BEHAVIOUR SURVEILLANCE SURVEY - WAVE VI
IN
IBBA AND NON- IBBA DISTRICTS
(2010)

Submitted To

Submitted by:

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EXECUTIVE SUMMARY

Tamil Nadu AIDS Initiative (TAI) is managed by Voluntary Health Services (VHS) with financial support from Bill and Melinda Gates Foundation. Its primary objective is to reduce sexual transmission of STD/HIV/AIDS among specific target groups in the prioritized districts of the state of Tamil Nadu.

The purpose of Behavior Surveillance Surveys (BSS) is to draw a composite picture of the change in the knowledge levels, along with the attitudinal and behavioral changes amongst the beneficiaries of TAI interventions carried out in 13 districts of Tamil Nadu from the year 2004. The purpose of conducting Behavioral Surveillance Survey every year is to facilitate the mapping of the impact of HIV/AIDS/STD prevention based interventions conducted by TAI in a total of its 13 priority districts.

The present survey tracks information on behavioural change and understands the impact of the TAI project among its target groups, namely Female Sex Workers (FSWs), Male Sex Workers (MSWs) and their clients. The following twelve districts under TAI's intervention program were covered in the current round of BSS: Coimbatore, Salem, Madurai, Dharmapuri & Krishnagiri, Thiruvallur, Vellore, Thanjavur, Namakkal, Dindugul, Theni and Erode. The key aspects being looked into in this survey include knowledge and attitudes of the target groups with regard to HIV/AIDS; sexually transmitted diseases; risk perception; behavioral aspects like sex work profile and condom usage; experience of STD and their treatment seeking behaviour and exposure to the intervention programmes.

Methodology

The survey was conducted among the four segments, namely Female sex workers and their clients, male sex workers and their clients. The study comprised of 5900 interviews in the twelve districts of Tamil Nadu across the four segments. A mapping exercise was conducted prior to the surveillance stage. The objective of the mapping was to revalidate the sampling frames in the study centers, update the list with new/ shifted sites for each population group and do the selection of the sampling sites. TAI used certain behavioral indicators in their baseline survey to measure the impact of the programmes and activities in terms of the behavior change. The same indicators were followed in this survey.

Operational Issues

Training of the field investigators becomes crucial in a BSS; the interviewers were thus trained over a period of three days in Chennai. Cooperation from TAI and the community members was immensely helpful in conducting the survey within the stipulated time frame. This gave the field investigators a clear understanding of the objective of the study.

Data Management and Analysis

Data was entered in the sophisticated packages with in-built features or inter record checks and intra record checks. The data collected from the field was back-checked and scrutinized at the Chennai office. During the fieldwork and the data verification stages, the Senior Field Executive at the Chennai office was in-charge.

Salient Findings

The salient findings from the study for each of the segments are presented below:

Female Sex Workers

The mean age of the FSW in the present round (33.36 years) did not show a significant increase from the previous rounds. Though 78.5 percent of the FSWs could read and write, it was a decline from the previous rounds. Almost half of the population of the total respondents in the Wave VI consisted of unmarried female sex workers (living with family) and the proportion of respondents who are 'married and living with spouse' was 16.9 percent, lower than the previous wave.

A higher proportion of FSWs towards the higher end of the age spectrum engage in commercial sex in other towns and cities than their own (41.7 percent of FSWs were above 35 years of age). Similarly 40.3 percent of the total respondents who are above 35 years of age engage in commercial sex in metros. This indicated an enhanced usage of mobile phones by the FSWs. Across districts the highest proportion of FSW who did not consume alcohol was in Dindugal district (28 percent). A meager 0.69 percent of the FSW have reported to have consumed drugs.

The average age at first paid sex was found to be 27.56 years. The major place of solicitation was found to be market (52.36 percent) followed by theater (50.6 percent). For entering in the profession of sex work, 85.43 percent mentioned that they have economic compulsions, along with one third of the total respondents reporting that they are the only earning members of their family. Apart from this, widowhood has pushed close to one third of the respondents into the profession of commercial sex, with 16.76 percent of them saying that widowhood has driven them into commercial sex, while 19.36 percent cited being deserted by their husbands as the reason. Importantly, 13.38percent of the respondents also reported being trafficked.

99.9 percent of the respondents in this wave reported that they have received individual HIV interventions. The proportion of FSW who have received individual education on HIV/AIDS through Non-TAI intervention have been on a decline since 2006 and in this wave only 6.6 percent reported having received any non TAI intervention. The proportion of respondents who reported that the NGO outreach worker or peer educator has visited them 2-3 times has been the highest reported across the waves (41.8 percent)

It is encouraging to find that a significantly higher proportion of FSW in the present wave have complete knowledge on HIV prevention, as compared to the previous wave. The proportion of female sex workers having correct knowledge on ways of preventing spread of HIV without any misconceptions was higher in the current wave (84.7 percent) as compared to Wave V (73 percent). Similar trends were observed in case of complete knowledge on means of prevention of HIV. The decline in knowledge among sex workers about condoms preventing spread of HIV as observed in the previous wave is found to have increased significantly to 99.2 percent in the current wave.

The behavior indicators reveal that across the districts there is an increase in consistent condom usage among FSW with occasional clients. Consistency in condom use with occasional clients was reportedly the highest in Madurai and Dharmapuri districts (98.67 percent and 93.98 percent respectively) which are a significant improvement over the previous wave.

The condom usage with regular partners has been consistently low across the waves. However this wave reversed the trend with 83.4 percent of those having occasional clients reporting consistent condom usage as compared to 79.9 percent among those reporting to have regular clients. On probing the reasons for non-usage of condom with regular partners, the main reasons that emerged were the perception that it is unnecessary to use condoms with regular partners (45.2 percent) or the unwillingness of the partner to use a condom (16.6 percent).

The condom negotiation was higher among the female sex workers who were exposed to TAI intervention for both types of partners' viz. client and nonpaying partner. About 90 percent female sex workers who were exposed to intervention reported that they refused to have sex with the client if he insisted on not using condom.

The respondents who have ever used condom were asked whether they were carrying condom at the time of the interview. It is observed that about 30.7 percent of them reported carrying condom at the time of the interview and could also show that they have condom with them. 28.2 percent of the respondents reported that they cannot show the condom, but have it. This was significantly higher compared to the previous wave (20.4 percent). A majority (53.0 percent) reported that NGO worker was the source of condom for the last sexual intercourse.

Self risk perception was higher among respondents who experienced STI symptoms (18.8 percent) compared to those who did not experience STI symptoms (6.3 percent). The perception of contracting HIV was observed to be higher part-time sex workers (9.5 percent) than full-time sex workers (4.7 percent). Risk perception was also observed to increase with age, with 43 percent of the respondents above 35 years of age perceiving risk of contracting HIV/AIDS while only 6 percent in the age group 21-25 years perceived any risk and none below 21 years reported perceiving any risk of contracting HIV/AIDS.

On the parameter of ever taken HIV test, it was found that all the districts recorded over 93 percent of ever experienced HIV testing and the lowest among them was Thanjavur (92.9

percent). Six districts among those surveyed (Vellore, Namakkal, Dindigul, Erode, Coimbatore and Krishnagiri) recorded 100 percent of the respondents having ever experienced HIV testing.

More than 88 percent of the respondents reported that they had visited TAI clinic the last time they experienced STI. TAI clinic was followed by Government clinic or hospital in preference for STI treatments. The proportion of those seeking treatment in a government health facility has shown a steep rise since the previous wave as compared to the values before the year 2008. In the current wave 84.4 percent reported that they sought treatment from a government hospital or clinic.

About 95.7 percent of the respondents in this wave reported to be aware of TAI Vizhudugal, the community based organization run by TAI as compared to 88.4 percent sex workers in the previous wave. The membership in TAI Vizhudugal has also seen a significant rise in this wave with an increase from 70 percent in the previous wave to 93 percent in this wave.

Male Sex Workers

Male sex workers (MSW) encompass an important group at risk of HIV infection. Among the known types of male sex workers we have collected the data on their status and covered Kothis, Double Deckers and Aravanis in the present study. An effort has been made to give a detailed description of their sexual practices, behaviour pattern, risk perception, and identities of men who have sex with men. The study sought to acquire information about the sexual behaviour of MSM.

As far as the respondents' profile of the current wave is concerned, about three fourth of the total respondents (74.1 percent) belong to the category of MSWs and rest of them (25.9 percent) are Aravanis. The median age of MSWs of the current wave at the overall level is 28 years. The mean age was found to be the highest for Erode with 32.65 percent.

More than half (54.1 percent) of the male sex workers are unmarried and living alone at the overall level. On the other hand, about one fifth of the total respondents were married and living along with their wife. The average number of clients per day was found to be the highest for Namakkal with 3.67 clients per day and the least for Theni with 1.98 clients per day.
It was found that 13.2 percent of MSWs do not consume alcohol at all. Out of the total number of Aravanis, 43.8 percent consume alcohol at least once a week. 29.33 percent of MSWs in Thanjavur do not consume alcohol at all.

The proportion of male sex workers having correct knowledge on ways of preventing spread of HIV without any misconceptions was higher in the current wave (83.6 percent) as compared to Wave V (79.4 percent). Interestingly, the levels of awareness of Aravanis are higher than those of Male Sex Workers for all the categories, exact on 'correct knowledge on HIV', for which 99.2 percent of the respondents are aware in case of both Aravanis and Male Sex Workers. The knowledge on the means of prevention of HIV differed by a high margin in the case of the

MSWs and Aravanis, with 44.3 percent of Male Sex Workers reporting awareness as compared to 66.7 percent in the case of Aravanis.

In the present wave, while 91.7percent of the respondents reported using condoms the last time they had sex with their regular clients, a substantially lower proportion of them reported doing the same with their regular male partners and non paying male partners. However, the proportion of the respondents who reported that they used a condom in the last sexual encounter with their regular male partners has increased in this wave as compared to the last wave with 63.5percent of the respondents saying so in wave V(2009) and a higher 76.4percent of the respondents saying the same in the present wave(2010). In the case of the last sexual encounter with regular clients, 81.9percent of Male Sex Workers reported using a condom, while a lesser 68.4percent of Aravanis said so. Similarly, while 82.3percent of the Male Sex Workers reported using a condom with their main male partners, only 66.8percent of Aravanis said so.

Out of the total number of Male Sex Workers, close to half (44.8 percent) reported not carrying condoms at the time of the interview. However, out of the total Aravanis interviewed, close to half (45.5 percent) reported carrying condoms at the time of the interview and they could also show the condoms to the investigators.

Condom negotiation was found to be the highest in the current wave among all the waves for the MSWs. For a non-paying partner, it is 44 percent in the current wave. It is found that a lower proportion of male sex workers reported that they could refuse the client if he insisted to have sex without condom (36.2 percent). This proportion was higher in case of Aravanis (66.3percent).

Nearly more than half of the male sex workers have been exposed to TAI Araichimani. The MSWs who were ever benefitted by TAI Araichimani was found to be the highest for the districts of Theni and Dindugal (94 percent and 87.62 percent respectively).

Clients to Female Sex Workers

The clients of female sex workers (CFSW) comprise bridge group for HIV transmission, but the characteristics of this segment are almost wide and variant. For the present study, the CFSW were identified and interviewed with the help of the community, pimps and most of the interviews were done at the site itself. CFSW are an important group which link female sex workers (with a high HIV prevalence) to the general population (wives, girlfriends assumed to have a lower prevalence). One of the intervention strategies for reducing the risk of HIV infection should be with the male client group which might therefore be able to have a substantial impact in slowing the spread of HIV. In the present study, efforts have been made to estimate the prevalence of HIV infection and the related risk behaviors among males who buy services from FSW.

In the current wave the mean age of the respondents was 32.51 years, higher than the mean of last year of 29.9 years. The mean age was found to be the highest in Dharmapuri with 35.87 years and second highest in Tanjore with 35.72 years. A majority of the clients of FSWs were literate (88.64 percent) and had been to school (89.88 percent). Nearly 35 percent of the respondents reported that they were unmarried and were living alone and about 44 percent reported that they were married and were currently living with their spouse. The mean age at first sex was 22 years, which was similar to the earlier wave. The clients to FSWs reported that on an average they had sex with a commercial sex worker for 2.25 times in the past month, which was higher than last year of 1.7 times.

There was significant increase in the proportion of CFSWs who drink alcohol everyday (from 3.8 percent during 2009 to 12.84 percent in 2010). 16.67 percent of CFSW in Dindugal have reported non-consumption of alcohol. On further analysis, on the basis of age of the respondents, it was observed that everyday consumption of alcohol was reported by respondents in the higher age group.

A significant increase has been observed in the percentage of CFSW who received individual education on HIV through TAI interventions across the five waves. It has increased from 4.6 percent in 2009 to 12.6 percent in 2010. In the current wave about 98.5 percent respondents reported that they were exposed to condom messages which exactly the same as the previous wave.

Consistency of condom usage with FSW was found to be 74.32 percent overall and it was 100 percent for Erode, followed by 98.91 percent for Madurai.

The proportion of respondents who were aware about STD was highest in the age group of less than 21 years (100 percent). Interestingly, at overall level, about 97.78 percent respondents were aware about STD irrespective of the age group. A small proportion of the respondents (2.47 percent) reported that they experienced genital sores/ulcers in the past one year.

Clients to Male Sex Workers

Clients to male sex workers were selected from the same sites where the survey covered the sex workers. The sample was proportionately distributed across the sites, based on the universe estimates. The clients for male sex workers were a considerably difficult category to access. The respondents in this group were identified with the help of the community. The report provides a profile of clients of male sex workers (MSW) in the state of Tamil Nadu. The report captures their behavior pattern, risk perception and health risks. It can be observed that the risk of infection is highest where sex workers are unable to negotiate the use of condoms by their clients.

It was found that more than half of the respondents lie between 26-35 years of age, and their median age is 29 years. As we move from the lowest age group (21-25 years) towards the higher age groups, the proportion of respondents who have migrated from their city/district of

origin increases. It was founded that the highest majority of literate respondents (92.2percent) is in the age group of 26-30 years. However, most of those respondents have finished their education only up to standard 10th, indicating high dropout rates.

More than one third of the total respondents reported that they are married and living with a wife. Additionally, 1.5 percent of the respondents said that they are married, but are currently living with some other partner.

Alcohol consumption was found to be 12.84 percent on an everyday basis at an overall level. It was found to be the highest for Krishnagiri with nearly one-fourth of CMSW consuming alcohol everyday. However, drug consumption was found to be 5 percent for the current wave.

As per the findings of the current wave, the proportion of respondents who had correct knowledge on at least two acceptable ways of preventing the spread of HIV has gone up to 99.8 percent this year from it being 96.7 percent in the last wave. Similar is the case for the awareness levels on the knowledge that condoms prevent HIV.
The median age at which the respondents reported engaging in first sexual intercourse with a male/hijra partner is 23 years, with about half of the respondents falling in the age group of 22-25 years. However, the median age at which the respondents reported having paid for sex with a male/hijra partner (25 years) is higher than the age at which they had their first sexual intercourse.

As per the findings of the current wave, three fourth of the total respondents mentioned that they have had anal sex in the last one month. A little more than three fourth of the respondents (78.3 percent) mentioned that they have indulged in oral sex. In the case of condom usage during last sex with a non paying male partner, there was a sharp decline in the proportion recorded in the current wave (56.4 percent), as compared to the last wave (97.5 percent).

As per the findings of the current wave, only about one third of the respondents (32.8percent) reported having taken an HIV test at least once till the time the interview was taken. The proportion of respondents who reported having taken a test voluntarily was found to be 95.4percent, and this was higher than the proportion of respondents reporting the same in the last wave (90.1percent). Additionally, the respondents were also asked if they received any counseling before the test. The proportion of respondents who answered in the affirmative had increased heavily in the current wave (96.2percent) has scaled up heavily as compared to the result of the last wave.

When the respondents of the current wave were asked about whether they have ever heard of any Sexually Transmitted Disease or not, most of them (99percent) reported being aware of STDs. The awareness levels on ‘urethral discharge’ and ‘burning/pain on urination’ were reported to be lower in the current wave (61.36 percent), as compared to the last wave (71.5 percent). Nearly 5 percent of CMSWs were exposed to correct usage of condoms. When asked about their perception on their chances of contracting HIV/AIDS, a meager 2 percent perceived having any possibility of such risk.

Also, it is found that only 2 percent of the CMSW have visited TAI/SESA clinics in the last six months. Though the exposure to condom ads and messages have been consistently high across the past few years (with it gradually increasing from 96 percent in 2007 to 99 percent in 2010), exposure to key clinic ad/messages has been consistently low. In fact, it took a plunge to as low as 14 percent in the current year from 26.7 percent in 2009, and 28.6 percent in 2008.

BACKGROUND OF THE STUDY

Behavior Surveillance Surveys

Behavior Surveillance Surveys began in 2005 to evaluate the impact of the HIV/STD/AIDS prevention programme initiated by Tamil Nadu Aids Initiative (TAI) for male and female sex workers in Tamil Nadu. This initiative is administered by Voluntary Health Services (VHS), and is financially supported by "Avahan", The Bill and Melinda Gates Foundation.

HIV/STD/AIDS Prevention Programme- Tamil Nadu AIDS Initiative

The aim of this programme is to strengthen the efforts centered on HIV/AIDS prevention amongst the sex workers in Tamil Nadu. To achieve this aim, Tamil Nadu AIDS Initiative initiated a 5 years long community-driven STD/HIV/AIDS prevention programme in 13 districts of Tamil Nadu (they are also known as TAI priority districts). The programme began on April 1, 2004, with its focus on male and female sex workers in these priority districts. Male sex workers included Aravani Penngal and Kothis (transgender), besides including 'Double-deckers'.

- To reduce the burden of sexually transmitted diseases among male and female sex workers and as well as their clients
- To address the issues of vulnerability among sex workers
- To focus on enhancing the quality of life, giving self confidence, developing high self esteem and empowering them to take control of their lives
- To empower the key population to avoid unsafe sex through effective condom negotiation, and skills to manage power structures
- To increase the health seeking behavior with regard to general health, hygiene and STD-treatment

To achieve the aforementioned objectives, TAI supported a number of NGO partners to implement the intervention programme. These NGOs were screened through a vigorous selection process, and were also exposed to a serious of systematically designed training programmes. In the beginning, each NGO was expected to reach a key population of 1000-1500 sex workers through its implementation activities. This target was reached within a year of the beginning of the project, post which the intervention efforts were intensified further. Along with the NGO partners, TAI also joined hands with various capacity building agencies that were capable of providing auxiliary services to these NGOs.

Behavior Surveillance Survey

In order to study the impact of these activities carried out by TAI, in conjunction with the partner NGOs and the chosen capacity building agencies, Behavior Surveillance Surveys were initiated in 2005, an year after the beginning of the project. Wave I (first BSS study in 2005) was subsequently followed year on year by Wave II in 2006, Wave III in 2007, Wave IV in 2008 , Wave V in 2009, and Wave VI in the current year.

The purpose of Behavior Surveillance Surveys (BSS) is to draw a composite picture of the change in the knowledge levels, along with the attitudinal and behavioral changes amongst the beneficiaries of TAI interventions carried out in 13 districts of Tamil Nadu from the year 2004.

At the very beginning (before the onset of BSS Wave I), 13 districts of Tamil Nadu (also known as TAI priority districts) were classified as IBBA and non- IBBA districts. IBBA stands for Integrated Behavioral and Biological Assessment. These districts where IBBA method was used for surveillance (also called as the IBBA districts) were kept out of the purview of the surveys conducted by IMRB International during Wave I and II (2005 & 2006). Therefore, Wave I and II were carried out by IMRB International only in the rest of the districts (referred to as non-IBBA districts).

However, for Wave III and IV (2007and 2008), the BSS included both IBBA and non-IBBA districts. Please refer to the table below for distinction between districts that fall under the IBBA and non-IBBA categories.

Wave V, conducted in the year 2009, incorporated the impact evaluation of the intervention in only the non-IBBA districts, followed by the current wave (Wave VI), which takes into its ambit all the non-IBBA districts, along with all IBBA districts except Chennai.

Year District	2005	2006	2007	2008	2009	2010
Chennai			✓	✓		
Coimbatore			✓	✓		✓
Salem			✓	✓		✓
Madurai			✓	✓		✓
Dharampuri & Krishnagiri			✓	✓		✓
Thiruvallur						✓
Vellore		✓	✓	✓	✓	✓
Tanjore & Trichy *		✓	✓	✓	✓	✓
Namakkal & Karur*		✓	✓	✓	✓	✓
Dindugul		✓	✓	✓	✓	✓
Theni		✓	✓	✓	✓	✓
Erode		✓	✓	✓	✓	✓

*Trichy & Karur were dropped from wave IV

 IBBA districts, Non-IBBA districts

The purpose of conducting Behavioral Surveillance Survey every year is to facilitate the mapping of the impact of HIV/AIDS/STD prevention based interventions conducted by TAI in a total of its 13 priority districts.

From being classified as a high HIV/AIDS prevalent state in India to its present prevalence status, Tamil Nadu has seen a robust improvement in its strength to fight against the epidemic of HIV/AIDS over the course of the last few years. Even though the abatement in the prevalence of HIV/AIDS in Tamil Nadu is evident, it could only be proven scientifically by employing biomedical tests to check for the presence of HIV amongst the population.

However, it's clear that there is a noticeable increase in the general awareness levels about HIV/AIDS amongst people along with relevant attitudinal and behavioral shifts over the last few years. This could be accounted to the intervention work done by various institutions that target Tamil Nadu for HIV/AIDS related work. Tamil Nadu AIDS Initiative, being one of the biggest HIV/AIDS/STD prevention projects carried out in 13 districts of Tamil Nadu, is studied under this context through the findings of the present wave, vis a vis the findings of the previous surveys.

RESEARCH OBJECTIVES

The primary objectives of the BSS were:

- To obtain measures on behaviour indicators for observing trends in high-risk behaviour among selected sub-population groups.
- To obtain qualitative diagnostics on the trends and explain the behaviour across the key groups wherever required.

GEOGRAPHICAL COVERAGE

The following eleven districts under TAI's intervention program were covered in the current round of BSS:

- Coimbatore
- Salem
- Madurai
- Dharampuri & Krishnagiri
- Tiruvallur
- Vellore
- Tanjore
- Namakkal
- Dindigul
- Theni
- Erode

OPERATIONAL DEFINITIONS

Key Population Groups and Operational Definitions

The current study in the 12 districts of Tamil Nadu covered the following categories:

- Female Sex Workers (FSW)
- Male Sex Workers (MSW)
- Clients to Female Sex Workers (CFSW)
- Clients to Male Sex Workers (CMSW)

Operational Definitions of the Groups:

The definition of the population group is as follows:

Female Commercial Sex Workers (FSW):

Women above 18 years of age and engaged in sex, either full time or part time, as a means of living, during the past three months.

Men who have Sex with Men (MSM)

Men between 15 to 45 years of age, who have had sex with men in the last six months.

Aravani Pengal (ARA) - Transgender

15 to 45 years of age, Aravani (Transgender, Kothis and DDs) who have been/were active in sex trade in the last 12 months.

New/Occasional Clients of Sex Workers

Occasional clients refer to those clients who solicit services from a sex worker but not on a regular basis. They may seek sex from the FSW once or occasionally.

Regular Clients of Sex Workers

Regular clients refer to those clients who develop familiarity with the sex worker and solicit sex from her on a regular basis. They are paying partners.

Non-paying partner-Regular partner

Regular partners are sex partners like husband, live-in partner, who are non-paying and having sex fairly often with the female sex workers.

Other non-paying partner

Other non-paying partners are casual partners who are non-regular, non-paying partners and may include friends, relatives, colleagues, neighbours etc.

Clients to Female commercial Sex Workers (CFSW)

Men who had sex with a commercial female sex worker during the past one month.

Clients to Male Sex Workers (CMSW)

Men above 18 years of age who had sex with a commercial male sex worker during the past one month.

SAMPLING METHODOLOGY

A mapping exercise was conducted prior to the surveillance stage. These were the following areas that were covered in this mapping exercise.

Geographical Update

The objective of this exercise was:
(1) To revalidate the sampling frames in the study centers
(2) To update the list with new/ shifted sites for each population group
(3) To do the selection of the sampling sites

Updating the Sampling Frames

- To revalidate the sites and the population of the target community mapped earlier
- To identify the sites of the movement of the target population and to resolve the substitute sites if required

Updating of Sampling Frames- Female Commercial Sex Workers

Female commercial Sex Workers are highly mobile within the same city as well as outside the city. The professional difficulties and the opportunities results in the mobility of this community. In this exercise we updated the site list and the size of each site mapped during 2007 (Study conducted by SRI-IMRB).

The sites and the number of the FSW in each of these sites were reconfirmed through the physical site validation exercise by IMRB. As we also have conducted the earlier BSS and mapping exercises, we used the same set of investigators for this revalidation too. However, we tried meeting new key informants.

The target community that was contacted for this part of the study was:

- Pimps/brokers/madams
- Auto rickshaw drivers
- Hotel / Lodge owners
- Cycle rickshaw pullers
- Petty shop owners
- FSW themselves
- NGOs working with FSW etc.

Updating of Sampling Frames- Men who have Sex with Men

This is one of the most critical and hidden groups. As this group is highly mobile and does not have specific areas of operation, it was necessary to understand their presence and map them prior to starting the fieldwork. This exercise also established links for contacting them.

In this exercise we updated the mapped sites list. The list of sites and the population of the men who have sex with men mapped earlier was taken as the base for this part of the exercise.
The areas and the population of the MSMs across the areas were reconfirmed through the physical site validation exercise done by the field staff of IMRB, with personal involvement of the research staff.
The Key Informants contacted for this part of the study were:

- Target Community (Other Men who have sex with Men)
- Watchmen in the parks and other recreation places
- Pimps
- NGOs who are working with these groups
- FSWs etc

It has also been observed that the community in this group is mostly found in the areas where there is less crowd moving etc. Hence we involved the people from the target community. These people were mostly found in:

- Parks
- Cinema Theatres
- Slums
- Lonely areas away from city
- In and around college campuses (lesser extent though) etc.
- Bus and Railway stations
- Near temples etc.

There are three sub-groups of MSMs we have studied:

- Panthis (Who behave like male in the sex)
- Kothi (Who behave like female in the sex)
- Double Decker (Who behave like both male and female in sex)

Since the behaviour and psychology of these four groups is extremely different, and mapping and interacting with these groups required specific training skills for the interviewers, training was imparted to the surveyors prior to start of the revalidation exercise.
IMRB's field staff who is experienced in such studies physically visited all these areas and revalidated the numbers.

BEHAVIOURAL SURVEILLANCE SURVEY

BSS Indicators

TAI used certain behavioural indicators in their baseline survey to inform their programmes and also to measure the impact of the programmes and activities in terms of the behavior change. The same indicators were followed in this survey.

These indicators are classified by TAI in the following manner:

- Knowledge Indicators
- Behavior Indicators
- STD symptoms and treatment seeking behavior
- Exposure to Individual Interventions
- Individual felt levels of stigma and discrimination
- Risk Perception
- Voluntary Testing and Counselling

TAI intends to obtain repeated measures on each of these indicators during every round of Behaviour Surveillance Survey and compare the trends to monitor and obtain directors for the intervention programmes.

