

HIV prevalence and Risk factors on STIs and AIDS, in Female Sex Workers of Ellapuram Panchayat Union, Tamil Nadu

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Abstract: This study was done in collaboration with Social Welfare Centre for Weaker Section (SWCWS) which focussed on 5 districts of Ellapuram Panchayat Union, at Periyapalayam. The exploratory study found that there were no cultural beliefs or myths associated with the temple or the Goddess and sex work. Since the number of people who came to the temple as a pilgrimage place were floating population with more anonymity, the opportunity for sex work was more conducive. In the main study having 248 FSWs, nearly half the females (46.8%) were 35 years or more, 59% were literates and 56% were married. Most of the FSWs (92%) were from outside Periyapalayam area. Nearly half of them (48%) reported that their age at first sexual intercourse was less than 18 years and the mean age of entry into the sex work was 27 years. With respect to type of clients, 50% reported of truck/lorry/bus/car/auto drivers and mean number of casual clients and regular clients in the previous week was 6 and 5, respectively. In the last one month, 30% reported that they were asked for anal sex by their clients; in that 25% of the FSWs had accepted. Overall only 16% reported of consistent condom usage. Alcohol consumption was reported by 27% and among them, 91% informed of, drinking before sexual act. Significant proportion of drivers (52%) used consistent condom use whether they were casual clients ($p=0.045$) or regular clients (0.032). Significantly ($p=0.036$) more literate FSWs (78%) reported of condom usage than the illiterate FSWs (65%). There were significant associations between duration of profession, usage of condom with casual clients or regular clients and STI symptoms ($p<0.005$). The odd of getting STI symptoms by FSWs with inconsistent use of condom by casual or regular clients was 2.67 (O.R.=2.67, 95% CI is 1.512 to 4.714, $p=0.001$ /O.R.=2.29, 95% CI is 1.275 to 4.135, $p=0.006$) times higher than the consistent use of condom by casual clients/regular clients, respectively. In all, HIV seroprevalence in the FSWs was 3.6%.

This article reports, floating population and more anonymity for sex work at Periyapalayam. In addition, type of clients, literacy status, inconsistent condom usage, drinking habit and history of STIs were reported as risk factors for STIs and AIDS among these FSWs, who required specific intervention.

Key words: HIV prevalence, STIs and AIDS risk factors, FSWs, Ellapuram-Periyapalayam

I. INTRODUCTION

India, with many concentrated HIV epidemics [1], had an estimated 2.5million people living with HIV in 2006 [2-4]. HIV epidemic in our country is concentrated among the high-risk groups and, the female sex workers (FSWs) are one of these target groups or the "key populations"[5]. Controlling and managing HIV infection and AIDS in these key populations is critical as they are the most affected [6]. The estimated adult HIV seroprevalence in our country was 0.34% [7]. The overall HIV prevalence in FSWs was 5.06% [8]. Integrated Behavioural and Biological Assessment (IBBA) districts in Tamil Nadu showed a prevalence of 2.2% to 12.5% in Round 1 and 2.4% to 8.8% in Round 2 [5]. HIV transmission has been shown to be strongly associated with repeated sexually transmitted infections (STIs) and sexual behavior [9-12]. Key risk factors that have been identified in the literature are engaging in, commercial sex work [13],

having bacterial and/ viral sexually transmitted infections (STI) [14], numbers of sex partners, and male non-circumcision [15]. In order to find out the HIV seroprevalence and the STDs/AIDS related risk behavior of FSWs belonging to Ellapuram Panchayat union, a study was attempted by National Institute of Epidemiology (NIE) in collaboration with an NGO named Social Welfare Centre for Weaker Sections (SWCWS).

II. METHODS

Study Site and Population

The study site was SWCWS, situated at Periyapalayam about 40 Kms. from Chennai. This NGO has identified 5 sites namely, Ellapuram, Vengal, Thamaraipakkam, Latchivakkam and Uthukottai to work for FSWs under Ellapuram Panchayat Union, covering a population of about 1,10,000. There were about 630 full time FSWs. The NGO Provided services on Counselling,

condom promotion and STIs/AIDS related behaviour change education to FSWs and their clients.

Study participants and tools

Both qualitative and quantitative methods were used for data collection. Before starting the main study with FSWs, an exploratory study was conducted at Periyapalayam through key informant interviews (KIIs) using Interview guide. Key informant interviews (KIIs) were done with an objective to study whether there was any relationship between the Goddess Bhavani Amman – temple and the profession – sex work. KIIs were conducted among 23 senior people (Key informants) like senior temple priests, senior citizens, senior FSWs, shop owners who were selling condoms and senior local leaders who were staying at Periyapalayam for more than 20 years. The domains in the interview guide mainly focused on history of the temple, sex work at Periyapalayam and the relationship among the Goddess, temple and the sex work profession.

