caste								
SC/ST	118	123	35.6	25.2	64.4	62.6	50.0	42.3
Others	36	29	36.1	13.8	58.3	72.4	44.4	62.1
Belong to Devadasi family								
No	64	59	29.7	16.9	60.9	66.1	48.4	52.5
Yes	90	93	40.0	26.9	64.4	63.4	48.9	41.9
Number of members in household								
<4	48	25	35.4	16.0	70.8	60.0	56.3	36.0
4-5	54	42	33.3	23.8	51.9	69.0	35.2	52.4
>5	52	85	38.5	24.7	67.3	63.5	55.8	45.9
Own a house								
No	19	26	57.9	19.2	63.2	76.9	52.6	57.7
Yes	135	126	32.6	23.8	63.0	61.9	48.1	43.7
Own agricultural land								
No	116	112	34.5	24.1	62.1	67.9	46.6	49.1
Yes	38	40	39.5	20.0	65.8	55.0	55.3	37.5
Rural-Urban								
Rural	73	72	27.4	25.0	67.1	63.9	57.5	44.4
Urban	81	80	43.2	21.3	59.3	65.0	40.7	47.5
District								
Bagalkot	75	76	38.7	26.3	62.7	61.8	44.0	42.1
Belgaum	79	76	32.9	19.7	63.3	67.1	53.2	50.0
Total	154	152	35.7	23.0	63.0	64.5	48.7	46.1

Table A.3.3: Fear and social isolation associated with HIV infection among family members of FSWs by selected background characteristics

	N		People who have HIV should be isolated		Children with HIV should not go to school		Children with HIV should not play with others		Willingness to care in own household if a relative becomes sick with HIV		No food sharing with HIV positive friend/family member		No stay together with HIV positive friend/family member		No bed sharing with HIV positive partner		HIV positive should stay away from religious function		HIV positive sex workers should be treated differently than other HIV positive	
	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Sex																				
Male	30	18	73.3	16.7	26.7	16.7	30.0	11.1	50.0	22.2	60.0	16.7	53.3	16.7	56.7	37.5	36.7	11.1	50.0	17.6
Female	124	134	65.3	18.7	37.4	6.7	37.1	9.0	61.3	19.4	50.8	15.8	52.4	16.4	63.7	47.2	44.3	14.9	45.8	20.0
Age of respondent																				
<25	24	38	75.0	10.5	47.8	2.6	37.5	10.5	79.2	23.7	50.0	10.8	66.7	18.4	62.5	42.4	43.5	13.2	63.6	20.0
25-34	35	41	51.4	9.8	22.9	9.8	25.7	4.9	48.6	12.2	37.1	12.2	34.3	9.8	45.7	25.0	28.6	7.3	40.0	17.9
35-44	42	28	69.0	32.1	33.3	7.1	35.7	7.1	52.4	32.1	61.9	17.9	50.0	21.4	66.7	53.6	45.2	10.7	40.0	17.9
45+	53	45	71.7	24.4	39.6	11.1	41.5	13.3	62.3	15.6	56.6	22.2	60.4	17.8	69.8	64.3	50.0	24.4	49.0	22.2
Marital status																				
Never married	55	56	61.8	10.7	38.9	3.6	40.0	1.8	60.0	17.9	43.6	10.7	45.5	10.7	56.4	40.4	42.6	10.7	39.6	20.8
Currently married	65	62	70.8	21.0	35.4	11.3	32.3	12.9	56.9	19.4	53.8	18.0	58.5	19.4	61.5	48.3	47.7	19.4	48.4	18.3
Divorce/separated/ deserted/ Widow(ed)	34	34	67.6	26.5	29.4	8.8	35.3	14.7	61.8	23.5	64.7	20.6	52.9	20.6	73.5	51.5	33.3	11.8	54.5	20.6
Literacy																				
Illiterate	113	97	69.0	22.7	38.1	8.2	41.6	9.3	61.1	21.6	59.3	17.5	55.8	18.6	69.9	54.3	48.2	17.5	47.3	20.0
Literate	41	55	61.0	10.9	27.5	7.3	19.5	9.1	53.7	16.4	34.1	13.0	43.9	12.7	41.5	30.6	27.5	9.1	44.7	19.2
Occupation																				
Agricultural labourer	63	57	65.1	24.6	38.1	14.0	39.7	14.0	58.7	19.3	52.4	19.3	55.6	19.3	68.3	48.1	44.4	17.5	52.5	10.9
Others	59	54	64.4	14.8	25.4	1.9	28.8	3.7	54.2	20.4	47.5	14.8	40.7	14.8	45.8	39.2	35.6	11.1	42.1	25.0
Not working	32	41	75.0	14.6	48.4	7.3	40.6	9.8	68.8	19.5	62.5	12.5	68.8	14.6	81.3	52.6	53.3	14.6	43.8	25.0
Total	154	152	66.9	18.4	35.3	7.9	35.7	9.2	59.1	19.7	52.6	15.9	52.6	16.4	62.3	46.2	42.8	14.5	46.6	19.7