The following are the description of each of the above indicators considered for the study:

1. **Knowledge Indicators**
   - Proportion of respondents with knowledge on sexual mode of transmission of HIV/AIDS/STDs
   - Proportion of respondents with knowledge on condom usage as a method of prevention from HIV/AIDS/STDs

2. **Behavioural Indicators**
   - Proportion of respondents using condom in the last sexual intercourse with non-regular partners/ Regular clients/ Live-in partners
   - Proportion of respondents reporting consistent condom usage in the last one week (for female sex workers) and one month (for male sex workers) with non-regular partners/ Regular clients/ Live-in partners

3. **STD Symptoms Indicators**
   - Proportion of female respondents reporting vaginal discharge and genital ulcers in the last 12 months
   - Proportion of male respondents reporting urethral discharge/ anal STDs in the last 12 months

4. Health Seeking Indicators

- Proportion of respondents reporting seeking treatment from a qualified medical practitioner for the last observed STD symptom

5. Risk Perception

- Proportion of respondents perceiving risk of contracting HIV/AIDS for self

6. Exposure to Individual Interventions

- Proportion of respondents reporting exposed to the individual interventions in the last one year

7. Individual felt levels of stigma and discrimination

- Proportion of respondents who perceived that getting infection of HIV is a mark of shame
- Proportion of respondents who perceived that HIV infected person should be isolated from the society

The other additional information which BSS has obtained includes:

- Socio-demographic characteristics
  - → Age
  - → Education
  - → Marital Status
  - → Occupation etc.
- Age at first sex
  - → Additionally Age at first paid sex for FSW
- Misconceptions about the prevention and transmission of diseases
- Sources of awareness about HIV/AIDS
- Role of interventions in terms of creating awareness
- Population groups involved in paid sex
  - → Extent of involvement and consistency in condom usage.
  - → Reasons for involvement in non-regular sex
  - → Emotional and Rational reasons
- Condom use with different type of partners
  - → Type of the partners where condom usage is low and reasons for the same
- Reasons for using and not using condoms
  - → Across the types of sexual partners/ Emotional and Rational reasons
- Reasons for perceiving risk/ Lack of risk
  - → Cross tabulation with the knowledge and attitudes
- Condom negotiation practices and condom procurement
  - → Specifically among the Commercial sex workers
  - → Who proposes the condom usage (self or partner) in general population

IMPLEMENTATION OF SURVEY

The sampling methodology employed for this survey was a multi staged approach (as explained below) for sampling out target respondents from the universe i.e. total population of sex workers operating in TAI's intervention districts.

1. **Selection of Districts:** Current survey was carried out in both IBBA and Non IBBA districts**.**
   - Coimbatore
   - Salem
   - Madurai
   - Dharmapuri & Krishnagiri
   - Tiruvallur
   - Vellore
   - Tanjore
   - Namakkal
   - Dindugul
   - Theni
   - Erode

2. **Sampling of the Sites (PSUs)**

a. Estimating the Number of sampling sites

We interviewed 20 respondents in each of the sites. Ten to fifteen sites in each district were selected to ensure variability and spread within a district.

b. Selection of the sampling sites

Conducted a fresh sampling from the earlier mapping exercise using the same methodology as earlier and conducted the study among those sites after updating the site information. The sites were selected through PPS sampling in each of the districts covered.

Distribution of Sample Sizes

A sample of 3200 FSW, 1900 MSM were interviewed the above listed study centres (group of districts). For present wave 400 sample from CFSW and CMSW samples were interviewed to collaborate with the finding at the overall level in study area. Hence overall 5900 sample across the category groups were surveyed in wave VI

District-wise distribution of sample size of core groups are tabulated as follows:

Year	FSW	MSM	Total
Coimbatore	300	300	600
Salem	300	300	600
Madurai	300	300	600
Thiruvallur	200		200
Vellore	300	300	600
Thanjavur	200	150	350
Namakkal	300	100	400
Dindugul	200	100	300
Theni	300	50	350
Erode	300	300	600
Dharmapuri	300		300
Krishnagiri	200		200
Total	**3200**	**1900**	**5100**

The total sample size of 5900 (including 400 each from CFSWs and CMSWs) was covered across 12 study districts.

Justification for the above Sample

The following formula was used to determine the sample size at group level:

$$n = D\frac{\left[\sqrt{2P(1-P)}Z_{1-\alpha} + \sqrt{P_1(1-P_1)+P_2(1-P_2)}Z_{1-\beta}\right]^2}{\Delta^2}$$

Where:
D = design effect;
P_1 = the estimated proportion at the time of the first survey;
P_2 = the proportion at some future date, such that the quantity (P_2 - P_1) is the size of the magnitude of change it is desired to be able to detect;
$P = (P_1 + P_2) / 2$;
$\Delta^2 = (P_2 – P_1)2$
$Z_{1-\alpha}$ = the z-score corresponding to the probability with which it is desired to be able to conclude that an observed change of size (P_2 - P_1) would not have occurred by chance;
$Z_{1-\beta}$ = the z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (P_2 - P_1) if one actually occurred.

Assumptions for Sample Calculations

1. Assuming Key characteristic at 50 percent produces the optimum sample size to detect the minor changes which can be expected in the critical components of the behaviour.
2. Expected change that the sample size should detect: 15 percent. This refers to the amount of change that can be detected between two survey rounds. For example, if condom use changed by an absolute 10-15 percent, this would be detected as a statistically significant change. A lower absolute change would not be considered statistically significant. Smaller differences require larger sample sizes.
3. The alpha level has been set at 0.05, corresponding to 95 percent confidence in the observed estimates.
4. The beta level has been set at 0.10, corresponding to 90 percent power.
5. Design effect: 1.7 which is ideal for time-location sampling. This adjusts for the use of sampling designs that are not simple random methods, e.g. cluster sampling.

Implementation of Survey

The unique requirements of the study necessitated a very comprehensive data collection exercise. In this section we discuss various activities that were followed.

Phase-1 Preparatory Phase

This stage entailed a review of the sample design and discussions with the client to firm up the final research methodology being put to use. During this stage, apart from the revalidation exercise, we also identified the key NGO workers and gatekeepers whose help was sought to facilitate the field investigators in gaining access to respondent communities. At the end of the preparatory phase, the sample spread was modified and firmed up. This included sample site selection for the respondent group. If the sample size could not be achieved at one sample site, then the adjacent site was used for completing the sample. The preparatory phase also included finalization of the research instruments in consultation with the client.

Questionnaire

Structured and pre-tested questionnaires, which were used for BSS among the third round of IBBA districts, were used for the current BSS. Any changes, relevant for the current context of the programme and informing on the critical aspects, were made to the questionnaire. All the questionnaires were translated and back-translated into the regional language and English.

The need for pre-testing of the questionnaire was based on the kind of changes that were made in the questionnaire. No pre-testing was required if not many significant changes were made to the questionnaire.

Recruitment & Training of Investigators

The selection of interviewers was done from the pool of talented investigators who have been working with SRI-IMRB for a long period of time. The selection was based on the following criteria:

1. Experience in the field of social research and specifically on HIV/AIDS issues.

2. Experience in conducting interviews in BSS and similar surveys.
3. Tenure with SRI-IMRB
4. Willingness and enthusiasm shown for the study
5. Respect for ethics

Male interviewers were selected to conduct interviews with the respondents. Community involvement throughout the period of the fieldwork was also maintained.

As per our experience of conducting BSS in the state of Tamil Nadu for the last considerable number of years, we selected the interviewers as per the following criteria.

→ Communication skills (Expressiveness of the thoughts and ability to communicate the purpose of the study)
→ Attitude (Intention to put-in long hours of work)
→ Willingness to work with the sensitive target community
→ Experience (Previous experience of working in the similar categories)
→ Other factors like convincing appearance and friendly body language and gestures

In order to finalize the investigators who would be conducting the fieldwork, they were exposed to a rigorous training exercise.

Need for the training

Due to the high levels of sensitivity of the study, it was very important for the investigators to understand the techniques of interviewing the target community and elicit the most authentic information from them. The investigators had to be sensitive and "alive" to the issues being discussed with the respondents.

For this, a thorough training was required for all the field personnel involved in the study. An intensive training programme was conducted and the following topics were covered in the training program:

Topics covered
Day-1- Centralized Briefing
Orientation on TAI and TAI Project
Behavioural Norms in Training Programme
Basic issues on HIV/AIDS
Sex & Sexuality desensitization exercises
Norms for field investigation
Ethnographic details of various target population groups
Communication and interviewing skills and dress codes
Methodological issues and interview schedule briefing
Day-2- Centralized Briefing
Recap of previous day's discussions
Questionnaire Briefing
Day-3
Recap of previous day's discussions
Questionnaire Briefing
Mock Calls sessions/Role Plays
On field Briefing
On the field training at respective centers

Phase 2 – Data Collection

Field Administration

The fieldwork was entirely managed by IMRB office at Chennai and centrally managed by the core research team at SRI-IMRB, Delhi. The field teams were originated from the centers Chennai and Madurai.

Trained investigators of SRI-IMRB conducted the fieldwork. Review meetings were held with the teams on a regular basis to address the problems if any in the data collection exercise.

Key Points to be observed during Data Collection

The following points were taken care-of while conducting the fieldwork for the survey.

Confidentiality of the information provided by the respondent

→ The nature of the study makes it very important for the investigator to respect the right to confidentiality of the respondents. More importantly, the investigator maintained confidentiality regarding the respondent's identity.

Informed consent

→ The study warrants free and fair usage of respondents' right to know the purpose of the investigator's visit. The investigators informed the respondents, the nature and purpose of the study clearly.

- → The purpose of the survey was clearly mentioned to the respondent and her acceptance and willingness to participate in the study was taken prior to starting the interview.
- → The respondent was given the freedom to walk-away at anytime during the interview if she did not find the questions comfortable to answer to.
- → Respecting the dignity and self-respect of the respondent
- → Building rapport through an intensive warm-up exercise with the respondents prior to proceeding into the discussion on sensitive issues for ensuring accurate and frank information.

Rapport Building

- → Initial 10 minutes of the conversation focused on convincing the respondents on the nature of the study and develop comfort levels by clarifying the issues the respondents might have with the nature of the data requirement.

Avoiding the group / paired interviews

- → To keep the respondents in a comfortable situation the interviews were conducted without disturbance from their friends and peers.

Supervisor- interviewer Ratio

BSS does not allow the supervisors to do the back checks, as we cannot obtain the name and address of the respondents. Hence all the quality checks were done either through the accompanied calls or through the spot checks.

For this reason, there was 1 supervisor for every 4 investigators. This facilitated high involvement of the supervisor in the work being done by the investigators and therefore high quality of deliverables.

The following table presents the spread of investigators across base centers:

Base Centre	Number of Investigators	Number of supervisors
Chennai	8	2
Madurai	8	2
Total	16	4

Supervisory Framework

The data collected from the field was back-checked and scrutinized at the Chennai office. During the fieldwork and the data verification stages, the **Senior Field Executive** at the Chennai office was in-charge. The data collection exercise was, at all times, supervised by the **Senior Field Manager** at Chennai. After the information reached the Delhi office, adequate checks were performed by the core research team before subjecting it to analysis.

Involvement of TAI NGO project staff in the mapping and BSS studies

As discussed with the client, there were a maximum of two field staff from each of the 24 NGOs participating closely with IMRB in various stages of the survey. The objective of the involvement was to build the capacity of the NGO workers with regard to the research process and also to help IMRB in having easier access with the community at critical stages in the study.

Quality Checks

Quality checks were done at all stages of data collection by senior field personnel to ensure consistency. There would be 30 percent accompanied calls and spot checks of the work done by all the interviewers. Apart from this, 100 percent scrutiny was done of all the interviews.

Monitoring Plan

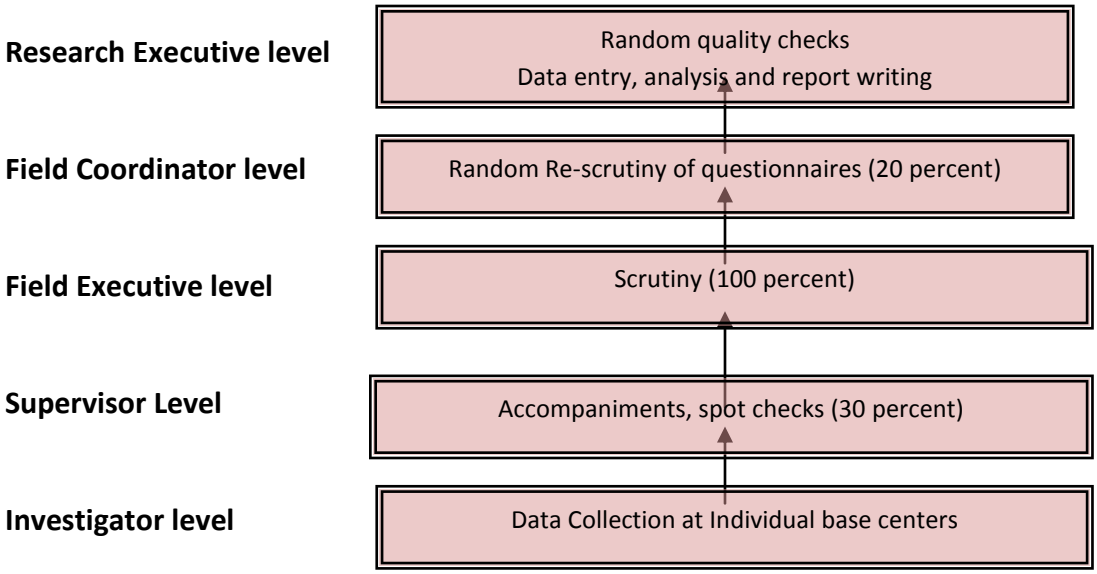
The monitoring plan presented here shows the plan of quality checks and accompaniments. This section also talks about supervision and quality control at various levels for each of the target groups.

Data Collection Mechanism

- Considering the sensitivity of the target groups, the interviews were conducted by senior interviewers who are experienced in administering interviews with such critical segments.
- Interviews were done only at the place of convenience for the respondents. All interviews were only conducted at the sites that were mapped during the study.
- Senior Field Executives accompanied the interviewers in this segment. Executives either accompanied the interviewer or did spot-check during the interview/ immediately after the interview.

Data Flow Back

The data flow took place in the following manner:



FEMALE SEX WORKERS

Section: 1. Demographic Characteristics of FSW

1.1. Introduction

Given the high propensity of HIV transmission through unprotected sexual intercourse, and the vulnerability of Female Sex Workers to sexual exploitation and sex without protection, they are identified as a high risk group for HIV/AIDS/STD related intervention programmes.

Tamil Nadu AIDS Initiative, in particular, addresses the issue of enhancing the self esteem, negotiation powers, and health seeking behavior amongst both male and female commercial sex workers in order to control the HIV/AIDS epidemic in Tamil Nadu.

1.2. Purpose of studying the demographic profile

The purpose of studying the demographic profile of FSWs is to formulate a background sketch against which the information on the knowledge levels, attitudinal and behavioral indicators of the respondents could be comprehended.

1.3. Classification of the respondent on the basis of their base location

As seen in the all the previous surveys (from 2005-09), it was found that most of the respondents were 'street based' Female Sex Workers (FSWs). Post Wave III, the proportion of 'brothel based' FSWs has shown a decline, with the proportion being 0.47 percent, 0.36 percent and 0.44 percent in 2008, 2009 and 2010 respectively. The proportion of 'home based' FSWs has declined since the first Wave in 2005 (when it was reported to be 5.88 percent). Similarly, the proportion of 'highway based' FSWs has also declined after Wave I ('highway based' FSWs reduced from 6.88 percent of the total respondents in 2005 to 1.38 percent, 0.86 percent, 0.27 percent0.04 percent and 0.66 percent in the years 2006, 2007, 2008, 2009, 2010 respectively).

1.4. Age and Marital status of FSWs

It was found that the mean age of the respondents, who were interviewed for the present Wave (VI), is 33.36 years. As far as the median age is concerned, it could be seen from the following table that the median age of the respondents hasn't noticeably changed over the past 6 years of BSS, with the median age at the overall level being 32 years.

One would expect FSWs to restrict their sex work more to their own cities, as they age. However, it was observed that there is a reverse relationship between age of the FSWs and the extent to which they localize their sex work.

A higher proportion of FSWs in the early twenties are likely to be independent, and unmarried. Therefore, they are likely to have higher mobility as compared to FSWs who are married and older .This could make it easier for them to travel across to other cities and increase their prospects of earning from commercial sex. However, the findings contradict this assumption, as we see that almost half of the respondents (41.7 percent) who engage in sex work in other towns and cities are above 35 years of age.

Moreover, almost one third of all the FSWs who are above 35 years of age, are illiterate. However, the proportion of the respondents lacking basic literacy in the younger age groups is far lower.

1.5. Basic Literacy Skills

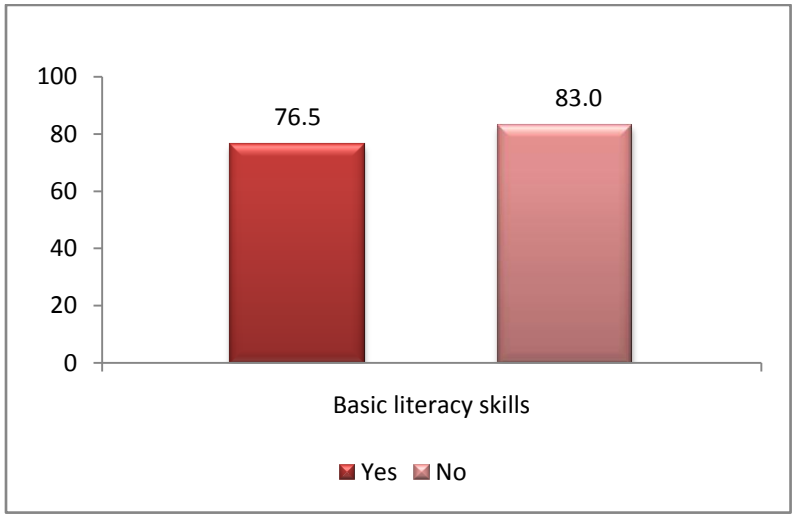
When the respondents of Wave VI (2010) were asked whether they could read and write or not, it emerged that 78.52 percent of them responded in the affirmative. However, this proportion has seen a decline as compared to the proportion of the respondents who could read and write as per the findings of Wave V (84.48 percent), but is higher than the proportion of respondents who could read and write as per the results of Wave I- IV.

Table: 1. Read and write

	Overall	2005	2006	2007	2008	2009	2010
Yes	74.0	69.2	69.2	74.3	69.9	84.5	78.5
No	25.8	30.8	30.8	25.6	30.0	15.5	21.0
Base : All Respondents	19391	2397	2399	4409	4488	2500	3198

It was also found that contrary to the popular belief, the basic literacy skills of the respondents does not have a meaningful relationship with whether they have any secondary sources of income available at their disposal or not. As suggested by the tables below, out of the total number of respondents who don't have access to secondary sources of income, a staggering 83 percent have basic literacy skills.

Graph: 1. Literacy skills- Availability of other sources of income



The lack of a positive relationship observed here between the basic literacy skills of FSWs and their engagement with secondary sources of income suggests that a high proportion of FSWs who can read and write are still solely dependent on commercial sex for fulfilling their monetary requirements. This could be of critical importance during condom negotiation and in dealing with sexual exploitation within the confines of commercial sex.

1.6. Current marital status

Almost half of the population of the total respondents in the Wave VI consisted of Unmarried Female Sex Workers (living with family). However, the previous Waves (II-V) didn't consist of any respondent from this category. Also, Wave I incorporated only 7 percent of such respondents.

At the same time, the proportion of respondents who are 'married and living with spouse' is only 16.9 percent in the Wave VI study. However, this category constitutes almost half of all the respondents interviewed for the previous Waves (I-V).

Moreover, the proportion of deserted/separated respondents is higher in the present Wave as compared to Wave V (17.32 percent in Wave VI and 9.56 percent in Wave V).

1.7. Consumption habits- intake of alcohol and drugs

Understanding the frequency and patterns of consumption of alcohol is relevant in the context of increasing the proclivity of FSWS of engaging in chance sexual encounters against their wish, and the difficulty of negotiating condom usage with the clients. This makes them more vulnerable to sexual exploitation and sexual transmission of HIV.

However, over the past few waves, the proportion of FSWs reporting that they don't consume alcohol at all as been gradually going up.

Table: 2. Frequency of alcohol consumption in the last 1 month

	Overall	2005	2006	2007	2008	2009	2010
Every day	2.5	6.1	1.4	2.0	1.8	1.7	3.2
At least once a week	12.2	18.7	12.9	12.0	12.5	9.6	8.5
Less than once a week	15.5	17.4	20.6	16.2	14.0	14.5	12.1
Not consumed Alcohol in the last one Month	14.1	13.1	18.5	20.1	12.9	6.0	11.0
Do not drink alcohol at all	55.2	44.6	46.4	48.7	58.2	67.7	64.8
Don't know	0.1	0.0	0.2	0.1	0.0	-	0.0
Base : All Respondents	19391	2397	2399	4409	4488	2500	3198

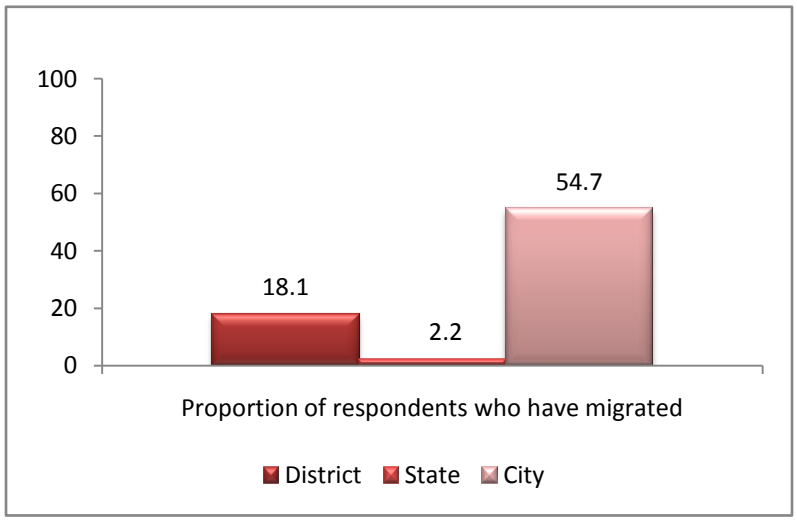
Intake of narcotic drugs can also have effects similar to the intake of alcohol in terms of reducing the discretionary powers of FSWs, and making them more vulnerable to unprotected sexual encounters. However, use of injecting needles for the intake of drugs is another means of transmission of HIV from an infected person to an uninfected person.

However, about three fourths of the total respondents of the present wave denied having tried drugs even once, suggesting that the drugs usage amongst FSWs (as reported by them) is very low.

1.8. Migration

The respondents of the current Wave (VI) were asked about the districts, states, and cities they belong to, and those that they are currently living in. Post this, it was found that the within city migration and the within district migration is much higher than the migration within states. Almost all the respondents (97.84 percent) who were interviewed mentioned that they are currently living in the same state that they originally belonged to. 81.89 Percent respondents mentioned that they are living in the same district that they originally belong to. However, only about half of the respondents (45.34 percent) mentioned that they have not migrated from their original city of residence.

Graph: 2. Migration from the city of origin



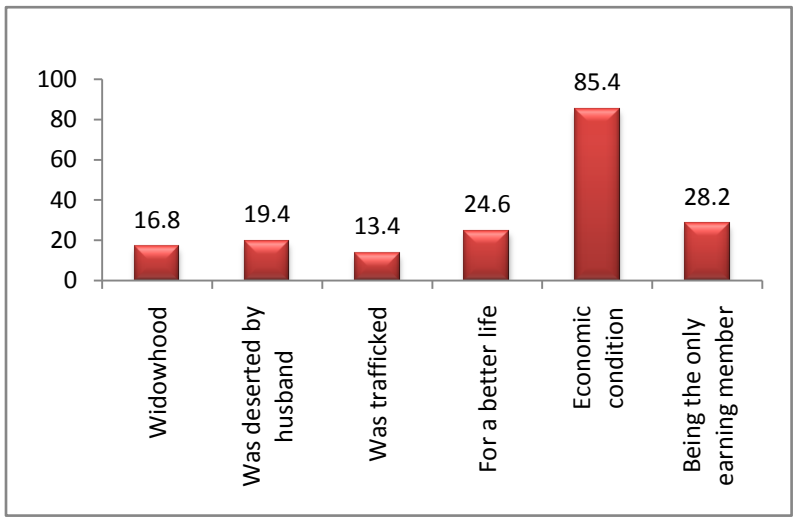
Studying the patterns of migration becomes crucial to all HIV/AIDS interventions, since the transmission of virus from one infected person to another can occur across all geographical boundaries. Also, an understanding of the migration trends also helps to strengthen local intervention programmes wherever required.

1.9. Engagement in sex work

When the respondents were asked about the reasons behind engaging in commercial sex, a majority of them (85.43 percent) mentioned that they have economic compulsions, along with close to one third of the total respondents saying that they are the only earning members of their family.

Apart from this, lack of spouse have pushed close to one third of the respondents into the profession of commercial sex, with 16.76 percent of them saying that widowhood has driven them into commercial sex, while 19.36 percent cited being deserted by their husbands as the reason.
Importantly, 13.38 percent of the respondents also reported being trafficked.

Graph: 3. Reasons for engaging in sex work



However, at the overall level, majority of FSWs (87.52 percent) reported that they have considered coming out of sex trade. A very small proportion of the total respondents (0.03 percent) said that they haven't considered coming out of sex trade.

Summary

Following are the points that could be highlighted from the aforementioned findings-

- *Median age of FSWs for Wave VI at the overall level is 32 years*
- *A higher proportion of FSWs towards the higher end of the age spectrum engage in commercial sex in other towns and cities than their own (41.7 percent of FSWs above 35 years of age)*
- *Similarly 40.3 percent of the total respondents who are above 35 years of age engage in commercial sex in metros*
- *A higher proportion of FSWs who are middle aged can't read and write as compared to their younger counterparts*
- *Positive relationship between the basic literacy skills of FSWs and their involvement with secondary sources of income*
- *Awareness levels of AIDS positively linked to the ability of FSWs to read and write*
- *Exposure to intervention programmes and membership of TAI Vizhudugal also positively linked with the basic literacy skills of the respondents*
- *A higher proportion of unmarried FSWs in Wave VI as compared to the previous waves*
- *Within city migration and within district migration of FSWs is found to be much higher as compared to the migration within the State*
- *Economic compulsion mentioned as the reason for engagement is sex work by a majority of FSWs*

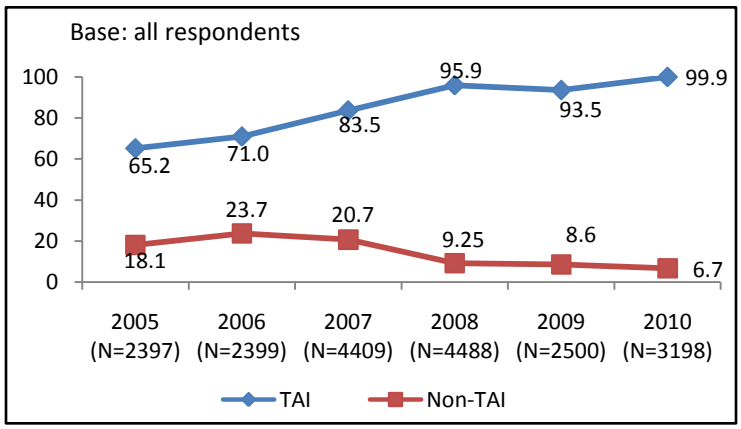
Section: 2. Exposure To Intervention And Collectivization

Intervention programmes constitute a primary response to the challenge of HIV/AIDS prevention. From a programme perspective it was important to assess the effectiveness of various interventions. STI/HIV/AIDS intervention programmes may take multiple forms, such as awareness campaigns through media, Inter Personal Education (IPE) activities, free medical checkups, campaigns/meetings etc.

