

Executive Summary

Prevalence of STI & HIV Among Women in Prostitution

The AIDS Prevention And Control [APAC] Project funded by USAID and administered by Voluntary Health Services (VHS) brought together a consortium of institutions with different strengths to study the prevalence of STI among WIP in the target intervention areas of APAC. Women in Prostitution are a core group addressed by APAC in all targeted interventions. The following partners participated in the study as consortium members: 1). Seva Nilayam, 2). Department of Biostatistics, Christian Medical College, 3). Y. R Gaitonde Center for AIDS Research and Education (YRG CARE-VHS) laboratory, 4). Dr. A.L. Mudaliar Post Graduate Institute of Basic Medical Sciences (PGIBMS) University of Madras, Chennai; and Department of Public Health (DPH), Government of Tamil Nadu.

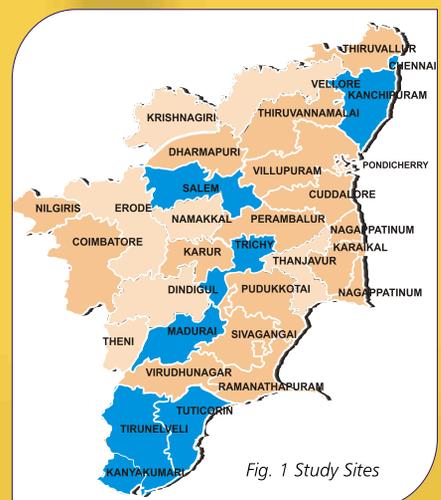
OBJECTIVES OF THE STUDY

- To assess the prevalence of Sexually Transmitted Infections and HIV among Women in Prostitution. The study included select STI conditions, such as Syphilis, Gonorrhoea, Chlamydia, Chancroids, Trichomoniasis, HIV, Hepatitis B, Herpes simplex virus 2, Bacterial vaginosis and Candidiasis.
- To assess the prevalence of the following syndromes of STIs: genital ulcers, genital discharge, inguinal bubo and pelvic inflammatory diseases.

METHODOLOGY

Selection of a site: Study participants were recruited from the ten intervention sites across the districts of Trichy, Chennai, Kanchipuram, Madurai, Salem, Tuticorin, Kanyakumari and Tirunelveli in Tamil Nadu where APAC has targeted intervention program for Women In Prostitution [WIP] (Fig. 1).

Sampling: Women engaged in sex as means of living during the past three months, full time or part time, were included in the study. Using respondent driven sampling, the first 30 WIP at each site were recruited into the study. Sample size calculations showed that 300 subjects provided a precision of 6-7% with 95% CI based on a prevalence of 25%. General health camp approach was adopted to collect data from the WIP.



Structured questionnaire was used to collect information from each study participant on socio-demographic details including patterns of sex trade, sexual behaviour, risk factors. Genital examination was done with special emphasis to identify STI syndromes of genital ulcers, vaginal discharge, inguinal bubo and pelvic inflammatory diseases. Clinical specimens collected for microbiological investigations included a sample of urine (first 10-20 ml), blood, two vaginal and three endocervical swabs.

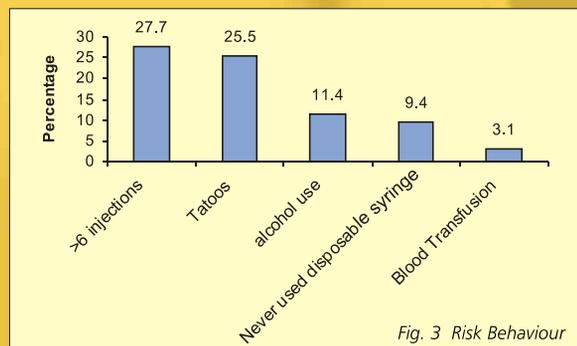
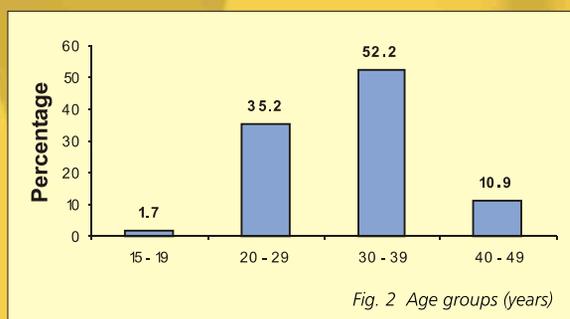
QUALITY ASSURANCE

- Methodology of clinical examination, specimen collection, transportation of specimens and laboratory procedures was standardized in a three-day workshop.
- Thorough scrutiny of all the data sheets at each campsite by the camp supervisors.
- Double entry of the data in the database.
- Laboratory test kits were standardized by the testing and the reference laboratory.
- 10 % of the serum, plasma swab and urine samples were analysed at the Dept. of Microbiology, Dr. ALMPGIBMS (University of Madras) as part of external quality assurance.