Table A.3.4: Fear and social isolation associated with HIV infection among family members of FSWs by household characteristics and level of HIV/AIDS knowledge

	N		People who have HIV should be isolated		Children with HIV should not go to school		Children with HIV should not play with others		Willingness to care in own household if a relative becomes sick with HIV		No food sharing with HIV positive friend/family member		No stay together with HIV positive friend/family member		No bed sharing with HIV positive partner		HIV positive should stay away from religious function		HIV positive sex workers should be treated differently than other HIV positive	
	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Caste																				
SC/ST	118	123	63.6	20.3	36.4	8.9	34.7	9.8	54.2	19.5	48.3	17.2	49.2	17.1	59.3	46.5	43.2	14.6	39.7	17.8
Others	36	29	77.8	10.3	31.4	3.4	38.9	6.9	75.0	20.7	66.7	10.3	63.9	13.8	72.2	44.8	41.2	13.8	71.9	27.6
Belong Devadasi family																				
No	64	59	70.3	20.3	30.2	8.5	34.4	11.9	53.1	28.8	59.4	18.6	56.3	16.9	65.6	49.1	37.1	15.3	60.0	20.3
Yes	90	93	64.4	17.2	38.9	7.5	36.7	7.5	63.3	14.0	47.8	14.1	50.0	16.1	60.0	44.3	46.7	14.0	37.5	19.3
Number of members in household																				
<4	48	25	70.8	16.0	41.7	8.0	35.4	12.0	62.5	16.0	45.8	16.0	52.1	24.0	64.6	47.8	44.7	16.0	45.7	20.8
4-5	54	42	59.3	26.2	31.5	11.9	37.0	11.9	55.6	23.8	53.7	19.0	51.9	19.0	63.0	61.5	42.6	19.0	44.2	20.0
>5	52	85	71.2	15.3	33.3	5.9	34.6	7.1	59.6	18.8	57.7	14.3	53.8	12.9	59.6	38.3	41.2	11.8	50.0	19.3
Own a house																				
No	19	26	63.2	7.7	36.8	3.8	42.1	7.7	47.4	15.4	63.2	7.7	47.4	15.4	57.9	24.0	38.9	7.7	57.9	16.0
Yes	135	126	67.4	20.6	35.1	8.7	34.8	9.5	60.7	20.6	51.1	17.6	53.3	16.7	63.0	50.8	43.3	15.9	45.0	20.5
Own agricultural land																				
No	116	112	66.4	19.6	32.2	8.0	37.1	10.7	51.7	17.9	53.4	14.4	51.7	14.3	62.9	43.8	40.4	13.4	47.7	14.8
Yes	38	40	68.4	15.0	44.7	7.5	31.6	5.0	81.6	25.0	50.0	20.0	55.3	22.5	60.5	52.6	50.0	17.5	43.2	33.3
Rural-Urban																				
Rural	73	72	67.1	22.2	42.5	11.1	34.2	11.1	52.1	18.1	50.7	18.3	54.8	19.4	60.3	47.8	43.8	15.3	38.0	17.1
Urban	81	80	66.7	15.0	28.8	5.0	37.0	7.5	65.4	21.3	54.3	13.8	50.6	13.8	64.2	44.7	41.8	13.8	54.5	22.1
District																				
Bagalkot	75	76	62.7	13.2	40.0	7.9	38.7	9.2	68.0	11.8	50.7	14.7	54.7	15.8	64.0	37.5	52.0	14.5	34.2	16.9
Belgaum	79	76	70.9	23.7	30.8	7.9	32.9	9.2	50.6	27.6	54.4	17.1	50.6	17.1	60.8	54.9	33.8	14.5	58.7	22.4
Level of HIV/AIDS knowledge																				
Have comprehensive knowledge about HIV and < 3 misconceptions	23	26	43.5	11.5	13.0	7.7	13.0	3.8	21.7	11.5	8.7	19.2	4.3	11.5	13.0	42.3	0.0	7.7	31.8	15.4
Have comprehensive knowledge about HIV and 3+ misconceptions	67	21	70.1	28.6	37.3	23.8	38.8	23.8	61.2	23.8	65.7	42.9	61.2	28.6	71.6	47.6	57.6	23.8	47.0	9.5
Have partial knowledge about HIV and misconception	62	86	71.0	19.8	42.6	4.7	41.9	8.1	71.0	20.9	56.5	10.5	62.9	16.3	72.6	50.6	42.6	14.0	53.4	25.6
Total	154	152	66.9	18.4	35.3	7.9	35.7	9.2	59.1	19.7	52.6	15.9	52.6	16.4	62.3	46.2	42.8	14.5	46.6	19.7