This section begins with the exposure to intervention and collectivization among the female sex workers, followed by the critical indicators which have been analyzed on the basis of exposure to intervention and trends across five waves.

Before we get into further analysis of the critical indicators on the basis of exposure to intervention, we need to understand the exposure to intervention across the six waves.

Graph: 4. Received individual education on HIV/AIDS through TAI & Non-TAI interventions

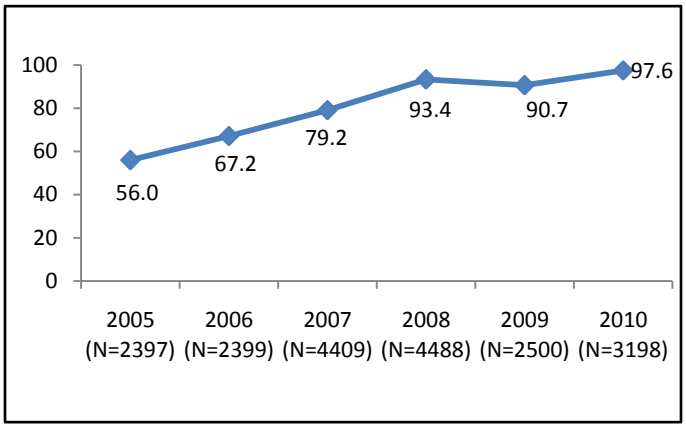


As observed from the graph, the individual education on HIV through TAI interventions had shown a slight dip in wave VI. However, timely actions from TAI have resulted in almost universal HIV education among the community. 99.9 percent of the respondents in this wave reported that they have received individual HIV interventions.

The proportion of FSW who have received individual education on HIV/AIDS through Non-TAI intervention have been on a decline since 2006 and in this wave only 6.6 percent reported having received any non TAI intervention. Tiruvallur was the only district which showed significant non-TAI interventions with 49 percent of the respondents in this district claiming to have received non-TAI interventions.

The decline of Non-TAI interventions reaffirms that the dissemination of education on HIV/AIDS through TAI intervention has better reach as compared to Non- TAI intervention.

Graph: 5. Attended any meeting at TAI office in the last 6 months through TAI & Non-TAI



This wave marks the highest ever in the proportion of respondents having attended meetings at TAI office or NGOs. In the last wave only 90.7 percent of the respondents had reported attending any TAI meeting.

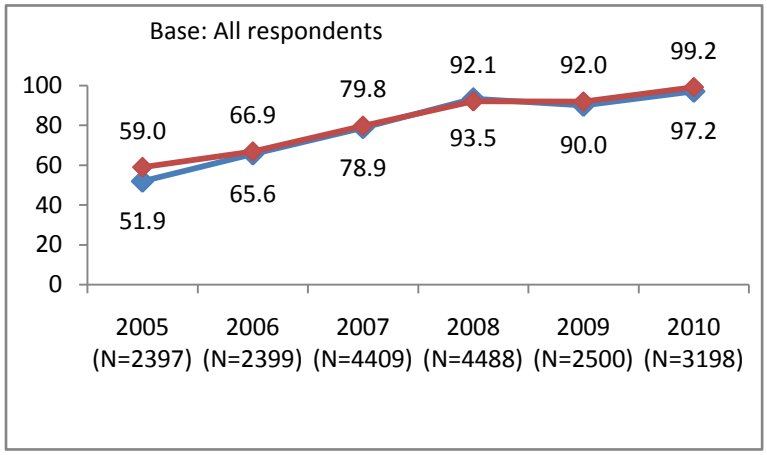
Those FSWs who did not attend any meeting at the TAI office (under TAI Intervention) were asked about the reasons for the same. While 55 percent of them reported the TAI office being too far as a reason, 25 percent reported not having the time to attend the meetings.

Table: 3. Number of times visited by NGO Outreach worker or Peer Jeevan in the last 6 months

	2005	2006	2007	2008	2009	2010
Base: All respondents	2397	2399	4409	4488	2500	3198
Never	35.92	30.1	17.06	5.19	7.68	0.78
Once	4.51	4.13	7.14	4.3	13.16	25.02
2 to 3 times	19.15	27.22	35.43	34.45	31.28	41.78
More than 3 times	40.43	38.52	40.1	55.75	47.64	32.27

The coverage by NGO outreach worker or Peer Jeevan has significantly increased as compared to the last wave. The proportion of respondents who reported that the NGO outreach worker or peer educator has visited them 2-3 times has been the highest reported across the waves with 41.8 percent of the respondents reporting it in the current wave. Over a quarter of the respondents reported that the NGO outreach worker or peer educator has visited them once in the past year. The significant increase in the reach of NGO workers and peer educators might be one of the factors for improved knowledge and practice indicators in the current wave.

Graph: 6. Taken by NGO Outreach worker or Peer Jeevan for any health check-ups in the last 6 months



It can be observed that there has been an increase in the proportion of FSWs who reported that they have been exposed to demonstration of correct use of condoms across the waves with the figure touching 99 percent in the current wave.

There has also been a significant increase in the proportion of respondents who reported that they were taken by NGO outreach worker or Peer Jeevan for any health check-ups in the last 6 months. This proportion had slightly declined in the previous wave.

Thus, the above data indicates that the exposure to interventions through TAI is at a high level.

Section: 3. Knowledge levels

3.1. Awareness about HIV

There was universal awareness among the female sex workers about HIV/AIDS, irrespective of the exposure to intervention. The critical knowledge indicators in this section are given below:

- Correct knowledge on HIV
- Correct knowledge without any misconception on HIV
- Knowledge on means of prevention of HIV
- Knowledge that condoms prevent spread of HIV
- Awareness of Sexually transmitted diseases (STDs)
- Knowledge of symptoms of STD in men and women

Table: 4. Level of awareness about HIV (Trends)

	2005	2006	2007	2008	2009	2010
Correct knowledge on two acceptable ways of preventing spread of HIV	99.7	98.9	100.0	96.0	96.2	99.3
Correct knowledge on two acceptable ways of preventing spread of HIV without any misconception on HIV	43.5	62.1	65.7	63.0	73.0	84.7
Complete knowledge on means of prevention of HIV and denied for any misconception	35.1	37.5	47.6	62.0	62.8	60.9
Knowledge about condoms prevent HIV	99.8	99.5	100.0	97.0	95.8	99.2
Base: All respondents	2397	2399	4409	4488	2500	3198

The above table shows the trends in the level of awareness about HIV across all the six waves. The above indicators shows comprehensive knowledge about preventing spread of HIV. One of the major challenges that intervention programs face is to counter the myths and misconceptions that persist about HIV/AIDS and the complete knowledge also captures the same.

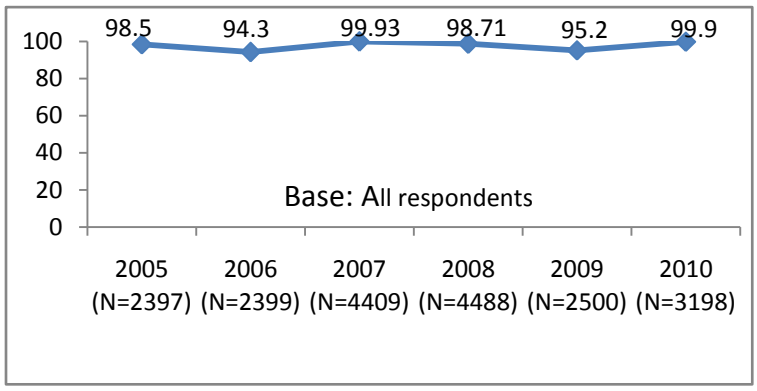
The complete knowledge on means of HIV prevention includes those who are aware of two acceptable ways of HIV prevention and also those who could identify the misconceptions and know for certain that they do not help prevent HIV. The proportion of female sex workers having correct knowledge on ways of preventing spread of HIV without any misconceptions was higher in the current wave (84.7 percent) as compared to Wave V (73 percent). Similar trends were observed in case of complete knowledge on means of prevention of HIV. The decline in knowledge among sex workers about condoms preventing spread of HIV as observed in the previous wave is found to have increased significantly to 99.2 percent in the current wave.

3.2. Awareness about STDs

Sexually Transmitted Diseases (STDs) are an important health priority because they affect acute illness, infertility, long-term disability and death, with severe medical and psychological consequences for men, women and infants (WHO 1999). STIs are transmitted from one person to the other during sexual intercourse. Research studies suggest that STIs and HIV are linked, insofar as the former facilitates the spread of the HIV virus.

To assess the levels of awareness of STI, all the FSWs were asked if they had heard of any diseases other than HIV or AIDS that are transmitted through sexual contact. The following graph presents the changes in STD awareness levels among FSWs between 2005 and 2010:

Graph: 7. Ever Heard of STD



It can be seen from the graph that the level of awareness which had shown a slight dip in the last wave has been overcome with almost all the respondents reporting that they have heard of sexually transmitted infection.

3.3. Knowledge about STD symptoms in women

The common symptoms of STI in women are lower abdominal pain, foul smelling discharge, burning pain during urination, genital ulcer/sore and pain during intercourse. The respondents who were aware of STI were asked to describe symptoms of STI in women in order to gauge their knowledge levels. The knowledge levels of FSWs about STI symptoms in women assume greater significance because as part of the core group, FSWs are at the highest risk of contracting such diseases. The following table presents the findings:

Table: 5. Knowledge about STD symptoms in women (Trends)

	2005	2006	2007	2008	2009	2010
Abdominal pain	64.3	58.6	75.42	73.41	67.5	82.47
Unusual or foul smelling vaginal discharge	82.9	74.2	80.25	72.8	83.2	84.1
Burning on urination	47.6	58.9	59.69	59.1	67.7	75.7
Genital ulcers/sores	73.4	61.5	77.76	71.96	73.9	68.2
Swelling in groin area	8.3	13.9	31.96	26.75	29.8	21.6
Itching/ Reddening	16.8	6.5	16.68	16.77	12.7	15.4
Base: All respondents ever heard of STD	2361	2261	4406	4430	2379	3194

It can be seen that 84.1 percent respondents reported to have the knowledge of STD symptom like foul smelling vaginal discharge, followed by burning pain on urination (75.7 percent), genital ulcers/sores (68.2 percent), and swelling in groin area (21.6 percent). The knowledge level of the above symptoms was higher in the current wave as compared to the earlier wave. There was a decline in the knowledge level of swelling in groin area and genital ulcers or sores as symptom of STD in current wave as compared to earlier wave.

3.4. Knowledge about STD symptoms in men

The female sex workers who were aware of STD were asked to identify STD symptoms in men, because men being the clients of FSW may be at high risk of contracting HIV and sexually transmitted diseases (STDs). They can be considered as a "bridge population," who transmit HIV/STD between high-risk groups and the general population through unprotected sex with FSW and other sexual partners. Thus, the knowledge levels of the female sex workers about the symptoms of STD in men were also included in the study.

The common STI symptoms in men are foul smelling urethral discharge, burning pain during urination and genital ulcer/sore and swelling in groin area. The following table presents the responses:

Table: 6. Knowledge about STD symptoms in men (Trends)

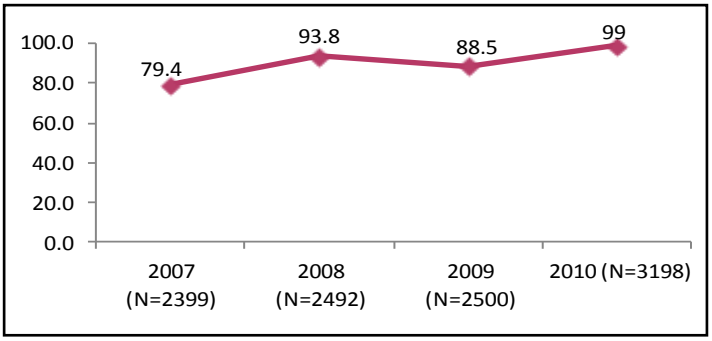
	2005	2006	2007	2008	2009	2010
Urethral discharge	59.6	54.2	68.02	67.83	60.1	67.9
Burning on urination	44.5	47.4	52.95	56.79	66.3	73.4
Genital ulcers/sores	80.8	71.2	84.73	72.62	72.2	77.5
Swelling in groin area	14.4	22.0	42.06	32.39	26.7	23.3
Base: All respondents ever heard of STD	2361	2261	4406	4430	2379	3194

It can be observed from the above table that there has been a general increase in the knowledge about STD symptoms in men. It can be seen that 77.5 percent respondents reported to have the knowledge of STD symptom like genital ulcers/sores, followed by burning on urination (73.4 percent) and urethral discharge (67.9 percent). The knowledge of swelling in groin area as a symptom of STD has shown a minor dip in this wave at 23.3 percent compared to 26.7 percent in the last wave.

3.5. Indicators relating to RMC

The respondents were asked about the awareness of RMC, the frequency of visit to the RMC and the motivation for doing the same. The trends for the same have been given below:

Graph: 8. Awareness about RMC



It can be seen from the graph that the awareness about RMC has increased considerably in this wave (99 percent) compared to the previous wave (88.5 percent)

Almost all the respondents who were members of TAI Vizhudugal reported that they were aware of RMC while only 93 percent of the non-members reported that they were aware of the same.

All the respondents who were aware about the RMC were asked about the frequency of the visit to the RMC. About 85 percent respondents reported that they visit RMC once in three months. About 85 percent respondents reported that they visit RMC because it is good for their health and more than half of the respondents reported that they were reminded by the peer jeevans to visit the RMC. This trend was found similar across the waves.

Section: 4. Behavioral Indicators

This sub-section examines the sexual history and sexual behavior of the female sex workers. The age at first sex of female sex workers is estimated and in addition, the levels of (i) involvement, (ii) last time condom usage and (iii) consistent condom usage have been also detailed. The sexual behavior of FSW vis-à-vis their different types of partners viz. regular paying clients, occasional paying clients, regular partners and non-paying partners have been analyzed on the above three parameters. Further, the respondents' alcohol consumption before sex has also been examined.

4.1. Sexual history

The mean age at first sex was 19 years which was almost constant across the six waves. The mean age of debut in commercial sex work is also observed to have remained fairly constant over the years averaging 27.4 years. Majority of female sex workers (93.0 percent) in Wave VI reported that they solicited clients from the bus stand, followed by market place (52.3 percent) and cinema theatre (50.6 percent). The trends observed were similar across all waves. The use of mobile phones for soliciting clients which was observed for the first time in the previous wave has increased by five times to 25.6 percent in wave VI. Rented room (83.8 percent) and Lodge (78.4 percent) were reported as the main place of entertaining clients in the current wave. Over half the respondents (56.8 percent) reported home as the place of entertaining clients.

4.2. Involvement with sexual partners

The average number of clients visiting a sex worker per day was 2 and this has been consistent across all the waves of TAI BSS. On further analysis it was found that the average number of clients for part-time sex workers (2.27) is marginally lower than that of full-time sex workers (2.64). On an average, the female sex workers reported that she entertained about 10 clients in a week in the current wave, which was higher by a unit compared to the previous two waves. The female sex workers reported that they were occupied in sex work for 4 days in a week and nearly 18 days in a month. The trend remains similar across all earlier waves.

4.3. Condom usage during last sexual intercourse

In this section the condom usage during last sexual encounter with various types of partners has been detailed. This indicator shows the extent to which condoms are used by people who are likely to have higher-risk sex (i.e. change partners regularly). In this case the female sex workers are involved not only with multiple partners but at the same time with various types of partners with whom they share different level of relationship. Thus, the condom usage in last sexual encounter generally reflects the trend in consistent condom use. Also, the condom usage during last sexual encounter indirectly reflects the bargaining power of the workers

which they exercise with their sexual partners which in turn govern the decision of using condom as well.

Table: 7. Condom usage in the last sexual encounter

	2005	2006	2007	2008	2009	2010
Occasional Clients	87.3	86.6	95.7	97.2	92.9	96.4
Regular client	79.0	77.5	85.3	87.4	86.7	89.8
Regular Partner	6.4	13.1	11.5	8.8	11.8	3.0
Other non-paying regular partners	48.9	45.7	52.4	64.5	70.2	64.7

From the above graph it can be seen that the condom usage with occasional clients has been the highest across the waves, followed by regular clients. The condom usage values which had shown a dip in the last wave is observed to have increased in this wave to 96.4 percent and 89.8 percent respectively with occasional clients and regular clients.

4.4. Consistent condom usage

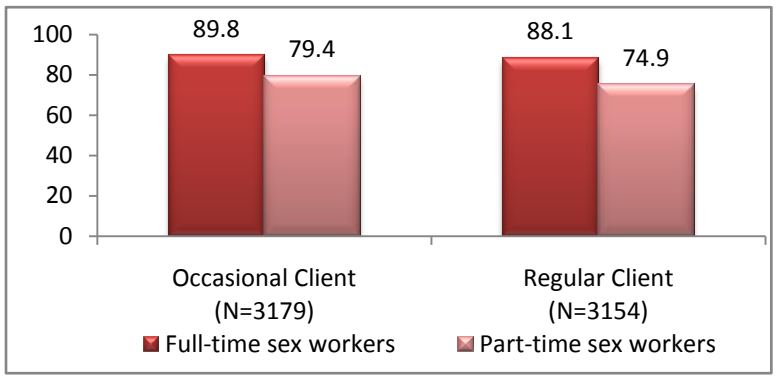
Consistent condom usage has been reported in this section as an important indicator because the maximum protective effect of condoms is achieved when their use is consistent rather than occasional. Thus, the level of consistent condom usage with the sexual partners reflects the level of risk of contracting HIV among the sex workers. The consistent condom usages with various partners have been given the graph given below:

Table: 8. Consistent Condom usage with sexual partners

	2005	2006	2007	2008	2009	2010
Occasional Clients	64.5	61.9	74.3	83.9	81.7	83.4
Regular client	62.6	59.4	71.8	85.4	83.5	79.9
Regular Partner	3.8	5.0	2.2	3.7	3.2	1.2
Other non-paying regular partners				44.8	54.8	52.4

As observed from the above graph, the values for consistent condom usage have increased significantly over the period. The last two waves reported a higher consistency in condom usage with regular clients as compared to occasional clients. However this wave reversed the trend with 83.4 percent of those having occasional clients reporting consistent condom usage as compared to 79.9 percent among those reporting to have regular clients. On probing the reasons for non-usage of condom with regular partners, the main reasons that emerged were the perception that it is unnecessary to use condoms with regular partners (45.2 percent) or the unwillingness of the partner to use a condom (16.6 percent).

Graph: 9. Consistent condom usage and full-time sex work



On further analysis it was observed that consistent condom usage was higher among full-time sex workers compared to part-time sex workers for all types of partners.

Base: all respondents involved with various partners

4.5. Condom Negotiation practices

Due to the stigma attached to the profession of the sex workers, few legal protections and the need for income puts the sex workers in a vulnerable situation, wherein they can be exploited or abused by clients. The isolation and disempowerment of sex workers, enforced by the threat of violence, may create barriers to negotiating safe sex practices, thereby increasing the risk for human immunodeficiency virus (HIV) and other sexually transmitted infections (STIs). Thus, the condom negotiation of the sex workers depends on the support from the peer groups as well as the other stakeholders.

The condom negotiation was higher among the female sex workers who were exposed to TAI intervention for both types of partners' viz. client and nonpaying partner.

About 90 percent female sex workers who were exposed to intervention reported that they refused to have sex with the client if he insisted on not using condom. This was possible because the strong support enjoyed by them due to being attached to the TAI intervention as compared to those who were not exposed to any intervention.

Table: 9. Condom negotiation practices (Trends)

	2007	2008	2009	2010
Refused client if he insisted to have sex without using condom	75.8	85.1	86.4	94.6
Refused non-paying partner if he insisted to have sex without using condom	14.9	18.9	25.3	31.5
Base: All respondents	4409	4488	2500	3198

It can be seen from the table that there has been an increase in the condom negotiation with the clients and non-paying partner. About 94.6 percent female sex workers reported that they refused to indulge in sex with the client if he insisted on having sex without condom. The proportion of sex workers who refused non-paying partner to have sex was the highest (31.5 percent) as compared to earlier waves.

This could be due to the strong social support of the peer groups as well as other support systems.

On further analysis it was also observed that those who are members of the community based organization, TAI Vizhudugal demonstrated better condom negotiation skills. Refusal to have sex with a non-paying partner if he insisted to have sex without a condom was higher among those who were members TAI Vizhudugal (33.6 percent) as compared to 14 percent who were non-members. TAI Araichimani services is also observed to have empowered the community to refuse having sex with those who do not wish to use a condom. 63.6 percent of those aware of TAI Araichimani refused non-paying partner if he insisted to have sex without using condom compared to 15 percent who were not exposed to TAI Araichimani services.

4.6. Practices relating to condom use and procurement

This section includes indicators relating to condom use and procurement which is given below:

- Whether carrying condom at the time of the interview
- Place of purchase of condom in last occasion
- Experience of not using condom against wish in the last one month & reasons

Table: 10. Whether carrying condom at the time of the interview (Trends)

	2005	2006	2007	2008	2009	2010
Can show the condom	42.0	27.5	30.4	27.2	31.8	30.7
Cant show a condom but have	16.2	30.4	50.9	41.6	20.4	28.2
Do not have right now	41.8	42.1	18.6	31.0	47.6	41.0
Base: All respondents who ever used condom	2392	2390	2399	2491	2466	3190

The respondents who reported ever use of condom were asked whether they were carrying condom at the time of the interview. It can be observed from the trends given above that about 30.7 percent sex workers reported that they were carrying condom at the time of the interview and could also show that they have condom with them. 28.2 percent of the respondents reported that they cannot show the condom, but have it. This was significantly higher compared to the previous wave (20.4 percent).

Table: 11. Whether carrying condom at the time of the interview & duration of sex work

	1 year & less	Above 1 year-3 years	Above 3 years-5 years	More than 5 years
Can show the condom	27.78	31	28.13	33.59
Cant show a condom but have	17.59	26.57	30.68	27.74
Do not have right now	53.7	42.19	41.19	38.68
Base: All respondents who ever used condom	108	813	1056	1179

It can be seen that the duration of sex work impacts the comfort in the sex workers in carrying condom. About 33.6 percent respondents who were involved in sex work for more than 5 years reported that they possessed condom at the time of interview as compared to 27.8 percent sex workers who were fairly new entrants in the profession. The proportion of respondents who did not have condom at the time of the interview was higher among those who had entered sex work in last 1 year or less as compared to those who were in sex work for more than 3 years and above.

Table: 12. Place of purchasing condom in the last occasion (Trends)

	2005	2006	2007	2008	2009	2010
NGO Worker	41.1	45.3	46.3	39.7	55.6	53.0
Peer educator	10.5	16.9	27.1	33.2	16.8	11.6
Pharmacy	12.7	15.1	9.3	11.6	13.1	13.0
Client	17.1	5.2	7.3	2.4	5.2	7.9
Vending machine	10.5	10.3	5.5	5.3	2.7	1.9
Others	8.2	7.2	4.5	7.8	6.7	14.3
Base: All respondents who ever used condom	2392	2390	4409	4486	2466	3190

A majority (53.0 percent) reported that NGO worker was the source of condom for the last sexual intercourse. It could be observed from the table above that, NGO workers as the source of condom has increased considerably over the years. This could be one of the major reasons for the reduced dependency on clients for condom procurement and usage. The other important sources of procuring condom during last sex were Pharmacy (13.0 percent) and peer educator (11.6 percent).

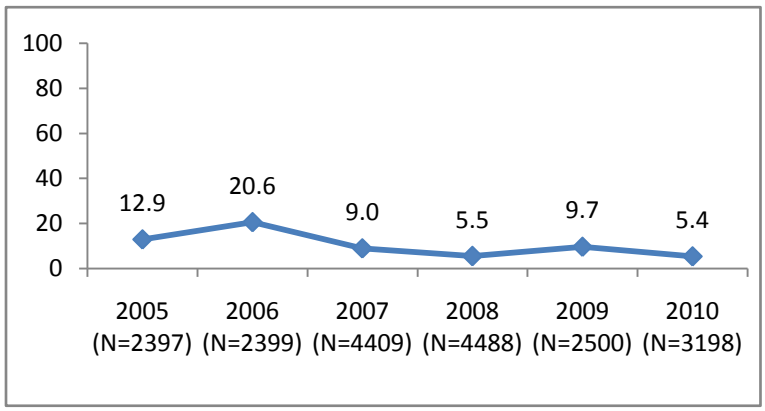
Table: 13. Place of purchasing condom in the last occasion & duration of sex work

	1 year & less	Above 1 year-3 years	Above 3 years-5 years	More than 5 years
NGO Worker	47.2	53.4	51.0	54.9
Peer educator	7.4	8.9	11.9	13.4
Pharmacy	8.3	14.2	13.9	12.0
Health facility	5.6	4.7	10.4	9.8
Madam/broker	0.9	0.7	0.3	0.3
Client	15.7	11.6	7.5	4.9
Vending machine	0.9	2.2	1.5	2.0
Others	0.9	0.2	0.9	0.2
Base: All respondents who ever used condom	108	895	750	640

The place of procuring condoms was further analyzed on the basis of duration of sex work, and it was observed that NGO worker and peer educator were reported as an important source of procuring condoms by those sex workers who were involved in sex work for more than 3 years as compared to those who were fairly new entrants in the profession. From the table it could also be clearly observed that new entrants in sex

trade report client (15.7 percent) as a major source of condom. Dependency on clients for condoms is observed to show a decline with increase in the duration in sex trade, with only 4.9 percent of those more than 5 years in the trade reporting client as a source of condom during last sex.

Graph: 10. Experience of any incident of not using condom against wish in the last one month



Only 5.4 percent of the respondents in the current wave reported any incident of not using condom against wish in the last one month compared to 9.7 percent in the last wave. Such instances were reported higher in non-IBBA (7.8 percent) districts compared to IBBA districts (3.2 percent).

The instance was also reported marginally higher by the part-time sex workers (6.1 percent) compared to the full-time sex workers (4.2 percent).

The sex workers who reported experience of not using condom against wish in the last one month were asked for reasons for the same. About 55 percent respondents reported that they didn't use condom because their partner didn't want to use condom. About 17 percent said that they were in a hurry and did not buy condom. About 11 percent respondents reported that they faced a situation of condom breaking. Only 1.1 percent of the respondents reported that they didn't use condom because the client paid more money compared to about 7 percent in the last wave.