The data Collection of the main study with FSWs was from April 2006 to June 2007. In the study period whoever attended the NGO was considered as the study sample excluding the FSWs who came for the subsequent visits. The total number of FSWs enrolled was 248. The interview schedule for the FSWs contained questions on their demographic and socio-economic details, STIs and AIDS related risk behaviours. All the FSWs were tested for HIV seroprevalence using ELISA kits.

Data Analysis

The quantitative data was entered in SPSS version 16; descriptive, univariate and logistic regression analysis, were the statistical tools used for the study. The qualitative data was analysed thematically.

Ethical Clearance: Ethical Clearance was obtained from the Institutional Ethics committee of NIE for the ethical aspects of this study.

III. RESULTS

Exploratory study

Most of the participants of the exploratory study (78%) were between 55 to 65 years of age. More than three fourths informed that the temple was having a history of 100 years. They also informed that number of devotees from different places, including other states, come and worship this “powerful Goddess”. More number of people (75%) were involved in jobs connected to the temple and its related nature (petty shops in front of the temple, selling: flowers and neem leaves-dress, fire woods, Amman photos and articles, etc.); in addition, there were people who were involved in agricultural work, business and other employment (25%).

Many of them (70%) informed that sex work was going on in that area for about 10 years visibly. The female sex workers were from Thiruvallure, Washermenpet, Vadapalani, Avadi, and other nearby areas and also from Andhra. Many (65%) of the FSWs were reported to be married or separated. Quiet a

number of them (60%) would ask their customers to come to Periyapalayam and they would meet there. Some of them (25%) would be picked up on the way and brought to Periyapalayam. They also informed that most of the customers would be from outside Periyapalayam and many of them (60%) were married men. In addition there were few school going adolescents, who came in their uniforms. Because of their uniforms mostly, they would be caught by police and settled with their respective parents.

There were number of permanent tenements and hutments around the temple area, in addition to temporary hutments during festival season of the temple. All these shelters would be used as temporary brothels, other than the temple festival days.

It was found that there were no cultural beliefs, myths or customs associated with the temple and the sex work. Since number of people came to the temple as a pilgrimage place, which had floating population with more anonymity, the opportunity for sex work was more conducive.

Main study: Among the 248 FSWs who formed the study sample, nearly half the females (46.8%) were 35 years or more and 39% were 25 to 34 years. With respect to literacy status 59% were literates (Table 1). In all 56% were married. Most of the FSWs (92%) were from outside Periyapalayam area. With respect to type of residence, 54% were from thatched houses. Eighty two percent and 72% of them reported of not having drinking water and toilet facilities in their residences, respectively.

STIs and HIV risk factors: Nearly half of them (48%) reported that their age at first sexual intercourse was less than 18 years and 90% reported that they had first sex with their respective husbands. Mean age of entry into the sex work profession was 27 years and 47.6% entered the profession at the age of 25 to 34 years of age. More than 27% of the FSWs had mentioned that they were in the profession for 6 years or more (Table 1).

Three fourths informed poverty/financial situation as the reason for their entry into the profession. More than one third (35%) informed that their location of sex work was brothel based. With respect to type of clients, 50% reported of truck/lorry/bus/car/auto drivers and 32% informed of getting loading and unloading coolies as their clients. Mean number of casual clients and regular clients in the previous month was 6 and 5, respectively. Most of them (93%) informed that the type of payment was only by cash; 57% informed that the payment was decided as per the time and 31% informed, as per the number of acts.

In the last one month, 30% reported that they were asked for anal sex by their clients; in that 25% of the FSWs had accepted for anal sex. Overall only 16% reported of consistent condom usage. Alcohol consumption was reported by 27% of the FSWs and in that, 91% of them reported of drinking before the sexual act. More than one third of them (36%) informed “for giving good company” and 32% “to

avoid any inhibitions” as the reason for their drinking before the sexual act.

It was observed that there was a significant association between frequency of condom use and type of clients. That is, significantly higher proportion of drivers (52%) used consistent condom use whether they were casual clients ($p=0.045$) or regular clients (0.032).