Table A.3.5: Shame and blame associated with person infected with HIV among family members of FSWs by selected background characteristics

	N		I Would be ashamed if someone in my family had HIV / AIDS		Families with PLHIV should be ashamed		People with HIV/AIDS should be ashamed of themselves		It is the female sex worker who bring HIV in community		HIV/AIDS is a punishment from God		Promiscuous men spread HIV in our community		Men should not be blamed if become positive by promiscuous sexual behavior		PLHA should bear the consequences of their bad behavior		Women should not be blamed if become HIV positive through promiscuous sexual behavior		HIV/AIDS is a social evil		People with HIV/AIDS are to blame for bringing HIV into community	
	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Sex																								
Male	30	18	66.7	38.9	60.0	23.5	90.0	43.8	86.7	66.7	70.0	38.9	93.3	72.2	43.3	47.1	96.7	70.6	36.7	41.2	96.7	88.9	73.3	58.8
Female	124	134	69.4	25.6	70.2	27.6	84.6	37.3	69.7	53.1	77.2	77.4	90.2	80.5	24.0	35.7	96.8	83.6	29.4	32.3	92.7	74.6	71.8	48.9
Age of respondent																								
<25	24	38	66.7	28.9	79.2	29.7	87.0	37.8	78.3	64.7	70.8	55.3	87.0	77.1	39.1	45.7	95.8	78.4	40.9	37.1	91.7	71.1	70.8	55.6
25-34	35	41	54.3	12.5	45.7	14.6	80.0	20.0	65.7	34.1	62.9	75.0	85.7	82.5	22.9	34.1	94.3	78.0	28.6	36.6	97.1	85.4	71.4	36.6
35-44	42	28	78.6	42.9	76.2	50.0	81.0	57.1	65.9	67.9	70.7	82.1	92.9	78.6	14.3	32.1	97.6	89.3	19.0	35.7	90.5	82.1	71.4	70.4
45+	53	45	71.7	28.9	71.7	22.2	92.5	42.2	81.1	57.8	90.6	80.0	94.3	79.1	37.3	35.7	98.1	84.4	38.0	25.6	94.3	68.9	73.6	45.5
Marital status																								
Never married	55	56	65.5	20.0	70.9	18.2	83.6	23.6	61.8	43.6	72.7	67.9	81.5	71.7	27.3	37.0	94.5	76.4	33.3	31.5	90.9	66.1	63.6	50.9
Currently married	65	62	69.2	29.0	63.1	24.2	84.4	41.0	82.5	63.3	70.3	69.4	95.4	82.3	26.6	38.3	96.9	80.6	26.6	35.0	92.3	80.6	75.4	54.2
Divorce/ separated/ Deserted/ widow(d)	34	34	73.5	35.3	73.5	47.1	91.2	55.9	73.5	57.6	91.2	87.9	97.1	87.1	31.3	34.4	100.0	94.1	35.5	33.3	100.0	85.3	79.4	41.2
Literacy																								
Illiterate	113	97	72.6	27.1	69.9	26.8	86.7	37.1	70.5	53.7	82.1	82.3	90.3	80.4	24.3	33.0	97.3	88.7	29.1	29.5	92.9	76.3	71.7	50.0
Literate	41	55	58.5	27.3	63.4	27.8	82.5	39.6	80.0	56.6	58.5	56.4	92.5	77.8	37.5	44.2	95.1	70.4	35.9	40.4	95.1	76.4	73.2	50.0
Occupation																								
Agricultural Labourer	63	57	65.1	32.1	69.8	29.8	81.0	38.6	67.7	56.4	82.3	82.1	90.5	84.9	30.2	40.0	95.2	87.7	30.6	30.4	92.1	73.7	73.0	43.9
Others	59	54	71.2	27.8	71.2	26.4	88.1	32.1	72.9	47.2	69.5	66.7	88.1	73.6	21.1	38.5	96.6	77.4	28.1	36.5	91.5	79.6	78.0	50.0
Not working	32	41	71.9	19.5	59.4	24.4	90.3	45.0	83.9	62.5	75.0	68.3	96.8	80.0	35.5	30.8	100.0	80.5	36.7	33.3	100.0	75.6	59.4	59.0
Total	154	152	68.8	27.2	68.2	27.2	85.6	38.0	73.0	54.7	75.8	72.8	90.8	79.5	27.8	37.0	96.8	82.1	30.9	33.3	93.5	76.3	72.1	50.0