Section: 5. Risk Perception & HIV Testing Behavior

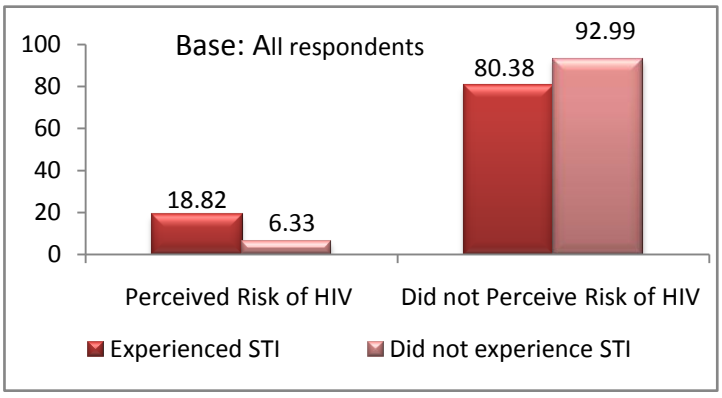
HIV testing and counseling form the gateway to care, treatment and support for persons in need especially the High risk groups. To ensure that they can exercise their right to know their HIV status, and at the same time people with HIV can benefit from increased access to antiretroviral (ARV) treatment provided, HIV testing and counseling must be radically scaled up. Thus, analyzing the critical indicators in this regard will give a complete picture about areas that requires programmatic focus. The main indicators covered in this section include the following:

- Self Risk Perception
- Knowledge of any place for confidential HIV testing
- Ever taken HIV test
- Voluntary HIV testing
- Received counseling
- Experience of STD symptoms
- Treatment seeking behavior for STDs

5.1. Self risk perception

The female sex workers were asked whether they perceive the risk of contracting HIV due to being involved in the high risk behavior.

Graph: 11. Self Risk Perception



Self risk perception was higher among respondents who experienced STI symptoms (18.8 percent) compared to those who did not experience STI symptoms (6.3 percent). The perception of contracting HIV was observed to be higher part-time sex workers (9.5 percent) than full-time sex workers (4.7 percent).

Table: 14. Self Risk perception on the basis of duration in sex trade

	1 year & less	Above 1 year-3 years	Above 3 years-5 years	More than 5 years
Perceive Risk of HIV	2.8	6.0	9.3	8.1
Did not perceive risk of HIV	95.4	93.9	90.1	90.8
Base: All respondents	108	815	1058	1182

does not include 'No response'

From the table it is clear that the lower proportion of sex workers who have joined sex trade in the current location in last

year perceive risk of contracting HIV as compared to those who joined sex trade more than 5years ago.

Risk perception was also observed to increase with age, with 43 percent of the respondents above 35 years of age perceiving risk of contracting HIV/AIDS while only 6 percent in the age group 21-25 years perceived any risk and none below 21 years reported perceiving any risk of contracting HIV/AIDS.

The self-risk perception among respondents in IBBA districts was observed to be 8.1 percent while for those in non-IBBA districts it was observed to be 7.4 percent

5.2. Knowledge of any place for confidential HIV testing

Table: 15. Knowledge of any place for confidential HIV testing (Trends)

	2005	2006	2007	2008	2009	2010
Aware of place for confidential HIV testing	79.4	87.4	93.8	95.8	95.5	99.6
Not aware of place for confidential HIV testing	20.6	12.5	6.1	4.1	4.2	0.4
Base: All respondents	2391	2397	4409	4488	2500	3198

From the above table it is clear that there has been a reported increase in the awareness of any place for confidential HIV testing across waves, with the highest level of awareness reported in Wave VI (99.6 percent). All the districts covered in the study record over 98.0 percent awareness of any place for confidential HIV testing.

5.3. Ever taken HIV test

The World Health Organization (WHO) recommends that, in the context of community mobilization around the importance of learning one's HIV status, HIV testing and counseling should be offered whenever a patient shows signs or symptoms of HIV infection or AIDS. Thus, proportion of respondents in the high risk group should be taking HIV test to know about their HIV status. The following table shows the trends across waves on proportion of respondents who have ever taken HIV test.

Table: 16. Ever taken HIV test (Trends)

	2005	2006	2007	2008	2009	2010
Ever taken HIV test	64.78	60.87	76.41	87.68	64.4	97.84
Not taken HIV test	35.22	39.13	23.59	12.32	35.28	2.13
Base: All respondents	2391	2397	4409	4488	2500	3198

The above table reflects the trends in HIV test taking behavior across all the six waves. The decline which was observed in the last wave has increased considerably to reach the highest ever across the years at 97.8 percent. All the districts recorded over 93 percent respondents having ever experienced HIV testing the lowest among them being Thanjavur (92.9 percent). Six districts among those surveyed (Vellore, Namakkal,

Dindigul, Erode, Coimbatore and Krishnagiri) recorded 100 percent of the respondents having ever experienced HIV testing.

Table: 17. Voluntary HIV testing and received counseling (Trends)

	2005	2006	2007	2008	2009	2010
Voluntary HIV testing	96.45	97.05	99.44	97.66	98.7	99.55
Attended counseling	95.74	99.73	99.76	98.17	98.88	99.01
Base: All respondents	1549	1459	3369	3935	1610	3129

All those respondents who reported to have ever taken HIV test were asked whether they took the HIV test voluntarily or the test was prescribed to them. They were also asked if they received counseling while taking the HIV test. 99.5 percent of the respondents in this wave reported that they underwent the test voluntarily. Among the test takers, 99.3 percent were aware of the test result and 99 percent reported having received counseling for the HIV test.

There was no significant difference in the proportion of respondents who took voluntary HIV test and received counseling on the basis of full time vs. part-time sex work.

5.4. Experience of STD symptoms

The FSWs were asked if they have experienced genital discharge or ulcer/sore in the genital/anal area or burning pain during urination in the one year prior to the survey. The self-reported STI prevalence among the respondents who reported these STI symptoms is presented in the following table:

Table: 18. Experience of STD symptoms (Trends)

	2005	2006	2007	2008	2009	2010
Vaginal discharge	14.1	12.1	12.52	8.69	8.3	8.1
Lower abdominal pain	13.4	10.5	9.28	4.77	5.7	4.35
Genital ulcers/sores	5.1	4.8	5.65	2.45	3.8	2.85
Base: All respondents ever heard of STD	2361	2261	4409	4488	2379	3198

From the above table it could be observed that the reported experience of STI symptoms has marginally decreased in this wave. However at an aggregate level 11.6 percent of the respondents reported to have suffered from atleast one of the STI symptoms in the last wave compared to 9.9 percent in the previous wave

5.5. Treatment seeking behavior for STIs

All the respondents who reported that they experienced STI symptoms in the last 1 year were asked about their treatment seeking behavior. The following table shows the trends for the same.

Table: 19. STD treatment seeking behavior (Trends)

	2005	2006	2007	2008	2009	2010
TAI/SEESA Clinic	41.8	66.3	65.24	89.09	73.1	88.98
Government clinic/ hospital	50.2	35.4	46.98	41.21	81.9	84.4
NGO/Charity run hospital	10.0	25.3	6.63	8.48	10.8	6.7
Private hospital/ clinic	29.5	22.1	20.62	22.02	12.9	12.6
Private Pharmacy	33.5	23.6	23.27	21.21	12.9	22.6
Non-allopathic doctor	8.2	4.4	2.36	8.28	4.4	12.1
Took medicine at home	16.7	7.9	8.84	12.73	8.8	5.4
Base: All respondents experienced STI symptoms	562	407	679	495	249	372

Among the female sex workers, preference for TAI/Sesa clinic for STI treatment has always been high. In the current wave 88 percent of the respondents reported that they had visited TAI clinic the last time they experienced STI. Treatment in TAI clinic was followed by Government clinic or hospital. The proportion of those seeking treatment in a government health facility has shown a slight rise to 84.4 percent from 82 percent last year. In the current wave, 84.4 percent reported that they sought treatment from a government hospital or clinic.

Table: 20. Other actions taken during the experience of STD symptoms (Trends)

	2005	2006	2007	2008	2009	2010
Told regular partner about STI	15.3	37.4	7.6	41.8	25.3	26.1
Stopped having sex	52.9	37.8	52.6	57.9	57.4	51.9
Used condom while having sex	31.1	57.5	42.3	65.4	47.0	78.7
Base: All respondents experienced STI symptoms	562	407	331	280	249	372

The table indicates a trend in increase in condom usage during sexual intercourse while having STI, with more than three quarters of the respondent reporting to have done so. About 51.9 percent respondents reported that they stopped having sex when they experienced STI symptoms and 26.1 percent of the respondents reported informing their regular partner that they had STI.

Section: 6. Enabling environment and collective mobilization

This section deals with the female sex workers' sense of identity as a community. Due to the stigma attached to their profession, they are unable to access their basic rights as an individual. Some of the rights denied due to discrimination are: freedom from physical and mental abuse; the right to education and information; health care, housing; social security and welfare services. Thus, there is need to empower the sex workers in order to increase their bargaining power in front of the clients and help them to access their basic rights. Presently, the empowerment of women sex workers is often taken to mean the development of sex workers as peer educators and their empowerment strategies tend to be more about providing them with ways to access health services but rarely do these strategies consider the women sex workers' overall socio-economic situation in order to facilitate the realization of their rights. As a consequence, empowerment strategies for female sex workers necessarily need to address the issues of exploitation, oppression and other human rights abuses or make female sex workers aware of their rights, particularly their health and other socio-economic rights.

In this section, the indicators on collective mobilization and enabling environment will be presented which is explained below:

- Possession of critical documents like birth certificates etc.
- Collectivization
- Awareness about TAI Vizhudugal
- Community mobilization
- Awareness about TAI Araichimani

6.1. Possession of documents/Social entitlements

The documents like birth certificate, voting ID card, ration card enable the sex workers to access the basic rights as a citizen and also is a measure of empowerment for them. The possession of these documents has been explained in the following table:

Table: 21. Possession of certain documents

	Membership in TAI Vizhudugal	No membership in TAI Vizhudugal
Birth Certificate	12.68	11.71
Marriage certificate	20.26	22.29
Child's birth certificate	54.49	44
Voting ID card	86.27	65.43
Bank account/pass book	47.72	40
Ration card	28.34	22
Caste certificate	6.99	8.29
Widows pension	0.18	1.14
Base: All respondents	2848	350

From the above table it is clear that the proportion of sex workers who possessed the above documents was higher among those who had membership in the community based organization TAI Vizhudugal. This trend was observed for most types of documents and is notable especially in the case of visiting ID card, child's birth certificate and bank account. This indicates that membership in TAI

Vizhudugal empowers the sex worker community about their rights and also facilitates in providing improved social identities.

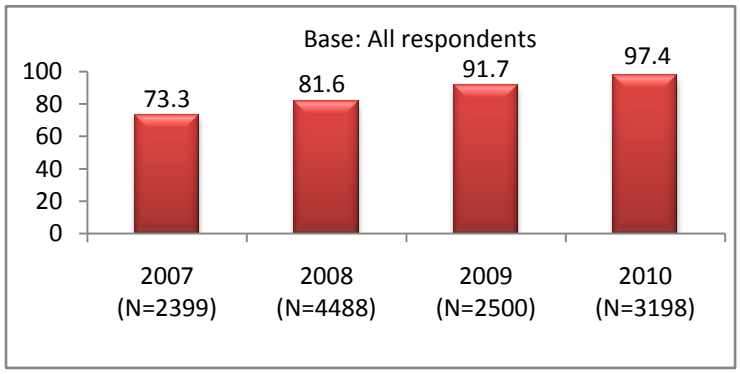
6.2. Collectivization

This sub-section explains in detail the behavior of sex workers as a collective and as support system for each other. It also deals with the TAI intervention and activities on collective mobilization. The following graphs and tables explain this process of collectivization:

6.3. Awareness about TAI Vizhudugal

About 95.7 percent of the respondents in this wave reported to be aware of TAI Vizhudugal, the community based organization run by TAI as compared to 88.4 percent sex workers in the previous wave. The membership in TAI Vizhudugal has also seen a significant rise in this wave with an increase from 70 percent in the previous wave to 93 percent in this wave. All the respondents who reported that they are the member of TAI Vizhudugal were asked about the duration of their association with the same. At an aggregate level, about 85 percent female sex workers reported that they have been member with the CBO for more than 6 months.

Graph: 12. Heard of TAI Araichimani (Trends)



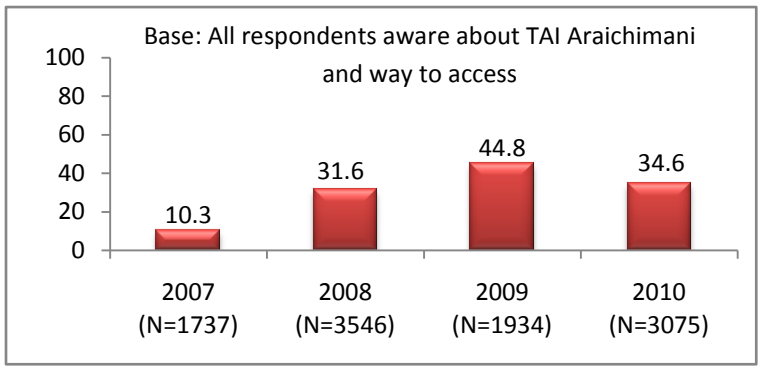
TAI Araichimani is an initiative to provide legal services to those sex workers in distress. From the graph which represents the trends across the last four waves reflects that the awareness about TAI Araichimani has maintained its consistent increase in the current wave too with an increase of about 6 percentage points to 97.4 percent in the previous wave. The knowledge about how to access TAI Araichimani has also increased considerably to 98.7 percent in the current wave as compared to the 84 percent in the previous wave.

Table: 22. Awareness and association with TAI Araichimani

	Those having membership in TAI Vizhudugal	Those not having membership in TAI Vizhudugal
Aware about TAI Araichimani	99.51	80.57
Base: All respondents aware of TAI Araichimani and know how to access it	2811	264
Benefitted from TAI Araichimani	36.36	16.29
Base: All respondents	2848	350

From the above table, it is clear that awareness about TAI Araichimani was higher among those who have membership in TAI Vizhudugal (95.4 percent) as compared to those who did not have membership in TAI Vizhudugal.

Graph: 13. Ever benefitted by TAI Araichimani (Trends)



All the respondents who were aware about TAI Araichimani and also knew how to access TAI Araichimani were asked whether they were benefitted by it. About 34.6 percent respondents reported that they have benefitted from TAI Araichimani.

Over 50 percent of the respondents in non-IBBA districts reported that they have been benefitted from TAI Araichimani. However only 18 percent of the respondents interviewed in the IBBA districts reported that they have benefitted from the services offered by TAI Araichimani.

6.4. Community Mobilization

The indicators given in this section explains the collective mobilization of the female sex workers:

About 96.3 percent of the female sex workers agreed that the individual problem was the same as the community. A vast 92.6 percent of sex workers agreed that the community will support in case of police violence. This feeling of community was a result of the TAI intervention wherein all the members of the community come together for the meetings as well as support which gives the sex workers a sense of belonging to the community.

An overwhelming 94.5 percent of the respondents reported that TAI NGOs have improved the lives of sex workers.

CLIENTS TO FEMALE SEX WORKERS

Section: 1. Demographic Characteristics of CFSW

1.1. Introduction

The clients to female sex workers (CFSWs) are the bridge group and the carriers of the epidemic forward to the general population. Therefore, the study CFSWs becomes important, not only because of their involvement in heterosexual behavior but also involvement with commercial sex workers. The majority of clients are seasonal economic migrants from rural to urban centres and other neighbouring states in search of work during the lean period. This migration and stay in urban areas provide an opportunity to get involved with FSWs and hence are susceptible to the risk of contracting HIV infection. When they return to their families they transmit the infection to their wives, which further gets transmitted to their children. The infection thus spreads from the core group population to the rest of the low risk general population and from urban centres to many villages.

Thus, it is important to analyze the knowledge and behaviour of this category of bridge group in order to understand their vulnerability. This section beginning with demographic characteristics of the respondents, deals in detail about their knowledge, behaviour, risk perception, exposure to intervention etc.

1.2. Age Distribution, literacy & marital status

In the current wave, the mean age of the respondents was 32.51 years, higher than the mean of last year of 29.9 years. During the first five waves of this survey, the average age of the clients of female sex workers (CFSWs) has remained constant at around 31 years across all the districts.

As far as the literacy of the CFSWs is concerned, a majority of the clients of FSWs were literate (88.64 percent) and had been to school (89.88 percent). This proportion was lesser in the current wave as compared to earlier wave, where about 91 percent respondents reported that they could read or write and had been to school.

Nearly 35 percent of the respondents reported that they were unmarried and were living alone and about 44 percent reported that they were married and were currently living with their spouse. The proportion of clients who were married and living with their spouse has significantly declined in the current wave (Significant at 95 percent confidence level; z=8.97). On the other hand, the proportion of unmarried clients (living alone) has decreased from 51.6 percent in 2009 to 35 percent in 2010.

1.3. Primary source of income

In the current wave, 19.75 percent were laborers, slightly increased from 17.6 percent in the last wave (Significant at 95 percent confidence level; z=2.06). Also the proportion of construction workers among the CFSWs has significantly decreased from14.6 percent in the last wave to 12.35 percent during the current wave. 19.26 percent of the respondents reported that they were auto drivers and the proportion was slightly higher than the previous wave.

The proportion of factory workers among the CFSWs across the districts has increased from 8.8 percent in the last wave to 12.35 in the current wave.

1.4. Frequency of alcohol intake

Table: 23. Frequency of alcohol consumption in the past one month (Trends)

	2005	2006	2007	2008	2009	2010
Everyday	10.8	8.9	11.0	23.1	3.8	12.84
At least once a week	38.9	38.8	43.1	35.8	41.7	40.74
Less than once a week	28.4	31.6	26.8	21.1	36.2	30.12
Not consumed in the last one month	13.7	11.0	12.2	10.4	8.8	7.9
Do not drink	0.0	0.0	5.9	4.0	7.2	6.91
No answer	8.1	9.8	1.1	5.5	2.2	1.48
Base: All respondents	1500	1480	1480	1586	1598	405

There was significant increase in the proportion of CFSWs who drink alcohol everyday (from 3.8 percent during 2009 to 12.84 percent in 2010). However, there has been a decrease in the proportion of CFSWs who consume alcohol at least once a week from 41.7 percent during 2009 to 40.74 percent in 2010.

Table: 24. Frequency of alcohol consumption in the past one month & age group

*low base	Less than 21 yrs	21-25 yrs	26-30 yrs	31-35 yrs	'36 years or Above
Everyday	0	3.77	5.79	18.02	19.66
At least once a week	0	33.96	46.28	34.23	45.3
Less than once a week	100	49.06	26.45	27.03	26.5
Not consumed in the last one month or do not drink	0	7.55	7.44	12.61	4.27
Base: All respondents	3*	53	121	111	117

On further analysis, on the basis of age of the respondents, it was observed that everyday consumption of alcohol was reported by respondents in the higher age group (19.66 percent in the age group of above 36 years or above). This is much higher than the consumption of alcohol in the same age group of mere 7.5 percent last year.

Section: 2. Exposure to Intervention

Intervention programmes constitute a primary response to the challenge of HIV/AIDS prevention. From a programme perspective it was important to assess the effectiveness of various interventions. STI/HIV/AIDS intervention programmes may take multiple forms, such as awareness campaigns through media, Inter Personal Education (IPE) activities, free medical checkups, campaigns/meetings etc.

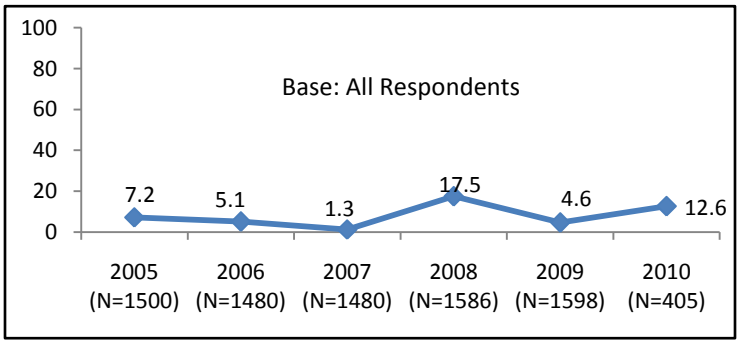
Before we get into further analysis of the critical indicators on the basis of exposure to intervention, we need to understand the exposure to intervention across the five waves.

Table: 25. Exposure to intervention (Trends)

	2005	2006	2007	2008	2009	2010
NGO/Outreach worker visited once or more times in last 6 months	5.9	3.3	0.9	1.0	0.5	1.23
Visited TAI SESA Clinic for health/ STI checkups in the last 6 months	1.8	1.7	0.3	0.0	0.4	0.74
Base: All respondents	1500	1480	1480	1586	1598	405

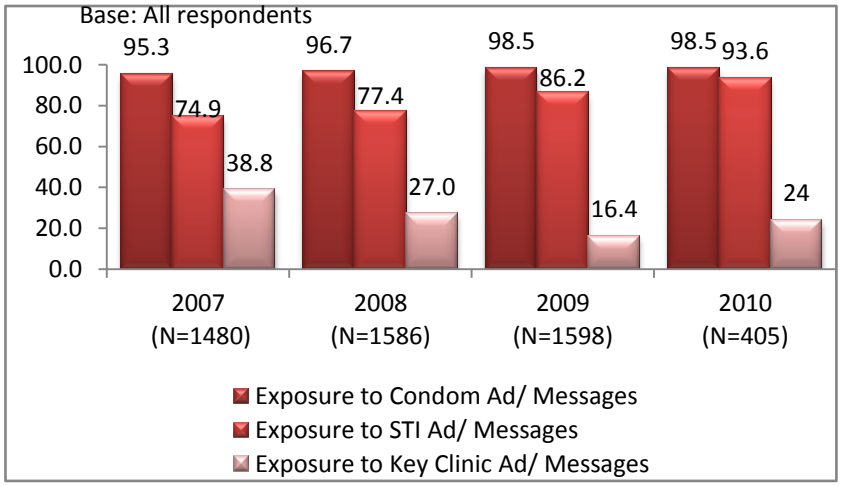
The above table shows the various indicators on the exposure to intervention. At an overall level, being close and part of the general population, the exposure to intervention is quite low among the clients to female sex workers as compared to the high risk groups.

Graph: 14. Received individual education on HIV/AIDS in the last 6 months through TAI interventions



It can be seen that across all the waves, the proportion of respondents who reported that they had received individual education on HIV/AIDS in the last 6 months through TAI interventions. A significant increase has been observed in the percentage of CFSW who received individual education on HIV through TAI interventions across the five waves. It has increased from 4.6 percent in 2009 to 12.6 percent in 2010.

Graph: 15. Exposure to messages relating to Condom use/STI/Key clinic



It can be seen from the graph that the exposure to condom messages, STI ad messages and key clinic ad messages was the highest in this wave. In the current wave about 98.5 percent respondents reported that they were exposed to condom messages which exactly the same as the previous wave. All the exposures have found to be on the rise in this year as compared to the last year. This has shown a steady increase and is found to be high for the current year.

Section: 3. Knowledge Indicators

Sexually Transmitted Diseases (STDs) are an important health priority because they affect acute illness, infertility, long-term disability and death, with severe medical and psychological consequences for men, women and infants (WHO 1999). STIs are transmitted from one person to the other during sexual intercourse. Research studies suggest that STIs and HIV are linked, insofar as the former facilitates the spread of the HIV virus. In this section, the following areas are covered:

- ❖ Awareness of STD
- ❖ Knowledge of STD symptoms in women
- ❖ Knowledge of STD Symptoms in men
- ❖ Experience of any STD symptoms

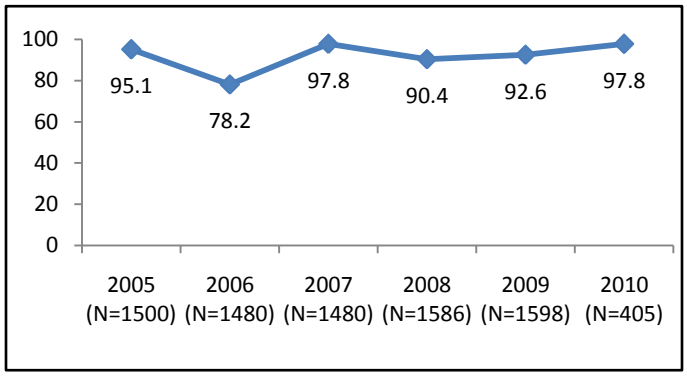
There was universal awareness among the female sex workers about HIV/AIDS, irrespective of the exposure to intervention. The critical knowledge indicators in this section are given below:

- Correct knowledge on HIV
- Correct knowledge without any misconception on HIV
- Knowledge on means of prevention of HIV
- Knowledge that condoms prevent spread of HIV

3.1. Awareness of STD

To assess the levels of awareness of STI, all the CFSWs were asked if they had heard of any diseases other than HIV or AIDS that are transmitted through sexual contact. The following graph presents the changes in STD awareness levels among FSWs between 2005 and 2009:

Graph: 16. Ever Heard of STD



It can be seen from the graph that the level of awareness was comparatively higher in the current wave (97.8 percent) as compared to the earlier wave (92.6 percent).

The proportion of respondents who were aware about STD was highest in the age group of less than 21 years (100 percent).

Interestingly, at overall level, about 97.78 percent respondents were aware about STD irrespective of the age group.

3.2. Knowledge about STD symptoms in men

The clients to female sex workers who reported to be aware of STD were also asked to identify STD symptoms in men. The common STI symptoms in men are foul smelling urethral discharge, burning pain during urination and genital ulcer/sore and swelling in groin area.

Table: 26. Knowledge about STD symptoms in men (Trends)

	2005	2006	2007	2008	2009	2010
Base: All respondents aware about STD	1427	1157	1448	1434	1479	396
Urethral discharge	54.9	53.5	48.9	71.7	53.7	43.94
Burning/pain on urination	66.2	56.7	46.8	60.4	64.8	63.89
Genital ulcers/sores	84.5	79.7	79.4	84.9	78.6	83.08
Swelling in groin area	11.8	21.4	37.3	55.7	19.8	21.21

It was found that at an overall level, the percentage has gone down for knowledge on STD symptoms in men. However, in case of genital sores and swelling in groin area, it is found to be higher in the current year than the previous year.

3.3. Experience of STD symptoms & Treatment seeking behavior

The CFSWs were asked if they have experienced urethral discharge or ulcer/sore in the genital in the one year prior to the survey. A small proportion of the respondents (2.47 percent) reported that they experienced genital sores/ulcers in the past one year. This could also be because they did not want to reveal their experience about such diseases. The most recent STD experienced by the CFSWs were urethral discharge and genital ulcers.

Table: 27. Level of awareness about HIV (Trends)

	2005	2006	2007	2008	2009	2010
Correct knowledge on two acceptable ways of preventing spread of HIV	100.0	99.5	99.9	93.0	96.8	99.75
Correct knowledge on two acceptable ways of preventing spread of HIV without any misconception on HIV	48.5	68.2	65.9	71.8	76.4	70.37
Complete knowledge on means of prevention of HIV and denied for any misconception	41.1	42.5	45.7	58.7	64.6	43.7
Knowledge about condoms prevent HIV	99.8	99.3	99.3	93.3	96.6	99.51
Base: All respondents	1500	1480	1480	1586	1598	405

This table shows the trends in the level of awareness about HIV across all the waves. The indicators show comprehensive knowledge about preventing the spread of HIV. One of the major challenges that intervention programs face is to counter the myths and misconceptions that persist about HIV/AIDS and the complete knowledge also captures the same. It is found that in the current wave, knowledge of acceptable ways of preventing the spread of HIV is found to have increased as compared to the previous wave.

The complete knowledge on means of HIV prevention includes those who are aware of two acceptable ways of HIV prevention and also those who could identify the misconceptions and know for certain that they do not help prevent HIV. The proportion of clients to female sex workers having correct knowledge on ways of preventing spread of HIV without any misconceptions was a tad lower in the current wave (70.37 percent) as compared to Wave V (76.4 percent).