FINDINGS

Socio-demographic profile:

A total of 293 women in prostitution participated in this study of which 96% were from urban areas. 52% of the study population belongs to the age group of 30-39 years (Fig. 2).



Risk Practices :

Some of the practices that put people at higher risk of contracting infections like taking more than 5 injections was reported by 80 (27.7%) study participants, tattoos 74(25.5%), alcohol use 32 (11.1%), never used disposable needles 24 (9.4%) and blood transfusion 9 (3.1%).

Trade Pattern: Majority, 70% (200) of the WIP, were involved in sex work on a part-time basis. Amongst the part time WIP most were vendors, construction workers, agricultural labourers.

Client Profile: 69% (198) of the respondents reported having clients (paid partner) who use their services on a regular basis. Nearly 68% had a non-paid partner during the last 12 months. Non-paid partners are largely husbands or live-in partners.

Condom use: 77.3% of the study respondents reported the use of condom with their last client while 57.6% of them reported using condom with regular partners in their last sexual contact.

Clinical Findings:

Symptoms reported by study participants: Nearly 80% of the study participants reported genital symptoms. Vaginal discharge (77.4%) was the commonest complaint followed by pelvic pain (49.1%). The prevalence of pruritis, dysuria and dyspareunia were 37.4%, 42.2% and 36.1% respectively.

A total of 289 WIP underwent clinical examination. 4 (1.4%) respondents could not be examined as they were menstruating. Syndromes were noted in 69.6% (195) of the study participants while 53.3% (104) had more than one syndrome.

In the **bimanual examination**, uterine mass was noted in 2 (0.7%) study participants while 1 (0.4%) had adnexal mass and 18 (6.4%) were noted to have tenderness. **Genital discharge** was noted among 167 (57.8%) of the study participants. **Genital ulcers** were noted in 12 (4.2%) of the study participants. **Inguinal bubo** was noted in 1 (0.3%) study participant only. The syndrome of **PID** was noted in 98 (33.9%) of the study participants.

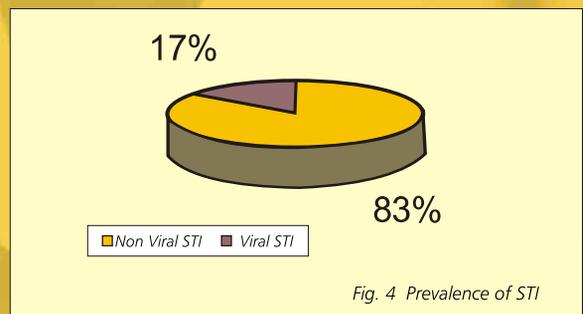


Fig. 4 Prevalence of STI

Lab Findings:

The overall prevalence of any STI - Syphilis, Gonorrhoea, Chlamydia, Chancroids, Trichomoniosis, Herpes Simplex Virus 2, HIV and Hepatitis B among Women in Prostitution is noted to be 56.0% (n = 266). Among those who had lab confirmed STI, 83% had a non-viral STI (Fig. 4).

The table1 shows the prevalence of individual STI conditions. The prevalence of bacterial vaginosis and candidiasis is 52.6% and 9.2% respectively.

Table 1: Prevalence of STIs in WIP

Type of STI	Overall		
	No. tested	No. +ve	Prevalence
Gonorrhoea (Culture)	278	4	1.4
Syphilis (both RPR & TPPA positive)	293	46	15.7
Trichomoniasis (culture)	278	88	31.6
Chlamydia (PCR)	257	50	19.5
Chancroid (culture)	278	-	0.00
HIV (Elisa)	285	27	9.5
HBV (Elisa)	293	10	3.4
HSV2 (ELISA- IgM) Antibodies	287	12	4.2
Any STI	266	149	56

SUMMARY & CONCLUSION

- Most of the commercial sex activity in Tamil Nadu is carried out by women in the older age group of more than 30 years (63%) coming from the urban areas of the state (96%). They are mostly married and living with spouse (67%).
- More than 56% of the subjects had at least one measured Sexually Transmitted Infection. The high levels of STI in this group calls for more concerted efforts at treatment programs in the targeted population.
- Condom use with non-paid partners remains low at 58%. Encouraging consistent condom use may help in bringing down the prevalence of STIs among WIPs and intervention programs need to develop strategies to address the same.
- The HIV prevalence in WIP in the target intervention area is 9.5%. The prevalence is lower than other states as is evident from data from other studies in India.