Table A.3.6: Shame and blame associated with person infected with HIV among family members of FSWs by household characteristics and level of HIV/AIDS knowledge

	N		I Would be ashamed if someone in my family had HIV / AIDS		Families with PLHIV should be ashamed		People with HIV/AIDS should be ashamed of themselves		It is the female sex worker who bring HIV in community		HIV/AIDS is a punishment from God		Promiscuous men spread HIV in our community		Men should not be blamed if become positive by promiscuous sex behavior		PLHA should bear the consequence of their bad behavior		Women should not be blamed if become HIV positive through promiscuous sex behavior		HIV/AIDS is a social evil		People with HIV/AIDS are to blame for bringing HIV into community	
			BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL	BL	EL
Caste																								
	118	123	64.4	27.9	63.6	27.9	82.1	38.8	65.5	56.3	77.1	74.8	89.0	79.5	17.1	34.2	95.8	79.5	20.0	31.4	91.5	72.4	65.3	53.3
Others	36	29	83.3	24.1	83.3	24.1	97.2	34.5	97.2	48.3	71.4	64.3	97.1	79.3	64.7	48.3	100.0	93.1	67.6	41.4	100	93.1	94.4	35.7
Belong Devadasi family																								
	64	59	76.6	32.2	70.3	35.6	90.5	47.5	88.7	61.4	74.6	72.4	98.4	82.1	47.5	42.9	98.4	91.5	48.3	35.1	100	91.5	87.5	46.4
Yes	90	93	63.3	23.9	66.7	21.7	82.2	31.9	62.2	50.5	76.7	73.1	85.6	77.8	14.4	33.3	95.6	76.1	19.1	32.2	88.9	66.7	61.1	52.2
Number of HH members																								
	48	25	79.2	36.0	75.0	36.0	85.4	44.0	66.7	58.3	70.8	76.0	89.6	83.3	30.4	39.1	97.9	92.0	32.6	34.8	91.7	72.0	77.1	54.2
	54	42	57.4	40.5	55.6	41.5	81.5	56.1	73.6	55.0	79.6	82.9	90.7	80.0	27.8	42.5	94.4	92.7	30.2	37.5	92.6	92.9	64.8	51.2
	52	85	71.2	17.9	75.0	17.6	90.2	27.4	78.4	53.6	76.5	67.1	92.2	78.0	25.5	33.7	98.1	74.1	30.0	31.0	96.2	69.4	75.0	48.2
Own a house																								
	19	26	73.7	34.6	68.4	34.6	89.5	50.0	84.2	48.0	73.7	76.0	100.0	68.0	38.9	60.0	94.7	92.3	38.9	64.0	100	84.6	84.2	36.0
Yes	135	126	68.1	25.6	68.1	25.6	85.1	35.5	71.4	56.1	76.1	72.2	89.6	81.8	26.3	32.2	97.0	80.0	29.8	27.0	92.6	74.6	70.4	52.8
Own agricultural land																								
	116	112	69.0	28.8	69.0	25.2	87.8	36.9	72.8	53.2	76.5	77.5	93.9	77.8	29.2	38.3	97.4	82.9	32.1	34.6	95.7	79.5	74.1	48.1
Yes	38	40	68.4	22.5	65.8	32.5	78.9	41.0	73.7	59.0	73.7	60.0	81.6	84.2	23.7	33.3	94.7	80.0	27.0	30.0	86.8	67.5	65.8	55.0
Rural-urban																								