Section: 4. Behavioural Indicators

This sub-section examines the sexual history and sexual behaviour of the female sex workers. The age at first sex of female sex workers is estimated and in addition, the levels of (i) involvement, (ii) last time condom usage and (iii) consistent condom usage have been also detailed. The sexual behaviour of CFSW vis-à-vis their different types of partners viz. commercial female sex workers, ,regular partners and non-paying partners have been analyzed on the above three parameters.

4.1. Sexual history

The mean age at first sex was 22 years, which was similar to the earlier wave. The mean age at first paid sex was 26.56 years in the current wave, again similar to Wave V (reported to be 26 years). Majority of clients to female sex workers in Wave V reported that they solicited clients from the bus stand (91.6 percent), followed by theatre (46.17 percent). The trends observed were almost similar across all waves.

4.2. Involvement with various sexual partners

The clients to FSWs reported that on an average they had sex with a commercial sex worker for 2.25 times in the past month, which was higher than last year of 1.7 times. When asked about the charges paid to the sex worker, the respondents said that on an average they pay Rs 295.8 for having sex with the sex workers. For an overnight stay, the respondents reported that they paid Rs 807.

4.3. Condom usage during last sexual intercourse

In this section the condom usage during last sexual encounter with various types of partners has been detailed. This indicator shows the extent to which condoms are used by people who are likely to have higher-risk sex (i.e. change partners regularly). In this case the clients to female sex workers are involved not only with multiple partners but at the same time with various types of partners with whom they share different level of relationship. Being the important component of bridge groups their high risk behaviour also affects the transmission to general population.

Table: 28. Condom usage during last sexual intercourse (Trends)

	2005	2006	2007	2008	2009	2010
Base: All respondents who had female sex workers	**1500**	**1480**	**1480**	**1586**	**1598**	**405**
Last time condom usage with FSWs	89.7	87.2	91.1	93.1	92.5	91.4
Base: All respondents who had regular female partner	**816**	**811**	**849**	**1021**	**679**	**190**
Last time condom usage with regular female partner	5.2	10.5	1.9	10.7	4.3	5.3
Base: All respondents who had non-paying female partner	**349**	**289**	**318**	**332**	**193**	**73**
Last time condom usage with non-paying female partner	37.0	29.1	39.6	48.8	41.5	31.5

The clients to female sex workers are the bridge population and their condom usage is of mammoth importance to all the partners. The above table reflects the trends in condom usage during last sexual intercourse with various types of sexual partners across waves. In the current wave about 91.4 percent CFSWs reported to have used condom in the last sexual encounter with the commercial sex workers which was slightly lower than that reported in 2009 (92.5 percent).

It was observed that the last condom usage with regular and non-paying female partners have declined in the current wave as compared to earlier wave IV. The trends of the above are given in the table above.

4.4. Consistent condom usage

Consistent condom usage has been reported in this section as an important indicator because the maximum protective effect of condoms is achieved when their use is consistent rather than occasional. Thus, the level of consistent condom usage with the sexual partners reflects the level of risk of contracting HIV among the sex workers. The consistent condom usage with various partners has been given the table given below:

Table: 29. Consistent condom usage with different types of partners

	2005	2006	2007	2008	2009	2010
Base: All respondents who had female sex workers	**1500**	**1480**	**1480**	**1586**	**1598**	405
Last time condom usage with FSWs	59.6	66.0	70.2	75.0	86.3	74.32
Base: All respondents who had regular female partner	**816**	**811**	**849**	**1021**	**679**	190
Last time condom usage with regular female partner	3.1	6.2	0.9	7.2	1.6	3.42
Base: All respondents who had non-paying female partner	**349**	**289**	**318**	**332**	**193**	73
Last time condom usage with non-paying female partner	19.8	13.8	29.9	20.5	27.5	31.51

The above table shows the trends of consistency of condom usage across waves with various types of partners. It is found to have decreased for last time condom usage with the FSWs but has shown an increase with their female regular partner.

The study also tried to understand the possible reasons for the CFSWs for not using the condoms while indulging in sex with their various types of partners. The major reason that was quoted for not using condom with commercial female partners was that 'did think it was necessary' (43.75 percent) and followed by 'did not think about it' as quoted by 37.5 respondents

4.5. Practices relating to condom use and procurement

This section includes indicators relating to condom use and procurement which is given below:

- Whether carrying condom at the time of the interview
- Place of purchase of condom in last occasion
- Experience of not using condom against wish in the last one month & reasons

Table: 30. Whether carrying condom at the time of the interview (Trends)

	2005	2006	2007	2008	2009	2010
Can show the condom	5.6	5.9	5.5	5.2	3.3	5.22
Cant show a condom but have	4.3	6.3	3.2	5.0	2.6	3.48
Do not have right now	90.1	87.7	91.4	89.7	94.2	88.31
Base: All respondents who ever used condom	1480	1468	1479	1568	1538	402

About 99.26 percent of the respondents reported that they had ever used a condom while having sexual intercourse. The respondents who reported that they ever used condom were asked whether they were carrying condom at the time of the interview. It can be observed from the trends given above that about 5.22 percent of the clients to female sex workers reported that they were carrying condom at the time of the interview and could also show that they have condom with them. This proportion was slightly higher as compared to earlier wave, where the same was reported by 3.3 percent respondents. The present trend was in sync with the 2008 study.

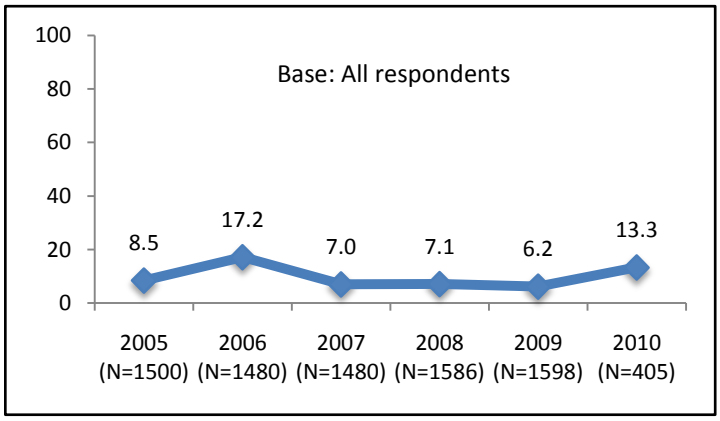
It was noted that CFSWs in higher age group (above 36 years) reported that they were carrying condom at the time of the interview (7.76 percent) which was not much higher than those in the age group of 21-25 years (5.66 percent).

Table: 31. Place of purchasing condom in the last occasion (Trends)

	2005	2006	2007	2008	2009	2010
Vending stall	29.3	31.8	16.6	26.1	7.9	5.72
Pharmacy	35.3	42.5	17.9	36.2	37.0	22.64
Health facility	2.0	1.4	1.4	2.7	1.2	2.99
Friend	6.4	2.5	4.1	6.6	0.9	5.97
Partner	23.2	19.4	59.3	26.2	51.3	59.45
Others	3.9	2.1	0.7	2.2	1.7	5.97
Base: All respondents who ever used condom	1480	1468	1479	1568	1235	402

From the above table it is clear that as compared to the earlier wave, the dependence on commercial sex worker for procuring condoms was high in the current wave of 59.45 percent, as compared to the previous wave of 51.3 percent. Pharmacy was reported as the major source of procuring condom in the last occasion (22.64 percent) in the current wave, which was slightly higher as compared to wave V (37 percent).

Graph: 17. Experience of any incident of not using condom against wish in the last one month



It can be seen that about 13.3 percent of the clients to female sex workers reported that they experienced an incident of not using condom against will in the last one month. This proportion was higher in the current wave as compared to earlier wave (6.2 percent).

Section: 5. Risk Perception & HIV testing Behavior

HIV testing and counseling form the gateway to care, treatment and support for persons in need especially the high risk groups. To ensure that they can exercise their right to know their HIV status, and at the same time people with HIV can benefit from increased access to antiretroviral (ARV) treatment provided, HIV testing and counseling must be radically scaled up. Thus, analyzing the critical indicators in this regard will give a complete picture about areas that requires programmatic focus. The main indicators covered in this section include the following:

- Self Risk Perception
- Knowledge of any place for confidential HIV testing
- Ever taken HIV test
- Voluntary HIV testing
- Received counseling

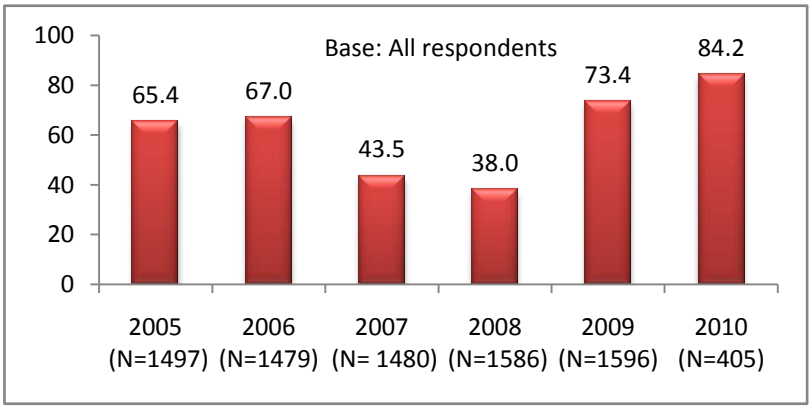
5.1. Self risk perception

The clients to female sex workers were asked whether they perceive the risk of contracting HIV due to being involved in the high risk behavior. The findings of the current wave revealed that lower proportion of Clients to FSWs reported that they perceived the risk of contracting HIV (5.9 percent) in the current wave as compared to Wave V (4.9 percent).

5.2. Knowledge of any place for confidential HIV testing

The knowledge about any place for confidential HIV testing has been detailed in the following table on the basis of exposure to intervention, in order to understand whether there exists any difference in the awareness of those sex workers who were exposed to intervention and those who were not.

Graph: 18. Knowledge of any place for confidential HIV testing

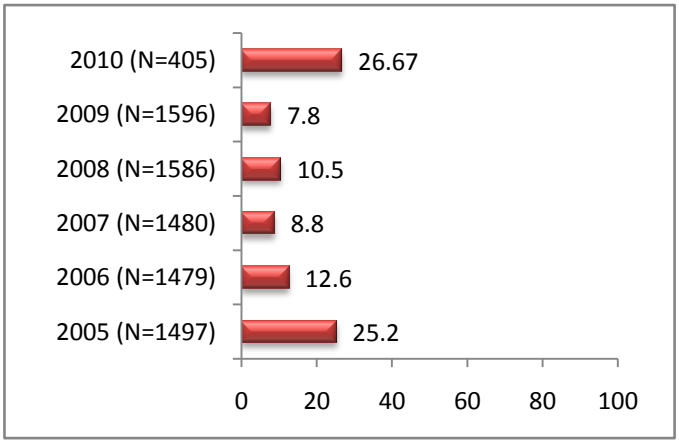


From the above table, it is clear that the awareness about any place for confidential HIV testing was higher among the CFSWs in the current wave (84.2 percent) as compared to those in the earlier waves.
It is in fact the highest than the previous waves.

5.3. Ever taken HIV test

The World Health Organization (WHO) recommends that, in the context of community mobilization around the importance of learning one's HIV status, HIV testing and counseling should be offered whenever a patient shows signs or symptoms of HIV infection or AIDS. Thus, proportion of respondents in the high risk group should be taking HIV test to know about their HIV status. The following table shows the trends across waves on proportion of respondents who have ever taken HIV test.

Graph: 19. Ever taken HIV test (Trends)



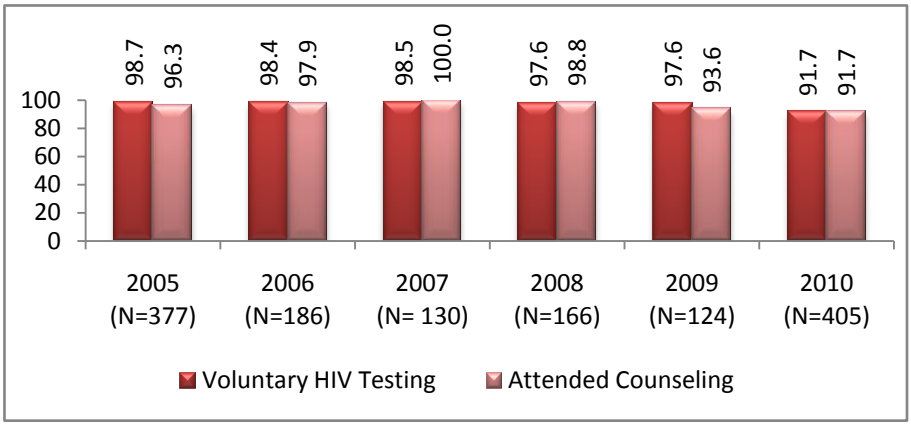
The above table reflects the trends in HIV test taking behaviour across all the five waves.

It has found to be the highest among all the waves. It is 26.67 percent as compared to 7.8 percent in the previous waves.

5.4. Voluntary HIV testing and received counseling

All those respondents who reported to have ever taken HIV test were asked whether they took the HIV test voluntarily or the test was prescribed to them. They were also asked if they received counseling while taking the HIV test.

Graph: 20. Voluntary HIV testing and received counseling (Trends)



All the respondents in the current wave reported that they had undergone voluntary HIV testing which was slightly lower than Wave V (93.6 percent). It is found that an equal percent of the CFSWs have both taken

voluntary testing and also attended counseling. Though it is lesser than the previous wave, it remains constant.

There was no significant difference in the proportion of respondents who took voluntary HIV test and received counseling on the basis of exposure to intervention, age group and duration of sex work.

MALE SEX WORKERS

Section: 1. Demographic Characteristics Of Male Sex Workers

1.1. Introduction

Along with Female Sex Workers (FSWs), Male Sex Workers are also identified amongst the population that is at a high-risk of HIV transmission as unprotected sexual intercourse is a common practice amongst all commercial sex workers. HIV transmission is known to be accentuated by unprotected sexual transmission and it could spread quickly amongst people getting exposed to unprotected sexual intercourse through multiple partners.

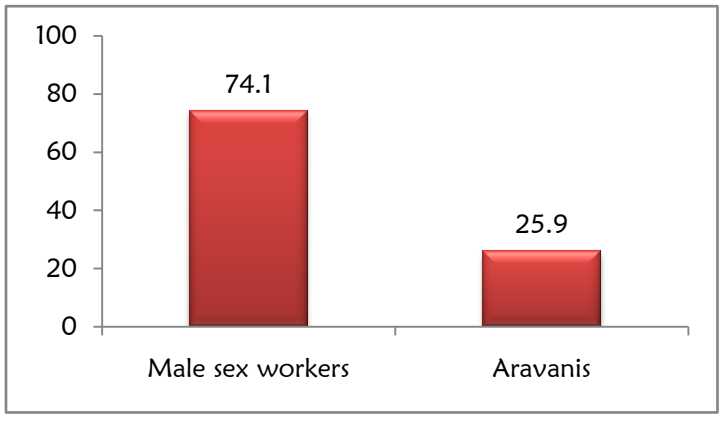
1.2. Purpose of studying the demographic profile

The purpose of studying the demographic profile is to formulate a background sketch of the respondents (Male Sex Workers) against the backdrop of which the information on the knowledge levels, attitudinal and behavioral indicators could be comprehended.

Respondents of this study included both Male Sex Workers and Aravanis. Aravanis are transgenders, and very often they work as male sex workers to attain a means of livelihood. In general, they are born with the physiology of a male, with a few born with male intersex variations. At the same time, the group- 'Aravanis' also includes 'Kothis' and 'Double Deckers'. 'Kothis' are men who assume the a 'feminine role' (of being penetrated) by their male partners, and 'Double deckers' are men who , in an act of a sexual intercourse, both penetrate and get penetrated, unlike the other two categories.

It is considered essential for the purpose of this study to understand the basic characteristics, living conditions, knowledge levels, attitudinal and behavior practices of Male Sex Workers (MSWs) and Aravanis regarding HIV/AIDS/STD separately, given the inherent differences in their living conditions, their relative positions in the social landscape and their sexual behavior.

Graph: 21. Distinction based on the sexual behavior



As far as the respondents' profile of the current wave is concerned, about three fourth of the total respondents (74.1 percent) belong to the category of MSWs and rest of them (25.9 percent) are Aravanis.

Typically, Aravanis are more vulnerable to HIV/STD infection as compared to the other MSWs, as the

sexual act with the clients is performed in haste, and the condom usage is inconsistent. This is because the clients do not want to get caught soliciting an Aravani. Moreover, the use of lubrication is scanty and that damages their anal tract and makes them more vulnerable to HIV infection.

On making a district wise assessment, it was found that a majority of respondents from Dindigul (79.1 percent) and Erode (52.7 percent) were Aravanis.

1.3. Classification of respondents on the basis of the type of location

The findings of the current wave (VI) point out that most of the Male Sex Workers (MSWs) solicit their clients from places frequented by a large number of people. Bus stands (mentioned by 43.7 percent of the total respondents), street, parks and beaches (mentioned by 27.4 percent of the total respondents) and cinema theatres emerged as the most popular locations.

However, street/parks/beaches have seen an overall decline in their popularity amongst Male Sex Workers for solicitation of clients over the last few years. This can be pointed out from a decreasing trend of the same depicted by the data obtained from Wave I- Wave VI.

Table: 32. Locations for soliciting the clients

	Overall	2005	2006	2007	2008	2009	2010
Street/park/beach	34.1	42.8	50.7	31.6	35.8	23.4	27.4
Bus stand/railway station	35.7	35.2	29.1	32.0	34.1	42.1	43.7
Cinema theatres	5.2	7.0	2.8	5.6	4.9	2.8	7.1
Base : All Respondents	10922	912	1197	2800	2857	1250	1906

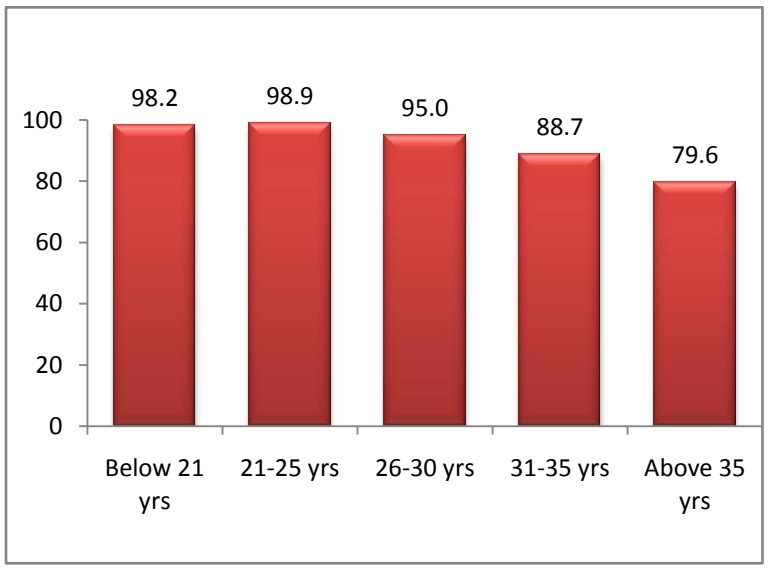
1.4. Age of Male Sex Workers

The median age of the respondents of the current wave at the overall level is 28 years. The trended data also suggests the median age of the respondents hasn't shifted drastically over all the BSS surveys done in the past (Wave I-Wave VI).

1.5. Basic literacy skills

At the overall level, majority of the respondents (91.2 percent) reported that they can read and write.

Graph: 22. Basic literacy skills as per age



However, as seen in the case of FSWs, the lower age groups had a higher proportion of people who could read and write, whereas the higher age groups (respondents between 31-35 years and respondents who are above 35 years of age) had a lesser proportion of respondents who could read and write.

The highest grade of more than half of the respondents (69.2 percent) of the total number of respondents who displayed literacy skills (91.24 percent at the overall level) lied between 'Class VI-Class X'. Less than a percent of them (0.98 percent) reported having finished their post graduation, and about one tenth of them had either finished their education up to class XII or had graduated.

The findings of the current wave suggest that out of all those respondents who displayed basic literacy skills, about one fourth (25.6 percent) are engaged in agricultural work. About one fifth of them are engaged in non-agricultural work as labor force, 5.9 percent of them are employed as cooks and 7.8 percent of them collect money in shops. Further, others are also engaged as coolies, tailors, construction workers, etc.

1.6. Current marital status

As per the findings of the present wave, more than half (54.1 percent) of the respondents are unmarried and living alone at the overall level.

Table: 33. Current marital status

Current marital Status	Overall
Unmarried (living alone)	54.1
Unmarried (live-in partner)	0.6
Married and living with wife	19.0
Separated /divorced/widower	4.6
Unmarried (living with friends/relatives)	17.4
Base : All MSMs (excluding Aravanis)	1413

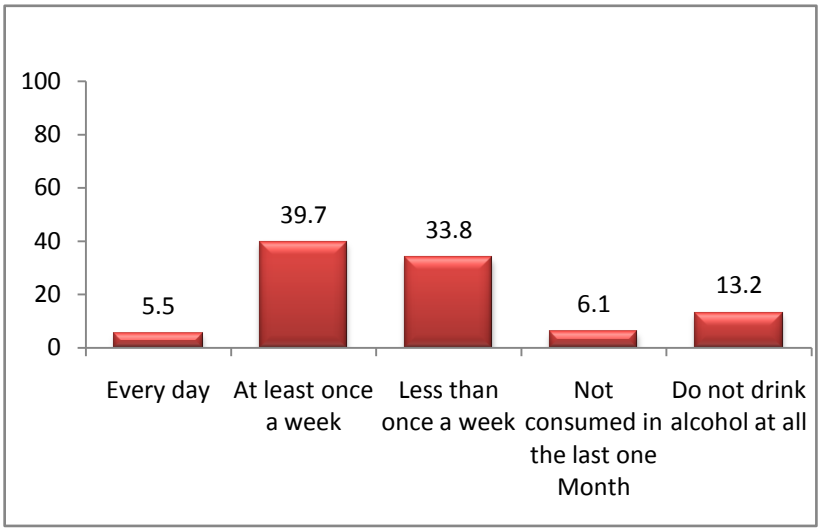
On the other hand, about one fifth of the total respondents were married and living along with their wife. A small proportion of the respondents (0.6 percent) also reported that they are unmarried but they have a regular partner with whom they stay in an arrangement of a live- in relationship. Such patterns are crucial to HIV/AIDS/STD transmission, as having a regular partner enhances the chances of the commercial sex workers (both male and female) of spreading the infection to their partners.

1.7. Alcohol consumption

Respondents of the current wave were asked about their consumption habits related to alcohol. Excessive use of alcohol lowers down the discretionary powers in people, and renders them incapable of making sound decisions. In the context of their sexual behavior, they might engage in an intercourse they otherwise wouldn't have, and negotiating condom usage with the client can become a difficult task too.

When the respondents were interviewed on their alcohol consumption behavior, only a little more than one tenth of the total respondents (13.2 percent) reported that they don't consume alcohol at all. Rest of the respondents were asked about the frequency with which they consumed alcohol in the last one month.

Graph: 23. Consumption of alcohol



Also, it was observed that out of the total number of Aravanis, 43.8 percent consume alcohol at least once a week. At the same time, out of the total number of Male Sex Workers who were interviewed, a lesser proportion of them (38.2 percent) consume alcohol at least once a week. This makes Aravanis relatively more vulnerable to unwilling sexual encounters, and inconsistent condom usage, thereby increasing the chances of transmission of HIV/STD amongst them. When the respondents were asked about how often they used a condom with a new/occasional client during the last one week, 91.3 percent of Male Sex Workers reported having used a condom 'every time', while only 66.1 percent of Aravanis said so. This indicates that the consistency of condom usage with new/occasional clients is lesser in Aravanis as compared to the Male Sex Workers.

Similarly, consumption of narcotic drugs (especially those that are injected) holds crucial ground in the context of transmission of HIV, as they not only have a mood altering effect on the user, but if needles used for injecting them are shared with an infected person, the chances of HIV transmission are very high.

When the respondents were asked if they have ever consumed drugs, a very small proportion of respondents (2.7 percent) reported that they have consumed drugs at least once till now.

1.8. Migratory patterns and sexual practices

Since Male Sex Workers fall under the category of 'high risk groups' , studying their migration pattern aids in understanding the possibility of the spread of HIV infection from one geographical unit to the other.

When the respondents of the current wave were asked if they have migrated from their city/district of origin to the place where they are situated right now, 13.4 percent said that the city/district that they live in currently is not their city/district of origin/suggesting that they have migrated.

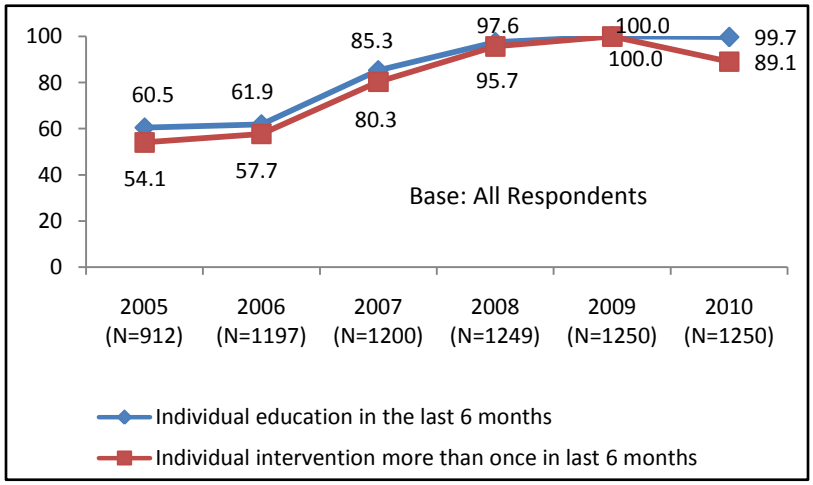
However, a small proportion of respondents (1.3 percent) reported having migrated from their state of origin to another. But, in the context of HIV/STD infection, migration itself is not as important as whether commercial sex workers are involved in sex trade at multiple places, from one city/district/state to another. When the respondents of the current wave were asked if they have ever practiced sex anywhere else other than their current location, almost half of the respondents (48.2 percent) answered in the affirmative, while the other half said that they have never practiced commercial sex anywhere other than the current location.

Section: 2. Exposure To Intervention And Collectivization

An estimation of the extent to which the study groups have been exposed to various HIV/AIDS/STD related intervention programmes helps in understanding the activities and programme components that have had an impact in enhancing the knowledge levels, attitudes and behaviors of the target population. This section begins with the exposure to intervention and collectivization among the male sex workers, followed by the critical indicators which have been analyzed on the basis of exposure to intervention and trends across six waves.

Before we get into further analysis of the critical indicators on the basis of exposure to intervention, we need to understand the exposure to intervention across the six waves.

Graph: 24. Received individual education on HIV/AIDS in the last 6 months through TAI interventions



When the respondents of the current wave were asked about whether they received individual education on HIV/AIDS in the last six months or not, as many as 99.7 percent of them responded in the affirmative. However, this proportion saw a decline from the universal receipt of individual education on HIV/AIDS (in the last 6 months) reported by the respondents of the last wave (V). However, the data suggests that from wave I –VI, more and more people are being covered by TAI's services that provide individual education on HIV/AIDS.

However, there was a substantial drop in the proportion of respondents who received individual education on HIV/AIDS more than once in the present wave (89.1 percent) as compared to wave IV and wave V.