There was a significant association ($p=0.036$) observed between literacy and condom usage by casual clients during last sexual encounter, showing more literate FSWs (78%) reported of condom usage with casual clients during last sexual encounter than the illiterate FSWs (65%). It was observed that there was a significant association between duration of profession, usage of condom with casual clients or regular clients and STI symptoms ($p<0.005$). The odd of getting STI symptoms by FSWs with inconsistent use of condom by casual clients was 2.67 (O.R.=2.67, 95% CI is 1.512 to 4.714, $p=0.001$) times higher than the consistent use of condom by casual clients. Similarly, for regular clients the odd was 2.67 (O.R.=2.29, 95% CI is 1.275 to 4.135, $p=0.006$) times higher than the consistent condom use of regular clients.

In all, HIV seroprevalence in the FSWs was 3.6% (9 out of 248)

The present study reported that the type of clients, literacy status, inconsistent condom usage, drinking habit and history of STIs as risk factors for STIs and AIDS among these FSWs. So, we need to have relevant intervention either from Governmental, non-governmental institutions or Community Based Organisations.

IV. DISCUSSION

In Integrated Behavioural and Biological Assessment (IBBA), the age group of FSWs in Round 1 was 35 to 39 years in 28% of them and Round 2 it was the same in nearly one third of the FSWs [16]. In a study conducted in Northern India it was found that average age of FSWs was 31 years [17]. In the present study it was found that 48% of the FSWs were almost of the same age group. It was observed that illiteracy was 16.3% in Tamil Nadu and Puducherry [18] by NACO; whereas in the present study the illiteracy was found to be 41% which was higher, as number of people belonged to interior rural areas.

The mean age at which the Tamil Nadu FSWs started selling sex was 25 to 28 years [6]. In the present study the mean age of entry into the sex work profession was 27 years. Overall, about one-fifth of FSWs in BSS 2001 and BSS 2006 surveys reported consuming alcohol everyday during last four weeks [18]. In the current study alcohol consumption was mentioned by 27% of FSWs and in that most of them were drinking before the sexual act.

Condom usage with regular partners was found to be poor in a study done in northern India. However, with the non-regular partners the condom usage was better. Consistent condom use with clients also increased

from 56.3% in 2006 to 75.3% in 2009-2010 [17]. In our study significantly higher proportion of drivers (52%) used consistent condom use whether they were casual clients or regular clients.

Nearly half the sex workers with STI had non-regular partners, while more than half of sex workers without any STI had regular partners. The relation between type of partner and STI was statistically significant in the same study [17]. In the current study, the odd of getting STI symptoms by FSWs with inconsistent use of condom by casual clients was 2.67 times higher than the consistent use of condom by casual clients. Similarly, for regular clients the odd was 2.67 times higher than the consistent condom use of regular clients.

HIV prevalence in the current study was 3.6; whereas in IBBA Round 1 in Chennai it was 2.2% and in Round 2 it was 2.4%. [6]. Very low HIV Prevalence of 1% among FSWs in 8 cities of Bulgaria [19] was found. The study done at Argentina [20] in 6 cities, showed a HIV prevalence of 3.2% among FSWs. In another study done in 2 large cities on the Mexico-US border [21] showed a 6% prevalence of HIV among FSWs. However in majority of the districts (Kolhapur, Pune and Yevatmal) of Maharashtra, the prevalence was very high ranging from 33% to 39% [6].

As regards to limitations of the study, the FSWs who had registered and attended the NGO only covered and not the others. More statistical analysis could not be applied due to want of more number of study participants.

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VI. REFERENCES

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Table 1. Basic Characteristics of the respondents

S.No.	Characteristics	No.	%	Minimum	Maximum	Mean	S.D.
1	Current Age of FSWs #						
	≤ 24 yrs.	35	14.1				
	25-34 yrs.	97	39.1				
	35+ yrs.	116	46.8				
	Total	248		16	55	33	7
2	Education						
	Literate	146	59				
	Illiterate	102	41				
3	Income –Sex work #	248		0	15000	2736	2616
4	Family income #	248		0	7000	967	1107
5	Total income #	248		300	16500	3703	2984
6	Age at First Sex #	248		8	30	18	3
	< 18 yrs.	119	48				
	≥ 18 yrs.	129	52				
7	First Sex with	248					
	Husband	223	89.9				
	Other than Husband	25	10.1				
8	Age entered this profession	248		13	53	27	7
	<18 yrs.	15	6				
	18-24 yrs.	75	30.2				
	25-34 yrs.	118	47.6				
	35+ yrs.	40	16.1				
9	Duration of Profession #	248		1	35	5	6
	≤ 1 yrs.	61	24.6				
	2 yrs.	51	20.6				
	3 yrs.	34	13.7				
	4 or 5 yrs.	34	13.7				
	6+ yrs.	68	27.4				

Indicates the variables are not significantly associated with STI symptoms since $P > 0.05$