	73	72	60.3	30.6	61.6	33.3	80.6	43.7	73.2	60.9	75.3	71.8	89.0	86.6	26.0	34.8	95.9	83.3	31.9	30.0	94.5	81.9	61.6	52.1
Urban	81	80	76.5	24.1	74.1	21.5	90.1	32.9	72.8	49.4	76.3	73.8	92.5	73.4	29.5	39.0	97.5	81.0	29.9	36.4	92.6	71.3	81.5	48.1
District																								
	75	76	60.0	18.7	66.7	14.7	78.7	25.7	57.3	47.3	74.7	68.4	82.7	76.7	9.3	33.8	94.7	70.7	14.9	31.1	86.7	57.9	57.3	50.7
Belgaum	79	76	77.2	35.5	69.6	39.5	92.3	50.0	88.3	62.2	76.9	77.3	98.7	82.2	46.1	40.3	98.7	93.4	46.7	35.6	100	94.7	86.1	49.3
Level of HIV/AIDS knowledge																								
	23	26	52.2	11.5	47.8	23.1	87.0	19.2	60.9	48.0	69.6	76.0	87.0	68.0	18.2	30.8	100.0	76.9	27.3	34.6	95.7	57.7	60.9	26.9
	67	21	68.7	42.9	70.1	38.1	89.6	50.0	81.8	61.9	80.6	66.7	94.0	85.7	27.7	28.6	97.0	85.7	26.2	23.8	97.0	85.7	74.6	70.0
	62	86	74.2	25.9	74.2	27.1	80.3	37.6	70.5	51.8	75.4	74.4	90.2	79.3	32.3	40.7	95.2	83.5	38.3	35.8	88.7	80.2	74.2	48.8
Total	154	152	68.8	27.2	68.2	27.2	85.6	38.0	73.0	54.7	75.8	72.8	90.8	79.5	27.8	37.0	96.8	82.1	30.9	33.3	93.5	76.3	72.1	50.0

Table A.3.7: Distribution of family members who would maintain confidentiality if their family member contracted HIV/AIDS by selected background characteristics

	BL		EL	
	N	%	N	%
Sex				
Male	30	93.3	18	27.8
Female	124	75.8	134	47.0
Age of respondent				
<25	24	83.3	38	50.0
25-34	35	85.7	41	46.3
35-44	42	76.2	28	53.6
45+	53	75.5	45	33.3
Marital status				
Never married	55	63.6	56	35.7
Currently married	65	84.6	62	45.2
Divorce/ separated/ deserted/ widow(d)	34	94.1	34	58.8
Literacy				
Illiterate	113	77.9	97	42.3
Literate	41	82.9	55	49.1
Occupation				
Agricultural labourer	63	81.0	57	42.1
Others	59	79.7	54	40.7
Not working	32	75.0	41	53.7
Caste				
SC/ST	118	73.7	123	39.8
Others	36	97.2	29	65.5
Belong Devadasi family				
No	64	92.2	59	66.1
Yes	90	70.0	93	31.2
Number of members in household				
<4	48	81.3	25	36.0
4-5	54	79.6	42	52.4
>5	52	76.9	85	43.5
Own a house				
No	19	84.2	26	61.5
Yes	135	78.5	126	41.3
Own agricultural land				
No	116	82.8	112	49.1
Yes	38	68.4	40	32.5
Rural-Urban				
Rural	73	76.7	72	47.2
Urban	81	81.5	80	42.5
District				
Bagalkot	75	68.0	76	22.4
Belgaum	79	89.9	76	67.1
Level of HIV/AIDS knowledge				
Have comprehensive knowledge about HIV and < 3 misconceptions	23	87.0	26	46.2
Have comprehensive knowledge about HIV and 3+ misconceptions	67	74.6	21	47.6
Have partial knowledge about HIV and misconception	62	80.6	86	45.3
Total	154	79.2	152	44.7