Table: 34. Number of times visited by NGO Outreach worker or Peer Jeevan in the last 6 months

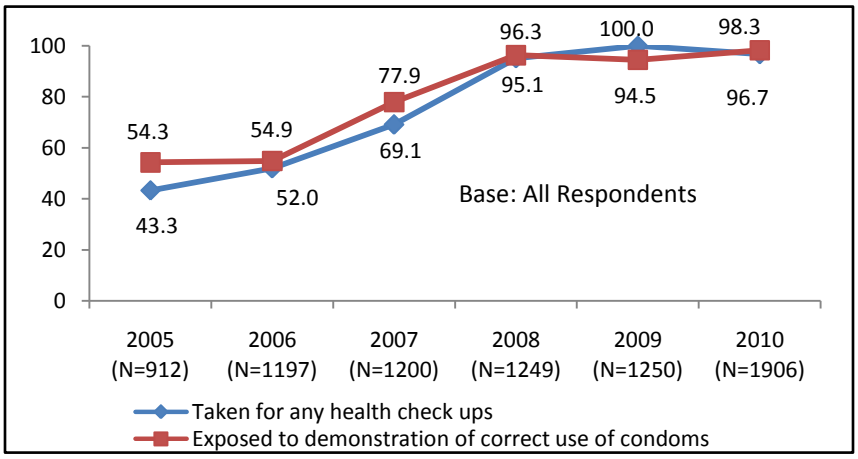
	2005	2006	2007	2008	2009	2010
Never	41.2	41.3	15.3	3.8	0.0	0.8
Once	6.1	6.4	6.3	2.7	0.0	18.5
2 to 3 times	23.3	21.0	25.2	49.7	44.8	35.7
More than 3 times	29.4	31.4	53.3	43.7	55.2	44.7
Base: All respondents	912	1197	1200	1249	1250	1906

The coverage by NGO outreach workers or Peer Jeevan has significantly increased as compared to earlier waves in Wave IV and Wave V. However, it has seen a substantial decline as per the findings of the present wave, since the proportion of respondents who reported that they were

visited 2-3 times or more than 3 times by the NGO outreach worker or Peer Jeevan in the present wave has declined.

However, at the same time, the proportion of respondents who have been visited at least once by NGO outreach workers or Peer Jeevan in the last six months has shot up to 18.5 percent in the present wave from zero in the last wave.

Graph: 25. Taken by NGO Outreach or Peer Jeevan for any health check-ups & demonstrated condom usage in last 6 months



It can be observed that there has been a decrease in the proportion of MSWs who reported that they have been taken by NGO worker for any health check- ups in the last 6 months across the waves.

Considering the fact that the above data is indicative of universal exposure to various interventions of TAI, we'll analyze the critical indicators keeping in mind this 'exposure to interventions' as a basis for analysis.

Section: 3. Knowledge Levels

Sexually Transmitted Diseases (STDs) are an important health priority because of the acute nature of the group of illness that fall under the category of Sexually Transmitted Infections. They could also lead to infertility, long-term disability and death, with severe medical and psychological consequences for men, women and infants (WHO 1999). STIs are transmitted from one person to the other during sexual intercourse. Research studies suggest that STIs and HIV are linked, insofar as the former facilitates the spread of the HIV virus. In this section, the following areas are covered:

- Awareness of STD
- Knowledge of STD Symptoms in men
- Experience of any STD symptom

The critical knowledge indicators presented in this section are as follows:

- Correct knowledge on HIV
- Correct knowledge without any misconception on HIV
- Knowledge on means of prevention of HIV
- Knowledge that condoms prevent spread of HIV
- Awareness about STDs
- Knowledge about STD symptoms in men

3.1. Awareness about HIV

Table: 35. Level of awareness about HIV (Trends)

	2005	2006	2007	2008	2009	2010
Correct knowledge on two acceptable ways of preventing spread of HIV	99.8	99.8	100.0	95.0	99.4	99.2
Correct knowledge on two acceptable ways of preventing spread of HIV without any misconception on HIV	48.4	51.0	66.3	55.0	79.4	83.6
Complete knowledge on means of prevention of HIV and denied for any misconception	40.5	28.5	29.3	43.9	65.8	50.1
Knowledge about condoms prevent HIV	99.8	99.5	99.9	99.1	99.2	99.0
Base: All respondents	912	1197	1200	1249	1250	1906

The above table shows the trends in the level of awareness about HIV across all the six waves. The indicators mentioned above are meant to highlight comprehensive knowledge about the prevention of transmission of HIV from infected person to an uninfected person. Complete knowledge about the means of prevention of HIV also incorporates freedom from any misconception that is linked to HIV transmission. Myths surrounding HIV also translates into stigma faced by the patients, and this is a challenge that intervention programmes continuously face.

Complete knowledge on HIV would include knowledge about at least two acceptable ways of HIV prevention, being able to identify the misconceptions and knowing for certain that they do not help prevent HIV. The proportion of male sex workers having correct knowledge on ways of preventing spread of HIV without any misconceptions was higher in the current wave (83.6 percent) as compared to Wave V (79.4 percent). This knowledge level was much higher than that recorded in Wave IV (55 percent), suggesting that the knowledge level has been gradually increasing for the past three years of TAI intervention. However, in the case of having complete knowledge on the means of prevention of HIV and being denied of any misconception, the awareness level in the present wave is noted to be lower than that recorded in the previous wave (50.1 percent in wave VI and 65.8 percent in wave V).

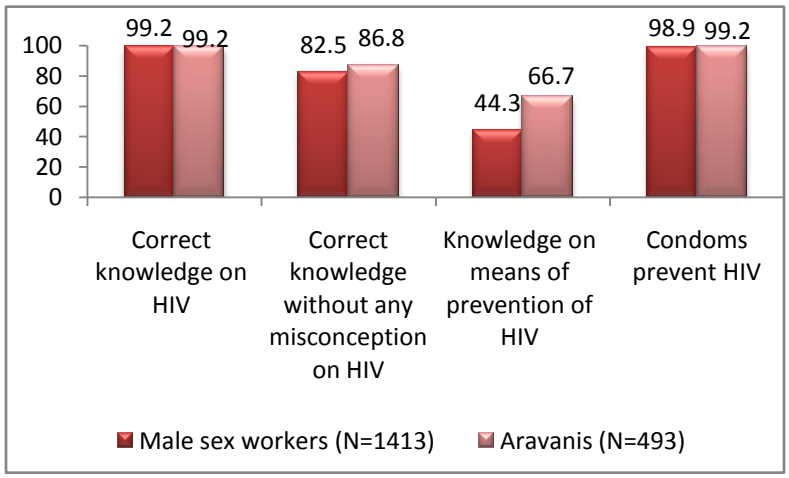
The above indicators have been analyzed on the basis of type of male sex workers to get a clear understanding on their level of awareness about HIV/AIDS. The following graph represents the above indicators.

Table: 36. Awareness about the symptoms of STDs in Aravanis/Kothis

Symptoms of STDs in men	Overall
Anal Ulcers	75.3
Unusual or foul-smelling Anal discharge	65.4
Burning on urination	63.1
Genital ulcers/sores	52.9
Swelling in groin area	42.5
Itching	37
Ulcer at - Sapti	41.6
None	0.1
Don't know	0.7
Base : All Respondents who are aware about STDs	1903

While anal ulcers were not mentioned as symptoms of STDs in men, as many as 75.3 percent of the respondents who are aware about STDs reported that Aravanis/Kothis are prone to getting anal ulcers if they are suffering from STDs. At the same time, 'unusual or foul smelling anal discharge' was mentioned as a symptom of STD in Aravanis/Kothis by 65.4 percent of the respondents who had heard about STDs. Genital ulcers/sores were mentioned by a little more than half of them (52.9 percent), while swelling in the groin area was reported by 42.5 percent of them, itching and 'ulcer at- Sapti' was mentioned by 37 percent and 41.6 percent of the respondents respectively.

Graph: 26. Level of awareness about HIV & type of respondent

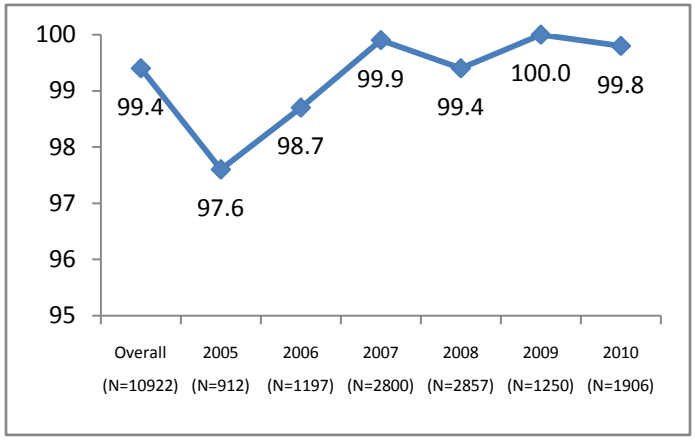


Interestingly, the levels of awareness of Aravanis are higher than those of Male Sex Workers for all the categories, exact on 'correct knowledge on HIV', for which 99.2 percent of the respondents are aware in case of both Aravanis and Male Sex Workers. The knowledge on the means of prevention of HIV differed by a high margin in the

case of the MSWs and Aravanis, with 44.3 percent of Male Sex Workers reporting awareness as compared to 66.7 percent in the case of Aravanis. Moreover, a slightly higher percentage of Aravanis are aware that condoms prevent the transmission of HIV, as compare to Male Sex Workers. However, despite this, the consistency of condom usage in the last one week was higher in the case of Male Sex Workers as compared to Aravanis (as seen earlier).

3.2. Awareness of STDs

Graph: 27. Awareness about STDs

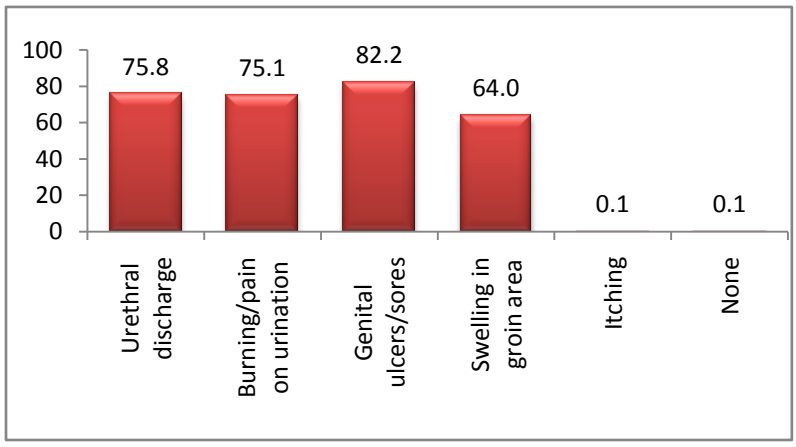


The respondents were further interviewed for their awareness levels on Sexually Transmitted Diseases (STDs). Most of the respondents of the current wave (99.8 percent) reported that they have heard about Sexually Transmitted Diseases. Also, the awareness levels about STDs have been gradually increasing from Wave I to Wave VI, with the findings of the last wave reporting universal awareness about STDs.

3.3. Knowledge about STD symptoms in men

In the current wave, the respondents who displayed awareness about STDs were also asked about whether they know the symptoms of STDs or not.

Graph: 28. Awareness about the symptoms of STDs in men



When the respondents were asked about what the symptoms of STD in men are, more than three fourths of them cited 'urethral discharge' (75.8 percent), burning/pain on urination (75.1 percent), genital ulcers/sores (82.2 percent) separately as symptoms of being affected by a Sexually Transmitted Disease.

It was also seen that 'swelling in the groin area' was seen as a symptom by a relatively lesser proportion of the respondents (64 percent). At the same time, 'itching' was mentioned by only 0.1 percent of the total respondents at the overall level.

However, it was observed that the symptoms mentioned by respondents of STDs in Aravanis and Kothis, differed from those that were mentioned by them for STDs in men.

Table: 37. First action taken during the last phase of STD

	Overall	Exposed to the benefits of TAI Araichimani	Not exposed to the benefits of TAI Araichimani
Sought advice/medicine from SESA/TAI clinic	75.6	85.5	68.7
Sought advice/medicine from a government clinic/hospital	4.8	1.5	7.1
Sought advice/medicine from a private clinic/hospital	1.2	2.9	0.0
Sought advice/medicine from a private pharmacy	0.6	0.0	1.0
Stopped having sex when I had the symptoms	4.8	1.5	7.1
Base : All Respondents who have suffered from any urethral discharge/genital sores in the last 1 year	168	69	99

As is seen from the table, about 7.1 percent of the respondents who had not been previously exposed to TAI Araichimani just stopped having sex when they had the symptoms instead of seeking advice from a clinic or a pharmacy. However, a relatively less proportion of those who were exposed to TAI (only about 1.5 percent) reported doing the same.

At the same time, as many as 85.5 percent of the TAI beneficiaries relied on SESA/TAI clinic for advice/medicine when they suffered from STD symptoms.

Section: 4. Behavioral Indicators

This component serves the purpose of examining the sexual history and sexual behavior of the male sex workers. The age at first sex of male sex workers is estimated and in addition, the levels of

- Involvement with various sexual partners
- Last time condom usage
- Consistent condom usage
- Condom negotiation
- Practices related to the condom use and procurement
- Uses of lubricants are also explained in detail.

The sexual behavior of MSW vis-à-vis their different types of partners viz. regular paying clients, occasional paying clients, regular partners and non-paying partners have been analyzed on their involvement with various sexual partners, condom usage during the last sexual intercourse, and consistency in condom usage.

4.1. Sexual history

In order to be able to estimate the amount of time that the respondents have been exposed to the risk of transmission of HIV through unprotected sexual intercourse, they were initially asked about the age at which they had their first intercourse.

Table: 38. Age at the first sexual intercourse

Age during the first sexual intercourse	Over all	2005	2006	2007	2008	2009	2010
Median	15.0	16.0	17.0	14.0	15.0	16.0	15.0
Base : All Respondents	10922	912	1197	2800	2857	1250	1906

The median age at which the respondents had their first sexual intercourse has been shifting by 1 unit at least over the last few years (from wave I-VI). As compared to the finding of the last wave, when the median age was as low as 16 years, this data from the current wave reveals that it has further dropped down to 15 years.

However, the median during their first commercial sexual intercourse is considerably higher than the age at which they had their first intercourse. Moreover, this holds true for the results from wave I- wave VI.

Table: 39. Age at the first paid sexual intercourse

Age during the first paid sexual intercourse	Over all	2005	2006	2007	2008	2009	2010
Median	20.0	19.0	20.0	18.0	21.0	22.0	20.0
Base : All Respondents	10922	912	1197	2800	2857	1250	1906

This suggests that a lot of respondents had engaged in a sexual encounter at a very tender age, before they got involved in commercial sex. Their involvement at such young ages is also suggestive of the long duration of time through which

they have been vulnerable to getting exposed to HIV. Further, the respondents were also asked about the amount that they pay to the client for oral sex, anal sex, and manual sex, to gain an understanding of how these sexual practices differ from each other in terms of the monetary gains that they offer to the male sex workers.

4.2. Involvement with sexual partners

The median of clients visiting a sex worker per day was 2 for the current wave and this has been consistent across all the waves of BSS. On an average, as per the findings of the present wave, male sex workers spend at least 4.5 days engaged in sex work per week. However, the average number of such days was lower for the respondents of the last wave (4).

Table: 40. Involvement with types of sexual partners

	Male Sex workers	Aravanis
Occasional Clients	99.9	100.0
Regular Client	98.7	99.6
Main Male Partner	31.5	54.4
Other Non-Paying Partners	23.6	33.9
Base All Respondents	1413	493

As it is clearly seen from the chart, most of the respondents are engaged with occasional clients and regular clients. The proportion of involvement with such clients was marginally higher among Aravanis as compared to male sex workers in the case of both occasional and regular clients. However, while more than half of the total Aravanis interviewed responded that they have a main male partner, only a little more than one third of the Male Sex Workers (31.5 percent) said so. As far as other non paying partners are concerned, similar results were observed. While a little more than one third of the total Aravanis (33.9 percent) are involved with other non paying partners, only 23.6 percent of the Male Sex Workers reported having any such involvement.

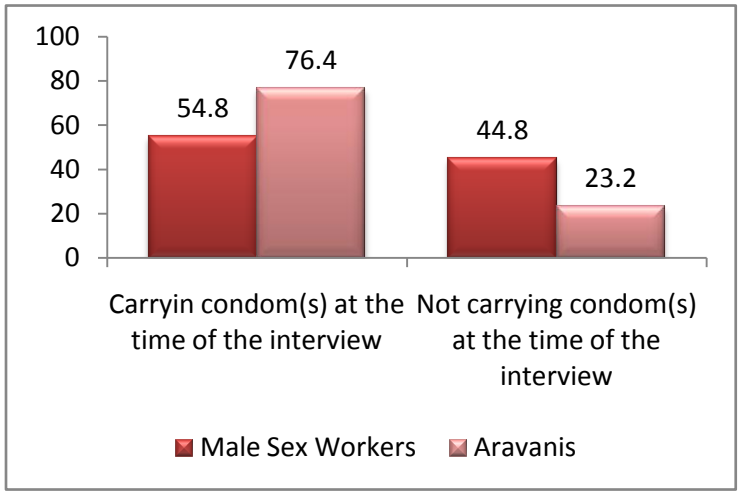
4.3. Condom usage

Since the usage of condoms is essential to prevent the sexual transmission of HIV from an infected person to an uninfected person, the respondents of the current wave were interviewed for their behavior in this context.

When the respondents were asked if they have ever used a condom, most of them (99.7 percent) at the overall level reported that they have. This has been found across the findings of the survey done over the last few years (from wave I- VI).

However, for the present wave, those respondents who said that they have used condoms at least once were asked if they are carrying it while they were being interviewed.

Graph: 29. Carrying condoms along at the time of the interview



If the commercial sex workers are carrying condoms along, it's a sign that they are prepared for chance encounters, and hence less vulnerable to unprotected sexual activity.

When the respondents of the present wave were asked whether they are carrying condoms at the time of the interview or not, then at the overall level- 39.2 percent of them said that they aren't carrying a condom at the present moment, while 60.4 percent of the respondents reported carrying a condom then.

On this aspect, there were differences seen between the behavior of 'Male Sex Workers' and 'Aravanis'. Out of the total number of Male Sex Workers who were interviewed for the present wave, close to half (44.8 percent) reported not carrying any condoms at the time of the interview. However, out of the total Aravanis interviewed, close to half (45.5 percent) reported carrying condoms at the time of the interview and they could also show the condoms to the investigators.

This displays better preparedness of Aravanis for protected sexual encounter, as compared to the Male Sex Workers. However, this also points to the intensity of the difficulties that Aravanis might be facing in negotiating condom usage with their clientele.

Interestingly, respondents who have a main regular partner displayed more preparedness for protected sexual encounters as compared to those who don't have a main regular partner. For the present wave, out of the total number of respondents who have a main regular partner, about half of them (48 percent) reported carrying condoms at the time of the interview. On the other hand, about half of the total respondents who don't have a main male regular partner, reported not having any condoms at the time of the interview. This is suggestive that the Male Sex Workers who have a regular partner are likely to be more cautious about condom usage, in order to guard themselves against unprotected sexual encounters for the safety of their partners.

4.4. Incidence of not using condoms against wish in the last six months

In addition to this, the respondents of the present wave were asked if there was any incident in the last one month when they did not use condoms against their wish. At the overall level, one tenth of the total respondents (9.9 percent) said that they did. However, the findings from wave I to Wave VI were also compared on this aspect, and it was observed that the proportion of these incidences saw a gradual decline from wave I- VI.

Table: 41. Incidence of not using condom against wish in the last one month

	Overall	2005	2006	2007	2008	2009	2010
Yes	11.7	18.6	22.5	10.5	7.8	10.2	9.9
No	88	81.4	77.5	89.5	91.7	88.3	89.8
Base : All Respondents	10922	912	1197	2800	2857	1250	1906

However, out of the total respondents who were interviewed, the respondents who had a main male regular partner reported a lesser incidence of such an event.

Out of the total number of respondents who have a regular partner, only about 6.6 percent stated that they faced an incidence in the last one month when they did not use a condom against their wish. On the other hand, out of the total respondents who did not have a main male regular partner, almost double the proportion of respondents (11.7 percent) said that they have faced such an incidence.

These findings are aligned to the understanding that when Male Sex Workers have a regular partner, they feel more concerned about being cautious about condom usage and preventing themselves from engaging into unprotected sexual encounters.

Moreover, according to the findings of the present wave, almost half of the total respondents interviewed (49.7 percent) mentioned that the reason for not using condom was because their partners declined the usage of condoms. This clearly highlights low condom negotiating abilities, and points out the vulnerability of the Male Sex Workers to sexual transmission of HIV.

However, the situation in this context has considerably improved over the last few years, with the proportion of respondents indulging in unprotected sex against their wish coming down to almost half from the third wave to the present wave.

Table: 42. Reason for not using condom against the wish in an incidence within the last one month

	Over all	2005	2006	2007	2008	2009	2010
Partner did not want to use a condom	65.0	64.1	74	80.6	66.4	32.0	49.7
Base : All Respondents who have not used condom against their wish in the last 1 month	1273	170	269	294	223	128	189

It is a known fact that the chances of HIV transmission from an unprotected sexual activity is closely linked to the type of sexual activity that one is indulging in. For instance, anal sex is the riskiest form of sexual activity in the context of HIV transmission. Therefore, the respondents were asked about whether they use condoms while having anal sex or not. In the present wave, most of the respondents (96.7 percent) reported that they used condoms while engaging in anal sex with their last client.

It was found that the proportion of those respondents who did used condoms for their last encounter with a client (anal sex) gained a lot of momentum between wave I and wave II (with a jump from 26.1 percent of the total respondents in wave I to 87.5 percent of them in wave II. Also, post Wave II, this proportion has been gradually increasing.

For understanding of the non-usage of condoms while having anal sex, the respondents were asked for the reasons as to why condoms were not used with their last client while having anal sex. Findings of the present wave point out that for a little more than half of the total respondents (50.46 percent at the overall level), the influence/pressure from their sexual partner was the cause. At the same time, about one fifth of the respondents also mentioned that 'they did not think about using a condom' before engaging into anal sex.

Table: 43. Condom used with the last client during anal sex

	Overall	2005	2006	2007	2008	2009	2010
Yes	88.6	26.1	87.5	93.1	94.8	96.3	96.7
No	5.9	20.3	12.6	4.7	4.2	2.7	2.3
Unspecified	4.3	53.6	0.0	0.0	0.0	0.0	0.0
Base : All Respondents for whom number of clients with whom intercourse occurred	10234	827	1044	2601	2733	1190	1839

4.5. Condom usage during last sexual intercourse

This section focuses on the condom usage of the Male Sex workers during their last sexual encounter with their regular clients, regular male partner, and non-paying male partner. Studying condom usage patterns across different sexual patterns is crucial to the understanding of the vulnerability of the Male Sex Workers towards the sexual transmission of HIV. For

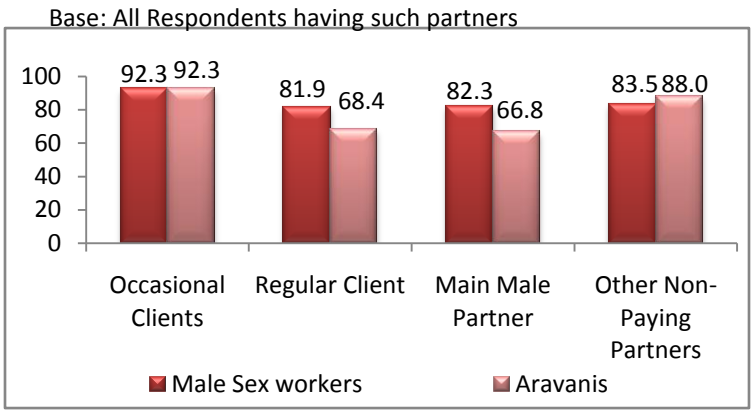
instance, with regular and non paying partners, there might be a level of comfort and trust associated, that could bring down the frequency of condom usage, and increase the likelihood of HIV infection. Considering the interplay of the dynamics played by the different kinds of sexual relationships that the Male Sex Workers are exposed to, it needs to be ensured that protected sex is the common denominator to all of them. Studying the condom usage during the last sexual intercourse is required to give us an inkling of the general practice of condom usage amongst the members of this group.

Table: 44. Condom usage during last sexual intercourse (Trends)

	2008	2009	2010
Last time condom usage with regular clients	92.9	92.3	91.7
Base: All respondents who had regular clients	1230	1170	1886
Last time condom usage with regular male partner	**71.3**	**63.5**	**76.4**
Base: All respondents who had regular male partner	401	576	713
Last time condom usage with non-paying male partner	**70.3**	**87.4**	**85.0**
Base: All respondents who had non-paying male partner	175	302	500

The above table reflects the trends in condom usage during last sexual intercourse with various types of sexual partners across Wave IV (2008) and Wave VI (2010). The new occasional clients could not be analyzed in comparison to Wave IV (2010) because of low base as the proportion of respondents who reported to have sex with new clients in the last 12 months was quite low in earlier wave. In the present wave, while 91.7 percent of the respondents reported using condoms the last time they had sex with their regular clients, a substantially lower proportion of them reported doing the same with their regular male partners and non paying male partners. This is suggestive that in general, the likelihood of condom usage with regular male partners and non paying male partners could be lesser than that with the regular 'clients'. However, the proportion of the respondents who reported that they used a condom in the last sexual encounter with their regular male partners has increased in this wave as compared to the last wave (with 63,5 percent of the respondents saying so in wave V(2009) and a higher 76.4 percent of the respondents saying the same in the present wave(2010).

Graph: 30. Condom usage in the last sexual encounter



When the condom usage patterns during the last encounters were studied separately for Male Sex Workers and Aravanis, it was found that lesser proportion of Aravanis reported using condoms during their last sexual encounter with regular clients and main male partners. In the case of the last sexual encounter with regular

clients, 81.9 percent of Male Sex Workers reported using a condom, while a lesser 68.4 percent of Aravanis said so. Similarly, while 82.3 percent of the Male Sex Workers reported using a condom with their main male partners, only 66.8 percent of Aravanis said so.