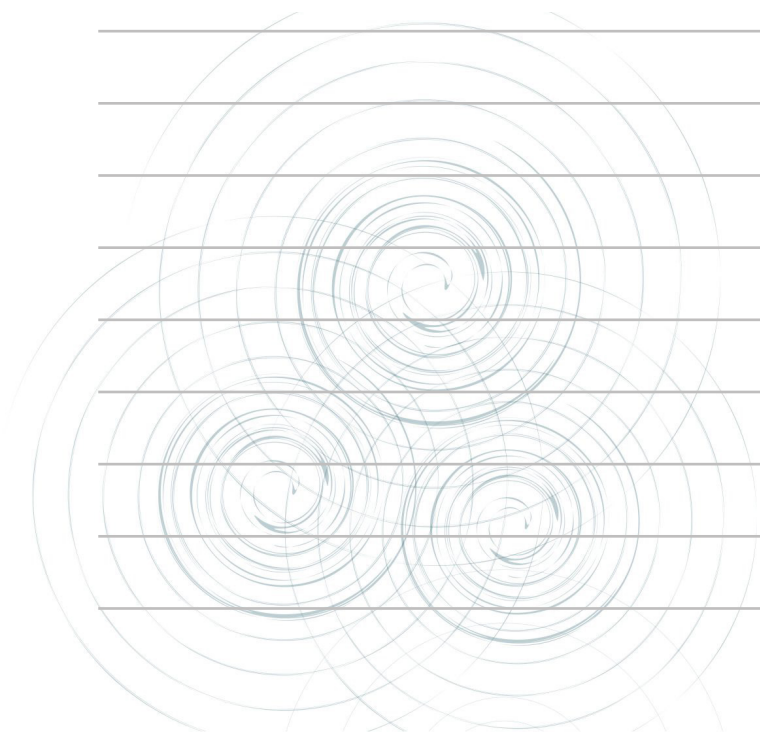
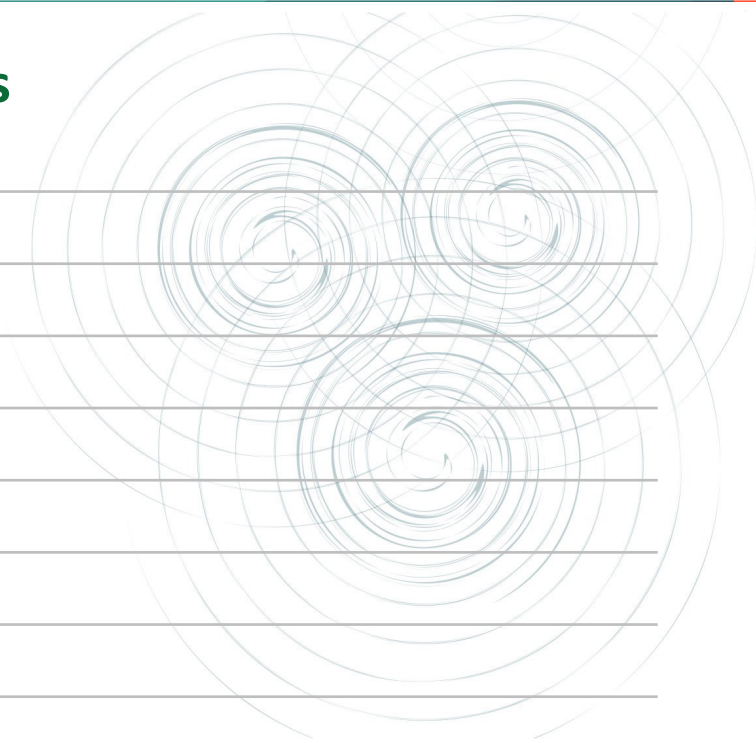
Table A.3.8: Reasons behind keeping family member's HIV/AIDS status secret