4.6. Consistent condom usage

Since any incidence of an unprotected sexual intercourse could be potentially threatening in terms of the transmission of HIV, it is essential that awareness about the necessity of condom usage translate into its consistent use. Moreover, condoms need to be consistently used with all kinds of partners in order to minimize the exposure to HIV. The consistent condom usage with various partners of Male Sex Workers has been given the table below:

Table: 45. Consistent Condom usage with various sexual partners (Trends)

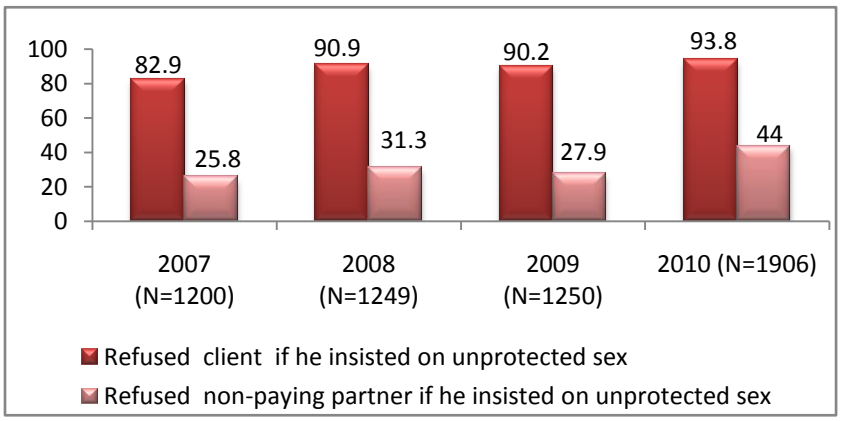
	2008	2009	2010
Consistent condom usage with regular clients	86.6	82.3	82.9
Base: All respondents who had regular clients	1230	1170	1190
Consistent condom usage with regular male partner	71.3	53.0	80.2
Base: All respondents who had regular male partner	401	576	1886
Consistent condom usage with non-paying male partner	70.3	75.5	78.2
Base: All respondents who had non-paying male partner	175	302	500

The findings of the present wave suggest that relatively the lowest proportion of male sex workers (78.2 percent) reported using condoms consistently with their non-paying male partners. A higher 80.2 percent of them reported that they consistently use condoms with their regular male partners, and even higher 82.9 percent of them reported that they always use condoms with their regular clients. However, as compared to the findings of the last two waves, there's a considerable improvement in the proportion of the respondents who have reported consistent usage of condoms with their regular male partners in the present wave. At the same time, the proportion of respondents who reported consistent usage of condoms with their non paying male partners is also slightly higher in 2010 (78.2 percent) as compared to the 2009 (75.5 percent) and 2008 (70.3 percent).

4.7. Condom Negotiation practices

Due to the stigma attached to the profession of the sex workers, few legal protections and the need for income lays the sex workers in a vulnerable situation, wherein they can be exploited or abused by clients. The isolation and disempowerment of sex workers, enforced by the threat of violence, may create barriers to negotiating safe sex practices, thereby increasing the risk for human immunodeficiency virus (HIV) and other sexually transmitted infections (STIs). Thus, the condom negotiation of the sex workers depends on the support from the peer groups as well as the other stakeholders.

Graph: 31. Condom negotiation practices (Trends)



Condom negotiation was found to be the highest in the current wave among all the waves.

From the table it can be seen that the proportion of MSWs who refused clients in case he insisted to have sex without condom was increasing across the waves. It has shown a drastic increase to 44 percent for a non-paying partner in the current wave.

Table: 46. Condom negotiation practices & type of respondent

	MSWs	Aravanis
Refused client if he insisted to have sex without using condom	92.99	96.15
Refused non-paying partner if he insisted to have sex without using condom	36.16	66.33
Base: All respondents	1413	493

It is found that a lower proportion of male sex workers reported that they could refuse the client if he insisted to have sex without condom (36.16 percent). This proportion was higher in case of Aravanis (66.3percent).

This could be attributed to the stronger negotiation and success rates of Aravanis who succeeded better than the MSWs in condom usage.

4.8. Practices relating to condom use and procurement

This section includes indicators relating to condom use and procurement which is given below:

- Place of purchase of condom in last occasion
- Whether carrying condom at the time of the interview
- Experience of not using condom against wish in the last one month & reasons

Place of purchase of condom in last occasion

Enhancing condom availability and accessibility by people, who are sexually active, have been the focus of a lot of target interventions related to HIV/AIDS/STD prevention.

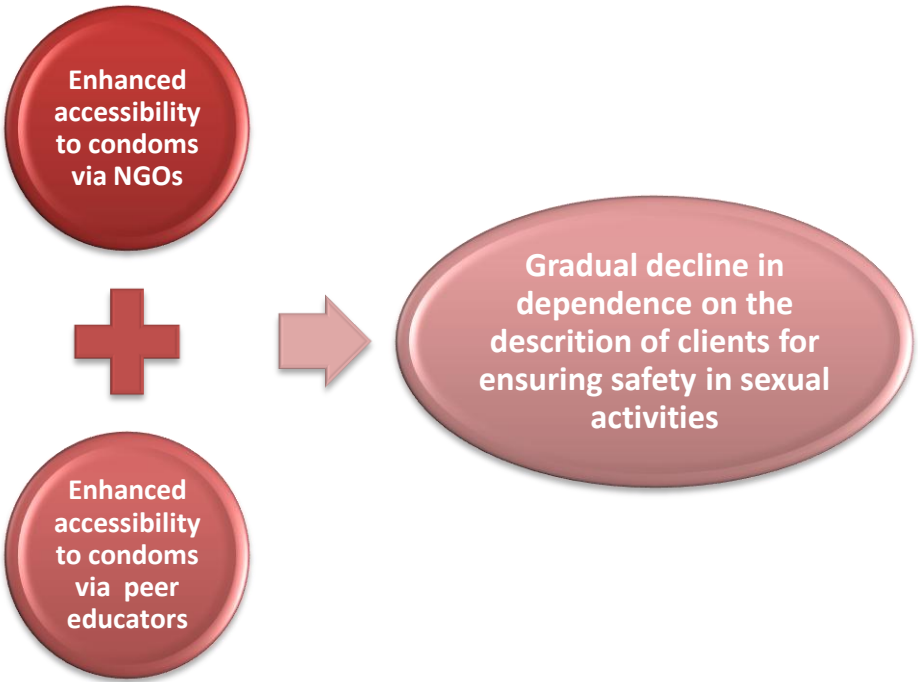
When the respondents of the present wave were asked about the places where the purchased condoms from during the last occasion, NGOs were reported as the most popular location at the overall level. About one fifth of the respondents also mentioned that they purchase condoms from peer educators.

Table: 47. Place of purchase of condoms- last occasion

Place of purchase of condoms- last occasion	Overall	2005	2006	2007	2008	2009	2010
Vending stall /store	5.3	15.1	9.3	5.3	3.7	2.8	2.0
Apothecary/pharmacy	10.0	15.1	15.1	9.5	9.6	7.6	7.4
Health facility	3.6	5.8	13.5	0.5	1.2	1.6	5.6
Friend	4.5*	8.6	7.2	4.0	5.3	0.4	3.3
Client	24.4	48.2	50.6	50.2	4.0	3.2	3.3
Madam/ Broker	1.8	7.1	3.7	1.4	0.0	3.8	0.0
Peer educator	12.8	0.0	0.6	7.9	20.3	17.3	19.6
NGO Worker	37.1	0.0	0.0	20.9	54.8	63.0	58.7
Base : All respondents who have used condoms at least once	10922	912	1197	2800	2857	1250	1906

As seen from the table above, NGOs weren't considered as locations to buy condoms from till the year 2007. With the onset of Wave III, the respondents have been purchasing condoms from NGOs, and their popularity has been shooting up ever since.

At the same time, the data up to Wave III (2007) shows heavy reliance on clients for procuring condoms, with almost half of the respondents(50.2 percent) depending upon the discretion of client for protecting themselves against getting exposed to unsafe sexual encounters. Since then, there has been a rapid decline in this trend, with only about 3-4 percent of the respondents depending upon the clients for having access to condoms from the year 2008-2010. Moreover, the proportion of the respondents buying condoms from peer educators has also been gradually increasing from wave II-VI(2010).



This is suggestive that the efforts made by intervention programmes of distributing condoms amongst commercial sex workers have actually yielded benefits in terms of making the sex workers more self sufficient, and less dependent on the clients.

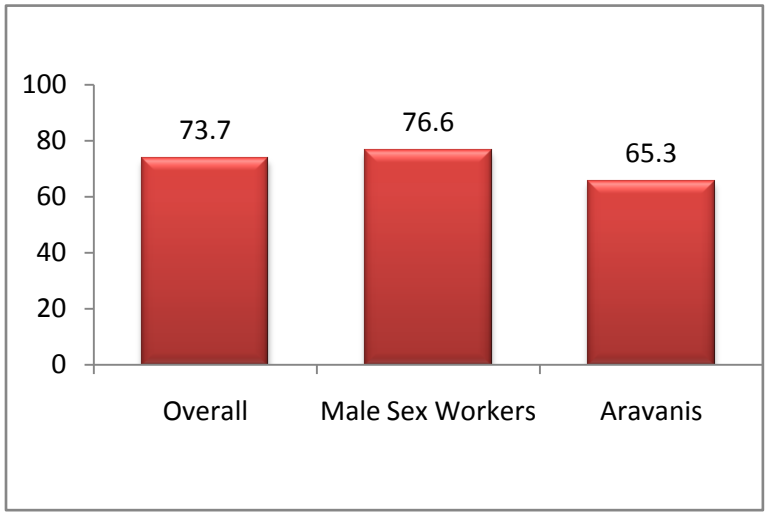
However, according to the findings of the present wave, there are observable differences between the condom purchase behavior of Male Sex Workers and Aravanis.

4.9. Use of lubricants

Considering that anal sex is the riskiest sexual activity in the context of HIV transmission, use of condoms is very crucial to be safe. However, the anal area of the partner who is getting penetrated, is surrounded by a lot of white blood cells tissues, and there is a risk of the rupture of the rectum tissue too because of friction. This makes it essential to use a lubricant along with a condom, in order to reduce the friction. However, lubricants are also known to enhance the risk of the transmission of HIV. This is because HIV is more prone to be transmitted in the presence of other infection in the rectum lining. Since lubricants are known to cause infections/allergies, hence making the user more vulnerable to HIV transmission.

To estimate the extent of this risk, the respondents of the present wave were asked about whether they have ever used any lubricants while indulging in anal sex.

Graph: 32. Use of lubricants



It could be observed that almost three fourths of the total respondents at the overall level (73.7 percent) reported having used lubricants at least once. However, out of the total number of Male Sex Workers who were interviewed, a little more than three fourth said that they have used lubricants while having anal sex, but on the other hand, a smaller proportion of the total number of Aravanis (65.3 percent) have said the same.

Additionally, it is known that oil based lubricants tend to react with the latex in condoms, and make them more likely to rupture/prone to HIV transmission. In this context, the respondents were asked about whether the type of lubricants that they use.

It was found that the most popular lubricant used by the respondents is 'Jelly' (mentioned by 75.5 percent of the total respondents), followed by almost one fifth of the respondents reporting that they use 'coconut oil'.

Use of oil based lubricants is known to affect the functionality of condoms. However, the findings of the current wave report that as many as one fifth of the total respondents depend on oil based lubricants while having anal sex. Dependence on oil based lubricants might rupture the condoms, which could enhance the likelihood of HIV transmission. This is a cause of serious concern, given the propensity of the use of lubricants by male sex workers and their frequency of engaging in anal sex.

Section: 5. Risk Perception And Testing Behavior

For controlling the prevention of AIDS, the motivation to approach HIV testing and counseling form the first step to care, treatment and support for people in need especially the High risk groups.

To ensure that respondents know their HIV status, and at the same time benefit from increased access to the treatments provided and avail the schemes at the state and national level. Thus, analyzing the critical indicators in this regard will give a complete picture about areas that requires programmatic focus. The main indicators covered in this section include the following:

- Self Risk Perception
- Knowledge of any place for confidential HIV testing
- Ever taken HIV test
- Voluntary HIV testing
- Received counseling
- Experienced the symptoms of STDs
- Treatment seeking behavior for STIs

5.1. Self Risk perception

When the respondents of the present wave were asked about whether they are at risk of contracting HIV. A majority of them (94.3 percent) at denied that they are susceptible to HIV infection.

Table: 48. Risk perception (self) – of contracting HIV

	Overall	2005	2006	2007	2008	2009	2010
Perceive Risk of HIV	7.1	14.7	10.2	2.7	4.7	16.2	5.7
Did not perceive risk of HIV	92.1	84.6	87.0	97.0	95.1	81.0	94.3
Don't know	0.6	0.7	2.8	0.3	0.3	0.9	0.1
Base : All Respondents who have heard of HIV/AIDS	10913	911	1195	2800	2857	1245	1905

In comparison to the last wave, the findings from the current wave reveal that the proportion of respondents who reported that they are at risk of HIV has considerably gone down, while 16.2 percent of the total respondents from wave V (2009) said that they are at risk of contracting HIV, only 5. 7 percent from the present wave said so. The low risk perception could be attributed to the known status of HIV testing done in the current wave (97.4 percent) which is discussed in detail in the subsequent section.

When compared across the age groups, it was found that the respondents below 21 years had the lowest risk perception of 3.5 percent as compared to the other age groups. On contrary,

respondents *above 35 years of age*, have reported the highest risk perception of nearly 8 percent.

In addition, it is found that those who were *unmarried but with the live-in partner* had the highest risk perception of 22.22 percent. Moreover, it was seen that out of the total number of respondents who had a main male regular partner, the risk perception was almost double than it was for those who didn't have a main male regular partner.

Table: 49. Self Risk perception on the basis of duration in sex trade

	1 year & less	Above 1 year-3 years	Above 3 years-5 years	More than 5 years
Perceive Risk of HIV	5.74	3.46	5.77	6.72
Did not perceive risk of HIV	93.92	96.54	94.23	93.28
Base: All respondents	296	231	260	953

From the above table it is clear that the lower proportion of sex workers who have joined sex trade in the current location in within last 3 years perceive risk of contracting HIV as compared to those who joined sex trade more than 5years ago.

Also, for people who have *had the occurrence of STD* in the past 1 year have shown the higher risk perception of 19.64 percent than those who have not experienced STD in the past 1 year. A similar behavior is found with the respondents with main male regular partner who have a high risk perception of 8.42 percent.

Table: 50. Perception of risk of contracting HIV/AIDS among respondents

	2005	2006	2007	2008	2009	2010
Base: All respondents	912	1197	1200	1249	1250	1905
Perceive Risk of contracting HIV	14.7	10.2	3.7	3.8	16.1	5.67
Base: All respondents not used condom in the last sexual intercourse with regular clients	905	1174	1199	88	90	157

It can be seen from the above table that at the overall level the risk of contracting HIV is comparatively lower among the MSWs in the current wave as compared to the earlier waves.

The respondents of the present wave were also asked about the reasons why they think that they are not susceptible to HIV infection. It was observed that at the overall level, the popular reasons that emerged were having multiple partners (26.9 percent), having sex without condoms sometimes (24.1 percent), and having sex without condom with an occasional client (20.4 percent).

5.2. Knowledge of any place for confidential HIV testing

In order to assess whether the awareness levels of the respondents towards HIV testing, they were asked about whether they know of any place meant for confidential HIV testing or not.

Table: 51. Knowledge of any place for confidential HIV testing

	Overall	2005	2006	2007	2008	2009	2010
Aware of a place for confidential HIV testing	93.0	78.6	91.0	93.5	91.4	98.4	99.1
Not aware of a place for confidential HIV testing	7.0	21.2	9.0	6.5	8.5	1.4	0.9
Base : All Respondents who have heard of HIV/AIDS	10913	911	1195	2800	2857	1245	1905

In the present wave, most of the respondents (99.1 percent) reported that they aware to take a confidential HIV test. There was no significant difference among MSWs and Aravanis on the knowledge levels for HIV testing.

When the responses to this indicator were studied over the last few years (from wave I-VI), it was observed that there was a visible change in the awareness levels from wave I- II. Post that, the awareness levels have remained considerably high and increasing until the present wave.

From the above table, it is also clear that the awareness about any place for confidential HIV testing was higher among the MSWs in the current wave as compared to those in the earlier waves.

5.3. Ever taken HIV test

Table: 52. Ever taken an HIV test (trends)

	Overall	2005	2006	2007	2008	2009	2010
Ever taken HIV test	74.5	53.2	65.1	51.1	87.1	88.1	97.4
Not taken HIV test	14.3	46.8	34.9	6.0	12.5	11.3	2.6
Base : All Respondents who have heard of HIV/AIDS	10913	911	1195	2800	2857	1245	1905

The number of respondents who took the HIV test grew from 88 percent in the last year to 97.4 percent this year.

It is found that over the last few years, the proportion of respondents who have undergone the HIV test has been increasing considerably. Also, with a high percentage, there is no profound difference across categories for the test taking behavior.

5.4. Experience of STD symptoms

Moving to Sexually Transmitted Diseases, it was found that in the last wave, no respondent reported suffering from urethral discharge or genital discharge. However in the present wave, while only 1.8 percent of the respondents have mentioned that they had urethral discharge in the last one year, close to one tenth of the total respondents of the current wave have reported suffering from genital discharge.

Table: 53. Symptoms of STDs

	Over all	2005	2006	2007	2008	2009	2010
MSWs who reported urethral discharge in last 1 year	2.2	7.8	3.7	2.0	1.3	0.0	1.8
MSWs who reported genital discharge in last 1 year	6.9	12.6	11.2	8.1	4.6	0.0	7.5
MSWs who reported STD symptoms during the last year	8.1	18.1	11.5	9.3	5.4	0.0	8.8
Base : All Respondents who are aware about STDs	10922	912	1197	2800	2857	1250	1906

Similarly, the proportion of MSWs who reported STD symptoms during the last year have also increased to 8.8 percent in the present wave.

5.5. Treatment seeking behavior for STIs

Due to the relatively less threatening consequences of Sexually Transmitted Diseases vis a vis HIV/AIDS, the motivation to get tested for Sexually Transmitted Diseases could even be lower. The respondents of the present wave were asked about the last time they suffered from the symptoms of a STD.

At the overall level, the respondents mentioned an average of 4.9 months since the occurrence of the last STD. However, the average number of months was much higher in the case of Male Sex Workers (5.8 months) , as compared to the Aravanis (3.5 months), suggesting that STDs could be more rampant amongst Aravanis as compared to the Male Sex Workers.

Further the treatment seeking behavior of the respondents at the time of the occurrence of the last STD was studied, both in the case of the respondents who were the beneficiaries of TAI Araichimani, and those who were not.

5.6. Risk perception and testing behavior

Table: 54. Voluntary HIV testing and received counseling

	2005	2006	2007	2008	2009	2010
Yes	97.3	96.1	100.0	99.6	100.0	99.7
No	2.7	3.9	0.0	0.2	0.0	0.1
Base: Ever taken an HIV test	485	778	1432	2488	1097	1855

All those respondents who reported to have ever taken HIV test were asked whether they took the HIV test voluntarily or the test was prescribed to them. They were also asked if they received counseling while taking the HIV test. About 99.27 percent MSWs reported that they received counseling when they had undergone HIV testing. This trend was found to be similar across all the waves.

For 97 percent of the respondents, the HIV test was taken less than a year ago and the mean number of times they had taken the test was twice. Nearly half of the respondents have taken the HIV test twice. However, it was found that Aravanis had a higher involvement of taking tests.

Section: 6. Enabling Environment And Collective Mobilization

There needs to be an enabling environment to ensure that the male sex workers are able to access their basic rights as an individual. Some of the rights denied due to discrimination are: freedom from physical and mental abuse; the right to education and information; health care, housing; social security and welfare services. Thus, there is need to empower the sex workers in order to increase their bargaining power in front of the clients and help them to access their basic rights.

In this context, this sub-section deals with the male sex workers' sense of identity as a community and details the indicators on collective mobilization and enabling environment as follows:

- Possession of critical documents like birth certificates etc.
- Collectivization
- Exposure to TAI Araichimani
- Membership of a Community Based Organization (TAI Vizhudugal)
- Exposure to violence

6.1. Possession of documents/Social entitlements

The documents like birth certificate, voting ID card, ration card enable the sex workers to access the basic rights as a citizen and also is a measure of empowerment for them. The possession of these documents has been explained in the following table:

Table: 55. Possession of certain documents

	2007	2008	2009	2010
Birth Certificate	35.3	20.2	17.2	21.3
Marriage certificate	5.4	3.8	7.1	3.6
Child's birth certificate	11.9	11.1	23.4	13.0
Voting ID card	63.5	74.3	87.3	72.6
Bank account/pass book	20.1	25.6	32.1	48.3
Ration card	59.3	77.1	87.0	77.5
Caste certificate	29.4	40.8	29.8	31.0
Base: All respondents	1200	1249	1250	1906

The possession of bank account/pass book and caste certificate has seen an increase in the current wave from the previous waves. However, for other documents, it shows a negative trend in comparison with the previous wave.

It is found that nearly 5 percent of the male sex workers have the marriage document whereas less than 1 percent of Aravanis have the same. The social discrimination and the stigma could be attributed to this difference.

Amongst all the documents, voting ID card and Ration card have a consistent percentage of possession as compared to other documents. In relation to the statement, it is found that for nearly 12 percent of the respondents, CBOs have assisted in obtaining the voting ID card and

ration card. Since it is not only important for election times, but also a major requirement for obtaining other previleges.

6.2. Collectivization

Community Based Organizations are those that necessitate participation of the community members (target beneficiaries) in various group activities. Moreover, the members of the groups grapple with similar problem, and deal with similar circumstances. This usually empowers the beneficiaries of the programme to take control over their lives, and gain the right to better health.

This section explains how the male sex workers are motivated to stay together and support the cause of collectivization. It also deals with the TAI intervention and activities on collective mobilization. The following graphs and tables explain this process of collectivization.

6.3. Exposure to TAI Araichimani

Table: 56. Knows how to access TAI Araichimani

Knowledge of ways to access TAI Araichimani	2007	2008	2009	2010
Yes	95.0	97.8	93.4	97.6
No	5.0	2.1	6.6	2.4
Base : All Respondents who have heard of TAI Araichimani	639	2434	1122	1873

Nearly more than half of the male sex workers have been exposed to TAI Araichimani.

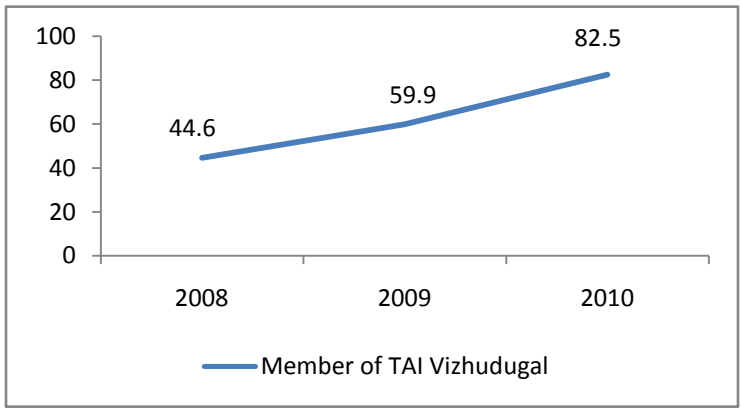
Among those who have heard of TAI Araichimani, it is found that a considerable percentage of them (97.6 percent) have knowledge of ways to access TAI Araichimani. This accessibility of TAI Araichimani has seen a considerable increase over the waves.

6.4. Membership of a Community Based Organization (TAI Vizhudugal)

The respondents of the present study were asked if they are members of any Community Based Organizations. At the overall level, it emerged that a majority of the respondents (82.47percent) are enrolled with a Community Based Organization (TAI Vizhudugal).

Out of the total number of Male Sex Workers interviewed nearly 80 percent are members of TAI Vizhudugal. However, as much as 91.9percent of Aravanis have the membership of TAI Vizhudugal. This shows a greater reach of TAI Vizhudugal to the Aravanis.

Graph: 33. Member of TAI Vizhudugal

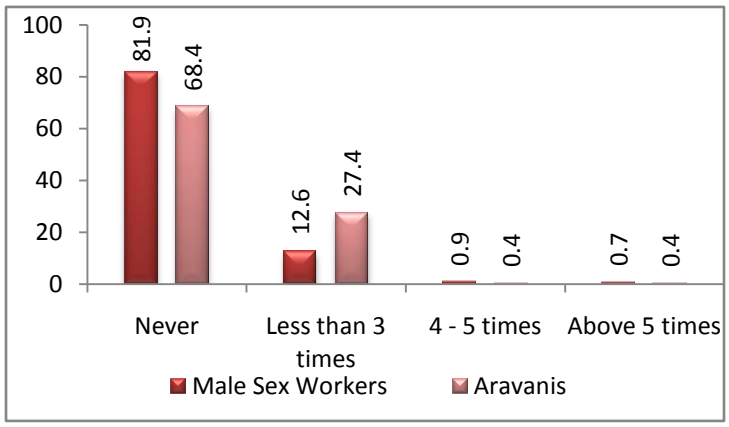


Across the waves, it is found that the membership has increased over the years from 44 percent in 2008 to a leap of 82.47 percent in the current wave. This is a positive picture and could be a reason for increase in HIV test taking behavior, lower risk perception and better condom negotiation.

6.5. Exposure to violence

Violence is meted out to commercial sex workers by clients, police force, and pimps is commonplace. It is found that Aravanis, especially, are at a much larger risk of facing violence, as compared to the Male Sex Workers.

Graph: 34. Number of times beaten in the past 6 months as per the group type



The respondents were asked about the incidence of violence experienced by them and the perpetrators of violence. Out of the total number of Male Sex Workers, as many as 81.9percent reported that they have never been beaten in the last 6 months. However, in the case of Aravanis, only 68.4percent of them said so. Such violence could manifest into forceful sex and the makes the negotiation of condoms with the clients even more difficult. Among those who have been beaten, it is found that it was their client for 60 percent of the time.

CLIENTS TO MALE SEX WORKERS

Section: 1. Demographic Characteristics Of Male Sex Workers

1.1. Introduction

The respondents identified as clients to male sex workers for the purpose of this study are men who had sex with men in the past one month. When Male Sex Workers engage in sexual activities with clients, lot of the decisions that are taken regarding the sexual behavior determine how vulnerable both parties are to the transmission of HIV. In this context the knowledge levels, behavior, risk perception and testing related behavior of the client is tested. Moreover, clients to sex workers (both male and female) are potential conduits of HIV from high risk groups (sex workers) to the general population (their own spouse/regular partners/non paying partners). Therefore, it becomes even more important to understand their behavior patterns, in order to holistically tackle the epidemic of HIV/AIDS.

1.2. Age Distribution, literacy & marital status

As per the findings of the present wave, it was found that more than half of the respondents lie between 26-35 years of age, and their median age is 29 years.

It was found that the age of the respondents have a meaningful relationship with their migration patterns. For instance, from the age group –'36 years and above', the proportion of respondents who have migrated from their city/district of origin is the highest (almost one fifth), as compared to the lower age groups.

Table: 57. Migration from the city/district of origin

	'21-25 yrs	'26-30 yrs	'31-35 yrs	'36 or Above
Migration from the city/district of origin	11.25	12.99	14.74	19.35
Base: All respondents	80	154	95	62

As we move from the lowest age group (21-25 years) towards the higher age groups, the proportion of respondents who have migrated from their city/district of origin increases. It was founded that the highest majority of literate respondents (92.2 percent) is in the age group of 26-30 years. However, most of those respondents have finished their education only up to standard 10th, indicating high dropout rates. Additionally, as compared to the previous waves (2005-09), the current wave has seen a drop in the proportion of clients who reported having finished their education up to class 12th, and graduation/diploma.

Table: 58. Marital Status

	Over all	2005	2006	2007	2008	2009	2010
Un-Married living alone	51.49	57.4	53.32	52.14	43.29	63.08	49.75
Married & living with Wife	37.12	35.29	31.89	37.87	41.71	32.04	35.75
Seperated/Divorced/Widower	9.89	6.24	14.12	9.31	12.43	3.88	11.25
Unmarried (live-in-partner)	0.78	1.07	0.68	0.51	1.16	0.55	0.5

The respondents were also asked about their marital status to gauge if they have a spouse/live in partners/other regular partners. About half of the total respondents reported that they are married and living with their wife. Additionally, 1.5 percent of the respondents said that they are married, but are currently living with some other partner. Having multiple partners increases the complex network within which HIV can be potentially transmitted from an infected person to the other people.