Reasons	Spontaneous (%)		Spontaneous + Prompted (%)	
	BL	EL	BL	EL
Family members would be blamed	33.6	57.4	82.8	89.7
Family member would find it difficult to get access to care & treatment	21.3	7.4	79.5	57.4
Family member would be neglected, isolated, avoided	45.9	60.3	93.4	94.1
Family member would be verbally abused, teased	54.1	52.9	98.4	88.2
Family members would be physically abused	9.0	1.5	44.3	33.8
Family members would not be allowed to go to work/school	13.9	2.9	86.9	54.4
Family members would not be allowed to go to temple/ mosque/ church	4.9	4.4	59.8	45.6
Family members would not be allowed to be in public places	11.5	2.9	77.0	39.7
N	122	68	122	68


Table A.3.9: Stigma associated with disclosure of HIV status among family members of FSWs by their selected background characteristics

	N		FSWs are hesitant to take HIV testing due to the fear of people's reaction if the test result is positive for HIV		Respondents think FSWs should not share their HIV status with others		FSWs would not share their test results with others if they get tested positive for HIV	
	BL	EL	BL	EL	BL	EL	BL	EL
Sex								
Male	30	18	33.3	38.9	20.0	33.3	73.3	61.1
Female	124	134	65.3	44.0	34.7	32.1	59.7	38.1
Age of respondent								
<25	24	38	45.8	42.1	25.0	39.5	62.5	39.5
25-34	35	41	71.4	34.1	40.0	29.3	71.4	43.9
35-44	42	28	47.6	39.3	31.0	25.0	59.5	32.1
45+	53	45	66.0	55.6	30.2	33.3	58.5	44.4
Marital status								
Never married	55	56	72.7	46.4	30.9	32.1	52.7	30.4
Currently married	65	62	46.2	43.5	29.2	32.3	67.7	50.0
Divorce/ separated/ deserted/ widow(d)	34	34	61.8	38.2	38.2	32.4	67.6	41.2
Literacy								
Illiterate	113	97	61.9	43.3	33.6	28.9	61.1	38.1
Literate	41	55	51.2	43.6	26.8	38.2	65.9	45.5
Occupation								
Agricultural labourer	63	57	58.7	54.4	41.3	33.3	61.9	38.6
Others	59	54	54.2	37.0	22.0	25.9	64.4	38.9
Not working	32	41	68.8	36.6	31.3	39.0	59.4	46.3
Caste or tribe								
SC/ST	118	123	66.9	43.9	33.1	32.5	61.9	39.0
Others	36	29	33.3	41.4	27.8	31.0	63.9	48.3
Belong Devadasi family								
No	64	59	42.2	45.8	20.3	28.8	68.8	42.4
Yes	90	93	71.1	41.9	40.0	34.4	57.8	39.8
Number of members in household								
<4	48	25	47.9	52.0	29.2	36.0	64.6	40.0
4-5	54	42	61.1	45.2	35.2	16.7	63.0	33.3
>5	52	85	67.3	40.0	30.8	38.8	59.6	44.7
Own a house								
No	19	26	47.4	46.2	10.5	38.5	52.6	42.3
Yes	135	126	60.7	42.9	34.8	31.0	63.7	40.5
Own agricultural land								
No	116	112	62.1	45.5	33.6	29.5	64.7	40.2
Yes	38	40	50.0	37.5	26.3	40.0	55.3	42.5
Rural-urban								
Rural	73	72	58.9	47.2	30.1	30.6	61.6	40.3
Urban	81	80	59.3	40.0	33.3	33.8	63.0	41.3
District								
Bagalkot	75	76	76.0	44.7	41.3	35.5	56.0	40.8
Belgaum	79	76	43.0	42.1	22.8	28.9	68.4	40.8
Level of HIV/AIDS knowledge								
Have comprehensive knowledge about HIV and < 3 misconceptions	23	26	60.9	46.2	26.1	26.9	82.6	23.1
Have comprehensive knowledge about HIV and 3+ misconceptions	67	21	62.7	57.1	22.4	23.8	58.2	38.1
Have partial knowledge about HIV and misconception	62	86	54.8	40.7	45.2	33.7	61.3	45.3
Total	154	152	59.1	43.4	31.8	32.2	62.3	40.8

Notes



Notes



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