1.3. Primary source of income

The respondents were asked about the source of income that they primarily rely on for meeting their day to day needs. Type of work, and the monetary remuneration obtained from it is expected to have an impact on the lifestyles of the respondents, along with determining the level of disposable income is available at their disposal.

The most popular primary source of income that emerged from the interviews of the respondents is that of a construction worker/factory worker/laborer. About one third of the respondents mentioned that they are auto drivers, followed by close to one tenth of them saying that they work in hotels or run a petty business. Auto drivers/rickshaw pullers could also play a role in guiding other prospective clients to hot spots.

1.4. Frequency of alcohol intake

Table: 59. Frequency of alcohol consumption in the past one month (Trends)

	2005	2006	2007	2008	2009	2010
Everyday	4.8	5.4	18.0	22.1	3.7	13.0
At least once a week	33.5	37.2	43.5	39.0	40.7	33.3
Less than once a week	34.1	35.8	20.5	23.8	30.3	25.8
Not consumed in the last one month	16.8	10.7	10.4	6.5	15.4	11.3
Do not drink	10.9	10.6	6.3	4.8	5.2	10.8
Base: All respondents	561	737	751	899	902	400

The extent of alcohol intake gains significance for studying the vulnerability of the Clients to Male Sex Workers to HIV/STD infection, as an inebriated state could lower their self restraint, and capacity to make sound decisions. This could possibly be connected to condom usage, and therefore, can pose a threat of transmission of HIV from an infected person to an uninfected person in the absence of a condom.

Table: 60. Frequency of alcohol consumption in the past one month & age group

	21-25 yrs	26-30 yrs	31-35 yrs	36 years or Above
Everyday	8.8	12.3	14.7	19.4
At least once a week	31.3	34.4	32.6	35.5
Less than once a week	28.8	24.7	27.4	22.6
Not consumed in the last one month or do not drink	22.5	24	19	16.1
Base: All respondents	80	154	95	62

Overall, it can be seen that the findings of the current wave show that the alcohol consumption has gone up, with a relatively higher proportion of respondents(19.4 percent) admitting that they drink alcohol daily in the present wave as compared to the last wave (14.7 percent). In fact, this proportion has been going up gradually in the last few years.

Section: 2. Exposure to Intervention

Intervention programmes constitute a primary response to the challenge of HIV/AIDS prevention. From a programme perspective it was important to assess the effectiveness of various interventions. STI/HIV/AIDS intervention programmes may take multiple forms, such as awareness campaigns through media, Inter Personal Education (IPE) activities, free medical checkups, campaigns/meetings etc.

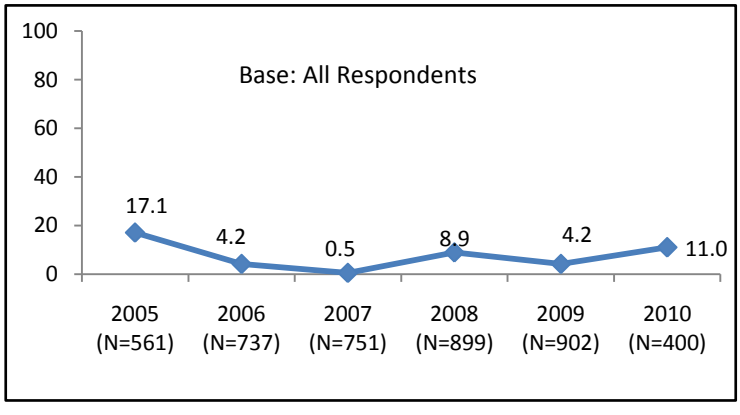
Before we get into further analysis of the critical indicators on the basis of exposure to intervention, we need to understand the exposure to intervention across the five waves.

Table: 61. Exposure to intervention (Trends)

	2005	2006	2007	2008	2009	2010
NGO/Outreach worker visited once or more times in last 6 months	14.8	4.1	0.5	0.9	0.8	0.75
Visited TAI SESA Clinic for health/ STI checkups in the last 6 months	6.6	2.0	0.1	1.1	0.3	2.75
Taken by NGO worker for medical check up	6.4	2.3	0.0	0.4	0.4	0.25
Demonstrated about condom use	12.5	2.9	0.3	7.0	2.4	5.75
Base: All respondents	561	737	751	899	902	400

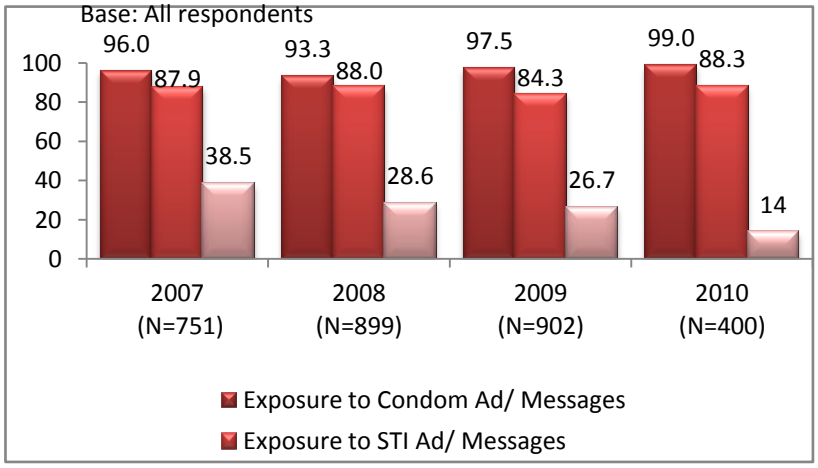
The table above shows that as per the findings of the current wave, a higher percentage of the total respondents (5.8 percent) have been exposed to a demonstration of the correct condom usage. At the same time, a higher proportion of the respondents have visited TAI SESA clinics for health checkups in the last 6 months. However, the proportion of respondents who said that they have been taken by NGO workers for a medical checkup has seen a decline to 0.3 percent in this wave from 0.4 percent in the last wave.

Graph: 35. Received individual education on HIV/AIDS in the last 6 months through TAI interventions



It can be observed that the proportion of respondents who have mentioned having received individual education on HIV/AIDS in the last 6 months through TAI interventions had gone up by about thrice the proportion in the last year. This is a considerable improvement with the programme providing individual education on HIV/AIDS to more than one third of the respondents in the last 6 months from 4.2 percent last year.

Graph: 36. Exposure to messages relating to Condom use/STI/Key clinic



Though the exposure to condom ads and messages have been consistently high across the past few years (with it gradually increasing from 96 percent in 2007 to 99 percent in 2010), exposure to key clinic ad/messages has been consistently low. In fact, it took a plunge to as low as 14 percent in the current year from 26.7 percent in 2009, and 28.6 percent in 2008. The awareness levels of key clinic ads/messages have been gradually decreasing over the last few years.

Section: 3. Knowledge Indicators

Sexually Transmitted Diseases (STDs) often go unnoticed, and underreported, given that the consequences are perceived as life threatening in most cases. However, it is an important health priority because they can lead to acute illness, infertility, long-term disability and death, with severe medical and psychological consequences for men, women and infants (WHO 1999). STIs are transmitted from one person to the other during unprotected sexual intercourse. Research studies suggest that STIs and HIV are linked and that STDs can proliferate or increase the chances of transmission of HIV. In this section, the following areas are covered:

- ❖ Awareness of STD
- ❖ Knowledge of STD Symptoms in men
- ❖ Experience of any STD symptom

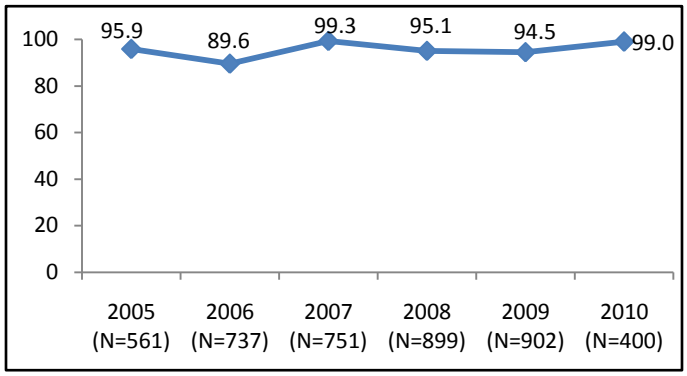
The critical knowledge indicators presented in this section are given below:

- Correct knowledge on HIV
- Correct knowledge without any misconception on HIV
- Knowledge on means of prevention of HIV
- Knowledge that condoms prevent spread of HIV

3.1. Awareness of STD

In order to examine the levels of awareness of STIs amongst the Clients to Male Sex Workers, they were asked if they had heard of any diseases other than HIV or AIDS that are transmitted through sexual contact. The following graph presents the changes in STD awareness levels among CMSWs between 2005 and 2010-

Graph: 37. Ever Heard of STD



Sexually Transmitted Diseases are not just harmful on their own, but they also increase the chances of transmission of HIV. However, if clients are not aware about STDs, their symptoms and consequences, they could be reckless about taking necessary precautions against taking the necessary precautions to prevent the infection from spreading. Also, they could act as bridge population and facilitate the transfer of STDs from high risk groups (commercial sex workers) to the general population (their spouses and regular partners).

When the respondents of the current wave were asked about whether they have ever heard of any Sexually Transmitted Disease or not, most of them (99 percent) reported being aware of STDs. The proportion of respondents who reported awareness about STDs has showed an increase in the current wave as compared to the last few years, with 94.5 percent of respondents reported being aware about it.

3.2. Knowledge about STD symptoms in men

Despite being aware about STDs in general, if a person doesn't have any idea about the first signs or symptoms of the infection, it is difficult for him/her to self examine himself/herself for the infection. In order to gauge the depth of knowledge of the Clients to Male Sex Workers about STDs, they were asked about what the symptoms of STDs in men could be.The common STI symptoms in men are foul smelling urethral discharge, burning pain during urination and genital ulcer/sore and swelling in groin area.

Table: 62. Knowledge about STD symptoms in men (Trends)

	2005	2006	2007	2008	2009	2010
Urethral discharge	58.7	49.7	66.0	78.5	71.5	61.36
Burning/pain on urination	58.4	58.3	39.4	60.0	74.2	67.68
Genital ulcers/sores	82.3	83.0	86.6	89.8	79.9	80.05
Swelling in groin area	13.6	25.6	35.9	65.7	26.5	41.92
Base: All respondents aware about STD	538	660	746	855	852	396

The awareness levels on 'urethral discharge' and 'burning/pain on urination' were reported to be lower in the current wave, as compared to the last wave. However, a relatively higher proportion of respondents reported knowing about 'genital ulcers/sores' and 'swelling in groin area' as the symptoms of STDs.

Table: 63. Level of awareness about HIV (Trends)

	2005	2006	2007	2008	2009	2010
Correct knowledge on two acceptable ways of preventing spread of HIV	99.8	99.7	100.0	95.9	96.7	99.75
Correct knowledge on two acceptable ways of preventing spread of HIV without any misconception on HIV	51.5	50.8	64.7	52.7	78.8	69.75
Complete knowledge on means of prevention of HIV and denied any misconception	42.8	26.5	21.4	41.8	67.6	41.5
Knowledge about condoms prevent HIV	99.6	99.6	99.9	97.7	96.3	99.75
Base: All respondents	561	737	751	899	902	400

For studying the trends in the awareness levels across all the six waves, the above four indicators were used. The above indicators show comprehensive knowledge about preventing spread of HIV. However, if knowledge about HIV is ridden with misconceptions, it does not solve the purpose of intervention programmes- which is to provide comprehensive knowledge that could be translated into meaningful action in the context of HIV/AIDS/STD transmission.

A person is said to be having complete knowledge on the means of HIV prevention if he/she is aware of at least two acceptable ways of HIV prevention, and at the same time, they can also identify misconceptions and certainly know that the misconception don't lead to the transmission of HIV.

As per the findings of the current wave, the proportion of respondents who had correct knowledge on at least two acceptable ways of preventing the spread of HIV has gone up to 99.8 percent this year from it being 96.7 percent in the last wave. Similar is the case for the awareness levels on the knowledge that condoms prevent HIV. However, there has been a considerable decline in the proportion of respondents who had 'correct knowledge on two acceptable ways of preventing the spread of HIV without any misconception', and 'complete knowledge on means of prevention of HIV and denied any misconception'.

Section: 4. Behavioral Indicators

This section focuses on studying the indicators that highlight the sexual history and behavior of the clients to Male Sex Workers. Apart from sexual history, the section also covers the involvement of CMSWs with various sex partners, condom usage during the last sexual intercourse, consistent condom usage, and other practices relate to condom usage and procurement. The added complexity in studying the behavior of the clients to male sex workers comes from a varied mix of sexual relationships that they are engaged in, and that further determines the extent to which they will be involved in the transmission of HIV/STD.

4.1. Sexual history

When the sexual history of the clients to the male sex workers was studies for the present wave, it was found that the median age at which the respondents reported engaging in first sexual intercourse with a male/hijra partner is 23 years, with about half of the respondents falling in the age group of 22-25 years. However, the median age at which the respondents reported having paid for sex with a male/hijra partner (25 years) is higher than the age at which they had their first sexual intercourse.

It was observed that the median age at which the respondents had their first sexual intercourse with a male/hijra partner has been increasing in the past few years from 19 years in the years 2005 to 23 years in 2010. Moreover, the median age at which the respondents reported having their first paid sex also saw a similar increase from it being reported as 21 years in 2005 to 25 years in 2010.

4.2. Involvement with various sexual partners

As mentioned before, the clients to male sex workers engage with different sexual partners, and their relationships with all of them differs in the not just the extent of association, but also in the type of sexual practices that they follow with each of those partners. This is an important area of study in the context of HIV/AIDS/STD transmission as the different sexual behaviors that the clients engage in make them and their partners vulnerable to infection with varying degrees of risk.

For the purpose of understanding this, the respondents were asked to mention the type of sexual activities that they are used to practice. As per the findings of the current wave, three fourth of the total respondents mentioned that they have had anal sex in the last one month. A little more than three fourth of the respondents (78.3 percent) mentioned that they have indulged in oral sex. However, manual sex was reported by only a little more than one third of the total number of respondents. Since anal sex is the most risky sexual activity in terms of the

risk of transmission of HIV, the high proportion of respondents engaging in anal sex with their partners is a cause of concern. This is a reason to worry especially if the condom usage is low. Usually, during anal sex, the partner who is penetrated is at a higher risk of contracting HIV as compared to the partner who is penetrating.

In order to estimate the risk that the respondents have exposed them to, they were asked whether they used a condom during the last time they had anal sex with a male/hijra. The majority of the respondents in the present wave (82.7 percent) reported that they have used a condom. However, about one tenth of the total respondents reported that they did not use a condom, and hence they exposed themselves to the risk of contracting HIV from their partners while they engaged in unprotected anal sex.

4.3. Condom usage during last sexual intercourse

The respondents were further asked about whether they used a condom with their sexual partner in their last sexual encounter or not. This was done in order to estimate the most recent behavior depicted by the clients to male sex workers, who are vulnerable to HIV transmission given the multiple partners that they sexually associate with, and the varied nature of complexity of their relationship with each of those partners.

Table: 64. Condom usage during last sexual intercourse (Trends)

	2007	2008	2009	2010
Last time condom usage with Main Male Regular Partner	100.0	100.0	79.4	36.8
Base: All respondents who had regular Male Sex Worker / Hijra	619.0	658.0	503.0	4.0
Last time condom usage with regular Male sex worker / Hijra	91.3	93.6	96.6	100.0
Base: All respondents who had non-paying Male partner	211.0	150.0	40.0	55.0
Last time condom usage with non-paying male partner	82.9	74.7	97.5	56.4
Base: All respondents who had Main Male Regular Partner	68	42	34	19

The above table reflects the trends in condom usage during last sexual intercourse with various types of sexual partners across all the six waves. For the current wave, the findings in the case of condom usage with the main male regular partner and male sex worker/hijra cannot be analysed as the sample size is not statistically valid. However, in the case of condom usage during last sex with a non paying male partner, there was a sharp decline in the proportion recorded in the current wave (56.4 percent), as compared to the last wave (97.5 percent), wave IV(74.7 percent) and wave II (82.9 percent).

4.4. Consistent condom usage

Even though condoms act as a reliable means of guarding against the transmission of HIV, they are required to be used every time one engages in a sexual activity that could put him/her at the risk of contracting HIV. In other words, even a single instance of not using condoms while engaging in a sexual activity with an infected person can lead to HIV infection. Hence, it's important to understand that the maximum protective effect of condoms is achieved only when their use is consistent rather than occasional. Thus, the level of consistent condom usage with the sexual partners reflects the level of risk of contracting HIV among the sex workers. The consistent condom usage with various partners has been given the table given below:

Table: 65. Consistent condom usage with different types of partners

	2007	2008	2009	2010
Base: All respondents who had Main Male Regular Partner	68	42	34	6
Last time condom usage with Main Male Regular Partner	67.7	47.6	79.4	83
Base: All respondents who had Male Sex Worker / Hijra	619	658	503	
Last time condom usage with regular Male sex worker / Hijra	57.8	84.2	79.5	
Base: All respondents who had non-paying Male partner	211	150	40	40
Last time condom usage with non-paying female partner	61.1	45.3	97.5	97

4.5. Practices relating to condom use and procurement

This section includes indicators relating to condom use and procurement which is given below:

- Whether carrying condom at the time of the interview
- Place of purchase of condom in last occasion
- Experience of not using condom against wish in the last one month & reasons

Table: 66. Whether carrying condom at the time of the interview (Trends)

	2005	2006	2007	2008	2009	2010
Can show the condom	5.3	11.6	5.8	8.5	9.8	4.01
Cant show a condom but have	1.7	9.9	8.8	2.3	6.1	6.27
Do not have right now	93.1	78.5	84.6	88.8	83.7	89.72
Base: All respondents who ever used condom	547	731	747	884	799	399

As per the findings of the current wave, there has been a slight increase in the proportion of the respondents who reported not carrying the condom during the time of the interview, with as many as 89.7 percent of the respondents reporting that they aren't carrying a condom. Carrying a condom shows preparedness for any chance sexual encounter or one in which the sexual act is performed in a hurry. Considering that thee interviews are taken in the hotspots where the clients usually get access to sex workers, there is a high likelihood that non availability of condoms just before the sexual intercourse would translate into the non usage of condoms and make both the clients and sex workers vulnerable to HIV infection.

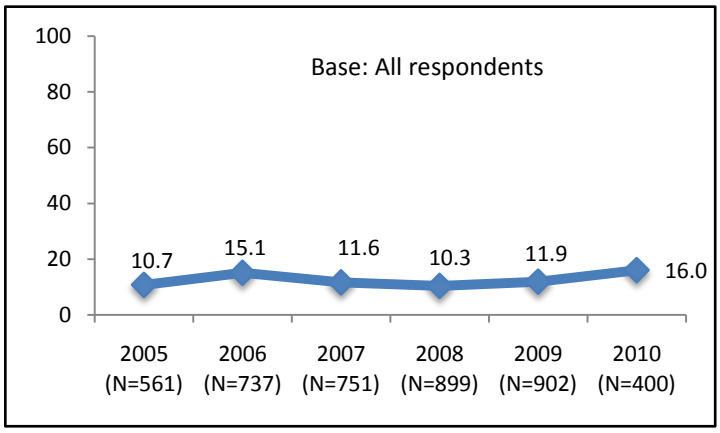
Table: 67. Place of purchasing condom in the last occasion (Trends)

	2005	2006	2007	2008	2009	2010
Vending stall	24.5	28.0	14.1	3.1	5.1	7.8
Pharmacy	28.2	33.9	22.6	35.6	33.8	19.1
Health facility	4.6	9.4	0.7	0.9	1.5	1.5
Friend	11.9	7.4	7.2	10.5	1.3	6.3
Partner	24.1	19.0	54.5	48.8	57.0	59.9
Others	6.8	2.2	0.9	1.1	1.4	4.8
Base: All respondents who ever used condom	547	731	747	884	799	399

In order to find out whether clients are still accustomed to buying condoms from traditional outlets (like a pharmacy), or they have explored newer options, they were asked about the place they visited last time for buying condoms. Many a times, condoms are not used by clients and sex workers because the association between them is very short lived and they find themselves out of time to purchase condoms. Enhanced availability and accessibility of condoms during those times can heighten the chances of usage of condoms. Awareness levels about the avenues available for condom purchase are understood here in that perspective.

The findings from the present wave show a clear decline in the popularity of pharmacies as places to purchase condoms from, as compared to the findings of the previous years, with only about one fifth of the respondents mentioning it. However, more than half of the total respondents reported relying on their partners for getting access to condoms, and this proportion has been consistently high across all the previous waves too.

Graph: 38. Experience of any incident of not using condom against wish in the last one month



It can be seen that in the present wave, there was an increasing in the proportion of respondents who reported that they experienced an incident of non usage of condom against their own wish in the last month. While 16 percent of the total respondents said that this year, a lesser 11.9 percent of them reported the same in the last year. This is a cause for concern as unwilling non usage of condoms can lead to a serious threat of HIV infection, and given the high likelihood of involvement of the clients to male sex workers to multiple numbers of sexual partners, the infection could spread from one individual to another at a very fact pace.

Section: 5. Risk Perception & HIV testing Behavior

Sexual behavior, in the context of taking the necessary precautions in order to guard oneself against HIV, depends a lot on whether individuals perceive themselves as being at risk of the infection or not. If HIV seems like an 'alien disease' which affects only a particular kind of people, one might not feel very motivated to be cautious against it, or get tested for the presence of HIV. This section studies the risk perception of people and their HIV testing behavior keeping these factors in the background.

The main indicators covered in this section include the following:

- Self Risk Perception
- Knowledge of any place for confidential HIV testing
- Ever taken HIV test
- Voluntary HIV testing
- Received counseling

5.1. Self risk perception

The clients to the male sex workers were asked if they think that they are at risk of contracting HIV or not. Considering their multiple sexual relationships, and their consistent engagement in risky behavior, they are at heavy risk of contracting the virus. However, the proportion of respondents who reported that they perceive themselves at the risk of contracting HIV is as low as 2.8 percent.

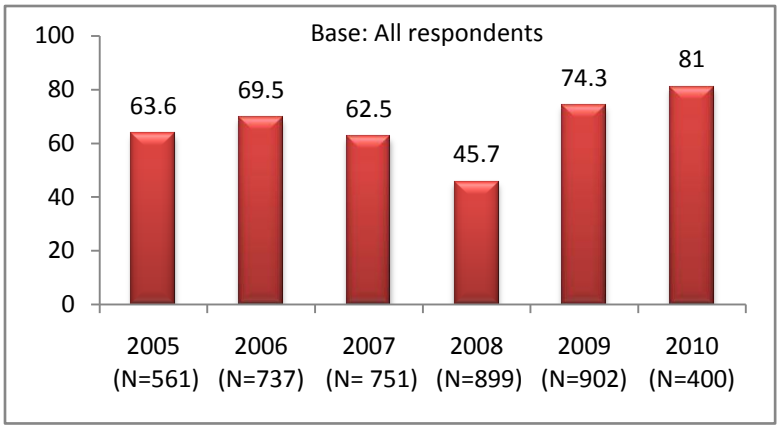
Risk perception of the respondents being as low as 3 percent is a serious cause of concern, considering the high risk behavior that they engage in, coupled with the fact that about three fourth of the respondents engage in anal sex which is the most risky sexual activity as far as HIV transmission is concerned, and that the usage of condoms is not universal.

5.2. Knowledge of any place for confidential HIV testing

If a person indulges in high risk sexual behavior that makes him/her vulnerable to contracting HIV, its important that he/she at least consistently gets himself/herself tested for HIV so that if there's an infection, then its detected as early as possible and the control measures are taken soon enough.

However, for this to happen, one needs to know about the places that he/she could contact/visit in order to get HIV tests done. The knowledge about any place for confidential HIV testing has been detailed in the following table on the basis of exposure to intervention, in order to understand whether there exists any difference in the awareness of those sex workers who were exposed to intervention and those who were not.

Graph: 39. Knowledge of any place for confidential HIV testing

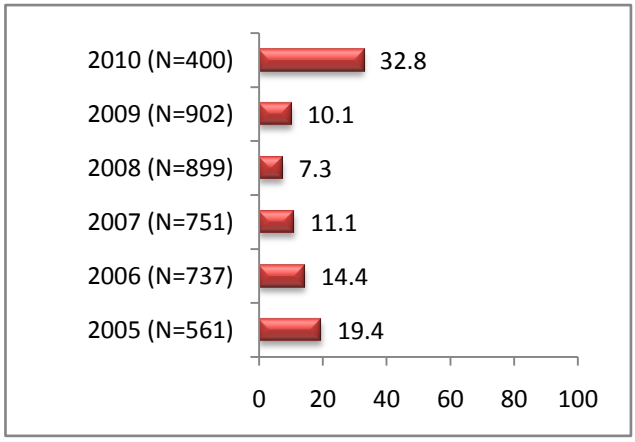


Clearly, there is a substantial difference between the awareness level in the year 2008 and the current year, with the proportion of respondents reporting awareness about places for confidentital HIV testing rising from 45.7 percent to 81 percent. Before that, from the year 2005-07, the awareness levels remained almost consistent, with little fluctuations here and there.

5.3. Ever taken HIV test

HIV testing is a crucial indicators not just to have a general know-how of the number of people affected by the AIDS epidemic at the broad level, but also to detect the presence of the virus at as early as a stage as possible in order to tackle its further transmission.

Graph: 40. Ever taken HIV test (Trends)



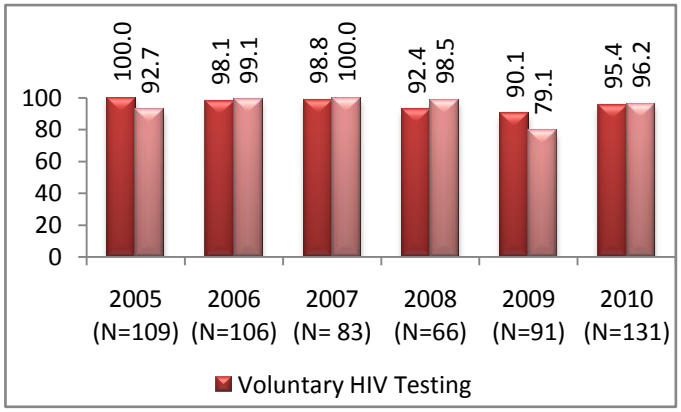
The table here reflects the trends in the HIV test taking behavior across all the six waves, conducted from 2005-10.

As per the findings of the current wave, only about one third of the respondents (32.8 percent) reported having taken an HIV test at least once till the time the interview was taken. However, this year's findings have shown a considerable improvement as compared to the findings of the last few years (2005-09), with the proportion of respondents being 10.1 percent during the last wave.

5.4. Voluntary HIV testing and received counseling

All those respondents who reported to have ever taken HIV test were asked whether they took the HIV test voluntarily or the test was prescribed to them. Moreover, they were also asked if they took availed of any counseling services before taking the test.

Graph: 41. Voluntary HIV testing and received counseling (Trends)



From the last wave, all the respondents who reported having taken an HIV test were also asked if they undertook the test voluntarily or not. The purpose of asking this was to gauge the motivation levels of the respondents to take the test on their own, without the influence of any external agency. The proportion of respondents who reported having taken a test voluntarily was found to be 95.4 percent, and this was higher than the proportion of respondents reporting the same in the last wave (90.1 percent).

Additionally, the respondents were also asked if they received any counseling before the test. The proportion of respondents who answered in the affirmative had increased heavily in the current wave (96.2 percent) has scaled up heavily as compared to the result of the last wave.